

University of Kentucky UKnowledge

University of Kentucky Doctoral Dissertations

Graduate School

2005

PRAGMATISM AND THE POLITICS OF REWILDING NATURE: THE CASE OF GRIZZLY BEAR REINTRODUCTION IN IDAHO

John G. Hintz University of Kentucky

Right click to open a feedback form in a new tab to let us know how this document benefits you.

Recommended Citation

Hintz, John G., "PRAGMATISM AND THE POLITICS OF REWILDING NATURE: THE CASE OF GRIZZLY BEAR REINTRODUCTION IN IDAHO" (2005). *University of Kentucky Doctoral Dissertations*. 357. https://uknowledge.uky.edu/gradschool_diss/357

This Dissertation is brought to you for free and open access by the Graduate School at UKnowledge. It has been accepted for inclusion in University of Kentucky Doctoral Dissertations by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

ABSTRACT OF DISSERTATION

John G. Hintz

The Graduate School

University of Kentucky

College of Arts and Sciences

2005

PRAGMATISM AND THE POLITICS OF REWILDING NATURE: THE CASE OF GRIZZLY BEAR REINTRODUCTION IN IDAHO

ABSTRACT OF DISSERTATION

A dissertation submitted in partial fulfillment of the requirements of the degree of Doctor of Philosophy in the College of Arts and Sciences at the University of Kentucky

> By John G. Hintz

Lexington, Kentucky

Director: Dr. Susan M. Roberts, Associate Professor of Geography

Lexington, Kentucky

2005

Copyright © John G. Hintz 2005

ABSTRACT OF DISSERTATION

PRAGMATISM AND THE POLITICS OF REWILDING NATURE: THE CASE OF GRIZZLY BEAR REINTRODUCTION IN IDAHO

In 1975, the US Fish and Wildlife Service listed the grizzly bear as a "threatened species" under the Endangered Species Act. Following the listing, a recovery plan was drafted in which the Bitterroot Ecosystem of central Idaho and extreme western Montana was one of six proposed grizzly bear recovery areas. It was the only one of the six, however, which did not contain a resident population of grizzlies. The Fish and Wildlife Service eventually accepted a proposal submitted by a coalition of environmental and timber industry groups. The coalition proposed to reestablish a population of grizzlies in the Bitterroot by translocating 25 bears over five years from existing populations in the US and Canada. The proposal, however, included significant concessions, including reduced protection for the reintroduced grizzlies and management of the grizzly population by a "Citizen Management Committee." A large contingent of regional and national environmental groups quickly rose up in vociferous objection to the proposal – exposing a significant rift within the environmental movement. These environmentalists objected to the very idea of Citizen Management and also claimed that the proposed recovery area was too small to ensure recovery.

Drawing on interviews and document analyses, this dissertation employs an environmental pragmatist approach to examine the intra-environmentalist disputes that flared up throughout the Bitterroot grizzly recovery debates. The dissertation focuses on the relationship between environmental ideologies, science, and conservation advocacy, with an eye toward examining how environmentalists crafted and defended rival proposals for grizzly recovery. Through this interpretive lens, the dissertation aims to explain the existence and persistence of this intra-environmentalism rift as well as explore its ramifications for environmentalism in the region.

While no wholly unified environmental movement can ever be possible – or is even necessarily desirable – unwavering commitments to unreachable ideals on the part of many environmentalists are hindering the growth, flexibility and efficacy of conservation in the region. The main contribution of this dissertation will be to provide an empirical case study that defends the environmental pragmatist assertion that hostile and unnecessary divisiveness within the environmental movement ultimately obstructs the development of a more successful environmentalism.

KEYWORDS: Environmental Pragmatism, Nature-Society Geography, Environmental Politics and Policy, Grizzly Bear Conservation, Rocky Mountain Northwest

PRAGMATISM AND THE POLITICS OF REWILDING NATURE: THE CASE OF GRIZZLY BEAR REINTRODUCTION IN IDAHO

By

John G. Hintz

Susan M. Roberts Director of Dissertation

Wolfgang Natter Director of Graduate Studies

RULES FOR THE USE OF DISSERTATIONS

Unpublished dissertations submitted for the Doctor's degree and deposited in the University of Kentucky Library are as a rule open for inspection, but are to be used only with due regard to the rights of the authors. Bibliographical references may be noted, but quotations or summaries of parts may be published only with the permission of the author, and with the usual scholarly acknowledgments.

Extensive copying or publication of the dissertation in whole or in part also requires the consent of the Dean of the Graduate School of the University of Kentucky.

DISSERTATION

John G. Hintz

The Graduate School

University of Kentucky

2005

PRAGMATISM AND THE POLITICS OF REWILDING NATURE: THE CASE OF GRIZZLY BEAR REINTRODUCTION IN IDAHO

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements of the degree of Doctor of Philosophy in the College of Arts and Sciences at the University of Kentucky

By John G. Hintz

Lexington, Kentucky

Director: Dr. Susan M. Roberts, Associate Professor of Geography

Lexington, Kentucky

2005

Copyright © John G. Hintz 2005

ACKNOWLEDGEMENTS

The following dissertation could never have come about were it not for the help of so many family members, friends, mentors, and colleagues. First and foremost, I want to thank my wife Michelle for her patience, support, and unwavering belief in my ability to write and finish the dissertation. It seems like such a cliché to say "without you, none of this could have been possible," but I write this with as much sincerity as any words I have every written. Thanks, Michelle, I love you.

I want to thank my advisor and friend, Sue Roberts, for her support, encouragement, suggestions, editing, scholarly advice – the list really could go on and on. Thanks, Sue, for five great years of advising and mentoring.

My other dissertation committee members all provided invaluable guidance and insight into my research project. Rich Schein has been consistently energetic, helpful, and insightful, both as Director of Graduate Studies and as a committee member. John Paul Jones III, a member of my committee before he headed to the desert, provided the initial list of readings on contemporary nature-society geography that really kickstarted my tenure as a "critical" scholar. Randall Roorda was an incredibly helpful and active external committee member. I appreciate Randall's close and critical readings of articles and dissertation chapters; and where would I be without his pointing me to Berthoff, Burke, and other pragmatist rhetoricians? (Answer: probably not here typing this right now.) Wolfgang Natter has been a supportive mentor who has generously shared his wealth of theoretical insight. Tom Barnes was the ideal external examiner, and I appreciate his flexibility and willingness to take part in the whole process pro bono.

I would also like to thank Karl Raitz, who, as chair of the Kentucky geography department, was always willing to help out wherever and however his assistance was needed, often on little to no notice. I have greatly benefited from the insight gained in graduate seminars due to the outstanding luck I had in taking offerings from Herb Reid (political science), Ted Schatzki (philosophy), and Dave Maehr (conservation biology). I would also like to thank my master's advisor at Idaho, Gundars Rudzitis, who has been a great mentor and friend since 1994, and a very active supporter during my doctoral studies. Many thanks are due to Josh Clemons, Dave Correia, Ben Smith, Paul Robbins, Sarah Moore, Jean Lavigne, and Jason Strange for excellent proofreading and critiques of

articles, conference papers, and dissertation chapters. Without the use of Andy Doolen's library cubicle, the home stretch would have been much more difficult. Many thanks to Andy for his generosity and trust. I would like to thank my parents, Jim and Mary Jane Hintz, for their generous help and encouragement on so many fronts. And finally I would like to thank my children, Lyell, Claire, and Theo, who showed amazing sensitivity to the pressures I was facing during my stretch run. Thanks for believing in me, kids! I hope to repay the favor every day from here out.

Acknowledgements List of Figures	
Chanter 1. Introduction, Examining on Intro Environmentalism Dehote	1
Chapter 1. Introduction: Examining an Intra-Environmentalism Debate 1.1. Grizzly Bears in the Bitterroot: Gone but not Forgotten	
1.2. The Evolution of an Environmental Debate	
1.3. The Object of Analysis: Conflict within Conservation	
1.4. Organization and Overview of the Dissertation	
1.5. Roads not Taken	10
Chapter 2. Nature: Now, More than Ever, Critical to Human Geography	12
2.1. Introduction.	
2.2. Critical Nature-Society Geography I: Marxist Geography and the Production	
Nature	
2.3. Critical Nature-Society Geography II: Constructed Nature(s)	
2.4. Critical Nature-Society Geography III: Nature as Discourse	
Chapter 3. Endorsing Nature: Environmental Pragmatism as Theory and Practice	
3.1. Introduction/Sentiment	36
3.2. The Political Case for Environmental Pragmatism and against Cavalier	
Constructionism	37
3.3. The Theoretical Case for Environmental Pragmatism and against Cavalier	
Constructionism	
3.4. Escaping the Prison, Breaking the Mirror: Pragmatism and Language	52
3.5. Pragmatism and Writing Nature-Society Geography	57
Chapter 4. Rewilding Nature: Conservation Biology, Deep Ecology and the 'New	
Conservation Movement'	62
4.1. Introduction.	
4.2. Deep Ecology Comes to America	
4.3. Biodiversity and the Preservation of Big Wilderness	
4.4. Deep Ecology and Wilderness Defense Meet Critics	
4.5. Conservation Biology and Rewilding: a Sympathetic Critique	
4.6. Conclusion: Two Steps toward a Wider Path	
ĩ	
Chapter 5. The Citizen Management Alternative Marks its Place	102
5.1. Introduction	102
5.2. A Geo-History of Federal Lands in Central Idaho	102
5.3. Multiple Use, Wilderness, and Public Participation: The 1960s Federal Lan	ds
Management Revolution	109
5.4. The Endangered Species Act of 1973	
5.5. A Methodological Intervention: Environmental Rhetoric as 'Ecospeak'	
5.6. It's as Easy as One (Reintroduce Grizzlies), Two ('Local' Management), T	
(Grizzly Recovery in the Bitterroots!): The Bitterroot EIS	

TABLE OF CONTENTS

5.7. Establishment Environmentalism Makes its Case	135
5.8. Conclusion: Marking the 'Radical Center'	146
Chapter 6. Reconsidering the Conservation Biology Alternative: Ethics, Science, and	d the
Paradox of Saving Wild Nature	
6.1. An Introduction to a Problematic Situation	
6.2. The Best of Both Worlds?: Grizzly Recovery, Rewilding, and Environmen	tal
Ethics	150
6.3. The Bitterroot Ecosystem: Imperfect Wilderness or Problematic Situation?	162
6.4. Science versus Everything Else: The Scientific Committee and the Persiste	nce
of Hierarchy	
6.5. The Uncritical Embrace of Scientific Authority: Three Explanatory Takes .	186
6.6. Conclusion: the Paradox of Saving Wild Nature	189
Chapter 7. Conclusion: Revisiting the 'Radical Center': a Generous Reading of the	
Potential of Citizen Management	193
7.1. Introduction: Lamenting Failure with the Aid of Hindsight	
7.2. Reintroduction in Idaho, or, It Isn't Just the Bitterroot Ecosystem	194
7.3. A Case for Collaborative Conservation	200
7.4. What If? Thinking about the CMC Alternative as if it were in place	206
References	215
Vita	240

LIST OF FIGURES

Figure 1.1. The Six "Grizzly Bear Ecosystems" in the US Lower 48 States (map from Roy et al., 2001, p. 208)
Figure 1.2. Objects of Analysis: Bitterroot Grizzly Reintroduction Debate Participants and their Outcomes/Products
Figure 3.1. Nature-Endorsing and Nature-Skeptical Theoretical Perspectives
Figure 4.1. Reed Noss's Idealized Conservation Reserve Design (from Noss et al., 1996, p. 956)
Figure 4.2. World Population Growth Counter from the Craighead Environmental Research Institute's Website (Craighead Environmental Research Institute, 2002a)
Figure 4.3. Alternative 4, the Conservation Biology Alternative from the Final EIS (USFWS, 2000a, p. 2-56)
Figure 5.1 Land Ownership in north-central Idaho and western Montana, with the prominent white/green pattern representing the private/Federal ownership checkerboard – a legacy of nineteenth century railroad land grants, specifically here the Northern Pacific and Chicago, Milwaukee & St. Paul railroads (Schwantes, 1993) (map by Hintz)
 Figure 5.2. Checkerboard clearcut in Idaho: private lands cutover and St. Joe National Forest lands forested. Note the extensive roading. This is a spectacular, but not atypical, example of railroad checkerboard landscape (Osborn, 2001)
Figure 5.4. "Horseshoe" Model of Attitudes and Perspectives toward Nature (in Killingsworth and Palmer, 1992, p. 14)
Figure 5.6. "Selway-Bitterroot Ecosystem Photo" from the National Wildlife Federation promotional flyer for the Citizen Management Alternative for Bitterroot Grizzly Reintroduction (NWF, 1997a, pp. 3-4)
Figures 5.7. Which of these bears would you like to see reintroduced into your 'backyard'? The top two images are from the NWF Flyer (NWF, 1997a); The ones at bottom (from left) are from the book covers of the real-life outdoor adventure tales Some Bears Kill (Kaniut, 1997) and Man eaters: true tales of animals stalking, mauling, killing, and eating human prey (Underwood, 2000)
 Figure 6.1. "The Bear Marian," cover page from Chapter 1 of Frank Craighead's 1979 popular natural history book <i>Track of the Grizzly</i> (Craighead, 1979, p. 13)
Terrare Griefferen, 1777, p. 667).

Figure 6.3. Grizzly bear fieldwork practice 2: "John and Frank Craighead remove a
young drugged grizzly from a culvert trap" (Craighead, 1979,p. 86+) 158
Figure 6.4. Grizzly bear fieldwork practice 3: "Each marked animal was given permanent
lip (right) and underarm (left) tattoos" (Craighead et al., 1995, p. 61) 158
Figure 6.5. Grizzly bear fieldwork practice 4: "To establish the age of adult bears, one of the fourth premolars was removed, thin-sectioned, and stained to reveal annuli"
(Craighead et al., 1995, p. 59)
Figure 7.1. Jobs-Creating Ecological Restoration Areas in the Conservation Biology Alternative (map by author)
Figure 7.2. The Conservation Biology Alternative with Montana and Idaho's

Neighboring "Isolated Timber Dependent Areas" Added (map by author) 197

Chapter 1. Introduction: Examining an Intra-Environmentalism Debate

1.1. Grizzly Bears in the Bitterroot: Gone but not Forgotten

It was the largest forest fire in American history. Maybe even the largest forest fire ever... For two terrifying days and nights - August 20 and 21, 1910 - the fire raged across three million acres of virgin timberland in northern Idaho and western Montana. Many thought the world would end, and for 86, it did (Petersen, 1994).

The devastating forest fires of 1910 hold a prominent place in the history of the State of Idaho. When reading about the "great burn" (Peterson, 1976, p. 118), it is invariably the loss of human life (Petersen, 1994) or the amazing physical destruction left in its wake (e.g., five Idaho towns, including the good-sized mining town of Wallace, were all but burned to the ground (Moore, 1996)) that dominate the storyline. Usually relegated to footnote status is the fact that the great burn opened up the rugged, scrabbly, mountainous and (thanks to the fires, formerly) densely forested areas north and south of the Lochsa River to sheep grazing. The newly arrived sheep herders – even as their presence in the region would be short-lived – would play a large part in determining the course of environmental politics in the region three-quarters of a century later.

Fearing (and occasionally suffering (Moore, 1996)) livestock losses due to grizzly bear depredation, Forest Service employees and sheep herders adopted a shoot-on-sight policy toward grizzly bears (Parsell, 1986; Roy et al., 2001), and their efforts would prove effective beyond even their goals. Unlike previous and concurrent campaigns to exterminate wolves (McIntyre, 1995), the elimination of the grizzly bear was never official Federal policy; but in the Bitterroot Ecosystem of central Idaho, their fates would be the same. By the 1930s reports of grizzlies in the Bitterroot were so scarce that the population had likely dwindled to only a few individuals, and the last confirmed track of a grizzly bear in the Bitterroot was seen in 1946 (Moore, 1996).

The blame cannot be laid completely at the feet of sheep herders – their efforts were just the final nail in the Bitterroot grizzly's coffin. For a couple of decades before the great burn, sport hunters and trappers killed dozens of grizzlies *every year* in the Bitterroot country (Moore, 1996). Dams were another anthropogenic cause of the Bitterroot grizzly's demise. In 1927 a hydropower dam was built on the Clearwater River at Lewiston, Idaho, cutting off salmon – an important Bitterroot grizzly food source –

from the Bitterroot country (Moore, 1996; Roy et al., 2001). No one knows how many grizzlies historically inhabited the Bitterroot and Clearwater regions of Idaho before their quick demise commenced around the turn of the twentieth century. What we do know is that much of the Bitterroot Ecosystem is now protected as Federally-designated wilderness, and that nearly all of the rest is national forests. Courtesy of these vast tracts of Federally owned and managed lands, and despite depleted salmon runs,¹ the region still contains the necessary habitat to support a population of grizzly bears today (Bader & Bechtold, 1996; Boyce & Waller, 2003; Merrill et al., 1999; Noss et al., 1996; Roy et al., 2001; USFWS, 2000a).

1.2. The Evolution of an Environmental Debate

In the lower 48 states today, grizzly bears number around 1,000 individuals – about two percent of the estimated 50,000 grizzly bears that roamed the West prior to Euro-American settlement (USFWS, 2000a). In 1975 the grizzly bear was listed by the US Fish and Wildlife Service (FWS) as a threatened species in the lower 48 States. The 1982 (revised 1993) FWS "Grizzly Bear Recovery Plan" listed six "grizzly bear ecosystems" within which recovery efforts would be concentrated (Roy et al., 2001; USFWS, 1982, 1993). Five of these ecosystems contain grizzlies: the Yellowstone (with 400-600 bears), Northern Continental Divide (300-400), Selkirk (45-50), Cabinet-Yaak (30-40), and the North Cascades (5-30) (USFWS, 2000b). The sixth grizzly bear ecosystem – the only one without a resident population of grizzly bears – is the Bitterroot Ecosystem of central Idaho and extreme western Montana.

¹ The dam at Lewiston is no longer there, even though four dams downstream (on the Snake River; Lewiston lies at the confluence of the Clearwater and the Snake) have been constructed since. These newer dams do not wholly block the Clearwater River anadromous fish runs, and steelhead and salmon do (once again) make up into the Bitterroot country, but in nowhere near-historic numbers. Small enough numbers, in fact, that their presence does not constitute a potential viable food source for grizzly bears. (USFWS, 2000a).

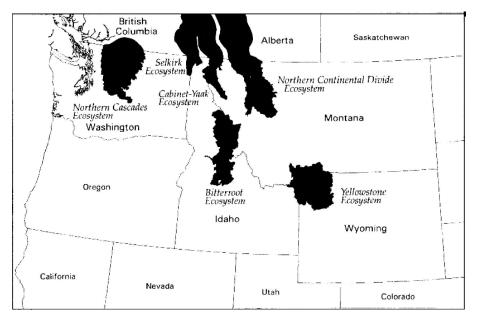


Figure 1.1. The Six "Grizzly Bear Ecosystems" in the US Lower 48 States (map from Roy et al., 2001, p. 208)

In 1992, the FWS began studying the idea of recovering grizzly bears in the Bitterroot Ecosystem (BE) by reintroducing a small number of grizzlies into the Selway-Bitterroot Wilderness area – a 1.6 million acre Wilderness area in the heart of the Bitterroot Ecosystem. The FWS accepted a recovery proposal submitted by a coalition of environmental and timber industry groups that would eventually become the FWS' official "preferred alternative" for recovery in the 1997 Draft Environmental Impact Statement (EIS) on Bitterroot grizzly recovery (Roy et al., 2001; USFWS, 1997a). Touted as a "grassroots" (Barker, 2000, p. 1) "common-sense solution" (NWF, 1997b, p. 3) to an historically polarizing issue – the conservation of endangered species on Federal lands – the recovery proposal included two key features that many environmentalists in the region found to be unacceptable compromises.

First, the reintroduced grizzly population was to be managed by a "Citizen Management Committee" comprised of gubernatorial appointees from Idaho and Montana, Federal and State management professionals, and one representative of the Nez Perce Tribe. Many environmental groups in the region vociferously opposed the idea of citizen management, fearing that the committee would be guided more by politics than science. Secondly, unlike grizzlies inhabiting the other five grizzly bear ecosystems, the reintroduced grizzly bears would not have the full protection offered under the

"threatened" status by the ESA. The reintroduced BE population would be designated an "experimental nonessential population," granting the FWS and Federal land management agencies a degree of "flexible and responsive management" not available to fully protected "threatened" or "endangered" species (Roy et al., 2001, p. 215). For many environmentalists in the region "greater flexibility can be translated as more dead bears" (USFWS, 2000a, p. 5-124), and because the grizzly is a slowly reproducing species, dead bears would spell the ultimate failure of the effort (Bader & Bechtold, 1996).

Environmentalists' objections to the preferred alternative, however, went well beyond questioning whether or not the recovery proposal, as written, would succeed. Utilizing recent findings from the science of conservation biology, environmentalists argued that adding a sixth, isolated population of grizzly bears - even if it were to become established – would do little to ensure the future of the grizzly in the lower 48 States. What was needed, rather, was a plan to reconnect the separate ecosystems into one grizzly bear "metapopulation," providing the grizzly bears the habitat, dispersal opportunities, and genetic diversity necessary to ensure long-term survival of the grizzly bear (Bader & Bechtold, 1996). A coalition of regional environmental groups presented the FWS with the more ambitious "Conservation Biology" proposal, which aimed to recover grizzlies in the Bitterroot with the full protection of the ESA. The Conservation Biology proposal also gave the reintroduced grizzlies a much larger protected recovery zone and, through an ambitious ecological restoration effort, attempted to reconnect the Bitterroot ecosystem to the Cabinet-Yaak ecosystem to the north. This recovery proposal was included in the Draft and Final EISs, and was endorsed by the majority of environmental advocates in the region (USFWS, 2001).

In 2000, with the publication of the Final EIS, citing favorable public opinion for Bitterroot grizzly recovery (but obscuring the fact that much of this support was for the Conservation Biology proposal), the FWS adopted its official preferred alternative, the "Citizen Management Alternative" for grizzly recovery in the Bitterroot Ecosystem. Interior Secretary Bruce Babbitt rubberstamped the proposal, and grizzly reintroduction was to begin in the summer of 2002. The success of the project proved short-lived, however. As her first major directive as Interior Secretary under the Bush administration, Gale Norton shelved the reintroduction plan, effectively halting the reintroduction efforts altogether. The inability of this project to realize success supports the argument that the growth – indeed the globalization – of environmental concern is not matched by increased success in curtailing ecological problems (Fischer & Hajer, 1999; Luke, 1997). The apparent intractability of grizzly bear conservation in the region makes the Bitterroot reintroduction debates an ideal case study for examining the intra-environmental aspects of the "crises" of grizzly bear conservation (Craighead et al., 1995; Mattson et al., 1996), biodiversity decline (Soulé, 1987; Redford & Sanjayan, 2003), and environmentalism more broadly (Athanasiou, 1998; Dowie, 1995; diZerega, 1996; Shabecoff, 2000).

1.3. The Object of Analysis: Conflict within Conservation

The divergence of opinion on what constitutes an acceptable grizzly bear recovery proposal in the region marked, and exacerbated, a significant ideological rift within conservation advocates in the region. This dissertation is devoted to examining the ramifications of this intra-environmentalism divide. Through an analysis of the debates over Bitterroot grizzly reintroduction during the latter half of the 1990s, my research broadly addresses the following questions: What rhetorical and practical strategies do environmentalists employ to advocate their proposals? How does ecological science inform and shape conservation programs? What is the relationship between environmental ideologies, environmental science, and conservation advocacy? Addressing these questions in the context of the Bitterroot grizzly debates allows me to accomplish a number of tasks in the dissertation. First, it enables an historical explanation of the development of this intra-environmental divide – an understanding of how each position developed individually as well as how the divide itself developed and is perpetuated. Secondly, by deploying a critical methodology, I can highlight weaknesses, inconsistencies, and contradictions within environmentalists' ideological foundations as well as within their products – the specific agendas for conservation. Thirdly, I can judge the various ideologies and proposals on their own terms and comparatively in the context of the Bitterroot grizzly reintroduction debates.

This general framework for analysis has enabled two significant contributions: In the specific context of assessing the Bitterroot debates, I will make the case that the FWS preferred alternative for grizzly recovery was preferable to the more ambitious alternative proposed by its environmentalist-critics. More broadly, I hope that my critiques of the conservation biology movement will assist in the positive development of endangered species conservation and environmentalism writ large in the Rocky Mountain Northwest.

The findings and analysis of the dissertation come from two sources: documents and interviews. The documents examined include government publications such as the grizzly bear reintroduction EISs, transcripts of the public meetings held as part of the EIS process, conservation proposals by grizzly bear ecologists, advocacy literature published by environmental organizations, press releases by politicians, and newspaper editorials and letters. **Figure 1.2** represents the various actors in the debates and their "products" – the documents, policies, and practices examined as part of the dissertation research process.

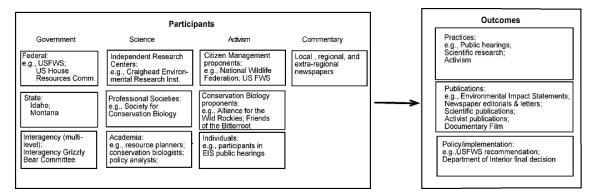


Figure 1.2. Objects of Analysis: Bitterroot Grizzly Reintroduction Debate Participants and their Outcomes/Products

I interviewed (in person, over the telephone, and over email) individuals representing a variety of groups involved in the reintroduction debates, including Federal Government employees, scientists, environmental activists advocating the Citizen Management proposal, and environmental activists advocating the Conservation Biology proposal. The majority of the document collection and the in-person interviewing took place during the summer of 2003 during a three-month stay in Idaho and Montana. Invaluable was the unlimited access I was granted to the extensive and well-organized collection of documents pertaining to the Bitterroot reintroduction debates housed at the FWS Grizzly Bear Recovery Office in Missoula, Montana.

1.4. Organization and Overview of the Dissertation

The dissertation is organized into six chapters following this introduction. In Chapter 2, I outline what I perceive to be the three dominant approaches to 'critical' nature-society geography. Critical nature-society geography reflects the broader trend within academic geography of scholars integrating the insights of various critical social theories into their methodological and philosophical frameworks for analysis. One result of this "critical turn" (Sayer, 1989, p. 206) in human geography has been new approaches that, each in their own way, challenge the status quo in environmental geography, rework existing and potential nature-society relationships, and open up previously uncharted analytical, methodological, and political terrain. In this chapter, I outline the primary philosophical and political underpinnings of these three frameworks – Marxist geography and the production of nature, the social construction of nature, and nature as discourse.

In Chapter 3, I present my case for environmental pragmatism as a fourth critical framework for nature-society analyses. This argument entails both a positive formulation of pragmatism and a critique of the existing critical frameworks outlined in the previous chapter. Positively, I develop and defend pragmatism as a philosophically and methodologically robust framework for examining environmental politics. Further, I argue that pragmatism offers a politically enabling framework for an environmental*ist* analysis of the politics of nature. Woven throughout my articulation and defense of environmental pragmatism is a thoroughgoing critique of the now-dominant critical paradigms, which I find (in places) philosophically and politically wanting. I hope to make clear in the chapter that I am not proposing environmental pragmatism as a wholesale replacement for existing frameworks. Nor do I see pragmatism and the others as mutually exclusive projects. Rather, I hope to establish the appropriateness of pragmatism for the type of analysis I aim to put into practice, all the while noting the methodological and political barriers that the other critical frameworks present for such a project.

Chapter 4 begins my review and analysis of the Bitterroot grizzly bear reintroduction debates. In this chapter, I map the development of the environmental philosophy of deep ecology in the US. I examine the influence of deep ecology on the science of conservation biology and specifically one of its more radical offshoots, the "rewilding" movement (Barlow, 1999; Soulé & Noss, 1998). This is followed by a review of recent academic critiques of deep ecology – critiques which are also, I find, quite relevant to the rewilding movement. These sincerely sympathetic critics share the

basic aspirations of deep ecologists, but none the less (in different ways and to different degrees) find deep ecology unnecessarily divisive, philosophically suspect, and politically problematic. As I find deep ecology, conservation biology, and the rewilding movement to be primary determining influences on the environmentalist coalition that crafted the Conservation Biology alternative for Bitterroot grizzly recovery, these investigations frame my initial review, explanation, and critique of the Conservation Biology alternative. After considerable review, I find that the deep ecology critics are basically right – that the rewilding movement is divisive, "self-congratulatory" (Fox, 1990, p. 120), and imparts a problematic politics. The Conservation Biology alternative, following this path, emerges riddled with unresolved inconsistencies and questionable foundational claims.

In Chapter 5, I critically evaluate the Citizen Management alternative for Bitterroot grizzly bear recovery. To situate the examination of this proposal, I offer a 'geo-history' of the Federal lands in the Bitterroot region, as well as an extended review of the Endangered Species Act. The ESA review focuses on the aspects of the Act that were the most controversial components of the Citizen Management proposal. Following these reviews, I examine the rhetorical and representational devices through which Citizen Management proponents attempted to gloss over the inherent inconsistencies in the proposal and affix a sense of inevitability to the prospect of Federally-mandated grizzly recovery proceeding in the region.

Chapter 6 revisits the Conservation Biology alternative. This chapter is divided roughly into two sections. In the first, I examine some contested components of the reintroduction debates through the lens of contemporary environmental ethics. Assessing the recovery alternatives through two prominent litmus tests for environmental morality – animal rights and holistic ecological ethics – I show how the Conservation Biology alternative could easily appear as definitely favorable to the Citizen Management proposal under both considerations. I contest the apparently self-evidentiary nature of this conclusion using a Deweyan pragmatist methodology that both serves to critique the foundational bases of the ethical claims of right action and offers an alternative method of assessing the validity and justness of normative proposals. I begin the second section of the chapter with a detailed examination of the adamant opposition to the Citizen

Management proposal by Conservation Biology proposal advocates. Further developing the analyses initiated in Chapter 4, I give more empirical weight to my preliminary conclusions that the Conservation Biology proposal was both internally inconsistent and politically problematic. I focus particularly on the persistence and upholding of the rigid science/politics divide that was foundational to the Conservation Biology alternative proponents' opposition to the Citizen Management alternative. Following this admittedly rather biting critique, I attempt an explanation of how and why the scientific-foundationalist model arose and has so resolutely persisted. This explanation – placing this model of environmentalism within the broader movement – helps bring to light this brand of activism's positive role and necessary niche within environmental protection.

Chapter 7, the concluding chapter, revisits the Citizen Management proposal. Following the (self-imposed, but as I see it mandatory) environmental pragmatist insistence on contributing to the development of more defensible policy, politics, and activism, I judge whether the Citizen Management proposal might have been a preferable and defensible course of action. Initially, I compare the economic components of each proposal, and find the Citizen Management proposal more attuned and sensitive to the sociopolitical and economic climate of central Idaho. This in itself, however, can not justify an endorsement of the Citizen Management proposal. After all, this is a grizzly bear conservation and not an economic development proposal, and it needs to be judged as such. To further judge the defensibility of the Citizen Management proposal, then, I begin with a review of the collaborative community-based conservation model upon which the proposal is based. I come out in agreement with proponents of community conservation, seeing this model as more democratic than traditional top-down Federal lands management and more open-ended in nature than proposals assuming an idealized and fixed socio-spatial-ecological end-result. Moreover, the history of the West particularly socioeconomic conditions in much of the rural West – seem to justify the Bitterroot region as an appropriate and hopeful site in which to commence such an effort. In response to the potential charge that I only reviewed literature sympathetic to, indeed promoting, the community conservation model, I would respond that this review was preceded by a careful analysis of some of citizen-based conservation's fiercest critics the conservation biology advocates in the Rocky Mountain Northwest.

Following the review and assessment of the community-based model, I outline the FWS's official response to the most strident critiques leveled by Conservation Biology alternative proponents. This explanation is necessary for a couple of reasons. First, it was not included in full in the discussion of the Citizen Management proposal in Chapter 5. Secondly, it provides a very reasonable defense, albeit of the admittedly narrow aims of the proposal. Realizing, however, that restating the official response to a proposal viewed by its critics as unacceptable compromise would do little to alter the opinions of these same critics, I then project several scenarios that might have come to pass if the Citizen Management proposal had been implemented. In projecting these 'what if' scenarios, I find that at worst, implementation of the Citizen Management proposal leaves us in no worse shape than before. More significantly, projected with any degree of optimism (optimism that I argue is warranted based upon my review of community conservation in the previous section), I see the Citizen Management proposal emerging as a positive step toward the broader goals of grizzly bear conservation and, more broadly, environmental sustainability in the region.

1.5. Roads not Taken

To conclude this introduction, I would like to mention a couple of 'roads not taken' in this research project. In the initial phases of the project, such as when I was applying to external funding agencies for travel expenses, I proposed something along the lines of a "comprehensive analysis of one long-standing ecologically and socially significant debate." As I attempted to outline what this project would ultimately end up looking like, and moreover as I read dozens of institutional, academic, and journalistic accounts of the debates, I soon realized that this project had already been completed by many others. Indeed, it had already been completed by many others much more 'inside' the debates than myself (as I initiated this project just before it was tabled by Secretary Norton, there was little opportunity to get inside the conflict). It seemed presumptuous, then, to assume that I could offer much that was substantively and analytically fresh at such a broad, overview scale. Even more problematic was trying to get any purchase on what exactly would be my lines of analysis in attempting some or another "comprehensive critical review" of the debates. So I decided to focus my efforts on finding some aspect of the debates not yet fully explored, or perhaps at least not yet 'critically' explored; my sense being that a more limited but more focused analysis would ultimately yield more original insight into this debate, and, just as significantly, be of greater relevance to the study and practice of environmental politics Hopefully my review of the debates that is still a large part of the dissertation is adequately "comprehensive" so that a reader with little or no knowledge of this conflict can still understand its broader import, as well as appreciate this work's specific contribution.

But even with all that said, the limited focus did obviate the review and analysis of at least one important component of the debate. Probably the most conspicuously absent characters in the dissertation are the outright opponents of grizzly recovery, and, as can be judged by the quick-and-easy termination of the reintroduction program, this opposition was no marginal force. Studying the power-politics of anti-conservation forces could certainly have resulted in an equally important contribution, but would have necessitated a different (or at least an enormous additional) collection of documents, research sites (e.g., Boise, Idaho and Washington, DC), and interview subjects. More likely than adding one more dimension to *this* project, however, would have been the development of a different project altogether.

It may indeed be true that the closure of the project was little more than a backroom deal brokered between the newly elected duo of Idaho Governor Dirk Kempthorne and President George W. Bush (both foes of environmentalism, it is fair to say). Even so, it seems fair to state that a less internally divided environmental movement – more specifically, one less hostile to creative if risky compromise – *would have*, to some degree or another, made it more difficult for the Bush administration to rather quietly terminate the entire Bitterroot grizzly bear recovery process. So there is a 'small picture' and a 'big picture' relevance to the framework I chose – small picture: intra-environmental divisiveness hindered (albeit to an unknowable degree) the implementation of Bitterroot grizzly recovery; big picture: a more unified environmental movement will be more successful, on the ground, in the future (Norton, 1991; Light, 2004).

Chapter 2. Nature: Now, More than Ever, Critical to Human Geography

2.1. Introduction

Despite two decades of a human geography increasingly infused with the insights of social theory, in 1989 Margaret FitzSimmons would be moan geography's "peculiar silence on the question of social Nature" (FitzSimmons, 1989, p. 106). Over the next decade, however, the silence would be replaced by a roar. Indeed, in 1998 Noel Castree and Bruce Braun would proclaim that "Nature ... is on the agenda as never before" (Castree & Braun, 1998, p. 3). But what exactly is the "nature" that Castree and Braun (correctly) claim is so prominently on "the agenda"? To answer this question, I will trace the development of three primary (and more or less chronological) streams of 'critical' nature-society geography: the production of nature, the social construction of nature, and nature as discourse. These frameworks rose to prominence in the geographical literature in a more or less chronological fashion, echoing broader social-theoretical trends within the discipline. Each of these frameworks, for different reasons and in different ways, places the idea that we can know, speak for, or save 'nature' under relentlessly skeptical scrutiny. They all present very direct challenges to 'status-quo' environmental geography. Addressing (and when necessary *redressing*) these challenges is a necessary component of any contemporary 'critical' environmental geography. To take up this task, I will review and critically assess each of these perspectives, outlining their foundational philosophical and political commitments, all the while critically assessing the consistency, veracity and tenor of their claims.

2.2. Critical Nature-Society Geography I: Marxist Geography and the Production of Nature

I begin my review and discussion of the production of nature thesis with the statement that, of the three theses reviewed in this section, the production of nature thesis is the one that I find the most helpful and useful for this research project. As such, out of these three theses, the production of nature is the one that will most directly inform the empirical analyses in chapters four through seven. Echoing Raymond Rogers, my goal is to formulate a theoretical framework for analysis that registers the "embeddedness"

(Rogers, 1994, p. 20) of human beings and cultural institutions *in nature*. Suffice it to say for now that it is my contention that the production of nature thesis does forge a theory of human embeddedness in nature (although it does so in a problematic fashion, a point which will be returned to in detail), while the social construction of nature and nature as discourse theses too readily veer toward a *disembedding* of things human *from* nature (again, a point which will be returned to later). With that said, I will review the arrival of Marxism to academic geography, followed by an elaborated discussion of the production of nature thesis.

Not surprisingly, the radical fervor of late 1960s – centered on issues of racism, sexism, the despoliation of the environment, and a general left outrage toward the Vietnam War - spurred a radicalism in segments of even the most conservative of academic disciplines (Peet, 1969, 1997). Geography proved no exception. In 1969, Antipode: A Journal of Radical Geography was founded for the express purpose of publishing overtly radical-political academic research: "We believe that involvement in the problems and inequities of an affluent but ailing nation is *the* critical issue and that the era of the academic ostrich has at long last come to an end" (Peet, 2000, p. 67). The bulk of the initial radical intervention was more form than substance, however, as early radical geographers remained reliant upon conventional methodologies and assumptions. What these methods lacked was any way of connecting "social issues to their origins in societal structures" (Peet 2000, p. 75). Space was an isometric plane and society was made of individual rational economic agents. What had become "scientific" geography could only ask questions that at the end of the day always managed to "justify the [existing] economic system" (p. 74). To truly break free of the limitations and ideological bases of "bourgeois modes of thought and analysis" (Slater 1997, p. 48) many radical geographers quickly turned to the *social theory* of Marxism.

Clearly, this is not the place to attempt to write the *n*th synopsis of Marxian political economy or social theory, but it is important to flesh out in a bit of detail some of the ways in which Marxist geography signaled a true departure from mainstream social science. This discussion is necessary as it marks the initial infusion of *any* critical social theory into academic geography. The two discussions that follow this one – on nature

constructionism and nature as discourse – are continuations of social theory-informed geography, and logically follow this thread.

In the two decades prior to the Marxist intervention, geography had moved from rather non-theoretical descriptive regional geographies to a more self-described scientific, theory-based quantitative geography.² The latter, the "spatial science" that took off in the 1960s, was for the most part a new (to America, anyway) economic geography which drew heavily on the earlier "commercial geographies" of European theorists such as Christaller, von Thünen, and Lösch (Gregory, 1994, p. 59). The foundation for the new spatial science was a rather uncritical appropriation and deployment of metaphors from neoclassical economics (rational landscapes and rational human action) and physics (spatial diffusion, spatial interaction). Early Marxist geographers cited (among other problems) two glaring deficiencies in this foundation: first, the assumption that society is comprised of disconnected, rational individuals unaffected by social structures and processes; secondly, that the physics-based spatial modeling made no connections between spatial form and social structures and processes. Established Marxist-materialist theory immediately remedied the former of these deficiencies and potentially could, it was thought, if properly applied, remedy the latter as well. Marxist geographers set out to challenge "the previously hegemonic 'spatial science'... [by turning the argument] on how the relation between space and society should be conceptualized" (Massey, 1994, p.254):

[While the] spatial scientist has posited an autonomous sphere of the spatial in which 'spatial relations' and 'spatial processes' produced spatial distributions, ... [the Marxist critic sets out to show that] all these so-called spatial relations and spatial processes were actually social relations taking a particular geographical form... The aphorism of the time was 'space is a social construct'. That is to say ... space is constituted through social relations and material social practices (p.254).

The first geographer to move well beyond aphoristic polemics and forge a Marxist geographical theory was David Harvey. His second major work, 1973's *Social Justice*

 $^{^2}$ This comment is not meant to disparage descriptive regional geographies as a wholly unworthy endeavor, but I will not review this geographical paradigm because it does not really inform or influence my research project. Nor is this comment meant to imply that spatial science simply replaced regional geography (indeed, this vein of regional geography still exists, but these geographers make up a significantly smaller cadre of the discipline than they did in the 1950s and 60s). One 'take home' point here is that spatial scientists did forge their theories as explicitly theory-based, in opposition and reaction to non-theoretical regional geographies.

and the City (Harvey, 1973), "records Harvey's move from a liberal, critical, position focused on ethics, to a Marxism based in the science of historical materialism" (Peet, 2000, p. 75). His experience in the inner city of Baltimore (he was then a professor at Johns Hopkins) combined with his readings of Marx made him acutely aware of the necessity for a radical, *materialist* theory of urban space (Peet, 2000). But how, exactly, does Marxist materialism offer a departure from the methods of 'bourgeois social science'?

Developed throughout his early philosophical works, Marx's materialism was foremost a deliberate repudiation of philosophical idealism. Marx's most concise and famous materialist maxim states that "it is not the consciousness of men that determine their being, but, on the contrary, their social being that determines their consciousness" (Marx, 1994, p. 211). Citing this one sentence out of context is not to suggest that a Marxian materialism crudely postulates a one-way determinism; Marxian dialectics is clearly more nuanced than any such cursory reading might suggest. The materialist fiat does, however, intentionally counter the idealist premise that ideas constitute the *primary* determinants of social change. To forge a radical theory, then, studying ideas and working toward changing what people *think* is inadequate. The site of social change (and therefore, the primary focus of Marxist analysis) must be the social structures that (again, to a great extent for any materialist, but to what extent is of course highly contestable) determine the ideological foundations of any society. The geographic analogue of the materialist critique of idealism lies in the materialist debunking of "spatial fetishismthat is, [mainstream] geography's restriction of causality to the spatial realm" (Peet, 2000, p. 110). Claiming that a certain aspect of the urban form³ under capitalism, perhaps the depression of a particular industrial region, for example, causes a particular geography of poverty is patently ideological. Such simplistic explanations obfuscate the

³ And, for early Marxist geographers, the urban did serve as something of a stand-in for all social space. As FitzSimmons (1989) argued so effectively in "The Matter of Nature," the near-exclusive concern with the urban (to the exclusion of the rural and undeveloped or less-developed lands) prefigures an analytical bias that tends to marginalize questions focusing on, for example, environmental problems not directly associated with cities. Harvey provides a succinct example, when he appears to find everything he needs for a comprehensive social analysis in the city: "Urbanism appears as a vantage point from which to capture some salient features in the social processes operating in society as a whole—[the city] becomes, as it were, a mirror in which other aspects of society can be reflected" (Harvey, 1973, p.16) This urban bias in Marxist social science has been remedied to a reasonable extent since FitzSimmons published her groundbreaking essay.

fact that the constant annihilation and renovation of the landscape (urban or otherwise) is a requirement for the ongoing reproduction of capitalism. The unceasing quest for capital accumulation *produces* space – as a geography of uneven development. Thus capitalist production spatializes the poverty which is already a necessary component of the capitalist mode of production (Harvey, 1973). Harvey would dedicate about two decades and several books toward his development of an adequately spatialized (and contemporized) reading of Marx's late political economy (i.e., all three volumes of *Capital* and the lesser-known three volume *Theories of Surplus Value* (Harvey 1982)).

Harvey was, of course, not without his critics. With the publication of the 1980 Annals essay "The Socio-Spatial Dialectic," Edward Soja set out to craft a more nuanced Marxist (or perhaps post-Marxist) materialist theory of space. Soja critiqued Harvey's conception of space as too deterministic, implicating space as "simply an expression of the class structure emerging from the social (i.e., aspatial) relations of production" (Soja, 1980, p. 208). The title of Soja's paper quite effectively outlines much of his thesis. Arguing for a "socio-spatial dialectic," Soja is proposing a 'third-way', one which doesn't fall prey to an uncritical spatial fetishism, where space and (social-) spatial forms are autonomous of social structure (as employed by spatial scientists), but also doesn't go too far in the other direction by evoking causality as somewhat unidirectionally *from* the social to the spatial (the framework Harvey resists, but still tends toward, according to Soja). Soja's "socio-spatial dialectic" is still materialist, locating this dialectic as "one defined component of the general relations of production" (Soja, 1980). By adequately registering the dialectic nature of this (and other) relations within capitalism, Soja argued, rather than getting bogged down in irresolvable discussions of *causality*, more fruitful lines of discussion and analysis are opened up.

My point here is not to take sides on the Harvey-Soja debate. Rather, my intent is to use this brief review to highlight both the fundamental tenets of the integration of Marxist materialism in geography (the radical transformative spirit; an analytical focus on social structures) and some key points of contention within early Marxist geography (problems of causality and determinism; the 'place' of space within Marxist theory). Space, of course, has never been the sole concern of disciplinary geography. The emphasis on space and spatial theorizing within early Marxist geography was probably more than anything reflective of the fact that the first wave of Marxist geographers was dominated by urban-economic geographers attempting to counter the spatial science that had achieved some degree of hegemony within the discipline. It wouldn't be long, however, before Marxist geographers would tackle another longstanding problematic of disciplinary geography – 'the matter of nature'.

Neil Smith elaborately developed the production of nature thesis his 1984 book Uneven Development (Smith, 1991).⁴ Smith prefigures his theoretical contribution with an historical review of the modern conception of nature, which he argues, is fundamentally contradictory and ideological. The modern conception of nature as external to human society is traced back to Francis Bacon. For science (since Bacon) nature is external "in the sense that scientific method and procedure dictates an absolute abstraction both from the social context of the events and objects under scrutiny and from the social context of the scientific activity itself" (Smith, 1991, p. 4). With the objectification and externalization of nature, science and scientists inherit an automatic and exclusive authority (an authority that science has more or less managed to retain to this day). For it is only through scientific method that nature can be known in its true sense. Science produces truth. Truth – about nature – is those statements that reflect nature in its objective, non-social, unfiltered form. This is an ontological as well epistemological claim. Ontologically, there is a nature that is external to human history. Epistemologically, science provides the procedure through which humans can filter out the 'noise' of sociality and history and comprehend the external objects and universal laws of nature.

The externalization of nature did not, however, simply supplant previous conceptions of the *universality* of nature (e.g., nature as cosmos, nature as the 'book of God' – conceptions in which humans are a part of nature). Universal nature still existed as natural processes (*laws*), space and time, and the fundamental physical bits of nature (matter). Smith argues that there is a conceptual dualism buried within the modern conception of nature: First, there is external nature, objectified in the labor process. But no matter how efficient this labor process becomes, no matter how much external nature

⁴ This review of Smith's theory is from the 1991 second edition of *Uneven Development*, but the additions to the second edition did not constitute a major revision of the book, and certainly not of the production of nature thesis, which is but one subset of Smith's larger argument.

is 'mastered', humans are still subject to natural laws (i.e., still at the whims of universal nature). The irresolvability of this dualism underpins the ideological character of the modern conception of nature. Smith takes ideology to be

an inverted, truncated, version of reality..., not simply a set of wrong ideas... [but rather] ideas rooted in the practical experience...of a given social class which sees reality from its own perspective. Although in this way a partial reflection of reality, the class attempts to universalize its own perception of the world (Smith, 1991, p. 15).

Thus prevailing dominant conceptions of nature will reflect the ideology of the dominant class. Regardless of the contradictory character of a simultaneously external and universal nature, either conception can be drawn upon (selectively yet unproblematically) to justify various normative pronouncements or productive activities. External nature can justify its subjugation (as mere matter, latent profit, or hostile domain) or its protection (as presocial, undefiled wilderness). Universal nature can

invest certain social behaviors with the status of natural events, by which it is meant that these behaviors and characteristics are normal, God-given, and unchangeable. Competition, profit, war, private property, sexism, heterosexism, racism, the existence of haves and have nots or of 'chiefs and Indians' – the list is endless – all are deemed natural. *Nature, not human history, is made responsible* (Smith, 1991, p. 15-16, emphasis added).

Smith argues that the contradiction of external/universal nature must be attenuated for its ideological (class-favoring) power to be maintained. But in the end, "the possibility of the socialization of universal nature is denied" (p. 16). The "socialization of universal nature" – Smith's ideal – would register the fact that there can be no nature external to the social. There is no external nature to subjugate or 'save'; likewise there is no universal (nonsocial) nature from which timeless, universal (social) morals can be gleaned. In his move from review to theorization, Smith adopts the more Marxist term "production" whereupon the human relation with nature (writ large) is theorized *as* "the production of nature."

Smith rarely shies away from making broad, bold statements, and the opening to the second chapter of *Uneven Development* (titled "The Production of Nature") proves no exception: "The function of this chapter...is to renovate our conception of nature in such a way that the dualistic world of bourgeois ideology can be reconstituted as an integrated

whole" (Smith, 1991, p. 32). Smith takes Marx's anthropological conception of production (from *The German Ideology*) to be the central, defining statement on the human-nature relation. Marx depicts "production [in general] as a process by which the form of nature is altered" (p. 35). A "producer" changes nature to make it useful to him or her and as such nature is changed in the production process. But the alterations inherent to the production process do not act solely in the direction of human \rightarrow nature. In the process of production, the human being is changed as well. Physical, material changes in the human being are required to fulfill the production in process, and the makeup of these changes is a product of the natural properties of the 'nature' being produced. But "production" itself clearly remains specific to humans: "It is human productive activity ... as an historical act designed to create means of subsistence that *differentiates* human beings from animals" (p. 37, emphasis added). A beaver building a dam, then, is not the production of nature, but a human building a dam is.

Defined as such, even though the dialectical (two-way) character of the "alteration" inherent in every act of production is noted, the production of nature clearly denotes the human production of non-human nature. As Mick Smith notes in his critique of eco-Marxist theorizing in general, the production of nature thesis holds an undeniably "explicit emphasis given to human activities and influences" (Smith, 2001, p. 90). When "the production of nature" stands in for all of nature, as it seems to for Neil Smith, the ambiguity of the foundational construct 'production' arises as problematic, particularly when deploying the theory to analyze, as in the example of my research project, debates over an endangered species. To place the debates over grizzly reintroduction in a production of nature framework, then, do we "widen the definitions of 'labor' and 'production' so far as to include nature as an *active* partner in the dialectic" ([Mick] Smith, 2001, p. 92)? We could, but how then would "the production of nature" be any more specified – and hence analytically useful – than, say, "society-nature relations"? As Stephen Seidman notes, we seem to be left with a choice: "[t]he category of 'productive' activity either expands to include virtually all human practices, in which case it is useless as a conceptual strategy, or it narrows arbitrarily to economic laboring activity" (Seidman, 1992, p. 57, in Smith, 2001, p. 101) (after which, I would argue, it is far too

narrow a category to be a central analytical construct for many research projects, this one included).

But perhaps, for an analysis of environmental *politics*, the production of nature thesis need not be accepted or rejected in its entirety; that is, *either* accepting it as The Theory of The Human Relation with Nature, *or* rejecting it on the grounds of its narrow reliance the upon the Marxist "production paradigm" (Smith, 2001, Chapter 3). Perhaps there are moments within the production of nature thesis that can be employed effectively to open up avenues for analysis that would be missed if a less explicitly critical-political framework were used. The production of nature provides, for example, *one* highly critical but serviceable 'window' through which to asses the mainstream American environmentalist "fixation on [the] purity" of wilderness (White, 1995, p. 185). More similarly qualified appropriations will follow in the empirical chapters, but for now, I will continue with the review of the production of nature thesis as developed in *Uneven Development*.

Following the discussion of production in general, Neil Smith moves into a more specific discussion of "capitalist production" and the production of nature under capitalism. Two major points are worth foregrounding: (a) "Under dictate from the accumulation process, capitalism as a mode of production must expand continuously if it is to survive"; and (b) "[The state] attempts to ensure the economic conditions necessary for accumulation. In short, it expedites and arbitrates the stable expansion of capitalism" (Smith, 1991, p. 49). Let me briefly flesh out the relevance of these points for environmental politics. Regarding point 'a' – the endless expansion of capitalist production – taken from a geographic standpoint, this denotes that no parcel of nature can remain forever out of reach of the sphere of production for profit. On the one hand, this could be read as a mandate to ratchet up the removal of selected parcels of nature from "productive activity" (at least productive activity in the obvious sense, such as timber cutting or mining or suburban development) through protective measures such as designating wilderness areas, parks, refuges, etc. On the other hand, it could be argued that such paper protection should by no means ever be perceived as permanent protection of nature.

The recent "Roadless Area Conservation Rule" provides a good example. Passed by executive order in the final days of the Clinton presidency, this rule states that no new roads may be built in the 58 million acres of existing roadless national forest lands (Taylor, 2003). This proposal was viewed by many environmentalists to be the most "far reaching" environmental initiative passed during the Clinton administration (Coile, 2003). The Bush administration has floated several proposals which would considerably weaken the rule. One most recent proposal, if passed and implemented, would allow Western governors to petition to have portions of national forests within their states exempted from the rule. Clearly, then, the Roadless Rule by itself cannot ultimately resist capital's "cancerous imperative to expand" (Kovel, 2002, p. 51), as many Western governors (the majority of whom are anything but 'eco-friendly') would waste no time in petitioning for exemptions on economically valuable swaths of roadless forests. From a more general materialist sentiment, it could be argued that under the capitalist mode of production, a nonexploitative human relationship with nature is altogether impossible. Here and there, we may be able to (more or less permanently) remove some parcels of nature from ecologically degrading productive activities, but the landscape as a whole will remain "sacrificed to accumulation" (Kovel, 2002, p. 82). The blocking off of wilderness areas would be viewed by most Marxists (including Neil Smith, I suspect) as creating "false boundary lines" (Kovel, 2002, p. 213) that produce the illusion of the protection of nature all the while working within the confines of a system bent on its destruction. This dire assessment is not grounds to dismiss support for wilderness or parks protection, but it does stand as a warning that these measures, at best, should only ever be considered part of the solution. If the goal is a sustainable society, the radical imperative must remain foregrounded.

Regarding point 'b' – the state's role as arbiter of capital accumulation – we are made aware that, under capitalism, it is false to perceive society as split into two discreet sectors, a private capitalist sector (under dictate of the profit motive) and a public governmental sector (under multiple dictates, e.g., social services, national security, environmental protection). The governmental sector – the state – cannot be counted on to protect nature from capitalism because the primary function of the state is to "ensure the economic conditions necessary for accumulation" (Smith, 1991, p. 49). The capitalist state can ultimately only 'save' enough nature as will still allow (inherently unsustainable patterns of) economic growth to continue. Environmental political strategies that focus strictly on land protection via Federal legislation – for example, seeking endless injunctions in Federal court through endangered species act petitioning – are fighting an unwinnable war. This theory of the capitalist state reinforces the imperative for a radical environmental politics, because "that which does not confront the system becomes its instrument" (Kovel, 2002, p. 171).

One additional component of Smith's production of nature thesis is worth reviewing. This is the insistence that now, in contemporary society, there is *only* produced nature. Smith argues that National parks serve as the prototypical examples of

supposedly unproduced nature. These are produced environments in every conceivable sense. From the management of wildlife to the alteration of the landscape by human occupancy, the material environment bears the stamp of human labor...Yosemite and Yellowstone are neatly packaged cultural experiences of environment on which substantial profits are recorded each year (Smith, 1991, p. 56-7).

I am confident that Smith would argue that this same line or reasoning applies even to wilderness areas. Although less obtrusively "bearing the stamp of human labor" than Yosemite or Yellowstone (which include, for example, hotels and swimming pools), wilderness areas are still the products of human labor. A wilderness area could never exist without, for example, the ecologists who propose it, the activists who fight for it, and the politicians who seal the deal. Once designated, a wilderness area can only be maintained through the *real work* of "wilderness management" (Hendee et al., 1990). The lesson, then (short of revolutionary systemic change), is that it is impossible to speak for, act on behalf of, protect, or 'save' nonhuman nature without bringing the nature-assubject fully into the "social production process" (Smith, 1991, p. 60). Every act of conservation is necessarily social and political. If "the production of nature at the global scale...is the goal of capital" (p. 62), then we *must* seek out a place within the system for the protection of some aspects of nonhuman nature from the vagaries of capitalist production. The logic here is little different from the impetus for developing social services designed to protect the low-income laborer, the unemployed, the sick or the elderly from the same potential ill-fate that capitalism – necessarily blind to its victims – bestows upon them. The question, Smith concludes, is not whether and where we

produce nature but "*how* we produce nature and *who* controls the production of nature" (p. 63). Point taken. The protection of nature – seen as the production of nature – foregrounds the inescapable political difficulties of forging an ecological politics within and/or against capitalism.

The production of nature thesis has been relatively influential within human geography. Numerous studies have taken the basic challenge as presented: that Marxism provides a more penetrating avenue of analysis for ecological problems than established methods such as "technocentric ... [analyses of] most environmental and resource geographers...advocating the elusive, if appealing, notion of 'sustainable development'" (Castree, 2000a, p. 277), "ecocentric ... [analyses which] put nature first and argue for a more harmonious human-nature relationship" (Castree, 2000a, p. 277), or "tragedy of the commons" explanations of resource use and depletion (Roberts & Emel, 1992, p. 251). While Marxists would have different specific objections to each of these analytical frameworks, the production of nature thesis points to common deficiencies as well. For one, all three share the "assumption of an external nature" (Castree, 2000a, p. 277), and as such suffer from the ideological trap of unproblematically gleaning causal explanations and normative solutions from an objectively known, asocial nature. Externalizing nature (a) fails to register the social and political grounding of all naturalistic explanation, and (b) wittingly or unwittingly tends to "embrace the existing economic, political, and social order" (Castree, 2000a, p. 277). These research frameworks also all tend toward evoking the specter of "natural limits," a construct that most Marxists (starting with Marx, actually, in his extensive and trenchant critique of Malthus) are loathe to legitimate. And, of course, these methods usually fail to locate the causes of ecological problems in the inextricable socio-political-ecological structures of capitalist production, and consequently fail to imagine non-capitalist (i.e., radical) alternatives.

This evidence of the influence of Marxism and specifically Smith's production of nature thesis in human geography notwithstanding, Marxist nature-society geographers are a fairly small sub-cadre within the broader nature-society tradition.⁵ It should

⁵ The lack of a strong Marxist cadre is particularly apparent within "First World" nature-society studies, although Marxist and 'neo-Marxist' political ecology has long been a fruitful analytical framework for

probably come as no surprise that Marxism never attained any sort of dominance within nature-society geography. Even in economic, political, and urban geography, the original 'home' of Marxist geography (and arguably the subdisciplines within which the Marxist framework is most directly applicable), Marxism remains a framework practiced by a few, engaged with by a few more, but more or less despised or ignored by the majority. The most direct 'challenge' to Marxist nature-society geography has been a series of internal critiques that parallel broader changes taking place within (more or less) 'radical' geography. As the dominance of Marxism within radical geography gave way to manifold 'post-isms' (e.g., postmodernism, post-Marxism, poststructuralism) and a move from 'radical' to the more tempered 'critical' geography, Marxist nature-society geography increasingly yielded to studies which foregrounded the so-called "social construction of nature."

2.3. Critical Nature-Society Geography II: Constructed Nature(s)

Nature is a part of culture... Our experience of the natural world – whether touring the Canadian Rockies, watching an animal show on TV, or working in our own gardens – is always mediated. It is always shaped by rhetorical constructs... To speak uncritically of the natural is to ignore these social questions (Wilson, 1991, p. 12).

Important political issues are at stake in questions about the social construction of nature and environmental problems (Demeritt, 2001a, p. 23).

I will preface this section by stating up front that I heartily agree with both of the above statements made by Alexander Wilson and David Demeritt. Yes, nature is (in a sense) constructed, and yes, recognizing the constructed nature of nature has significant political implications. That being said, by the end of the next chapter, I will have made a case against employing constructivist *rhetoric* in my analysis (all the while recognizing, acknowledging, and employing many of the *lessons* of constructivist critiques). My specific case against constructivism will be most fully worked out in the next chapter on environmental pragmatism. For now, in this section, I will outline the emergence of constructionist perspectives to nature-society human geography and highlight what I feel

[&]quot;Third World" environmental problems such as soil erosion (Blaikie, 1985; Guthman, 1997), tropical deforestation (Hecht & Cockburn, 1989; Peluso, 1992), and agrarian issues (Awanyo, 2001; Grossman, 1993). Whether and how political ecology marks a particularly useful 'lens' for "First World" nature-society studies has recently arisen as a topic of debate (McCarthy, 2002; Robbins, 2002; Walker, 2003).

are the primary tenets as well as some of the inconsistencies and problems with these perspectives.

During the late 1980s, a new wave of 'postmodern' social theories gained increasing prominence and influence within the social sciences, geography included. The most influential of the 'new' social theories in academic geography, and political naturesociety studies specifically, has been poststructuralism. The interfusion of poststructuralist theory and geography posed profound new philosophical and methodological challenges to radical and non-radical scholars alike. And politically, even as the "postmodern turn" (Best & Kellner, 1997) in the social sciences has (correctly) been associated with the political left (Demeritt, 2001a), the imperatives of poststructuralism (for its proponents) marked substantial shifts in the potential and desirable goals of left politics as well as the means through which they could and should be achieved. Although I make no claims that the following in any sense represents an exhaustive summary of poststructuralist theory, I will highlight three components, broadly shared by poststructuralists, which directly relate to my immediate discussion of the effects of the postmodern turn specifically on nature-society human geography. These are (a) an abandonment of the quest for certain truth(s), and with it the dismantling of the methods, theories, and particular investigations that comprise the scholarly production of truth (Haraway, 1997; Sayer, 2000); (b) the cultural-linguistic turn, whereby the objects of inquiry shift from the material to the always-already represented, and the modes of investigation and description shift from supposedly naïve representation to interpretation, particularly to textual and discourse analysis (Barnes & Duncan, 1992; Poster, 1989); and (c) within left circles, a rejection of a politics of solidarity aimed against a perceived singular oppression in favor of a politics emphasizing difference, identity, alterity, and play (Butler, 1990; Harvey, 1989).⁶ The postmodern turn would have a profound impact upon nature-society human geography.

⁶ My insertion of two references per bulleted point is not arbitrary. Obviously, for points as broadly stated as these, there are numerous references that could have been cited for each. What I have done here is to split each reference between one representative proponent of the referenced poststructuralist imperative, followed by one author who acknowledges the challenge of the critique, but is critical of its acceptance. The three latter authors (Andrew Sayer, Mark Poster, David Harvey) are proponents of three broad schools of social theory (Critical Realism, Critical Theory/Frankfurt School, Marxism) which are generally critical of the more celebratory renditions of postmodernism.

I will foreground this discussion with a set of assumptions and resulting questions that more or less frame the 'problem of nature' (even though the development of each of these assumptions will come later in the section): If nature is neither (*a*) ontologically: an external, 'real' entity that can be taken-for-granted; (*b*) epistemologically: something that can be objectively investigated, understood, and represented; nor (*c*) categorically: a fixed, stable "sign" which can be unproblematically drawn upon in (social- *or* natural-) scientific discourse; then how can we, as geographers, ever begin to talk about, much less state "truths" about, nature's existence? What does it mean to 'do' nature-society geography at all? This is (at least partially) the shaky ground on which nature-society geography stands once the imperatives of critical social theory are imposed upon the endeavor. One way in which geographers (and other social scientists) have attempted to manage this quagmire is by refusing to talk directly about "nature" itself (since this is, according to select theories, impossible), but to qualify all such discussions as dealing with "the social construction of nature" instead.

First off, it is important to note that – unlike the production of nature thesis, which is certainly internally contested and employed in various fashions by different authors, but does stand as a more or less coherent 'entity' or 'theory' (in the singular), and certainly speaks to a broadly shared sense of politics – to speak of 'the social construction of nature' does not, without considerable qualification, reference any specific philosophical, methodological or political commitment. At the most general level, foregrounding the construction of nature probably signals more of a starting point for analysis than anything, a recognition that "we can never refer to nature – something knowable that exists outside us - unproblematically" (Bird, 1987, p. 260). The 'cut' that Bird is forging here is between constructionists (those who recognize the inherent difficulties of referencing "nature") and non-constructionists (those who fail or refuse to recognize these difficulties). This cut maps roughly onto Kate Soper's distinction between "nature-skeptical" and "nature-endorsing" perspectives. Nature-endorsers, for Soper, are ecologists and environmental advocates who tend to reference a "prediscursive nature which is being wasted and polluted," while nature-skeptics are those for whom nature is always and only constructed through "specific conceptions of human identity" (Soper, 1996, p. 22-3). For pragmatic reasons, I am more inclined to work with

Soper's typology than Bird's. Even if not by intention, the practical *effect* of Bird's proposal (as well as, I will argue, most other constructionists as well) is a rather wholesale dismissal of "nature-endorsers" brought about by foregrounding the nearly infinite reasons to be skeptical about 'nature'. Soper, on the other hand, is working to produce more defensible grounds for endorsing nature, and is wary of the dismissiveness that can easily arise from too radically-skeptical a perspective:

[I]t is one thing to expose the myth-making, another to dismiss the impulse to environmental ... preservation as unwarranted or irrational, since it speaks to an altogether justifiable alarm about the ecologically destructive and deracinating effects of modernity (Soper, 1995, p. 200).

But I am getting a little ahead of myself here by discussing the *effects* of theoretical perspectives; the task at hand is reviewing constructionist theories of nature.

Bird's 1987 essay on "the social construction of nature" is one of the earliest to reference this perspective by name, and it is a logical place to begin this review. Roughly mirroring the 'members' of Soper's nature-endorsing camp, the non-constructionist targets of Bird's critique are scientists who unproblematically refer to an external nature as well as environmentalists who (also unproblematically) base their normative programs in the findings and conclusions of science. Strong statements are made often and early in the essay. On the first page, we are told that "it has become philosophically unacceptable for scientists to claim to know the Truth about nature. The most that they can claim to know is a *relative* truth about nature" (Bird, 1987, p. 255). This statement represents a point of convergence within constructionist theory writ large. A large part of the project of constructionism is the dismantling of the notion that Truths can be stated; regarding nature, this refutes the idea that science has some unique and superior access to the 'real' through which unmediated and universal Truth statements can be made. This common ground established, there are philosophical-theoretical divergences regarding the grounds upon which to support this claim. There are also political divergences regarding, for example, the reasons one might self-identify as a constructionist or the substance and import of the various implications to be drawn from the 'fact' that all knowledge is partial.

Bird's essay is presented as a theoretical survey (subtitled "theoretical approaches to…"), so she (reasonably) is not advancing one particular theoretical framework over

other, but she claims that Marxism, science studies, and critical ethnography all "suggest that nature is inaccessible to representation, because scientific knowledge is a thoroughly social construct" (Bird, 1987, p. 256). For this statement to be convincing, two key terms would need to be sufficiently specified. The first is "representation." This is a highly contested term and its meaning is hardly self-evident, even in this context. Bird fails to theorize representation in the essay, and for this reason, this statement fails to register with much force. The second term needing qualification is, of course, "social construct," as to argue that nature is socially constructed because it is a social construct would be a laughable tautology. This term is not unequivocally defined in the essay either, but there are a few passages smattered throughout the essay that point to the crux of what it means to say that nature⁷ is a social construct, such as:

Scientific paradigms are socio-historical constructs—not given by the character of nature, but created out of social experience, cultural values, and political-economic structures (p. 256).

[W]e recognize environmental problems through a variety of... interests. Those interests, grounded in individual, collective, historical, cross-cultural, and visionary experience, are socially constructed (*negotiated through time*) and socially interpreted (through received metaphors, stories and ethics) (p. 256).⁸

It is worth noting that Bird here introduces an arbitrary and pointless distinction between "socially constructed" and "socially interpreted." The interpretation of nature through, for example, "received metaphors," is an integral part of – but is in no way distinct from – the social construction of nature.

I have devoted this much time to the discussion of this essay because it presages much of what would comprise the constructionist debates over the fifteen or so years that followed its publication. Perhaps most prominently, the dismantling of Truth is arguably the broadest philosophically- (and sometimes politically-) shared baseline of constructionists. The dismantling of Truth ushered in a strong epistemological relativism, or at least skepticism: As received knowledge is no longer viewed as statements about the world, knowledge increasingly becomes just another subject for critique and

⁷ Although it seems that – despite the title of the essay ("The social construction of nature") – Bird is arguing most specifically that scientific knowledge is socially constructed, a much less controversial stance that arguing that nature *per se* is a social construct.

⁸ The italicization is mine. In each passage I have placed the quasi-definition, as I read it, in italics.

reinterpretation. The ability to 'say anything' about the world is rendered increasingly problematic. Secondly, the issue of representation – an issue of paramount importance in poststructuralism – is foregrounded (even if it is not fully worked through in this essay). Thirdly, a rather clean (and problematic) break is established between 'scientists' and 'constructionists', the latter being the only philosophically defensible camp. A fourth issue is the ambivalence as to whether constructionism refers solely to conceptual "natures" (and all constructionists share this common ground; that is, that constructionism marks an epistemological critique) or whether it speaks to the ontological construction of material "natures" as well. This ambivalence is difficult if not impossible to resolve when talking about the social construction of nature in general, as Marxism, science studies, and poststructuralism each provide different, and often inconsonant answers to this problem (Demeritt, 2002). Finally, Bird's essay mirrors much constructionism in that many of its key tenets – including "construction" itself – are not as specified as it seems they should be. Indeed, in a retrospective of "social construction of nature" theorizing written in 2002, David Demeritt was concerned that "the 'social construction of nature' is spoken about in such different and often imprecise ways that its precise meanings and implications can be difficult to understand and evaluate" (Demeritt, 2002, p. 768).

There are, of course, general nature-constructionist points missing from Bird's essay that are worth mentioning. One key tenet is the polysemous character of the word 'nature'. Raymond Williams famous three-part typology of the meanings of 'nature' is often used by constructionists to point out one reason exactly why referring to an unqualified 'nature' is fraught with problems (e.g., Castree, 1995; Demeritt, 2001a). As Williams showed, 'nature' can be (1) the essential quality or character of something (its 'nature'); (2) the inherent force which directs either the world or human beings or both ('natural laws'); or (3) the external, material world itself (capital 'N' 'Nature') (Williams, 1972). So, clearly, it is imperative to recognize the inherently ambiguous character of the word 'nature', and sufficiently specify any usage of the term. This is not, of course, to imply that referencing one of the three above meanings of 'nature' would count as sufficient specification. Deploying definition '3' without qualification, for example, might well register the contradictory sense of simultaneously external/universal nature, as

discussed in the production of nature section above. The broader point is that the word nature is, as Raymond Williams noted, "perhaps the most complex in the [English] language" (Williams, 1972, in Demeritt, 2001a, p. 29), and that it comes loaded not just with multiple meanings, but with layers upon layers of ambiguity.

Another prominent theme in more recent constructionist writing is the issue of nature's contingency. Indeed, Ian Hacking locates contingency at the center of all constructionist theories, arguing that (regarding "the social construction of 'X'") "social constructivists tend to hold that ... X need not have existed, or need not be at all as it is. X, or X as it is at present, is not determined by the nature of things; it is not inevitable" (Hacking, 1999, p. 6). Replacing "X" with a qualified deployment of the word "nature," we find that "what counts as "nature" was brought into existence or shaped by social events, forces, history, all of which could well have been different" (internal quote, Castree & Braun, 1998, p. 17; remainder, Hacking, 1999, p. 7). Constructed, contingent ideas of 'nature' and what is 'natural' have indeed helped "legitimate [among other things] social and sexual hierarchies and cultural norms" (Soper, 1995, p. 3). Thus the power of constructed-and-contingent categories to affect beings in the world is registered, and a potential 'politics of construction' is opened up:

The metaphor of construction enables [constructionists] to argue that what we had once accepted as self-evidently pre-ordained and inevitable is in fact contingent and might conceivably be remade in some other way, if only we would try (Demeritt, 2002, p. 776).

Geographers and other social scientists have widely and rapidly embraced the political potential of constructionism. The most openly political (non-Marxist) nature-constructionist writings have drawn largely on poststructuralist theory (Bartram & Shobrook, 2000; Birch, 1999; Braun & Wainwright, 2001; Cresswell, 1997; Darier, 1999a; Escobar, 1996; Moeckli & Braun, 2001; Willems-Braun, 1997). In addition to an assertive politics, poststructuralists have attempted to remedy some of the problems of constructionist theory by, for example, moving beyond the ambiguities of constructionism to reference nature through the (slightly) more specified term 'discourse'.

2.4. Critical Nature-Society Geography III: Nature as Discourse⁹

The two most prominent theorists influencing contemporary poststructuralist nature-society geography are Michel Foucault and Jacques Derrida (with Foucault easily being the single-most influential) (Braun & Wainwright, 2001; Castree, 2001). Two components of Foucault's social theory have been popularly appropriated in nature-society analyses, his theorization of discourse (and discursive practices) and his reconfiguration of the concept of power. For Foucault,

the objects of discourse are *constituted and transformed* according to the rules of some particular discursive formation, rather than existing independently and simply being referred to or talked about in a particular discourse (Fairclough, 1992, p. 41).

Discursive practices, in other words, guide what can and cannot be said in particular places and times. In modernity the 'rules' of discourse are increasingly tied to institutions such as governments, schools, hospitals and prisons (Braun & Wainwright, 2001). These are institutions that, by design, are in the 'business' of producing normative proposals for (individual and collective) social conduct. Accordingly, Foucauldian analyses tend to be highly anti-institutional and particularly skeptical of the *norms* that arise within (institutional, but not merely institutional) discourse. Methodologically, Foucauldian discourse analysis tends to focus on the textual aspects of discourse (rather than, for example, the institutions themselves), as it is from texts that the 'rules' of discourse can be extracted and the silences and displacements inferred. Discourse analysis offers the opportunity to 'rewrite' the discourse, writing back in that which was disallowed or disavowed. This is an openly political maneuver, designed to 'destabilize' primary or authoritative texts.

As many 'discourses of nature' (e.g., biodiversity conservation) are associated with large-scale institutions (science, the academy, government, national or international

⁹ Let me here briefly address one potential question of the reader: "What about actor-network theory?" To this I would reply that (a) My research project is an explicitly political examination of an explicitly political issue; (b) The emphasis on ("First World") environmental politics underlies my selection of these three perspectives as explicitly political theories relevant to my particular research subject; and (c) I fail to find the political 'moment' within actor-network theory, despite assertions to the contrary, such as those of Sarah Whatmore (2002). That being said, I do find certain strands of actor-network theory (particularly Bruno Latour's empirical science studies) to provide quite useful methods for 'doing' thick, descriptive reconfigurations of the ways in which scientific knowledges are made intelligible. As a method, then, actor-network theory will play a role in my analysis.

environmental organizations) and also tend to proffer normalizing programs, naturediscourses have come under increasingly scrutiny from poststructuralists:

'Deconstructing' [discourses of nature] entails 'denaturalizing' them: that is, showing them to be social products arising in particular contexts and serving specific social or ecological ends that *ought to be questioned* (Castree, 2001, p. 13, emphasis added).

There is, it seems, an assertively normative component to poststructuralism as well: discourses of nature "*ought*" to be deconstructed. This passage is representative of poststructuralism's radical nature-skepticism (employing Soper's typology). The task at hand is not just to call into question the naturalized discourses but to effectively *de*naturalize them. As so many discourses of nature rely to a great degree on the efficacy of their statements regarding nature or 'the natural', an effectively denaturalized text would certainly be stripped of much of its authority. (But then what, '*mission accomplished*'? This is a problem I will return to in the next chapter.)

Bruce Braun and Joel Wainwright hail poststructuralism as "a departure form existing work in the field which assumes nature to be an unproblematic category, in the sense that it is a thing that is self-present to knowledge" (Braun & Wainwright, 2001, p. 42). They argue instead that "the very thing that is taken to be the object of environmental studies and politics – namely, 'nature' – is an effect of power" (p. 41). The former statement is nothing new to this discussion; it sets out the basic premise of constructionism, that 'nature' cannot be taken-for-granted. The latter statement, however, takes the premise a step further. Since we are now told that there is no getting 'outside' of discourse (Castree, 2001), nature-as-object can now (theoretically and methodologically) be conflated with 'nature'-as-object-of/within-discourse. But even this is not as strong or as specified a statement as proclaiming nature to be an "effect of power." To make sense of this statement, it is necessary to examine Foucault's theorization of 'power', recognizing that it is through the reconfiguration of power that the politics of discourse analysis is effected.

For Foucault, "'power' is not something which the state or a dominant class *has* or *possesses* and which others don't have" (Darier, 1999b, p. 17). Power is diffuse and omnipresent: people (through discourse) are always and inevitably operating within a "field of power" (p. 17). This concept of power was at least partially formulated in an

attempt to replace the left-political goal of revolution (the overthrow of a singular, oppressive, 'sovereign power') with one of *resistance*, whereby individuals and groups regain a positive political presence *within* (rather than against) oppression through everyday acts of destabilizing authoritative discourses (as texts, rules, ways of acting). Foucault relieves us of the hubris that we can be 'against' or 'outside of' power. Regarding knowledge, Foucault argues that there can be no knowledge outside of power, so the concept of 'knowledge' is replaced by 'power/knowledge'. 'Power/' here acts as a flag, similar to scare-quoting 'nature', whereby the thing lost or displaced in dominant, unproblematized usages of the term (the presence of power within all knowledge, or the inevitably social character of all 'nature') is foregrounded, and the dominant discourse ('knowledge' or 'nature') is destabilized.

So, to return to conceptualizing of nature as an "effect of power" is to make an epistemological claim (Braun and Wainwright, in a statement echoed by most constructionists, are at pains to let us know that "rest assured, [they] believe in reality!" (Braun and Wainwright 2001, p. 45)). Scientists, or ecological advocates, (supposedly) register nature unproblematically, as a rhetoric of "innocent" constructions. Statements about nature, however, are always "non-innocent,... carry[ing] with them certain (disavowed) political commitments" (p. 42). Scientists and environmentalists "fail to recognize the ways in which relations of power are already present" (p. 42). Discursive practices are inescapable and constituted by power, so "nature" is both "an effect of power" (p. 41) and an "effect of discursive practices" (p. 46). If perhaps slightly redundant, for poststructuralists these are not contradictory statements. 'Discourse' and 'power' are at the very least fully imbricated, if not synonymous. As Demerit notes, "discursive constructionists" share a common concern for highlighting "power and its effects" (Demeritt, 2002, p. 774). In a more critical fashion, I might go so far as to say that to claim that "nature is an effect of power" is indeed to say very little. What it does is subsume 'nature' under the poststructuralist umbrella-term 'power', thus philosophically, methodologically, and politically prefiguring the term for poststructuralist 'deconstruction'.

In addition to Foucault, Derrida has also been influential in poststructuralist nature-society geography. Primary is Derrida's theorization of the arbitrary relationship

between signifier (a word) and signified (the "meaning or concept that is understood" (Braun & Wainwright, 2001, p. 49)). Fully effectuating a break between words and meaning would certainly set the table for a 'denaturalizing' discourse analysis. Derrida is also associated with the method of 'deconstruction'.¹⁰ Deconstruction is consistent with Foucauldian discourse analysis, even as their sites of emphasis differ, hence the ability to lump them both together into one poststructuralist theory/method (Braun & Wainwright, 2001; Belyea, 1992).¹¹ Derridean deconstruction, building on the assumption of the arbitrary signifier/signified relationship, emphasizes the "undecidability" of all meaning (Braun & Wainwright, 2001, p. 50). Derridean analysis construes words as 'signs', which (consistent with Foucault's theory of discourse) are "instances" within a "conventional ... system rather than a direct representation of the 'real'" (Belyea, 1992, p. 5). Deconstructive analyses seek out the "constitutive absences" (Willems-Braun, 1997, p. 7) missing from all authoritative texts, noting that "there will always be something left out" of any discourse (Sparke, 1995, p. 4), and, importantly for poststructuralists, that there is always a politics to this absencing. The absencing is an artifact of a reliance upon categorical constructs that cannot exist, or *effect*, without exclusion (Dixon & Jones III, 1996), hence the deconstructive project of destabilizing (or even better, dissolving) dualisms. All constructs remain "constitutively dependent" on their oftenunacknowledged Other (Dixon & Jones III, 1996, p. 768). Recognizing that which isn't but makes 'it' possible is a starting point for the larger project of relocating constructs within the "larger field of social power" (p. 786).

Bruce Braun's writing on the temperate rainforests of British Columbia offers representative examples of deconstructive nature-society geography. Braun locates the naturalization of the forests of British Columbia (and the attendant normalization of the 'proper' management-conservation program) as enabled through the deployment of the scientific construct of "temperate rainforests" as a way to construct these forests as part

¹⁰ Though, perhaps it should be noted, Braun and Wainwright claim that calling deconstruction a method is "incorrect." They see deconstruction as "an approach to reading that constantly and rigorously challenges the possibility of achieving *closure* of meaning" (Braun & Wainwright, 2001, p. 48). I must say I fail to see how an "approach to reading" (or, later in the essay, a "strategy for rigorous thinking" (p. 49)) is not methodological.

¹¹ Belyea (1992), for example, provides a general argument for the consistency of a Foucauldian-Derridean deconstructive-political theory, while Braun and Wainwright (2001) see Foucauldian and Derridean as complementary theorists for deconstructing environmental politics.

of "Nature." All the while rendering its exclusion invisible, this 'social construction of "Nature." *works* politically because of the discursively-produced absence of humans from the forests. Such exclusion allows environmentalists to 'erase' the millennia-old presence of the forests' indigenous residents, thus disallowing them a voice in the debates over the 'use' and 'protection' of the forest (Braun & Wainwright, 2001; Willems-Braun, 1997). This marks an important intervention into the debates over these forests. More generally, the poststructuralist imperatives outlined above signal important lessons for any 'critical' or reflexive analysis of environmental problems and politics. That being said, I will argue in the following chapter that poststructuralism poses political problems for anyone remotely sympathetic to the conservation cause (or case) targeted for deconstruction. I will also argue that there are theoretical inconsistencies in some of the more strongly asserted poststructural constructionist arguments. In Chapter 3, these critiques will be operationalized through the lens of environmental pragmatism, a

Chapter 3. Endorsing Nature: Environmental Pragmatism as Theory and Practice

3.1. Introduction/Sentiment

Echoing the feminist insistence of foregrounding personal politics – even, or perhaps especially, within academic research – I write nature-society geography *as* an environmentalist; that is, I believe that our society is producing excessive and needless deleterious effects on the ecological functioning and consequent sustainability of communities (human and non-human) and ecosystems. Environmentalism is a political stance, but at the same time it can reasonably be considered a "pre-political condition that any future politics must have the ability to address" (Light, 1996, p. 161). My research goal, then, begins with a self-imposed dual mandate: on the one hand, I aim to produce substantively rich and theoretically grounded research; on the other, I profess a commitment to contribute to a broadly conceived 'environmentalism', mindful that environmentalism is just as concerned with seeking solutions to ecological problems as it is to pointing them out.

In this chapter, I present environmental pragmatism as both a pragmatic (or practical) and pragmatist (theoretically defensible) basis for an analysis of environmental problems. Although the distinction between the terms pragmatic and pragmatist can not (and should not) be thought of as absolute – as perhaps most broadly exemplified by the overall goal of achieving a mode of analysis that *links* practice and theory – highlighting the two-fold nature is necessary, as it foregrounds both the aims and means of the framework. In short, (*a*) the pragmatic-practical side works to (*a.1.*) *positively*, formulate a spirit or tenor of investigation that foregrounds the goal of contributing to the ecological-environmentalist critique of contemporary life (and, importantly, searching for solutions to these same problems) and (*a.2.*) *negatively*, critique certain "critical" modes of analysis as unable – in the context of 'nature' – to move far beyond critique to a mode of constructive contribution; alongside (*b*) the pragmatist-theoretical side, which works to (*b.1.*) *positively*, formulate a theoretically-based framework for analysis and (*b.2.*) *negatively*, critique – on theoretical grounds – those critical modes of analysis which

strive to confound (on theoretical grounds) all efforts to preserve, speak for, even 'save' non-human nature.

3.2. The Political Case for Environmental Pragmatism and against Cavalier Constructionism

I begin my formulation of environmental pragmatism by revisiting Kate Soper's distinction between "nature-endorsing" and "nature-skeptical" perspectives (Soper, 1995, 1996). One of the most useful aspects of this distinction is its intuitive clarity. Different scholars, no matter the area of interest, explicitly or implicitly ground their analyses in some theoretical framework. Soper develops the nature-endorsing/nature-skeptical typology in reference to scholarly work dealing with the interactions between human society and the non-human 'natural' world, specifically studies that analyze the sociopolitical aspects of "the ecological crisis" (Soper, 1995).¹² Each 'half' of the distinction encompasses various theoretical and political perspectives for approaching nature-society studies. Nature-endorsers, in the broadest sense, are those whose primary focus is the "human plunder [of nature and its] destruction [and are] politically directed at correcting that abuse" (Soper, 1995, p. 3). Nature-skeptics, on the other hand, subscribe to a different project, foregrounding "the ways in which relations to the non-human world are always historically mediated, and indeed 'constructed'" (p. 4). In the following diagram, I list some theoretical perspectives relevant to my project alongside a few select proponents of each perspective. I should mention that from here on (including this diagram) I use Soper's typology, but the assignments of different theoretical perspectives within the typology are my own (for example, Soper does not discuss pragmatism in her book).

¹² Although nature-skeptics would quickly flag 'crisis' as a particularly political construction of the issues (e.g., Guthman 1997).

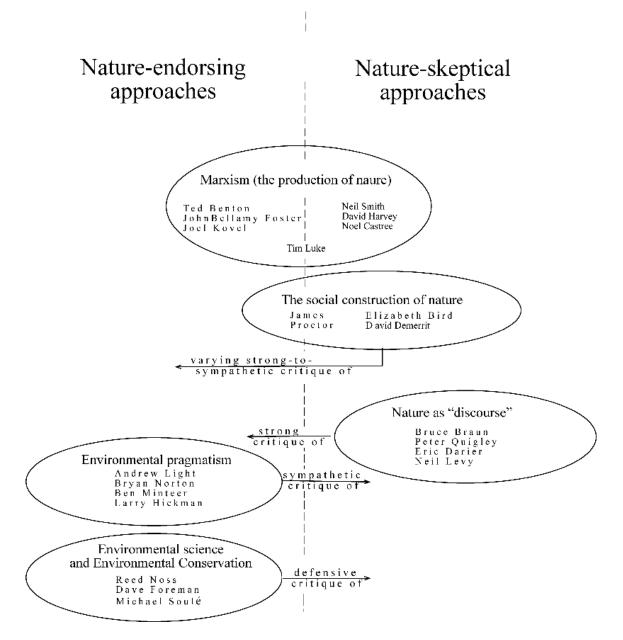


Figure 3.1. Nature-Endorsing and Nature-Skeptical Theoretical Perspectives

In this section, I present the pragmatic, or "metaphilosophical" (Light, 1996, p. 171) case for endorsing and employing environmental pragmatism. Responding to a perceived intradiscplinary crisis in environmental philosophy, the case for an "environmental pragmatism" was initially put forth by Andrew Light and Eric Katz in 1996 (Light & Katz, 1996c). Despite the maturity of academic environmental philosophy (the subdiscipline having been around for nearly thirty years at the time of their writing), Light and Katz professed a serious concern that the field was increasingly mired in a "theoretical dogmatism," seen by some to have erected more theoretical impasses *to*, than

workable solutions *for*, environmental problems (Light & Katz, 1996b, p. 3). Even though Light and Katz targeted their critique primarily toward academic debates between moral monists and mural pluralists, I argue that nature-skeptical social science (including Marxists, social constructionists, and poststructuralists) *can* effectuate a parallel dogmatism that keeps its important insights from being appropriated, or even considered, by the majority of nature-endorsers (although it would be unfair not to mention that many nature-endorsers are equally dogmatic). My point here is that there is a potentially productive cross-over conversation that is limited by both sides' entrenched theoretical dogmatism; or, perhaps to state it more mildly, folks on both sides of the aisle sense a bottom-line (theoretical and/or political) incommensurability between their perspectives that makes further dialogue impossible or fruitless. As James Proctor notes, there is an "abyss between constructivists and anticonstructivists [that] is simply too large to be productive, as it fuels little more than misinterpretation and intellectual hostility among scholars of nature" (Proctor, 1998a, p. 353). So wherein lies the source of this "intellectual hostility"?

Constructivists and poststructuralists, for the most part, make the case that theirs are assertive politics that are by no means anti-science, anti-nature or antienvironmentalism. If this stance was effectively articulated (and sincere), it would seem that nature-endorsers would have little reason to be defensive or hostile toward natureskeptics. What I will argue here is that nature-skeptics often do give nature-endorsers good reason to view their assertions as hostile to the fostering of any grounds for any sort of environmentalism. This examination is necessary because my perceived 'need' to foster an explicitly nature-endorsing approach can only be justified (a) if the natureskeptic/nature-endorse divide is 'real' and (b) if nature-skeptics did indeed produce substantial impasses to endorsing nature. I will make the argument that both halves of this assertion are correct based on a few examples. My case rests to some degree upon the assumption that the following examples are representative of nature-skeptical perspectives taken as a whole. And though a case for any 'true' representativeness is, of course, impossible to make, I would be so bold as to say - after a rather exhaustive reading of the constructivist literature (as well as responses by "anti-constructivists") that these selections, taken together, do speak for the bulk of constructionists.

Let me reassert that I am speaking here to the political tenor or pragmatic effect of the nature-endorsing/nature-skeptical divide. Later I will make the case for a theoretical pragmatism that also stands as a critique of theoretical constructionism (at least the more extreme forms of constructionism). Revisiting Castree and Braun's statement that "Nature...is on the agenda as never before" (Castree & Braun, 1998, p. 3), in this section I attempt to extract the spirit and substance of the constructionist "agenda." Conveniently, the essay from which this quote is taken - the editors' introduction to the 1998 volume *Remaking Reality* (Castree & Braun, 1998b) – is a logical place to start. *Remaking Reality* is an important book in human geography as it stands as the first elaborated examination/collection of the 'new' nature-society studies.¹³ One way to begin this investigation is with an examination of the specific constructs that were selected for 'scare-quoting'. Placing quotes around selected constructs is a common way for constructionists to flag constructs as broadly 'problematic' or perhaps more specifically as socially constructed (e.g., scare-quoted "nature" is often more or less just a shorthand for "the social construction of nature"). Following the constructionist logic, there is no way of escaping the inherently socio-historically constructed-contingent nature of all language, concepts, and knowledge. Stated another way, we only but always know the world through constructed concepts. This "logic," then, informs "us" that all "concepts" regarding "science," "nature," "the social," "politics" - whatever - are all socially constructed. I am not trying to be clever here, but rather stressing that foregrounding the social construction of 'X' can only be effectively achieved by not foregrounding other socially constructed concepts, lest the whole effort degenerate into a meaningless morass of scare quotes.

On the first page of the introduction to *Remaking Reality*, there are a couple of key representative passages; each which will be taken in turn:

From biotechnology to "wilderness" preservation, from the exciting medical promises and dark eugenic possibilities of the Human Genome Project to the moral imperatives and neo-imperialist rhetorics mixed together in discourses of "biodiversity," and from the complex politics of deforestation in India to the equally important struggles over models of global warming in Washington, nature is something imagined and real,

¹³ And, to address the issue of representativeness one final time, it would seem that this introductory essay is a logical and fair place to find statements intended to *represent* the new nature studies in geography.

external yet made, outside history but fiercely contested at every turn (Castree & Braun, 1998, p. 3).

There is plenty to deconstruct here. First point, and this one is very specific to my research project in which questions of wilderness and biodiversity play primary roles: which constructs are flagged with scare-quotes? "Wilderness" and "biodiversity." The discussion that follows should not be taken as a defense of wilderness and biodiversity as anything other than socially constructed (indeed, in later chapters I will examine contested constructions of wilderness at length), but more as an extended querying of why these two were flagged to the exclusion of "deforestation" and "global warming." The effect of this selective flagging, I would argue, is to take the *problematization* of "wilderness preservation" and "discourses of biodiversity" as the *primary point of departure* for any examinations of these issues.

Of all the issues on the nature "agenda" today, it might well be these two issues (or wilderness-biodiversity preservation taken together as one issue) for which natureskeptics reserve their deepest skepticism. Let us notice how each of the issues highlighted in this passage is foregrounded as well. Regarding biotechnology, specifically the Human Genome Project, we are presented with positive ("the exciting medical promises") and negative ("dark eugenic possibilities") of the discourse. Fair enough. All overlysimplistic renderings of this discourse – whether they be the techno-utopian marketing schemes of its corporate sponsors or the blanket denunciations of the entire project as "unnatural" – make deserving targets for constructionist critique. We are also urged to notice the "complex politics of deforestation" and the "equally important struggles over models of global warming." Again, fair enough. The politics of each of these issues is incredibly complex, and while foregrounding the *complexity* of the issues will not necessarily produce a crystal-clear activist case for or against one side of the issue, it can provide the grounds for meaningful and productive interventions. Indeed, Rangan (2000) and Demeritt (2001b) have produced important works that do just this for deforestation in India and global warming, respectively.

Besides the previously mentioned scare-quoting of "wilderness" and "biodiversity," how are *these* issues foregrounded? "Discourses of biodiversity" (and, at the risk of belaboring my point: why "discourses of 'biodiversity"" but not "discourses of global warming" or "discourse of deforestation"?) mix together "moral imperatives" and

"neo-imperialist rhetorics." Needless to say, this is not a dual positive/negative presentation of this issue. For constructionists, biodiversity – amazingly to me, as I think biodiversity decline is a deservedly paramount issue in environmentalism writ large somehow demands doubly-negative flagging when introduced (or even triply-negative, if counting the scare quotes). The authors feel no need to even connote that there may be a worthiness to this "discourse." And there is one final point I would like to make regarding the "moral imperatives" and "neo-imperialist rhetorics" of "discourses of 'biodiversity'." These two selected components of the (incredibly) complex science and politics of biodiversity conservation represent a common ground upon which Marxists and poststructuralists can contest this issue. If indeed the case can be made that biodiversity conservation is first and foremost a discourse of moral imperatives and neoimperialism, then poststructuralists (as anti-moralists) and Marxists (as anti-imperialists), it would seem, have a duty to join in the refutation of this discourse. More broadly, I suspect that one significant reasons that constructionist accounts of "nature" have become so popular with social theory-informed geographers is that – case in point: biodiversity conservation – discourses of nature provide a grounds for poststructuralists and Marxists to temporarily set aside their often-intense internal squabbles and rally against a perceived common enemy. My point here is not to catalyze a polemic against constructionists, nor is it to argue that moral imperatives and neo-imperialist rhetorics do not exist within biodiversity discourses. My point is that constructionism, at least as presented here, does not make for a particularly auspicious perspective from which to support the general sentiment that we should try to not let grizzly bears go extinct in the lower 48 States.

Even though I hope to have effectively presented my case through this elaborated example, a few more examples might help make the argument more convincing. Here is another passage from the *Remaking Reality* introductory essay:

More than ever before, then, nature is something made. For some, this represents the 'end' of nature (Bill McKibben's *End of Nature* is cited here), a response rooted firmly in a modern dualism in which nature is seen as external to society: its other. From this perspective nature must be defended against its 'destruction' by humans, and battle lines are drawn to preserve its 'pristine' character (Castree & Braun, 1998, p. 4).

The first sentence highlights what I feel is a highly problematic component of much 'production of nature' and constructionist theorizing. I would argue that valorizing the "made" character of contemporary nature is an achingly anthropocentric sentiment, especially if taken as one of the points of departure for politics. In a critique of David Harvey's *Justice, Nature, and the Geography of Difference*, Raymond Rogers captures my reticence toward the perceived need to flag nature's "destruction" with scare quotes. Rogers is commenting on David Harvey's supposedly dialectics-informed pronouncement that it is "materially impossible to destroy the earth" (Harvey 1996, p. 196). Rogers counters "[t]he claim that it is 'materially impossible to destroy the earth' allows some space for socialism to emerge. To have a more immediate and grief-stricken sense of loss of species, meaning, and livelihood does not allow for a sense of global succession" (Rogers, 1998b, p. 48-9). Only a person bereft of any sense of grieff whatsoever over loss of species, or environmental degradation in general, it seems, would find it necessary to problematize the idea that non-human nature could be destroyed.

The above passage from Castree and Braun also sets up a problematic insider/outsider binary, with the 'insiders' being the constructionists who correctly recognize the "made" character of nature, and the 'outsiders' being the pitiable souls who, mired in romanticism, insist on forging philosophically indefensible programs opposing nature's "destruction." The outsiders, it seems, comprise the majority of the contemporary US environmental movement. Gary Snyder argues that deconstructing the notion of "pristine" nature is "beating a dead horse." For environmentalists, "'pristine' is only a relative term," correctly signifying the real differences between the more or less "wild terrain" that remains and the much more profoundly 'made' landscapes that dominate the world (Snyder, 1996, p. 8).

I will highlight one more passage from this essay.

[Our] first point is that nature... "cannot pre-exist its construction"¹⁴: it is figure, construction, artifact, displacement. It is something made – materially and semiotically, and both simultaneously. Those, like "deep greens," who would still appeal to "nature" as a source of moral and political guidance will, of course, find this argument scandalous (Castree & Braun, 1998, p. 5).

¹⁴ The internal quote is from Haraway (1992, p. 296)

Clearly, the point that nature is "made" is paramount. I have already made clear my qualms with this issue. What jumps out from this statement is that, of all the "greens" out there, it is "deep greens" who are targeted as most of all mired in indefensible foundations. This brusque writing-off of deep ecology is typical for constructionists, and to me, perplexing. For reasons that I hope to make clear throughout the dissertation, I think that deep ecology deserves at the very least a sincerely sympathetic-yet-critical treatment, as it is deep ecologists, who, more than anyone else, have thought long and hard about what it might mean to think and live in a less anthropocentric manner. Extending the sphere of moral concern (or even our ideas of 'identity' and 'community' (Rogers, 1994, 1998a)) beyond the human seems to me to be a worthwhile, even necessary, project. When Castree and Braun boast that their efforts will be found "scandalous" to deep greens, it seems less an invitation into a constructive dialogue as much as a snickering, smug writing-off of the entire deep ecology movement. Castree and Braun assert that constructionist politics "embodies a liberatory potential, radically opening the field of debate and action surrounding what kinds of natures we seek" (Castree & Braun, 1998, p. 5). It is difficult to imagine, however, despite their qualified pro-nature rhetoric, which existing cadres of self-identified environmentalists, if any, they are positioning themselves within, even if they have made it quite clear which cadres they are positioning themselves in opposition to.

It is not just deep greens, however, that are written off more or less indiscriminately. In an essay examining the Eden Project, Rob Bartram and Sarah Shobrook find "environmental conservation ... being drawn into the duplicative strategies of scientific and technological simulation ... as if to reclaim or protect nature's reality" (Bartram & Shobrook, 2000, p. 371). Leaving aside the question of whether techno-utopian projects like the Eden Project are representative whatsoever of any "environmental conservation," after eight pages of critiquing the project (a rather unchallenging undertaking) they conclude that "the paradox of proximity to nature is that it only confirms its irrevocable loss and that environmental conservation is no more than an illusory act of social redemption" (Bartram & Shobrook, 2000, p. 378). Environmental conservation as an "illusory act" notwithstanding, the authors "are not

suggesting that nature should be dismissed or forgotten" (p. 378). In nearly as broadbrushed a sweep, Braun and Wainwright dismiss the entire field of environmental ethics:

[T]o assert that environmental issues are primarily about 'ethics' (how to act *toward* nature) is to assume that it is only our attitudes and values that are at stake, not the 'thing' to which the ethical relation is to be fostered (Braun & Wainwright, 2001, p. 42).

This passage is rather mystifying to me, but one thing is made quite clear: environmental ethicists are deluded and somewhat egocentric theorists who care more about their own values than about non-human nature. Even though the overstated or even fatuous nature of this claim is probably self-evident, I would point the authors to Val Plumwood's "interspecies dialogical ethics" (Plumwood, 2002) or Wim Zweers' "participation with nature" (Zweers, 2000) as environmental ethical theories that have plenty to say about the 'things' with which the ethical relations are to be fostered.

I conclude this section with two more examples. In Éric Darier's explicitly Foucauldian critique of "green ethics" (note the essay's title: "Foucault against Environmental Ethics"), he asks:

Would it be possible... to imagine... a 'Green ethics' ... grounded not in naturalistic/essentialist assumptions but in practices of transgression of, for example, these naturalistic/essentialist boundaries? ... Wouldn't the radical questioning and transgression of given subjectivities, such as the consumer subjectivity, be an act of resistance which could lead towards a Green ethics, a Green aesthetics of existence? (Darier, 1999a, p.228).

I recognize why a self-identified "queer theorist" (p. 227) would necessarily ground any theory in a resolute antiessentialism; and I acknowledge that *any* social theory would be foolish not to take the lessons of antiessentialism very seriously. That noted, it seems that what Darier seems to be advocating here is transgression for the sake of transgression. Preoccupied with unabashed transgression, he fails to see that transgressing (without calling it that) the consumer subjectivity (without calling it that, either) is an everyday act that a substantial portion of self-identified 'environmentalists' or 'greens' *are doing*. So they aren't doing it for the sake of transgressing a subjectivity? So what? They are doing it with an eye towards the practical effects that would result from a less wasteful and ecologically degrading culture, and also for the potential effects on the individual transformed by ethical action. In similar fashion to so much nature-constructionism, Darier proposes this as not mere critique, but a positive assertion of a "green ethics" as

well. What would his green ethics look like? Transgression, subjectivity, resistance: these "magic words" (Halton, 1995, p. 6) are the keys to the 'new' (posthumous) Foucauldian Green ethics. I fail to see how this is anything other than out-of-the-box Foucauldian politics. This is not Foucault *informing* environmental philosophy; this is Foucault *replacing* environmental philosophy. This is not, of course, to argue that important political – even 'green' political – insights cannot be garnered from Foucault's writing. I *would* argue, however, that Foucault certainly did not write the entire recipe for a new environmental politics. Should we be surprised that Foucault, who famously "detested nature" (Darier, 1999b, p. 6), did not produce the grounds for a workable nature-endorsing philosophy? Probably not. Foucault and environmentalism may be something of a square peg and a round hole. It is very difficult, if not impossible, to just fit one into the other.

Finally, I wrap up this examination of the politics of nature-skeptics with the same author who kick-started my discussion of critical nature-society studies, Neil Smith. In his essay "Nature at the Millenium: Production and re-enchantment" (the concluding essay in Braun and Castree's *Remaking Reality*), Smith offers some statements that are representative of the nature-skeptical attitude toward environmental politics. For one, environmentalism has lost its critical edge:

The radical genie of the environmental challenge to late capitalist nature has been stuffed back into the bottle of institutional normality just in time to calm millennial jitters about nature. The challenge for the twenty-first century is to start again, to make environmental politics subversive again (Smith, 1998, p. 272),

This is a fantastic passage, and one I would hardly disagree with taken out of context. But when Smith lays out the five tasks of "production of nature" theorizing, four are challenges to the refinement of theory *qua* theory, while only one deals with environmentalist practice: through constructionism, we must "try and deflate the vocabulary of wilderness and pristine nature" (p. 277). Again, if constructionists are supportive of some environmentalisms (such as the environmental justice movement, which is deservedly valorized), and ambivalent toward others (such as critics of global warming), they reserve their most resolute opposition for any and all manifestations of wilderness preservation. What, for Smith, will comprise the needed project? It will "involve, in part, scandalizing contemporary appropriations of environmentalism, but it

also involves the more difficult task of eking out an alternative political vision" (p. 272). I agree and disagree. I agree that eking out an alternative political vision is necessary, and I heartily agree that this is a difficult task.

Where I part company with Smith, and nature-skeptics in general, is that I do not feel that a cavalier "scandalizing" of environmental politics is the most productive point of departure for such a project. To return to pragmatism (and to kick off the more elaborated discussion of pragmatism that follows), my assessment of constructionism could come in the form of answering the "pragmatic maxim": "If we stop here, if we put it this way, what difference would it make to our practice?" (Berthoff, 1999a, p. 5). Stopping at constructionism – its self-avowed liberatory potential notwithstanding – might well place too much distance between myself and the more openly activist proponents of grizzly bear or wildlands conservation. If it forged an impassable abyss, and the only conversation I was able to contribute to was academic discourses of nature and politics, then I will have failed in the political-pragmatic goal of maintaining a commitment to contributing to the project of a broadly conceived environmentalism.

3.3. The Theoretical Case for Environmental Pragmatism and against Cavalier Constructionism

In this section, I lay out the case for adopting a qualified 'environmental pragmatism' as a theoretically sound methodology, or framework for analysis, for my research project.¹⁵ In similar fashion to the previous section, this assertion will also involve a critique of constructionism. Let me be clear that I am not stating that I am appropriating philosophical pragmatism as a singular, overarching "theory" for my entire analysis. In later chapters, in addition to pragmatists I will selectively appropriate the insights of (among others) eco-Marxists (and some not-so-eco-Marxists), deep ecologists, environmental historians, and policy analysts to make my case.

In a sense, I am accepting here an 'offer' laid out by James Proctor, one that to my knowledge no geographer has taken up to date. As previously noted, Proctor senses an unproductive "abyss" between constructionists and anti-constructionists (Proctor,

¹⁵ This is distinct from (and will only include splices of) discussions of specific research *methods*: "the term *methods* refers more specifically to individual techniques (e.g., surveys, participant observation) whereas *methodology* can be construed broadly to suggest both the presuppositions of methods, as well as their link to theory and implications for society" (Morrow and Brown 1994, p. 36).

1998a, p. 353). He seeks out a potential "third position that takes social constructivism seriously but does not rob us of our ability to speak some degree of truth about nature as a consequence" (p. 353), and cites pragmatism and critical realism as two potential paths to fulfilling this goal. I agree with both his perception of the unproductive abyss and his sense that pragmatism might provide one way 'out'. Ideally, I will sufficiently elaborate his more cautious, tentative endorsement of pragmatism into a more robust defense of pragmatism as a viable 'third way' to approach nature-society geography.

It is logical to begin my development of environmental pragmatism with a brief outline of what I refer hereafter as "philosophical pragmatism" or just unqualified "pragmatism." Pragmatism is a school of philosophy that arose (and has remained for the most part specific to) the United States in the late 19th century. Pragmatism's most well-known and influential early theorists included Charles Sanders Peirce, William James, John Dewey, and George Herbert Mead (Parker, 1996). Though not as well-known or widely appreciated internationally – or even within American academic philosophy – as many European philosophers, these 'classical' American pragmatists continue to inform a diverse and evolving contemporary American pragmatism. Although there is a great deal of variation within pragmatism and between individual pragmatists, ¹⁶ commonalities can be drawn.

Perhaps most fundamentally, "all [pragmatists] agree in their rejection of foundationalist epistemology" (Parker, 1996, p.22). Pragmatist anti-foundationalism should not, however, be thought to reflect an anti-realism or anti-naturalism. The early pragmatists, particularly Peirce and Dewey, were intensely interested in theorizing the nature of scientific inquiry – in large part for the sake of the development of the practice(s) of natural science. For the pragmatists, we *must* continue our scientific investigations into the 'truths' of the world; but our explanations must proceed without recourse to *a priori*, unchanging 'laws'. This emphasis on experience and *experiment* (and perhaps the near conflation of the two) "led James to call his philosophy 'radical

¹⁶ For some, no doubt, this assertion would be considered an understatement. For example, Ann Berthoff cites Walker Percy's comment that "William James took one idea [from Peirce] and turned it into pragmatism which, whatever its value, is not the same thing as Peirce's pragmaticism" (in Berthoff, 1999a, p.57) But there has probably never been a school of philosophy so uniform in its theory that significant internal disputes were absent.

empiricism'" (p.25). All explanation is the product of experience, and experience has proven that our understandings of the world are nothing if not "fallible" (p.22).¹⁷

The concept of 'fallibilism' – originally theorized by Peirce – is also foundational to pragmatism. Clearly related to and consistent with the preceding treatment of pragmatist anti-foundationalism, a belief in fallibilism means that "pragmatists hold that there is never a metaphysical guarantee to be had that such-and-such a belief will never need revision" (Putnam & Conant, 1994, in Warner, 2002, p. 25). 'Beliefs' are always based in certain fundamental constructs. All such guiding constructs – whether guiding natural science (for example, evolution (Hickman, 1996)) or social (for example, democracy or community (Dewey, 1960)) inquiry – are also necessarily fallible. We can never, in other words, assume that there is ever a transhistorical correctness underlying any concept of belief. This does not mean that no beliefs or constructs are correct or accurate. It is more that "we may be able to get it [a belief or construct] better and better, truer and truer, but we never get it completely right" (Hickman, 1996, p. 54, emphasis added). "May" and "better" are primary qualifiers in this sentence. To anyone who would conflate the pragmatist optimism, inherent in this sentence, that "we may be able to get it...truer and truer" with the Enlightenment 'project' of the accumulation of knowledge increasingly nearing absolute Truth, it could be pointed that we only know that we may be getting it truer. So there is a point in trying, a necessity for inquiry, to be certain, but it is unverifiable – and therefore a non-issue – to argue whether the development of any particular truth is approaching Truth. To a staunch anti-metaphysicalist (which would include most poststructuralists) who might quarrel that "better and better, truer and truer" still harbors an implication that there is a transhistorical end-state toward which we 'think' we might be headed, the flat declaration that follows, that "we [know we] never get it completely right," should sufficiently silence this charge. Regarding language, then (and there will be considerably more on this matter later), pragmatism rejects the "metaphysical realist" possibility of language (Zeglen, 2002, p. 90). Truth can never be said to represent "a sort of correspondence" between reality and language; language can

¹⁷ And although a similarly humble, empiricist framework for explanation is certainly echoed by many poststructuralists (e.g., Philo, 2000) there are less nature-skeptical perspectives that echo this sentiment as well. For example, William Cronon, an environmental historian, endorses a similar course of knowledge production when he speaks of the need for less bold speculating and more detailed analyses of "very particular social and ecological changes" (Cronon, 1990, p. 1125)

not provide a "completely transparent or neutral medium with which to describe the world" (p. 90). Truths are what we believe. Beliefs are grounded in

accumulations of [empirical] verifications [which] provide the ground for ... contingent, probabilistic, but often practically undoubted, perceptual claims. The purpose of the creation of meanings is the establishment of beliefs that allow for successful interaction with a surrounding universe (Rosenthal, 1986, p. 59).

To put forth a crude example, when standing on the edge of a cliff, a belief in gravity allows for a much more "successful interaction with a surrounding universe" than a belief in the absence of gravity. Recognizing the inescapability of belief, pragmatists are "antiskeptical, … holding that *doubt* requires justification just as much as belief" (Putnam & Conant, 1994, in Warner, 2002, p. 25).

Pragmatist anti-foundationalism and empiricism are thus based in a desire to explain and understand the world, but (as I hope to have made abundantly clear) in a less epistemologically confident manner than as practiced within predominant modes of Western science. This epistemological apprehensiveness applies to both the production of knowledge and assessments of knowledge, and as such, pragmatism provides a methodology for reading science (or any field other knowledge production). Pragmatism recognizes that there is always a "tradeoff between security and definiteness" in scientific explanation (Rescher, 2002, p. 78). "We can and indeed should be scientific realists ... [at] the level of the looser generalities of 'schoolbook science'" (p. 78). My above example of gravity as "true" seems consistent with this sentiment. Following the same line of logic, it would be less sensible, less meaningful, to flag 'evolution' (in its broadest sense) as a "social construction" than to refer to it as 'true'. At this crude level, we have a great degree of "security" that our concepts are true. As a concept becomes further specified or, particularly, as it is tied into specific causal chains of explanation, we have increasingly less security that our assertions are accurate. For example, even as we regard evolution as 'true', any assertion that evolution is the causal factor behind this-or-that human behavioral trait should acknowledge the insecurity of the claim by registering the statement somewhere on the level of speculation. The level of generality is not, of course, the sole arbiter as to validating the security of our beliefs and concepts. But the "definiteness/security tradeoff" is a useful heuristic tool in pragmatist methodology.

When, in research, one makes assertions based on analysis of whatever object of inquiry, the 'tradeoff' serves as a useful check which can help 'set' the appropriate assertiveness or speculativeness of the tone. *Any* pragmatism, of course – acknowledging the fallibility of all human knowledge, constructs, beliefs, and truth production – *is* "speculative pragmatism" (Rosenthal, 1986).

Pragmatism also rejects the fact/value dichotomy (Putnam & Conant, 1994). All facts are the products of a particular socio-historical context (and attention to this is of course important), but even within a particular socio-historical context, within a particular inquiring community that broadly shares a standardized approach to investigation, facts are always the "result of selective attention and of deliberately chosen experimental procedures" (Putnam & Conant, 1994, p. 206). Moreover, "what sort of situations appear to us to be problematic" are the problems we choose to (scientifically or otherwise) investigate (p. 206). So facts are at least doubly value laden from the go: A problem is chosen to address the problem. The latter is a function of values as well. Which features of the problem are relevant? Which information will be helpful? How must this information be determined? Every step of the fact production process is a reflection of a value judgment.

Pragmatism here provides the methodological core for both critical and assertive (or normative) analysis. For critique, attention to context, stated and unstated values, value-bearing research methods, the inherently selective process of information gathering, etc. – this has become more or less standard within all endorsed by their practitioners as 'critical' methodologies. On the assertive or normative side, that is, considering the possibility of contributing to the solutions of problems through analyses, pragmatism provides a solid ground for assessing/asserting environmental politics, which always, quite obviously, reflect an entanglement of facts/values (or fact-values). As "environmental discourse generally justifies its 'oughts' based on scientifically founded assertions of truth concerning the imperiled state of nature" (Proctor, 1998a, p. 353) (but all the while, it is important to note, often staunchly defending the is/ought, fact/value dichotomies), the pragmatist requirement of "the democratization of inquiry" provides a model against which environmentalist politics can both be judged and aspire to meet

(Putnam, 1995, p. 73). The phrase 'democratization of inquiry' is, of course, not selfevident; that is, it is not an ideal model that can be unproblematically summoned and drawn upon to critique or validate certain arguments. As with any foundational construct, it requires specificity to be meaningful. Any pragmatist deployment of 'democracy' would, for example, be grounded in the positive recognition of moral pluralism that is foundational to any pragmatism worthy of the name (Hoy, 1998; Light & Katz, 1996a; McKenna, 2001; Norton, 1996a, 1996b; Rosenthal & Buchholz, 1996). In the following chapters of the dissertation I will draw on a considerable and diverse selection of pragmatist (and other) theorists in considering how pragmatist political theory might inform and help shape environmentalist politics. Pragmatist political theory will also (partially) inform my critical analyses of the Conservation Biology and Citizen Management alternatives in the empirical chapters. I will now turn specifically to a discussion of the pragmatist theory of language.

3.4. Escaping the Prison, Breaking the Mirror: Pragmatism and Language

Since the bulk of my analysis will consist of examinations of written documents and verbal statements, a discussion of how I will theorize language is necessary. Pragmatism provides a useful and appropriate theory of language for an analysis of environmental debates. Pragmatist theory also, I will argue, provides a more productive and defensible mode of analysis for a sympathetic reading of environmental politics than constructionism. I will argue that pragmatism provides a qualified naturalism and as such avoids the bogeyman of anti-naturalistic debunking or refutation that mires so much constructionism at the level of critique-for-the-sake-of-critique. I will also make the case that anti-naturalism as refutation is theoretically problematic. This 'pragmatic naturalism' reflects the "pragmatic focus on the human biological organism and organismenvironment [relation]... Neither human activity in general nor human knowledge can be separated from the fact that this being is a natural organism dependent upon a natural environment" (Rosenthal & Buchholz, 1996, p. 40). A pragmatist theory of language properly embeds human beings in nature, while certain forms of constructionism allow for language, text, and discourse to 'float' freely, "arbitrarily" even (Braun & Wainwright, 2001, p. 49), above the material world of necessity, probability, and possibility.

I will begin this section by briefly revisiting and critiquing Bruce Braun's representative constructionist writing. The first essay examined is the highly influential¹⁸ (and explicitly poststructuralist) essay "Buried Epistemologies" (Willems-Braun, 1997). In "Buried Epistemologies," two documents serve as the primary objects of analysis, one published by an industrial forestry group and one by environmentalists. One of the primary analytical goals of the paper is to assess the conditions through which particular knowledges are made intelligible, and the effects of the sedimentation of these knowledges; that is, what happens when these representations are made to work. This emphasis is counterposed to more positivistic methods that assert accurate representations of the world, or the ability to judge the accurateness of these representations. The forestry and environmentalist documents assume, we are told, a "metaphysics of presence" (p. 25), meaning they wrongly believe that they can accurately represent the 'whole' of nature. Braun emphatically argues that "what is at issue is *not* whether [these documents] represented the landscape accurately" (p. 15, emphasis in original). To do so would frame the issue as one of representations versus misrepresentations of nature, a method which masks the "power" that underlies any individual or group's ability to make a particular representation work. Fair enough: not attending to aspects of power in environmental controversies would certainly lead to a fairly impoverished analysis. But, as the "metaphysics of presence" accusation implies, the critique goes much deeper than this. Braun argues that "the production of an 'effect' of truthfulness [is always] tied to a metaphysics which assume[s] that *behind* representation lies an order that representation continually approache[s]" (p. 16, emphases in original - no minor point). Once the possibility of any sense of accuracy is demolished – a task largely accomplished via the poststructuralist 'magic word' accusation of "metaphysics" - the 'real' work, of assessing the effects of power, can begin.

¹⁸ According to "Web of Science," "Buried Epistemologies" has been cited fifty-five times in journals referenced in their database, including fifteen references in the *Annals of the Association of American Geographers* and nine times in *Progress in Human Geography*.

Alongside the strongly asserted anti-metaphysical perspective, however, are some starkly realist assertions. Perhaps the best example comes from Braun's discussion of the concept of "old-growth forests" in a footnote:

What constitutes 'old-growth' forests—and their significance—is widely debated. Most generally, 'old-growth' forests are characterized by the following: huge accumulations of biomass; large trees exceeding 1-2 m diameter at 1.3 m height and reaching 60-80 m total height; old trees, often older than 200 years and occasionally exceeding 1,000 years; and structural diversity, including various tree sizes, snags (dead standing trees), down logs, and so on (p. 26).

How else, other than assuming that nature can be represented more or less accurately, are we supposed to make sense of this passage? (This is a rhetorical question: we couldn't.) There is a flat inconsistency at work here. One the one hand, Braun unsheathes antimetaphysical accusations for the purposes of refuting the claims of whatever target is under scrutiny. On the other, for the purposes of explanatory clarity, and (importantly) for the purposes of analysis, Braun repeatedly resorts to realist assertions that, we can only assume, he believes accurately represent reality. "Discursive constructionism" is employed as both philosophical critique and as a vehicle to refute the statements, practices and representations of others (Demeritt, 2002, p. 774). As Demeritt argues, construction-as-philosophical-critique is a valuable method for descriptive renderings of representations of nature (or whatever else), but the "strong plea for epistemic caution" ushered in through discursive constructionisms does not provide solid grounds for refutation (p. 774). There is, then, something of a double standard at work here: Braun employs a philosophical stance that effectively denies anyone the ability say anything about the world, all the while making very "strong empirical claims" about their research objects, nature notwithstanding. Positively interpreting objects of analysis is enabled through the methodology of poststructuralist discourse analysis. Such a *method* of interpretation is possible, we are told, because the objects of analysis are not nature, but "discourses of nature" (Castree, 2001, p. 12). Biologists, ecologists, and environmentalists, those who craft (primary) representations of nature, are not granted the same capacity to interpret and accurately represent their objects of analysis. We are granted direct access to 'texts' and 'discourses', but only indirect (at best) access to nature. The result is a thoroughly bifurcated world, one of an inaccessible 'nature'

(always in scare quotes to highlight its inaccessibility) and an accessible realm of discourse. Pragmatism points to both the source of this conundrum as well as a potential way out.

Ann Berthoff traces French poststructuralist theory as developing in reaction to positivistic currents of French literary analysis and linguistics. In a rather strong assertion, Berthoff argues that such theories – deconstruction or discourse analysis, for example – often end up reinforcing positivism's dualizing and finalizing tendencies. Statements like "knowledge is socially and historically produced *rather than* found" (Braun & Wainwright, 2001, p. 46) reflect this "oscillation between a linguistic idealism ... and a self-refuting scientism" (Putnam, 1995, p. 75). Clearly, for Braun and Wainwright, those who understand the produced nature of knowledge are placed in a privileged position over those who naively think that knowledge can be discovered; the same goes for genealogically over scientifically produced statements. Why should we, human geographers, be surprised when ecologists react in a hostile fashion to constructivist critiques if our point of departure rather brusquely removes their ability to say anything about their objects of study?

This dualistic framing is reliant upon a dyadic semiotic, through which the significance of meaning becomes obscured as language is perceived as a "bottomless regress of interpretations" (Putnam, 2004, p. 119). "Bottomless" (as I read it, 'never touching the earth') may indeed be the key to this passage, as it marks the principal divide between poststructuralist and pragmatist theories of language. For poststructuralists, reference - to the world - becomes impossible, so that "there is no there out there, with the result that kindergartners and historians, cell biologists and novelists can only tell stories" (Berthoff, 1999b, p. 674, emphasis in original). Few geographers, however, make a career out of merely telling stories. Even poststructuralists invariably return, in the last instance, to interpretation. It is this, *interpretation*, which becomes the key to Berthoff's remedy for the radically skeptical poststructuralist anxiety over our inability to "escape the prison of language" (Demeritt, 2002, p. 774). The complexities of language, for pragmatists, are not the proof that we can never know the world, but rather the very enabling grounds for the social process of making sense of and getting by in the world.

Interpretation is the 'third' in the pragmatist triadic-semiotic theory of language and meaning (Berthoff is drawing primarily on the early pragmatist Charles Sanders Peirce here). No sign is a "clean machine awaiting a competent operator"; every sign – whether it be a word, symbol, phrase, text, or forest – must be interpreted to achieve *significance* (Berthoff, 1999b, p. 671):

To understand interpretation as the third element of the sign is to recognize mediation – and once mediation is understood as not constituting a barrier but as the logical condition of significance, there will be certain epistemological consequences, chief among them the recognition that all knowledge is interpretation and that all interpretation must itself be interpreted (Berthoff, 1999a, p. 5).

The idea of a sign achieving significance through always-mediated interpretation brings to light the processual and relational nature of thinking, speaking, and writing, always in and through signs. Interpretation is the act of making sense of signs as things-in-the-world, whether bacteria, or texts, or interpretations of texts. Only within a dyadic semiotic, such as the signifier-signified model, could the idea of an 'arbitrariness' between words and worlds arise. Employing a triadic semiotic, signs are only inert, or 'confined' to the site of language, until they are interpreted. And it is through every instance of interpretation that language *works*. Granting language, texts, or discourse autonomy from the world fails to recognize the constancy of interpretation, the productivity (world-altering character) of language.

Acknowledging the productive, relational nature of language does not, of course, make the task of analyzing language (in the form of discourses or particular texts) any easier. It does not remove the problems of, say, agency, power, or contextuality. If anything, pragmatism strongly echoes the "epistemic caution" (Demeritt, 2002, p. 774) that (*ideally*) guides constructionist analysis. This materialized, active model of language also does not discount the self-referential dangers of interpretation:

[M]any ... 'observations' are but implications of the particular terminology in terms of which the observations are made. In brief, much that we take as observations about 'reality' may be but spinning out of possibilities implicit in our particular choice of terms (Burke, 1966, p. 46).

This passage comes from Kenneth Burke's discussion of language as a "terministic screen" (Burke, 1966, Chapter 3, pp. 44-62). "Screen" here serves as a powerful metaphor for language that echoes the pragmatist contradistinction to both scientistic (language as "mirror" (Proctor, 1998a, p. 353; Rorty, 1979)) and discursive (language as "prison" (Demeritt, 2002, p. 774)) models of language. Consistent with Burke's concern over the tenuousness of many taken-for-granted notions of 'reality', numerous authors cite the growing mediatization and commoditization of social life, that is, the increasingly densely stratified nature of language in contemporary society (Chouliaraki & Fairclough, 2001; Davies, 2000; Davis, 1995; Fairclough, 1992; Gee, 1999; Hall, 1997; Harré et al., 1999; Penley & Ross, 1991; Poster, 1989; Wilson, 1991). That (analytical) problem noted, pragmatism still rejects the idea that language in any form can ever be theorized or analyzed as a *wholly* self-referential entity.

My aim so far has been to present pragmatism in general, and the pragmatist theory of language specifically, as a theoretically defensible and politically enabling framework for a critical, yet broadly nature-endorsing, analysis of environmental debates. To conclude this chapter, I will discuss an examination of environmental politics that broadly shares the epistemological, political and ethical sentiments of the environmental pragmatist perspective I am developing. What does it mean, in other words, to *do* environmental pragmatism?

3.5. Pragmatism and Writing Nature-Society Geography

This discussion will focus on a recent essay by James Proctor, the one geographer (that I am aware of) who has explicitly endorsed environmental pragmatism as one potential way out of the naïve-realist/abyssal-constructionist impasse (Proctor, 1998a). That essay, however, did not have any empirical content; it was solely a theoretical overview (and his discussion of pragmatism was quite cursory anyway). In a later essay, even though pragmatism *per se* is never mentioned, Proctor begins to show what an empirical environmental pragmatist analysis might look like.

In the concluding contribution to Castree and Braun's second edited collection on 'social nature', Proctor finds it necessary to "tak[e] social constructionism seriously," but this endorsement comes with a qualification, as he "would be gravely concerned [if appropriating a constructionist-informed perspective] were to rob [ecologists] of their ability to speak about [nature]" (Proctor, 2001, p. 225).¹⁹ I empathize with his problem, to be sure, even if I might invert the emphasis of the declaration.²⁰ In his empirical analysis, Proctor discusses a short environmental news piece decrying the loss of freshwater animal species. He shows how the authors of the story follow the scientific 'facts' about the species' decline with normative statements regarding what 'needs' to be done to halt their decline. The news piece jumps from an 'is' (freshwater biodiversity decline) to an 'ought' (the need to halt it) without any discussion whatsoever about why we should care or why we should act. Proctor argues against the idea that "such a clear case [for action] is morally indisputable" (p. 228). He follows this initial 'problematizing' of the issue with a detailed consideration of how a constructionist analysis might enrich our understanding of this particular environmental issue. One thing about this essay that is particularly significant for my purposes is Proctor's rationale for adding constructionism to his analytical toolkit:

The social constructionist perspective can enrich environmental ethics by reminding us that any human pronouncement on nature entails social as well as biophysical considerations, that there are, so to speak, important truths about the truths we invoke in our defense of certain normative positions (p. 229).

Proctor's point of departure is the potential contribution of constructionism to environmental ethics. This is a decidedly different political stance than most constructionists take. He proposes no grounds for the refutation or dismissal of environmentalist concerns; these concerns indeed underlie the entire discussion. There is also a point of convergence with the pragmatist theory of language that I outlined in the previous section. The notion of "truths about truths" echoes Berthoff's (philosophical and methodological) assertion that all interpretations are always subject to further interpretation.

¹⁹ And, it is probably worth noting that, despite the relentless skepticism that dominates constructionist renderings of biodiversity issues – with Castree and Braun as exemplars (a point I hope I have already made clear), allowing Proctor's much more sympathetic essay to be the literal last word on social nature stands as evidence that there is a willingness on the part of (at least these) constructionists to 'problematize' their own endeavor. Proctor's essay undeniably opens up an alternative space for considering environmental concerns that would have been missing without it. Its inclusion is a testament that the professed commitment to openness in dialogue is not merely rhetorical, and for this they should be commended.

²⁰ I would more likely say, for example, "I believe that nature-society geographers must take the findings of ecologists seriously, but I would be concerned if such a stance were to rob us of the ability to think critically about the relationships between language, science, the 'public', and politics."

A space for a realist acceptance of the possibility of truth is readily acknowledged: "It is important to know ... whether or not it is indeed true that freshwater species are going extinct at a rate five times greater than terrestrial animals, and that is what scientists ... are for" (p. 230). This does not mean, of course, that a rigorous analysis (pragmatist or otherwise) should uncritically accept such statements as fact. This would be to irresponsibly ignore important issues of power. If I was to make a statement along the lines of "after constructionism, we can no longer ignore," the blank would indeed likely be filled in with "issues of power regarding who is authorized to speak truths, and which voices are excluded in the process." Assessing the veracity of scientific statements, then, is a necessary task of any 'critical' analysis of environmental problems. This task poses analytical problems to be sure. In Proctor's empirical example, this task would require assessing, among other things: how the primary data from which the conclusions were made was gathered; what previous studies informed their models (and how they were integrated into these models); how the extinction trends were estimated; what assumptions had to be made to finalize these models of nature; if these assumptions were made explicit or if they were intentionally buried. There are research methods available that can answer these questions. The empirical "science studies" of Bruno Latour are particularly appropriate for these tasks (e.g., Latour, 1987, 1999). Again, I stress that I am outlining my methodology and not specific methods in this section. Discussions of particular methods will accompany specific analytical tasks in the empirical chapters that follow. In this vein, specifically, I will draw on Latour (and others) when I assess the various specific articulations of scientific facts evoked in support of the different cases for and against reintroduction. My analysis will, then, 'problematize' these facts to the degree that facts are always intentionally selective simplifications of nature, but not for the purposes of removing anyone's ability to speak truths about the world.

I will close this chapter with one more example from Proctor's essay. In this example, Proctor finds William Cronon's notion of environmental history as "narrative" helpful. Thinking of environmental debates as narratives helps make sense of the necessary act of simplification inherent in any "story" about humans and the

environment. Proctor quotes William Cronon at some length, but the power of the passage more than justifies its inclusion in his discussion as well as mine:

Narrative is the chief literary form that tries to find meaning in an overwhelmingly crowded and disordered chronological reality... By writing stories of environmental change, we divide the causal relationships of an ecosystem with a theoretical razor that defines included and excluded, relevant and irrelevant, empowered and disempowered... Narrative succeeds to the extent that it hides the discontinuities, ellipses, and contradictory experiences that would undermine the intended meaning of the story (Cronon, 1992, pp. 1349-50, in Proctor, 2001, p. 232).

A narrative, adds Proctor, "is a story, not a fairytale devoid of real content but rather an intentional selection and construction of evidence to bring forth some meaning or moral" (p. 232). Does this undermine Berthoff's previously noted (and my personally endorsed) rejection of the idea that all we can *ever* do is tell stories? I would argue not. Berthoff, you will remember, was polemicizing specifically against the misguided idea that a story is a story is a story; that we have no philosophical grounds on which to judge the veracity of any story, much less judge a story's confirmation of experience (as the material condition of embodied human existence in nature). Cronon's deployment of the concept of narrative, if anything, grounds all stories we tell of nature in experience; even more so, it theorizes experience *as* moral experience. This echoes the pragmatist insistence that lived experience is immanently normative, and that all such (honest) narratives reflect the shared social process of making sense of the world. This neither empties the notion of experience of its politics nor destroys the ground for learning what we can from nature.

In closing, I want to emphasize the dual-nature of what I have tried to accomplish in this chapter's final section. Primarily, the examples from James Proctor's essay ideally will have helped sketch what an environmental pragmatist nature-society geography might look like. This examination has come in the form of sentiments regarding the rationales for asking different analytical questions, but I also have provided a 'snapshot' of research that is philosophically consistent with the more explicitly pragmatist discussions that preceded it. Secondly, having outlined some of the multiple theoretical and methodological perspectives that will inform my research, I have prefigured the case that this 'environmental pragmatism' can constructively inform more than just the field of environmental ethics, the domain to which environmental pragmatism *per se* has been more or less confined up until now (though I do aim to make a contribution to this field). Specifically, my most robust contribution will be to critical nature-society geography. Through the discussion in these more theoretically-focused chapters, complemented by considerations in later chapters of how my empirical analyses can further inform theory, my dissertation will contribute to both theoretical and empirical nature-society studies. As Jody Emel put it, the goal of doing critical nature-society geography is "to be provocative but to stay in the game" (Emel, 1991, p. 384). In the empirical chapters that follow, I will provide what I hope is a convincing model of environmental pragmatism as "provocative" analysis. My parallel aim is for environmental pragmatism to provide the means by which I can stay in the game(s), by contributing to academic nature-society geography all the while the maintaining a commitment to the 'cause' of environmentalism.

Chapter 4. Rewilding Nature: Conservation Biology, Deep Ecology and the 'New Conservation Movement'

4.1. Introduction

The philosophy of deep ecology and the science of conservation biology have provided the wilderness movement in North America with a spark - a new suite of justifications for nature conservation. So revolutionized is the programme that one of the movement's leading proponents has dubbed it the "new conservation movement" (Foreman, 1995b, p. 55). The revitalized wilderness movement has grand ambitions and laudable goals. The goal, quite simply, is protecting Earth's biological diversity, to keep plant and animal species and ecosystem communities from going extinct. No region plays a more prominent role in the "continental conservation" (Soulé & Terborgh, 1999b, book title) of North America than the Northern Rocky Mountains (Clark et al., 1996; Gaillard, 2001; Noss et al., 1996), and no species is more integral or poses more challenges to this effort than the grizzly bear (Primm, 1996; Wilcox, 1997). Protecting biodiversity in the Rockies (or anywhere, for that matter) is, to put it mildly, no simple task. The complexity of the task is not lost on the leading proponents of continental-scale conservation biology in North America; they realize that "success in this endeavor depends on two conditions: good science and the popularization of a compelling, practical and inspiring vision" (Soulé & Terborgh, 1999a, p. 3).

Neither the vision nor the science, however, has developed unscathed from criticism. Deep ecology, the preservation of wilderness, even biodiversity conservation – all have been the subject of intense recent scrutiny by environmental and social theorists. In this chapter, I review some of the critics of the new conservation movement, and use their insights as a lens through which to assess the science, underlying philosophy, and politics of the movement. This analysis initiates one significant component of the dissertation, producing a sympathetic and reconstructive critique of the Conservation Biology proposal for grizzly reintroduction in Idaho and the burgeoning 'ecocentric' environmentalism of which it is a part. In doing so, I hope to help remedy one significant lacuna in geographical nature-society research: our general "unwillingness to entertain ecocentri[c]" thought as a noteworthy political endeavor (Castree, 2002, p. 207).

In the first section of the chapter, I develop a brief genealogy of the philosophy of deep ecology and one of its dominant North American offshoots. Following this, I examine the environmental group The Wildlands Project and its journal *Wild Earth*. This group espouses the ecocentric ideology of deep ecology and has been described as the radical vanguard of American environmentalism (Sessions, 1992). The Conservation Biology alternative for grizzly recovery was modeled on The Wildlands Project's signature conservation reserve design. Following the discussion of The Wildlands Project is a discussion of prominent critiques of deep ecology and wilderness preservation. These critiques frame an empirical analyses of the conservation biology proposal for grizzly recovery and The Wildlands Project as representative examples of "deep ecology on the ground" (Taylor, 2000, p. 269) – bringing to light some deficiencies in this version of ecological politics. In highlighting these deficiencies, my goal is not to provide a rationale for dismissing this wing of the environmental movement. Rather, in a reconstructive and pragmatic spirit, my aim is to help point a way toward a more roundly defensible and effective politics of wild nature.

4.2. Deep Ecology Comes to America

Nearly any genealogy of deep ecology begins in 1973, when the Norwegian philosopher Arne Naess (1973) coined the term in the short essay "The Shallow and the Deep, Long-Range Ecology Movement: A Summary." As the title of the paper suggests, this was at once a positive formulation of deep ecology and a critique of what he disparagingly termed "shallow ecology." These "ecologies" were not divisions within the science of ecology but branches of the environmental movement. For Naess, shallow ecology – or what would later be called "reform environmentalism" in the North American deep ecology literature – carried "an exclusive concern with issues of pollution and resource conservation insofar as these impacted on the interests of people in developed countries" (Mathews, 2001, p. 218). Consumed with the search for piecemeal solutions to particular issues, shallow ecology failed to ask "deeper questions" about the causes of ecological problems and therefore could never hope to solve the ecological crisis itself (Fox, 1990, p. 92). Deep ecology, on the other hand, offered a wholesale "normative critique" of human society and particularly the human relationship with nonhuman nature (Katz et al., 2000a, p. ix).

The bookends of Naess's philosophy of deep ecology are "Self-realization" and ecocentrism.²¹ These two idea(l)s are interrelated and arise out of the (scientific) ecological understanding of the living (and non-living) world as comprised of interrelated, interdependent, and mutually constitutive beings. The philosophy of deep ecology is thus at once *naturalistic* in that it is derived from ecological science and *holistic* as it appeals to the relationships between all beings constituting a whole, living Earth. Deep ecology offers a *corrective* against the (related) dominant Western, modern views that the human species is separate from nonhuman nature and that human individuals are in any sense separate from other living beings (humans included). "Self-realization," for Naess, is the logical conclusion of any truly deep ecological questioning (Fox, 1990). When "we" realize the interconnectedness of all things, it becomes evident that any concept of the self must expand beyond the individual to include all things. Promoting Naess's ideal of Self-realization, Warwick Fox states that

when we realize we are related to the whole, alienation drops away and we identify more widely with the world of which we are a part. Another way of expressing this is to say that we realize a larger sense of self; our own unfolding becomes more bound up with the unfolding of other entities (Fox, 1990, p. 105).

So while deep ecology purports to offer a planetary-scale solution to the ecological crisis, the locus of normative change is the human individual.

The second key component of Naess's deep ecology, ecocentrism, is a logical derivation of Self-realization. Once an individual realizes that he or she is not a narrow enclosed self and properly "identifies" (Katz, 2000, p. 18) with all of nature, anthropocentric (human-centered) thought or behavior becomes illogical. As such, deep ecology combines "a metaphysic of interrelatedness [with] an ethic of interrelatedness [in which] human beings are not morally privileged in any way, ... other life forms are just as morally considerable as we are" (Mathews, 2001, p. 218). Although Naess never writes in a polemical tone, the rhetoric of deep ecology is incontrovertibly divisive and dualistic. The most prominent example is the binary ecocentric/anthropocentric division,

²¹ The term actually used by Naess in his early deep ecology essays was "biospheric egalitarianism," but "ecocentrism" (and its near-synonym "biocentrism") have become the more widely used terms in contemporary deep ecology, particularly in North America (Fox 1990). All three terms are interchangeable for all but the most hairsplitting philosophical discussions, so I will stick with ecocentrism for currency and consistency.

which maps directly onto the deep/shallow ecology division. You – the environmentally sensitive individual – either possess deep ecological understanding or you do not; you either practice deep ecology or you do not. This is a prominently problematic feature of deep ecology which I will return to later in the chapter.

Deep ecology was relatively unheard of in North America until 1985 with the publication of Sessions and Devall's Deep Ecology: Living as if Nature Mattered. Contained in this book is a "platform" for the deep ecology movement (developed by Sessions and Naess). Unlike Naess's earlier work, the platform was intended to be less an "ecophilosophy" and more a set of principles that self-identified deep ecologists could rally around, regardless of "philosophical or religious positions" (Devall & Sessions, 1985, p. 70). The platform was based on the fundamental tenet that nature has "intrinsic value ... independent of the usefulness of the nonhuman world for human purposes" (p. 70). Beyond this fiat of intrinsic value, which is basically a restatement of the deep ecology commitment to nonanthropocentrism, the platform called for a reduction in human population, a decrease in human interference in the natural world, a change in "policies," and a personal "obligation directly or indirectly to try to implement the necessary changes" (p. 70). So the deep ecology platform at once codified a new grounding for many American environmentalists (ecocentrism) and recalled resonant themes within the movement (overpopulation, leaving "nature" to its own devices, and direct political action). Although summarizing Naess' early writing on deep ecology as a singular, cohesive entity is a relatively straightforward task, the same cannot be said of its American derivatives. Once deep ecology took root in the North American literature, it quickly irrupted into a diverse and rather amorphous catch-phrase, summoned by different writers to mean quite different things. It is will beyond the scope of this investigation to attempt to outline the various streams of the now incredibly-diffuse deep ecology movement in the US.²² What is necessary is to demonstrate the influence upon and continuity with the biodiversity/wilderness preservation movement in the US.

Although biodiversity/wilderness advocates in the US are not always selfidentified deep ecologists, several writers have traced its influence on and pervasiveness

²² Self-styled deep ecologists also include (among others) spiritual ecofeminists, proponents of Gaia theory, and Western Buddhist- and Taoist-environmentalists.

within the movement. Andrew McLaughlin locates deep ecology as one of five "streams" within "radical environmentalism" (McLaughlin, 1995, p. 258).²³ He states that "deep ecology grows out of a nature tradition extending back to John Muir and Henry David Thoreau" (pp. 258-9). This is familiar company for American environmentalists: along with Aldo Leopold, Muir and Thoreau comprise the "current canon...of American (read, United States) wilderness theory" (Van Wyck, 1997, p. 93).²⁴ Ramachandra Guha sees "a focus on the preservation of unspoilt wilderness" as foundational to the "uniquely American" version of deep ecology (Guha, 1998, p. 232, 233). Dave Foreman, perhaps the most prominent and outspoken wilderness defender in the contemporary US, lists deep ecology and conservation biology as the main inspirations behind his championed "new conservation movement" (Foreman, 1995b, p. 55). Before getting into an examination of this "new conservation movement," a short outline of the rise of conservation biology is necessary.

Conservation biology emerged in the early 1980s as an interdisciplinary field comprising "mostly biological and social scientists" dedicated to developing a scientific understanding of and response to the "biological diversity crisis" (Soulé, 1987, p. 4). Brulle states that "[d]eep ecology... inspired the formation of the academic discipline of conservation biology" (Brulle, 1996, p. 200) and it is not difficult to defend this assertion. Indeed, in 1985 Arne Naess gave the keynote address at the Second International Conference on Conservation Biology (Soulé, 1986). This talk was basically an introduction to deep ecology, highlighting the aforementioned key tenets of ecocentrism, Self-realization and the (then-new) deep ecology platform, culminating with a plea for conservation scientists to become active in the social realm, as policy advisors and even strong advocates of radical conservation measures (Naess, 1986). At the time, this call to action was perceived by many scientists as a bold proposition that might threaten their status as objective purveyors of scientific truths (Takacs, 1996). But the call was heeded by many, as most conservation scientists realized that all the data in the world on species decline and habitat degradation would be of little value if the resultant necessary protective measures were never achieved. The Society for Conservation Biology has

²³ The other four "streams" are "human-centered environmentalism calling for radical social change, social ecology, ecological feminism [and] bioregionalism" (McLaughlin, 1995, p. 258).

²⁴ The parenthetical section of the quote is van Wyck's.

grown immensely since its inception in 1985, now including over 5,000 members from 100 countries with annual conferences attended by over 1,000 people (Society for Conservation Biology). The society launched its flagship journal *Conservation Biology* and the journal is now ranked as the top environmental sciences journal in Thompson's Scientific Citation Index (Dalehousie Whale Research). While the bulk of the journal's essays are scientific-ecological analyses that would not be out of place in less activist journals such as *Ecological Monographs* or *Trends in Ecology and Evolution*, *Conservation Biology* also regularly includes more openly normative essays focusing on the social aspects of conserving biodiversity.

In the following section of the chapter, I will trace the rise of what Dave Foreman calls the "new conservation movement" (Foreman, 1995b, p. 55). I locate the advocacy for the Conservation Biology proposal for grizzly recovery within this wing of the environmental movement. This uniquely American deep ecology *cum* wilderness preservation movement will be introduced here through an examination of its most high profile and representative activist group The Wildlands Project and their journal *Wild Earth*.

4.3. Biodiversity and the Preservation of Big Wilderness

The Wildlands Project (TWP) emerged in 1991 when a small group of members of the radical environmental organization Earth First! (most notably Dave Foreman and Reed Noss) decided to dedicate their full-time energies to the service of "the biocentric grassroots elements within the conservation movement and advocating the restoration and protection of all natural elements of biodiversity" (Wild Earth, 1991, inside front cover). Rejecting the "radical anarchism [and] New Left anticapitalism" that guided Earth First!'s commitment to "localist" direct action campaigns (Luke, 1997, p. 35), these former "ecowarriors"²⁵ were both upping the scale of wilderness/biodiversity activism and fashioning the movement with a veneer of scientific respectability.²⁶ While Earth

²⁵ This moniker is from Foreman's (1991a) memoir of his "monkeywrenching" days as an Earth First!er.

²⁶ Murray Bookchin is helpful in explaining this shift away from the activist left and to scientific deep ecology (Bookchin's extensive writing on the subject paraphrased here by Matthew Humphrey): "Elements which has always existed in 1960s counter-culture – such as a fascination with Asian mysticism – but had been weighed down with a rationalistic left-wing political ballast exploded freely on to the political scene with the withering away of New Left ideology. The social analysis brought to 1960s counter-culture by the

First!ers were busy defending specific wilderness areas against specific threats, the folks at TWP were thinking big, "set[ting] the stage for the development of a North American Wilderness Recovery Strategy" (Davis, 1991).

Courtesy of the findings of the nascent academic discipline of conservation biology,²⁷ "Big Wilderness" had become ecological necessity (Foreman, 1991b). Wilderness, we are told, should no longer be perceived as "scenery" but rather *is* the foundation for the preservation of all "Nature" (Foreman, 1995a, p. 10). This is no minor point. The "issue theme" of *Wild Earth*'s inaugural issue was "ecological foundations for big wilderness." Proposing this as merely the "theme" of the first issue of the journal was a radical understatement. Advocating Big Wilderness as ecological necessity has persisted as the mission of TWP to this day.

In the 1992 *Wild Earth* special issue "The Wildlands Project: Plotting a North American Wilderness Recovery Strategy," the "mission statement" opens:

The mission of the Wildlands Project is to help protect and restore the ecological richness and native biodiversity of North America through the establishment of a connected system of reserves... It is time to ... begin to allow nature to come out of hiding and to restore the links that will sustain both wilderness and the spirit of future human generations (Foreman et al., 1992, p. 3).

Linking wilderness to the human spirit recalls the "old platitudes" of gurus like Thoreau and Muir, for whom wilderness was a "place to be loved, enjoyed, [and] inhabited respectfully" (Rothenberg, 1995, p. xiv). These (arguably anthropocentric²⁸) sentiments inspired the American wilderness movement for over a century, and ultimately led to the preservation of tens of millions of acres of national parks and wilderness areas (Soulé & Noss, 1998). What was protected, however, was mostly "rocks and ice' – high elevation, arid, or rough areas which are beautiful and are popular for backpacking, but which are *relatively* unproductive habitats" (Foreman, 1995a, p. 14). The relict patchwork of

New Left faded away, leaving [for example, deep ecology] – a mystical, potentially anti-humanist politics of the person in place" (Humphrey, 2002, p. 88).

²⁷ I would place The Wildlands Project as a subset of conservation biology, with a much more openly radical agenda, in the sense of an organization-wide consensus toward championing strict protection for huge wilderness areas. Not all conservation biologists adhere to the grand-scale ambitions of TWP, but nearly all contributors to *Wild Earth* echo the science-based advocacy of The Society for Conservation Biology.

²⁸ And this is not to baldly characterize Thoreau or Muir as anthropocentrists, but to note that the early wilderness movement succeeded mainly in preserving scenic and often spectacular locales irrespective of ecological considerations.

reserves has gone some ways toward preserving North America's endangered species and ecosystems, but for the most part, only by accident.²⁹ TWP rejects the wilderness-asscenery model in favor of a reserve model that would "protect wild habitat, biodiversity, ecological integrity, ecological services, and evolutionary processes" (Foreman et al., 1992, p. 4). The old model produced isolated wilderness areas unable to sustain the full complement of native species and ecological processes (Soulé & Noss, 1998).

What TWP proposes is a radical modification of the existing nature-reserve model. The dual spatial model of "discrete islands of nature in a sea of human modified landscapes" (Foreman et al., 1992, p. 4) is rejected in favor of a four-parcel model. Now called "core reserves" - defined as large areas "without roads, dams, motorized vehicles, powerlines, overflights, or other artifacts of civilization" (Foreman et al., 1992, p. 4) wilderness areas still form the heart of the model. Existing wilderness areas and other relatively undeveloped Federal lands would serve as the initial core reserves. As such it is no accident that this conservation reserve model has been so heavily promoted in the Rocky Mountain Northwest. No other region in the country contains both extant populations of endangered charismatic species (e.g., grizzly bear, wolf) and huge existing wilderness areas and national parks - de facto core reserves for the Wildlands Project's planning purposes. In these regions a "wildland matrix" would dominate the landscape (Noss et al., 1996, p. 956, see Figure 4.1). In areas where existing protected area reserves are smaller and significant expansion is not a possibility, a "human dominated matrix" would dominate the landscape, while smaller yet still connected and buffered core reserves would function to preserve and maintain biodiversity and ecosystem functions.

²⁹ For example, the creation of Yellowstone and Glacier National Parks may well have saved the grizzly bear from extinction in the lower 48 states, but neither park was created to help save the grizzly. A few species, such as the bison, have had large protected areas created specifically on their behalf. Other species, like the black-footed ferret, had little or no native habitat protected incidentally or intentionally, and have not benefited whatsoever from the creation of wilderness areas or national parks.

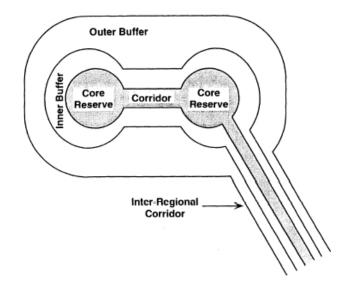


Figure 4.1. Reed Noss's Idealized Conservation Reserve Design (from Noss et al., 1996, p. 956)

Whether in a wildland or human-dominated landscape, core reserves would be managed as unobtrusively as possible to allow for natural ecological processes to flourish. Core reserves would be linked together by "biological corridors" (the second parcel in the model) enabling the dispersal, genetic exchange, and migration of wildlife, thus mitigating the 'island effect' of isolated protected habitats and ecosystems (Foreman et al., 1992, p. 4). Both core reserves and corridors would be surrounded by "buffer zones" (parcel three) designed to protect the "integrity [of core reserves] from disruptive human activities" (Foreman et al., 1992, p. 4). Limited human activities "compatible with protection of core reserves" would be "allowed" in buffers (Foreman et al., 1992, p. 4). The forth parcel in the model is areas of "intensive human activities... agriculture, industrial production, urban centers" (Foreman et al., 1992, p. 4). This core/corridor/buffer model has been most thoroughly developed by Reed Noss (Noss, 1992; Noss & Cooperrider, 1994; Noss et al., 1996), past president of the Society for Conservation Biology and science editor of *Wild Earth* since its inception. With occasional slight terminological modifications (for example, corridors as "landscape linkages" and buffers as "compatible use areas" (in Foreman et al., 2000)), the model has persisted relatively unchanged to the present day.

In addition to the radically revolutionized reserve design model, two other prominent motifs in TWP's conservation programme deserve highlighting. These are the concept of "rewilding" and the role of large carnivores in TWP's conservation strategies. Since the program's inception, these components have received increasing prominence and emerged as central to TWP's 'mission'. Reed Noss and Michael Soulé, the most prominent conservation biologists associated with TWP,³⁰ envisage TWP's conservation model as the third wilderness preservation paradigm in the US, and the first one capable of fully "rewilding" the landscape (Soulé & Noss, 1998, p. 20). The first paradigm was the monumentalist model of Muir and others (as discussed above). This wilderness is the mostly high elevation, spectacularly scenic landscapes that Foreman disparagingly refers to as "rocks and ice" to highlight the fact that most of these wilderness areas lack much biological richness (Foreman, 1995a, p. 15). The second paradigm, the "biological conservation" model, followed discoveries made in the nascent science of ecology and the visionary leadership of Aldo Leopold. The biological conservation movement worked to create preserves in often less spectacular, but more ecologically rich ecosystems. Such sentiments inspired the protection of places like the Okefenokee National Wildlife Refuge in 1937 and Everglades National Park in 1947.

Early empirical research by conservation biologists in the 1980s, however, demonstrated that even this model failed to fully protect biodiversity. In all but the largest reserves, mammal species had gone extinct or were in serious decline (Newmark, 1985). Typically the first species to go extinct were the large predators. Large predators act as "keystone species," defined as species "whose influence on ecosystem function and diversity are disproportionate to their numerical abundance" (Soulé & Noss, 1998, p. 22). The disappearance of large predators from any particular ecosystem, then, while perhaps appearing to be a minor ecological event (as the numbers of species and individuals of large predators are never high) often has enormous structural and functional effects on the ecosystem. For example, top predators can have a positive effect on songbird populations by keeping populations of smaller "mesopredators" in check (Terborgh, 1999). Top predators can even positively affect game species which they prey upon through the regulation of trophic functioning (Palomares et al., 1995). Predators' regulating function is not limited to other animal species. In an example from the

³⁰ Dave Foreman is the other high profile founding member and spokesperson for TWP, but Foreman is not a biologist.

northern Rockies, the reestablishment of wolves in Yellowstone has been linked to reinvigorated, healthier populations of aspens, due to the wolves' effects on elk browsing behavior (Bragg, 2000; Ripple & Larsen, 2000; Ripple et al., 2001). These examples are not meant to imply that all species simply increase their numbers when top predators are reintroduced. Yellowstone elk populations, for example, have declined since the reintroduction of the wolf in 1995, though it has also been shown that the reduced elk herds contain healthier, more robust individuals (Wilmers & Getz, 2004). While the effects of predator reintroductions in any given ecosystem will vary and be only partially predictable, what is undeniable is that predator reintroductions (or recolonizations) cause *some* set of signal changes in ecosystem function. For an increasing number of environmentalists, no matter what the changes, the difference marks a net gain in "wildness."

Soulé and Noss define "rewilding" as the protection or restoration of the full suite of native predators to ecosystems, thereby "restoring self-regulating land communities" (Soulé & Noss, 1998, p. 23). Large carnivores (grizzly bears not just being an example, but the Northern Rocky Mountain exemplar³¹) require enormous tracts of relatively undisturbed habitat (Noss et al., 1996; Weaver et al., 1996). If such habitat is protected with carnivores present, their regulating functions ensure (or help to restore, if the predators are reintroduced) a relatively healthy ecosystem. "Simply put, if enough habitat is protected to maintain viable populations of large predators ..., then most of the other species in the region will also be protected" (Foreman, 1995a, p. 13.). So what to call a wild or rewilded landscape? "Core reserves" works well in the technical literature, certainly in the context of the reworked reserve design model. It does fulfill the first of Soulé and Terborgh's (1999a) two necessary conditions for success, that is, the "core reserves" concept is backed up with "good science" (p. 3). But can the protection and defense of core reserves "popularize ... a compelling ... and inspiring vision"? Likely not. Certainly, it makes sense to choose a construct that connotes the wildness that should define it. What the folks at TWP and the proponents of the Conservation Biology alternative have done – instead of attempting to frame their agendas around an entirely

³¹ The grizzly bear is "the most telling barometer of the health of the Northern Rockies ecosystems" (Wilcox, 1998, p. 15).

new construct – is attempt a revitalized case for the protection of "wilderness." Wilderness, now (or even "now more than ever" (Noss, 1994/5)), is not determined by any particular land protection status. "True wilderness"³² (Foreman et al., 1992, p.4) is a function of "wildness," and wildness requires the presence of keystone species, including large predators.

Wilderness as a foundation for environmental politics has been the subject of scrutiny and sometimes rather intense criticism over the past couple of decades. Deep ecology as well has received its fair share of critical examination. In the next section of the chapter, I examine some recent debates regarding the politics of deep ecology and wilderness advocacy.

4.4. Deep Ecology and Wilderness Defense Meet Critics

Although there is a wide body of scholarly literature discussing and critiquing the *philosophical* basis for deep ecology and ecocentrism,³³ in this section I focus more on *pragmatic* critiques, that is, how deep ecology as a body of thought manifests as "deep ecology on the ground" (Taylor, 2000, p. 269). This is considerably less of an issue when dealing with critiques of wilderness preservation, as these discussions nearly always focus on the practical politics of the environmental movement.

For the purposes of terminological convenience, I will refer to the first critique of wilderness preservation outlined here as the "production of nature" thesis. The term "production of nature," as discussed at length in Chapter 2, was coined by Neil Smith (Smith, 1991). There is little reason, however, for limiting the term to critiques that directly reference Smith's initial theorizing. I use the production of nature to refer to more or less Marxist critiques rooted in historical examinations of the justifications for the preservation of wilderness, particularly those focusing on human labor and the transformation of nature in capitalist society. Carl Talbot argues: "Within the Western tradition the idea of wilderness is closely linked to its function as a salve for a spiritually battered workforce" (Talbot, 1998, p. 326). Due to the inevitability of "the degrading,

 $^{^{32}}$ To use a good example of one of the times the wilderness construct has been qualified to designate its new sense.

³³ Easily the best single-source for sympathetic critiques of the philosophy of deep ecology is Katz, Light and Rothenberg's (2000b) edited collection *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology.* The distinction between philosophical and pragmatic critique, of course, is by no means clear cut, and some of the literature I reference probably does tend as much toward theoretical as practical critique.

alienating, and 'unnatural' character of the work process under capitalism," nature – as wilderness – is "banish[ed] ... to the realm of leisure" (pp. 327, 328). Wilderness becomes a mere cog of "nature ... organized so as to meet the spatial, economic, and psychological needs of capitalism" (p. 326).³⁴ While contemporary wilderness defenders perceive themselves as being part of a longstanding tradition of resistance to an alienating, capitalist, consumer-driven society, in this light they are little more than unwitting dupes aiding and abetting its production and reproduction.

This critique, if convincing, certainly would undermine statements that rewilding might constitute a "radical environmentalism" (Sessions, 1992). Thus we are presented with a rather cynical debunking of wilderness-defense-as-resistance. But perhaps we need not accept or reject this critique *tout court*. I would argue that this critique is neither 'true' nor 'false' as applied to some imagined monolithic wilderness preservation movement (which certainly doesn't exist today, if ever it did). What this thesis points to, positively, is hypotheses to be tested through empirical analyses of particular wilderness narratives or particular political actions. For example: *Would rewilding on-the-ground require "capital's ideologues to seal the deal"*? (Talbot, 1998, p. 330); or, *Can the construct of wilderness be radicalized, rescued from its ideological and obfuscatory history*? Clearly, these questions will not have simple 'yes' or 'no' answers either, but such a line of "deep questioning" is fundamental to any deep ecology worthy of the name (Evernden, 1999; Fox, 1990).

Another strength of the production of nature thesis is an insistence on bringing every act of ecological advocacy firmly into the realm of the sociopolitical. Nature can never be preserved in-itself and/or for-itself (Smith, 1991). Every act of nature protection – no matter how much it enables "natural processes [to] reign" (Noss et al., 1999, p. 99) – is necessarily "the result of social decision-making and social action" (Talbot, 1998, p. 326). This "social decision-making" (i.e., politics), even in purportedly liberalized democratic societies such as the US, can (quite obviously) take various forms, some more desirable than others. Deep ecologists have long ordained decentralized, democratic politics as *the* necessary means to their desired ends (e.g., Devall & Sessions, 1985;

³⁴ And I think the parallels to Smith's thesis are pretty clear in this essay, even as Talbot's examination is considerably more specific, dealing with wilderness *per se*.

Naess, 1973; Soulé, 1992). This commitment notwithstanding, many critics (both sympathetic and hostile) have feared that deep ecologists would not shy away from an opportunistic alliance with authoritarian or reactionary politics (Bookchin, 1994; Ferry, 1995; Harvey, 1993).

The most salient examples of actually existing undemocratic wilderness conservation come from the Third World, where the exportation of the American model of wilderness preservation has often been "frankly imperialist" (Guha, 1998, p. 236), with "the setting aside of wilderness areas ... result[ing] in a direct transfer of resources from the poor to the rich" (p. 235). American deep ecologists, for the most part, have been anything but vocal opponents of the Third World eco-imperialism described by (among others) Guha in India and Neumann in Africa (Neumann, 1995, 1996, 1998). That noted, Soulé and Noss have of recent been careful to construct "rewilding" as a model appropriate for the North American context specifically, while recognizing "other rationales and strategies for conservation" in other parts of the world (Soulé & Noss, 1998, p. 21). Hopefully, this represents a heightened sensitivity to cultural context taking root within the wilderness preservation movement.

Human ("over")population receives enormous attention from deep ecologists and wilderness defenders. This issue also marks one of the seemingly more intractable rifts between these groups and Marxists and other leftist theorists and activists. This rift traces back to Marx and Engels' reaction to Malthus. Malthus argued that human population rises geometrically while the food supply can only rise arithmetically. Misery and poverty will beset a great majority of humans – this is the sad fact of human existence. Marx and Engels argued against the universality of the law of exponential population increase, adding that a surplus population was a historical feature distinct to capitalism (Benton, 1989). The Marxist rejection of Malthus' theory of natural limits was wholesale. Ted Benton – a sympathetic reader of Marx – has gone so far as to refer to Marx and Engel's "Utopian over-reaction to Malthusian epistemic conservatism" (Benton, 1989, p. 58) and this over-reaction has persisted through to many present-day Marxists. But again, taking this as an either/or issue (e.g., *either* nature can tell us exactly what limits it places on humans *or* all talk of natural limits is *ipso facto* reactionary) creates a meaningless standoff between green and red straw men. I would argue that a tempered skepticism

toward evocations of, for example, overpopulation as the cause of ecological degradation (particularly in the abstract), can expose some latent conservative-to-reactionary *tendencies* in environmental discourses.

Examples taken directly from bear conservation in the US should help make my point. The first example is taken from Craighead, Sumner and Mitchell's (1995) *The Grizzly Bears of Yellowstone*, a 500-plus page coffee-table book that is the most ambitious natural history of grizzly bears yet written. In a whistle-stop history of the Euro-American colonization of the American Northwest, the authors begin (logically) with Lewis and Clark, who found a "wilderness, its flora and fauna supporting small, widely dispersed tribes of Native Americans" (p. 457). The Native Americans were part of nature, ecologically "co-dominant" with the grizzly bear, "which was worshipped, feared, and always respected. The two species coexisted." But then, the settlers arrived:

Even at that time, the major threat to the pristine landscape and its flora and fauna was not the wasteful destruction and use of the natural resources, but the *rapidly growing Caucasian population* with a greed ethic that sanctioned genocide to all forms of life that threatened European man's manifest destiny. The raw, ugly disdain for life exhibited in the "annihilation" of Native Americans, the bison, and the large predators appears *to be innate in the human species* (p. 457, emphasis added).

Life-hating annihilating tendencies become "innate to the human *species*," and a slip of logic goes apparently unnoticed. If for thousands of years the Native Americans lived in harmony with and mutual respect toward the grizzly bear, in a pristine landscape of abundant flora and fauna, then how can this "greed ethic" brought by "European *man*" (*sic*) be naturalized — that is, universalized — to the human *species*? This inconsistency is never resolved. Perhaps it *cannot* be. For, if the "greed ethic" is the problem causing this (and no doubt other) forms of ecological degradation, and if this ethic is *not* inherent to the human species, then *alternatives* become necessary. Essentialist discourses that blame *humanity* obviate the need to imagine these alternatives. To be fair to these authors, they do attempt to peg down the causes of problems with grizzly conservation beyond blaming just "humanity" or a completely abstracted "greed ethic," but the rest of

the investigation remains as muddled, inconsistent, and generally unhelpful as this passage.³⁵

On the homepage of the Craighead Environmental Research Institute website we find that "world population growth" is "the problem":



Figure 4.2. World Population Growth Counter from the Craighead Environmental Research Institute's Website (Craighead Environmental Research Institute, 2002a)

Clicking on the "World Population Growth" link takes us to a page where we find following passage:

One obvious solution is to reduce the number of human beings to levels at which all can enjoy a high quality of life without endangering other species. This is clearly not going to happen overnight (at least not in any humane fashion). Another possible solution is to develop sustainable economies and to maintain large areas of natural habitat in order to provide ecosystem functions and provide space for other species. This is the approach we are working toward at CERI (Craighead Environmental Research Institute, 2002b, paragraph 2).

Developing sustainable economies and maintaining adequate wildlife habitats would undeniably be a wonderful solution, and I cannot fail the staff of the Craighead Environmental Research Institute for being unable to state exactly how these changes might come about. I would argue, however, that the problems are not simply functions of overpopulation. Moreover, a reduction in human population is not such an "obvious solution" – fewer people wouldn't necessarily lead to sustainable economies or more areas of healthy habitat. My point is not to denigrate the efforts of the Craigheads and their colleagues nor is it to represent them as Malthusian reactionaries. My point, rather, is to agree broadly with Marxists and social ecologists³⁶ that blaming "humanity" (under whatever guise) is not only a copout – if one is actually trying to assess the causes of ecological degradation – but can also be ideological by deflecting attention away from

³⁵ Other causal agents include "misguided bureaucrats" (p. 459), "our politico-economic system" (p. 491), and "catering to special interests" (p. 492).

³⁶ Social ecology here referring to the body of theory formulated by Murray Bookchin. A representative work that gives a concise version of his critique of deep green thought is his *Which Way for the Ecology Movement*? (Bookchin, 1994).

class, racial, and region inequalities and indeed may mask a programmatic reinforcement of dominant exploitative social relations (Benton, 1989).³⁷

Returning to the production of nature thesis in general, deep ecology's relative silence on nature outside of wilderness is also rendered problematic: "The [deep ecological] journey leads away from the urban setting, where this environmentalism has little, or nothing, to say about humanity's relation to nature in the sphere of production, to the 'wilderness'" (Talbot, 1998, p. 331). Too often, when American deep ecologists do speak of the "sphere of production," it is in a wholly cynical and condemning tone. Logging, mining, ranching, road building: these become the unqualified ecological villains of the American West (Foreman & Wolke, 1989). Despite token nods toward "compatible" human uses in buffer zones, a sharp rhetorical and material dichotomy between "true wilderness" (Foreman et al., 1992, p. 4) and human-occupied lands is forged and relentlessly defended.

There are multiple potential levels on which to critique this "fixation on [the] purity" of wilderness (White, 1995, p. 185). For one, environmentalists often hold privileged and affluent occupations which do not require a daily working, transformative relationship with nature. Indeed, most "environmentalists have come to associate work ... with environmental degradation" (p. 172). It can come as no surprise, then, that many "environmentalists disdain and distrust those who most obviously work in nature" (p. 172). This disdain and distrust often eliminates any potential for 'working alliances' with local communities, the very grounds of support which are so often needed for preserving particular parcels of nature. This is not to naively posit that engendering working alliances with resource-dependent communities is a straightforward task, if only it were attempted. In a case study from the northern California redwood forests, Jonathan London has shown how difficult it was for radical environmentalists to ally with timber workers, even when it was fairly obvious (at least to the environmentalists) that the timber companies did not have their workers' best interests at heart (London, 1998). Pragmatic difficulties noted, I would still argue that a purist wilderness ideal – whether

³⁷ Having a leading environmental group replaying the overpopulation card like this cannot, for example, help the Sierra Club (and, with the Sierra Club being arguably the highest profile environmental group in the US, the environmental movement in general) overcome the black eye worn after an anti-immigration proposition made its 1998 annual ballot (Solnit, 2004).

scientifically, aesthetically, or spiritually based – can and does preclude the development of potentially productive lines of communication (this thread will be most thoroughly elaborated in Chapters 6 and 7).

Further, if we are to protect thirty, forty, or even fifty percent of the land as wilderness (e.g., Noss, 1991; Shaffer, 1992), this must mean that our relationship with lands outside of wilderness will need to be transformed as well. The relative silence on the actual requirements of this forgotten half of the equation is evidence that, at best, rewilding advocates should be humbled by the fact that they have yet to produce anything close to all the remedies for our ecological ills. As Bron Taylor succinctly puts it, "little if any theory of social change" accompanies deep ecologists' profoundly radical proposals (Taylor, 2000, p. 283).

A second broad criticism of deep ecology and ecocentric environmentalism is the divisive of the rhetoric arises nature and the hubris that from the ecocentric/anthropocentric dualism. Divisiveness and hubris, quite obviously, are built into the term 'deep ecology' itself. From the go, environmentalists are divided into two camps, the 'shallow' and the 'deep', and it is clear that one term is "pejorative" and the other "self-congratulatory" (Fox, 1990, p. 120). 'Shallow' also maps directly onto 'anthropocentric', another term of derision, with the flipside being the more enlightened deep-ecocentric approach. For contemporary American deep ecologists, direct references to "shallow ecology" are relatively rare, but the ecocentric/anthropocentric divide is relentlessly guarded and defended. The rejection of anthropocentrism adds fuel to the fire of deep ecological hubris. Anthropocentrism is seen as a characteristic feature of Western society and the root cause of ecological degradation (Norton, 2003; Taylor, 2000). Those who subscribe to this tale, therefore, see themselves as not only having overcome an antiecological prejudice but also having risen above and beyond their entire cultural heritage. The American environmental movement, we are told by deep ecologists, is basically anthropocentric and *must* adopt a biocentric perspective. "Acceptance of the primacy of this distinction constitutes the litmus test of deep ecology" (Guha, 1998, p. 232). The often-smug dismissal of all questions 'anthropocentric' allows deep ecologists to view themselves as the vanguard of the environmental movement (e.g., Milbraith, 1984; Sessions, 1992).

Bryan Norton rejects the ecocentric/anthropocentric divide as counterproductive and empirically unverifiable. Deep ecology implicitly invokes a "divergence theory" where "[e]nvironmentalists gravitate toward ultimately incompatible policy programs ... because they are split between those who accept and those who reject anthropocentrism" (Norton, 2003, p. 79). But where, Norton asks, is the evidence that such a split exists in the American environmental movement? Why do deep ecologists disparage the various non-ecocentric arguments supporting biodiversity conservation? Why choose to "attack the ultimate values" of everyone other than self-identified ecocentrists rather than seeking pragmatic alliances with other environmentalists (Norton, 2003, p. 80)? Certainly, if they are to achieve anything close to their ambitious goals (all the while maintaining their commitment to democracy!), defenders of wilderness need at the very least a broad base of support within the environmental community. After all, what is it deep ecologists are defending, wilderness and biodiversity or individual commitments to ecocentric purity?

Mick Smith (2001, p. 122) argues that American deep ecologists rely on increasingly "scientistic route[s]" to arrive at their normative proposals. An institutional culture of unreflexive scientism effectively inhibits a self-critical, pluralistic politics. Normative proposals that can be questioned on a number of levels are given a philosophical gloss when touted as ecocentric. Anyone who dares to argue, for example, that the case for wilderness conservation might rest on shaky (ethical, epistemological, political, etc.) ground is dismissed as an anthropocentric "humanist" (Smith, 2001, p. 124). This is a strong critique for someone purporting to forge a theory "true to the spirit of radical ecology" (p. 3). But, as I read it, what Smith is attempting (and my sentiments and research intent echo this spirit) is to help foster a more constructive and mutually productive dialogue between radical ecology and progressive politics. Both 'sides' have much to learn from the other. Perhaps more significantly, for the sake of political change, I think it is very likely that neither movement can be as successful on its own as it would allied with the other. To be clear, this is not meant to imply a rigid binary typology of green/red or environmental-movement/social-justice-movement (or whichever various titles might apply). If this division ever applied, it would certainly be archaic to employ it today. Rather, my point is to survey various critiques of green thought, ecocentric politics, and wilderness conservation, and then assess whether and the degrees to which

they are relevant to the US conservation biology movement. My hope is that an honest assessment of the movement in light of trenchant but fair and insightful critiques can serve as one piece in the larger project of fostering a stronger movement. That digression allowed, I will return to Mick Smith's critique of "scientistic deep ecology."

Smith shows that deep ecologists often employ biologically determinist explanations of human behavior, down to and including the very action of advocating on behalf of wild nature. ³⁸ Much of this is due to the influence of Paul Shepard, who over the course of three decades wrote volumes of work speculating on the biological basis for human attitudes and behaviors toward nature. George Sessions (co-author of *Deep Ecology* and two-time contributor to *Wild Earth*) approvingly paraphrases Shepard's thesis as stating that:

Humans are genetically programmed for wild environments, and that ... modern urban humans who have not bonded with wild nature are ontogenetically stuck, remaining in some ways in an adolescent stage of human development (Sessions, 1995, p. 15, in Smith, 2001, p. 122).

Writing in *Wild Earth*, Shepard's wife and longtime editor Florence Shepard states that he "implored us to return to the integrity of our genes, to trust them and follow their lead" (Shepard, 1999, p. 25). It is not terribly difficult to make the case that this represents a scientistic sensibility, that is, that the methods and findings of science can ultimately explain all actions and behaviors (human and non-) including normative-ethical statements regarding right and wrong actions toward nature. There are problems with a scientistic propensity in general and with the particular scientistic influence of Paul Shepard specifically, each of which is deserves brief comment. Scientism in general, and this is a point Mick Smith convincingly makes, "relies upon a homogeneous picture of scientific discourses, ignoring the very real debates *within* sciences" (Shepard, 1999, p.

³⁸ If the charge of "scientism" appears abrasive, perhaps an example of scientistic conservation will help quell the potential charge that the critique is more damming in the abstract than in the real world. George Wuerthner, in his *Wild Earth* essay "Selfish Genes, Local Control, and Conservation," while arguing against local-based conservation efforts, states that "given a free hand, most humans tend to maximize their individual welfare at the expense of the collective whole... Indeed, our selfish nature may be a genetically determined behavior" (Wuerthner, 1999, p. 89). One of the "policy implications" he draws from this inanely simplistic and questionable (Lewontin, 1992) 'natural' species-wide selfishness and the resultant ecological degradation is that "rather than expect local support for conservation proposals, we should expect opposition, and work beyond it" (p. 91). "Expecting opposition," I would add, need only be the case when taken as an *assumption* when designing the conservation proposals in the first place. Stated another way, if we expect local opposition, it is likely that our proposals will live up to this expectation.

122). Not all ecological science, for example, suggests that grizzly bears require huge, connected roadless areas to remain ecologically viable in the lower 48 states (McLellan & Shackleton, 1988; Mincher, 2002). But the conviction that science can so unequivocally produce a sole potential solution establishes intolerance toward competing views and a generally disparaging attitude toward anything that might smack of compromise. It can and does, in other words, result in a sort of fundamentalism.

Regarding the influence of Paul Shepard, there are obvious positive effects his writing has on wilderness defense environmentalism. Most obviously it inspires people to care about wilderness enough to support its protection. Moreover, as Shepard's books postulate the significance of interactions with non-human animals to human development (Shepard, 1996, 1998b), the conservation-biology wilderness movement would seem to be truer to Shepard's ideal than the rocks-and-ice of spectacular mountain vistas. That being said, Shepard's work is very dichotomous, splitting human history between a valorized pre-modern era of human-animal bonding and "normal" ontogenetic development and a modern world of alienation from nature and stunted human development. This is potentially problematic on at least two levels. For one, it allows wilderness advocates who harbor the proper sensibilities toward nature and just as importantly the proper nature pastimes (e.g., backpacking, hunting³⁹) to feel like they have overcome the modern alienation from nature. This, of course, is only problematic if it fuels an arrogance and derogation toward those who think and act differently. Whether and to what degree this sentiment exists and assessing its effects are, to put it mildly, very difficult to gauge (even if the presence of the sentiment is rather easy to demonstrate). But it is a fair and worthwhile exercise to point out when a more or less foundational theory contains inescapably divisive elements. Shepard's meta-anthropology can also foster or further anti-urban attitudes, as the rise of sedentary life and agriculture mark the transition to alienated modernity (Shepard, 1998a). The charge of an anti-urban bias within deep ecology is nothing new, nor by any means should it be placed squarely on the shoulders of Paul Shepard. Pro-nature and anti-urban sentiments have been linked at least since the romantics. The real effects of anti-urbanism, again difficult to pin down, could

³⁹ Shepard's work strongly valorizes hunting. Perhaps this should not be surprising, since his model human societies are Paleolithic hunter-gatherers.

at the very least reinforce the aforementioned tendencies to marginalize non-wilderness portions of landscapes in conservation efforts as well as denigrate nature-transforming activities such as logging and agriculture.

I would agree with Bron Taylor that, within the deep ecology movement (and, I would add, its conservation-biology-inspired offshoot), "a social critique and social philosophy are needed" (Taylor, 2000, p. 287). Perhaps the lack of a sufficient social theory should not be surprising due to deep ecology's holistic aims (as exemplified by Paul Shepard's "mythologizing" (Taylor, 2000, p. 282)) and individualistic character (as exemplified by Naess's "Self-realization"). Too often, such theories do seem to foster a retreat into "simplistic binary oppositions" that often results in "mono-causal explanations [that tell us little about] the causes of and solutions to environmental degradation" (Taylor, 2000, p. 275). It is not terribly difficult, then, to make the case that deep ecologists often exhibit tremendous "interpretive hubris" (p. 275). Instead of deep ecology "informing [other] radical social movements seeking profound changes in our relationship with nature" (as it should), divisive posturing and potentially reactionary scientism do little to silence those who would "mak[e] deep ecologists everybody's favorite misanthropes" (Smith, 2001, p. 124).

It only makes sense to end this section with a discussion of William Cronon's essay "The Trouble with Wilderness." The essay is one of the more challenging of the sincerely sympathetic critiques of wilderness yet written. Probably for that reason, it sparked something of a firestorm of response from many wilderness defenders. Cronon begins the essay by stating that we can no longer honestly hold forth wilderness as "a pristine sanctuary where the last remnant of an untouched, endangered, but still transcendent nature can for at least a little while longer be encountered without the contaminating taint of civilization" (Cronon, 1995, p. 69). Moreover, and this is where his critique hits at the heart of the rewilding movement, "we mistake ourselves when we suppose that wilderness can be the solution to our culture's problematic relationships with the nonhuman world, for wilderness itself is no small part of the problem" (p. 70). I will examine each of the assertions in turn.

The first claim, that wilderness is not untainted nature but a particular way of perceiving particular types of landscape, should be nothing shocking for even the most

fervent defender of the wilderness idea. Few now are unaware that the idea of wilderness had much stronger negative than positive connotations in European and Euro-American culture through most of the nineteenth century. Far from connoting a paradisiacal nature in need of preservation, wilderness was places "savage", "desolate", "barren" (p. 70) places defined *negatively* due to their relative lack of (obvious) human presence and improvement. Romantics and transcendentalists (most famously in the US, Henry David Thoreau and John Muir), however, changed the perception of wilderness so profoundly that "it was frequently likened to Eden itself" (p. 72). Cronon sees the debates over the damming of the Tuolumne River in Hetch Hetchy Valley (well away from Yosemite Valley from within the bounds of Yosemite National Park) as the first major national wilderness debate. Damming the valley was a way to ensure the growing city of San Francisco with a reliable source of freshwater, but for the new wilderness preservation movement, "such an act [was] not improvement or progress but... desecration and vandalism" (p. 72). This would mark the first of a long line or environmentalist protests to large-scale development projects. Contemporary resistance efforts to such projects are not often couched in such explicitly religious metaphors as "desecration." In today's more secular society, the defense of wilderness is more likely to be justified by the preservation of biodiversity. As such, "the concept of wilderness [continues to be] loaded with some of the deepest core values of the culture that create[s] and idealize[s] it" (p. 73).

The American West has always been the most prominent geographical region for the wilderness preservation movement, and Cronon places a large part of this geographical bias as emerging out of Frederick Jackson Turner's frontier thesis. For Turner, a substantial portion of the "source of American democracy and national character" arose from Americans "moving to the wild unsettled lands of the frontier, shed[ding] the trappings of civilization, rediscover[ing] their primal racial energies, [and] thereby reinfus[ing] with vigor, independence, and creativity" (p. 76). His famous 1893 essay simultaneously declared and lamented the closing of the frontier. The conclusion is nearly self-evident: "if wild land had been so crucial in the making of the nation, then surely one must save its last remnants as monuments to the American past... To protect wilderness was in a very real sense to protect the nation's most sacred myth of origin" (p.

77). The rugged individualism implied and valorized in the frontier thesis is alive and well in the contemporary wilderness preservation movement, with backpackers and scientific fieldworkers having replaced cowboys, trappers and homesteaders as the new wilderness travelers. The myth of the rugged individual - at home in the wilderness obfuscates the considerably "dishonorable" (Jackson, 1965) history of the massive colonial effort by the US government of making the Western frontier safe and accessible for settlement, most obviously by way of the extermination of the indigenous nations who for millennia had produced the very nature that would later be deemed in need of protection. This is not meant to imply that rewilders are uncritical proponents of the frontier myth - far from it. Wilderness defenders often hold highly idealized and romanticized conceptions of Native Americans' relations with nature (Willems-Braun, 1997; e.g., Craighead et al., 1995)⁴⁰ and their resistance to US colonization (e.g., the famous Earth First! bumper sticker and t-shirt picturing a group of armed Indian warriors with the caption "My Heroes Have Always Killed Cowboys"). What is less common, however, is a soul-searching self-indictment of environmentalism's complicity in colonial projects. Examples abound, from John Muir's advocating the removal of the Indian residents of Yosemite to recent charges of Blackfeet Indians' "poaching" inside Glacier National Park – lands on which their right to hunt in perpetuity was reserved by treaty (Cronon, 1995; Warren, 1994). A more strident renunciation of the dishonorable aspects of the history of the movement would help quell those critics who (rather cynically, in my opinion) see wilderness preservation as little more than a contemporary manifestation of colonial desire (e.g., Braun & Wainwright, 2001; Chaloupka & Cawley, 1993; Gregory, 2001; Moeckli & Braun, 2001) or an ideology of nature (e.g. Castree, 1995, 2000b; Kovel, 2002; Smith, 1991, 1998).

Cronon does not stop with the historical contextualizing of the wilderness narrative. Wilderness stands as a problematic foundation for contemporary environmentalism because it reproduces the very human/nature dualism that environmentalism should be working to overcome.

⁴⁰ To clarify this citation, Willems-Braun depicts the romanticized (and highly selective) treatment by environmentalists of indigenous Americans. Craighead, Sumner, and Mitchell, by contrast, serve up a recent, romanticized representation of indigenous Americans.

If we allow ourselves to believe that nature, to be true, must also be wild, then our very presence in nature represents its fall. The place where we are is the place where nature is not. If this is so ... then also by definition it can offer no solution to the environmental and other problems that confront us... We thereby leave ourselves little hope of discovering what an ethical, sustainable, *honorable* human place in nature might actually look like (Cronon, 1995, p. 85, emphasis in original).

The resulting problem is that everything outside of wilderness receives at best short shrift or at worst contempt within the movement. Cronon quotes no other than Dave Foreman as openly admitting as much: "The preservation of wildness and native diversity is *the* most important issue. Issues directly affecting only humans pale in comparison" (Foreman, 1991a). Such a bias can never produce "an environmental ethic that will tell us as much about *using* nature as about *not* using it" (Cronon, 1995, p. 85). Even more troubling would be if the valorization of wilderness fostered a "dismissive or even contemptuous" (p. 491) attitude to all those places outside of wilderness. Again, as I noted in the production of nature section in this chapter, acknowledging this critique need not tempt us into setting up binary analytical dilemmas, for example, assessing if the rewilding movement *either* fosters a broader environmental ethic *or* fails to do so through its fixation on the purity of wilderness. As I will show in the empirical sections that follow in this and later chapters, neither characterization would be fair or helpful.

4.5. Conservation Biology and Rewilding: a Sympathetic Critique

How does the perceived mandate for Big Wilderness materialize as specific conservation agendas in particular places? How do these agendas fare in light of critiques of deep ecology and wilderness preservation? These questions mark my point of departure for examining and critiquing the Conservation Biology alternative for grizzly recovery in Idaho.

Although the Conservation Biology proposal was not the FWS's 'preferred alternative' in the EIS, this alternative nonetheless did receive substantial support from many scientists and environmentalists (and scientist-environmentalists). Indeed, among all those who testified in favor of grizzly recovery in the Bitterroots at the Draft EIS public meetings, the vast majority of those who specified a preference favored the Conservation Biology over the CMC alternative In the public hearings held in seven Idaho and Montana communities as part of the Draft EIS NEPA process, 70% of the

testimonials and written comments gave unqualified support for the Conservation Biology alternative, 18% supported the CMC alternative without modifications, and 12% supported the CMC alternative with sometimes major modifications (USFWS, 1998, p. 13). The latter group was mostly made up of elected officials or their spokespersons in, mostly from Montana, pushing for greater CMC authority and autonomy. The vast majority of Idaho elected officials rejected both recovery alternatives.

Originally drafted and presented to the FWS by the Alliance for the Wild Rockies, a good-sized⁴¹ regional environmental group based in Missoula, Montana, the fundamental components of the Conservation Biology proposal were (*a*) a grizzly bear recovery zone that included all of the Federally designated wilderness in central Idaho, plus all contiguous roadless areas and the "developed public lands" that lie within the area bounded by the wilderness/roadless area; (*b*) two "habitat restoration areas"; (*c*) a "habitat linkage corridor" which would link the central Idaho recovery zone to the existing grizzly population in the Cabinet-Yaak ecosystem of northern Idaho and southern British Columbia; and (*d*) reduced timber harvest on national and state forests within the recovery zone, due to the reintroduced grizzlies receiving fully protected status under the ESA (Bader & Bechtold, 1996, pp. 1 – 11).

⁴¹ At the time of the Draft EIS public hearings (October 1997) Alliance for the Wild Rockies claimed a regional membership of 6,000 (USFWS, 1997c, p. 11).

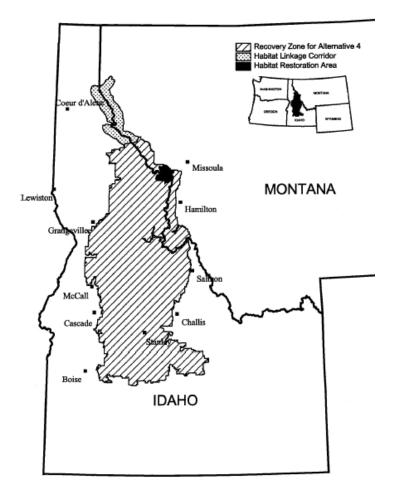


Figure 4.3. Alternative 4, the Conservation Biology Alternative from the Final EIS⁴² (USFWS, 2000a, p. 2-56)

Many (but not all⁴³) of the hallmarks of the rewilding model are present. The designated recovery area is enormous, covering 21,645 square miles of central Idaho and extreme western Montana (USFWS, 2000a, p. 2.55). The proposal requires a strict human/nature segregation, on the premise that grizzly bears need enormous extents of land free of human use to survive. Almost all human use – save perhaps scientific data collection and recreational uses like backpacking, horsepacking and hunting – would be prohibited in the proposed recovery area. Perhaps most fundamentally, the proposal was proffered as representing the best available grizzly bear conservation science. Anything

⁴² I created this map while working for the Nez Perce Tribe Natural Resources Department from 1997-1999. The Nez Perce Tribe was awarded a small contract to do the mapping for the EIS public meetings and documents.

⁴³ Missing are the "buffer zones." Their absence bolsters my claim (above, this chapter) that areas of human occupation make up the "forgotten half of the [rewilding] equation."

short of the full implementation of this ambitious proposal was said to be at best, political compromise, and at worst, an insincere effort at recovering grizzly bears.

In this section of the chapter, I examine the 1996 Alliance for the Wild Rockies (AWR) handbook promoting the Conservation Biology (hereafter, CB) alternative for grizzly recovery (Bader & Bechtold, 1996). AWR was the lead organization in the efforts to counter the FWS's service official "preferred" alternative with a stronger one, particularly one that would give Bitterroot grizzlies full 'threatened'-status protection under the ESA (Bader, pers. comm.).⁴⁴ In this section – the initial cut at the CB alternative – I will focus primarily on the scientific justification for the proposed recovery area, after which I will the findings back into the previous discussion of the problems with wilderness. In Chapter 6 I will greatly extend this empirical examination of the CB proposal. On page one in the first paragraph, the scientific mandate is presented:

Population viability analysis has revealed that to ensure longterm viability (a 95% or better chance of surviving for several hundred years), a population of grizzlies in the Northern Rockies will need to consist of approximately 2,000 bears or more (Bader & Bechtold, 1996, p. 1).

For the recovery goal of 2,000 grizzlies to be attained, reestablishment of a Bitterroot population would be necessary to augment existing populations in Yellowstone, the Northern Continental Divide Ecosystem, and northern Idaho. Population viability analysis (PVA) is a quantitative modeling technique in which demographic, genetic, spatial, and other requirements of a given species of plant or animal are used to predict the population size necessary for the species to maintain its ecological viability, that is, to not go extinct. Not surprisingly, PVA has become one of the most prominent tools in the conservation biology toolkit (Fiedler & Kareiva, 1998; Soulé & Terborgh, 1999b). A quick look at the scientific literature on PVA, however, reveals that PVAs are highly malleable and require the inclusion of arbitrarily defined variables in the models. The two prominent variables that must be arbitrarily chosen by the modeler are (a) the percent chance of the extinction of the population, and (b) the time period for which the model is predicting ecological viability (Boyce, 1992) (for example, a PVA model might be based

⁴⁴ Mike Bader was executive director of AWR during the Bitterroot recovery efforts. Bader was not around the summer I interviewed people in Montana and Idaho, but I have since had some short email correspondences with him.

on assessing the requirements for species 'x' to have a $\underline{90\%}$ chance of survival over a $\underline{100}$ year time frame).

As with all ecological models, these models are data-driven, yet there is an enormous amount of variability among the types, numbers, and quality of variables that go into any PVA. Mark Boyce, a proponent and practitioner of PVA modeling and a leading grizzly bear population ecologist, has noted the precarious nature of PVAs:

I maintain that PVA ought to be an integral part of any species management plan, but rather than being so presumptuous as to claim that we can actually use modeling to define a [minimum viable population], or to estimate the probability of extinction, I use it as a forum to champion the adaptive management approach (Boyce, 1992, p. 482).

I want to stress that this statement is no outlier by a renegade trying to shake up the conservation biology establishment, but is instead representative of the scientific community's awareness of the malleable and contestable nature of PVAs. My argument is that the Alliance *did* employ Boyce's PVA as a "forum" for championing a particular management approach, that is, the rewilding model. Without any recognition of the precarious nature of PVA modeling, PVA is presented in the manner of Bruno Latour's "black boxes..., in which 'observations' are presented as 'discoveries', which then become 'facts'" (Forsyth, 2003, p. 164)⁴⁵ after which they can be freely summoned as the sole justification for future actions. The PVA cited in the handbook, has revealed that 2,000 bears are *needed* to "ensure longterm viability" of the grizzly population. Granted, we are given the parameters through which this "longterm viability" was established: a "95% or better chance of surviving for several hundred years." Leaving aside the potential critique of the assumption that 'x' amount of habitat and regulatory protection for a species could ever be maintained for a period of several hundred years,⁴⁶ the scientific literature notes that PVA models become less reliable predictors the farther out in time they extend (Knight et al., 1999). The figure of 2,000 bears, it seems, is the

⁴⁵ To clarify, this quote is Tim Forsyth paraphrasing Bruno Latour.

⁴⁶ Parameters on the order of several-hundred years are not out of the ordinary in the PVA literature. Paquet and Hackman, for example, model their PVA estimates by defining survival over "the long term" as "greater than 1,000 years" (Paquet & Hackman, 1995, p. 34). My point is not to argue whether or not estimating the necessarily reserve size should be based on the chances of a species going extinct over 1,000 years – although the time-span does seem extremely long. My point, rather, is to demonstrate that the results of PVA are very much dictated by the whims of the modeler. If you desire results that suggest a smaller reserve size is necessary, choose a shorter recovery period, or vice versa.

product of a PVA deliberately modeled to produce the largest reasonably credible necessary population estimate, and therefore the largest required amount of land to be set aside in reserves. Instead of being candid about the highly conservative nature of the model, it is immediately "black boxed" as a verified, indisputable *fact*, after which no further discussion of its origins or production is necessary. For ecologists, the problem and its problematic solution are nothing new. In 1981, John Livingston addressed the double-bind that predictions and projections effect for ecologists:

Historically, [ecology] found it necessary to accept the burdens of proving the effect on wildlife and wildlands of various kinds of human activities. If the prediction could be quantitative, so much the better... [But] I can think of no 'hard' sciences so helplessly adrift on an endless sea of variables, their process relationships so complex that no individual mind can either encompass them or corral them for computer counting. Ecology does not know what its variables *are*, much less how to project them... Ecology cannot predict in a scientific sense (Livingston, 1981, p. 66).⁴⁷

Paralleling PVA's professed revelation of the necessary population size for grizzly bears, we are told that "Geographic Information Systems analysis has identified a proposed recovery zone covering approximately 21,645 square miles" (Bader & Bechtold, 1996, p. 3). This rhetoric implies that science-*cum*-technology magically reveals the previously unknown geographic needs of bears. However, the statement that the "proposed recovery zone" has been "identified" masks how the recovery zone itself was delimited. The next two sentences read:

Not all of this area is secure habitat, and some areas may have little value as grizzly habitat. Still, the region represents the largest block of secure

⁴⁷ I should note that I find much of the more radical, but nature-endorsing, environmental writing such as Livingston (1981; 1994) and Raymond Rogers (1994; 1995; 1998) very compelling and potentially helpful toward the broad goal of crafting a more sustainable society. This admiration was probably made clear in Chapters 2 and 3, as well as my deployment of the production of nature critique in this chapter. If this positive accounting of radical nature-society scholarship seems mismatched with my endorsement of the mainstream-ENGO/timber-industry Citizen Management proposal (that will be articulated in later chapters), I would respond that despite the apparent power that a Federal/national-ENGO/timber-industry coalition might wield, in the context of the Bitterroot grizzly debates the conservation-biology/rewilding movement had achieved relative dominance within environmentalism in the region (a status which, as Cooper (1996) notes, The Wildlands Project has been attempting to achieve since the inception of the movement). I would also counter, even as this point has probably already been made clear, that the implicit and avowed radical components of the conservation biology movement are questionable and problematic. The Citizen Management coalition, by contrast, was insurgent at least in that it seriously challenged offended even - many deeply entrenched ideologies and power structures of the conservation biology movement. Whether there was any truly radical potential for the Citizen Management proposal is, of course, now only a matter of speculation.

wildland habitat remaining in the lower 48 states (Bader & Bechtold, 1996, p. 3).

"Secure habitat" is defined on the previous page as roadless or extremely low-density (0.25 linear miles of road per square mile) roaded lands (p. 3). It is fair, then, to ask the question "*What* exactly was 'identified', a grizzly bear recovery zone, or merely the largest block of roadless and near-roadless lands in the region?" The acknowledged inclusion of lands "with limited value of grizzly habitat" in the proposed recovery zone will do little to quell critics, like the residents of Salmon, Idaho, who claimed that this proposal really isn't about the grizzly bear at all, that it is about restricting access to and use of all Federal lands.⁴⁸ A later study that delineated grizzly bear habitat in Idaho actually bolsters the "junk science" accusation of many grizzly recovery opponents. The town of Salmon nearly abuts the grizzly bear recovery zone, but even the roadless lands within 30-50 miles of Salmon are not "productive grizzly bear habitat" (Merrill et al., 1999, p. 243).

A smaller pamphlet than the full AWR recovery proposal put out jointly by AWR and the Salmon-Selway Grizzly Coalition bares itself for critique along similar lines. From the section of the pamphlet answering the question "*Why Reintroduce Grizzlies to the Greater Salmon-Selway*?" we are told:

The field of conservation biology has made several new discoveries which are enabling scientists to devise plans to preserve endangered species such as the grizzly bear. One of these is metapopulation theory. Conservation biologists now believe we can preserve the grizzly bear in the Northern Rockies if we protect subpopulations, or metapopulations of grizzly bears and connect them with linkage corridors (AWR, 1997, p. 5).

Theories, of course, are not discovered. A theory is "is a set of assumptions about reality that underlies the questions we ask and the kinds of answers we arrive at as a result" (Johnson, 2000, p. 178). Beyond this dubious assertion and its implication of the pre-existing, factual nature of all that metapopulation theory tells us, it doesn't even get its

⁴⁸ Salmon, Idaho was one of seven communities in which the USFWS held public comment meetings after the publication of the Draft EIS. The other communities were Challis, Lewiston, and Boise in Idaho, and Missoula, Hamilton, and Helena in Montana. The best example of this rhetoric was given by Lenore Hardy Barrett, the Idaho State Representative for Custer, Lemhi, Jefferson, and Clark Counties, who stated that "[r]ecovery isn't even about grizzlies. Recovery is about the blatant exercise of federal power, usurpation of state sovereignty, all this in tandem with the green group's search for a problem to go with their solution. Their solution? Render the West off limits to resource production and human habitation" (USFWS, 1997f, p. 29).

technical terms right. Metapopulations are not 'also' subpopulations but rather "consist of many small subpopulations linked by dispersal" (Riffell, 1998, p. 2212). A metapopulation – a linked set of subpopulations – is the conservation biology goal for ensuring grizzly recovery.

By critiquing these particular deployments of metapopulation theory, my intent is not to discount the problems of ecological degradation on Federal lands due to decades of industrial and recreational abuse. But, as critics of the Big Wilderness movement have noted (e.g., Cronon, 1995; Callicott, 1999), blocking off or 'locking up' all favored lands as wilderness or core reserves does little to tackle the underlying causes of ecological degradation. Moreover, doing so under a pretense of protecting grizzly bear habitat calls into question the sincerity of the purportedly scientific case for the conservation biology proposal. By no means is my point here to discount the entire conservation biology proposal or 'debunk' the science that underwrites it. Unlike William Cronon (1995, p. 86) I cannot simply "leav[e] aside the legitimate empirical question in conservation biology of how large a tract of land must be before a given species can reproduce on it." Neither, quite obviously, can conservation biologists. It is clear that grizzly bears fare best, and probably literally require, large blocks of relatively inaccessible, unroaded habitat (Wilcox, 1997). It is also undeniable that the Bitterroot ecosystem contains the largest and best block of habitat not currently occupied by grizzlies. That being said, Alliance for the Wild Rockies does not make a convincing case that the entirety of the proposed recovery zone is necessary for grizzly recovery, thus leaving open the potential charge that this was first and foremost an opportunistic wilderness 'land-grab'.

The presence of grizzlies makes the problem of wilderness *management* more difficult, not simpler. It is, I argue, evidence of both "social-scientific naïveté [*and*] interpretive hubris" (Taylor, 2000, p. 270) within conservation biology advocacy that makes it appear as though drawing lines around – and effectively fencing off – all "true" and potential wilderness can recreate some idealized pre-human, unmanaged landscape "where nature reigns" (Noss et al, 1999). On page seven of the Alliance for the Wild Rockies pamphlet, we are told:

In order to assess the effectiveness of habitat linkages, they must be established now, and grizzly bear restoration in the Greater SalmonSelway region provides the opportunity to study this concept out on the land (Bader & Bechtold, 1996, p. 7).

This statement serves as a representative example of how the "true wilderness" ideal harbors irresolvable contradictions and fosters a "social-scientific naïveté" that can only serve to weaken the movement's effectiveness. The rewilding model is premised on the idea that "huge roadless areas" serve as core reserves wherein "nature can operate in its own way in its own time" (Noss et al., 1999, p. 100). Once in place, the core reserves will be "essentially unmanaged" and operate as "controls, baselines against which we may measure the effects of *management experiments*" (Noss, 1999, p. 409).

The dualistic and untenable fantasy of a non-social 'pure' nature is reproduced. Wilderness – *our* social goal, *our* human product – is envisioned as a nonsocial place/state of unencumbered ecology. Core reserves, however, are not something *against which* "experiments" can be gauged. They are but one of many human experiments. This is implicitly acknowledged in the AWR pamphlet when they state that the conservation biology alternative presents an "opportunity to study [the rewilding model] out on the land" (Bader & Bechtold, 1996, p. 7). Following Neil Smith, the fantasy of unmanaged nature frames an "ideology of nature" in which

an exorcism of social activity from universal nature [is enacted] in order to attenuate the contradiction between external and universal nature. The possibility of the socialization of universal nature is ultimately denied not on the basis of historical experience but by the contradiction with external nature (Smith, 1991, p. 16).

Conservation biology is an admirable – even necessary – "*social* activity." No rhetoric of Edenic-ecological restoration can exorcise the labor that produces any particular nature reserve (including the ecologists who propose it, the activists who fight for it, and the politicians who seal the deal). Nor does Big Wilderness, once established, in any way become (or restore) "external nature."

The 1992 Wilderness Society report *Keeping the grizzly bear in the American West: a strategy for real recovery* (Shaffer, 1992) from which the Alliance drew their PVA figures is another document representative of the tenuousness of the wilderness concept. The following passage almost deconstructs itself:

The ecosystem the grizzly bear requires is wilderness. Existing and proposed wilderness areas in the Northern Rockies are absolutely essential to the grizzlies' survival. But pure wilderness is too limited to maintain this species. The challenge in recovering the grizzly, then, is to devise a plan that can maintain and/or restore enough *functional wilderness* – areas where human activity is not so intense that it increases mortality or decreases reproduction – to meet the species' needs (Shaffer, 1992, p. 10).

Wilderness-as-ecosystem, wilderness areas, pure wilderness, functional wilderness? Do grizzly bears require "pure wilderness" in the form of designated wilderness areas? No, even if this land management classification provides the best protection due to its limits on human use. What the grizzly requires is the broader category "functional wilderness," where the functioning is defined as capable of supporting grizzly populations. So what, then, is the meaning of wilderness in this context? It seems – circular though the logic is – that wilderness is anywhere the grizzly can survive and reproduce. Picking apart this passage is not to imply that it is *wrong*. It is not difficult, however, to make the case that this line of argumentation is grounded in uncontestable scientific constructs. If the scientific basis for using the "ecosystem" concept itself is questionable (Grumbine, 1992; Minta & Kareiva, 1994; Takacs, 1996), then surely qualifying it through an expanded and increasingly tautological usage of "wilderness" cannot help bolster its scientific credentials. As William Cronon has noted, scientific endangered species conservation strategies that call for the conservation of wilderness often wind up "vulnerable and easily attacked" by those who wish to see them fail (Cronon, 1995, p. 82).

We can envision a rewilded landscape, but *will it work?* This question only be answered by us, "out on the land" (Bader & Bechtold, 1996, p. 11). The Wilderness Society report and the AWR pamphlet acknowledge this – that a particular *produced nature* is the goal – but it has to be teased out of the traditional, originary pre-social wilderness narrative. The managed/wild dualism does not hold. There is no ontological divide between social nature (developed, degraded, managed) and external nature (wild, pristine, ecological), yet it is precisely this divide which the conservation biology proponents relentlessly forge and defend. As "one of the functions that ideologies are held to play is the bridging of the gap between conceptual thought and political action" (Humphrey, 2000, p. 249), the (unresolved, contradictory) narrative of an asocial nature enables the (unresolved, contradictory) politics of conservation biology. This ideology of nature propagates an iterative recourse to a literally unattainable goal. Not surprisingly,

the result is a "radical disenchantment...of the [ecologically defiled] world" and a cynical dismissal of all things human (Taylor, 1992, p. 94).

Reed Noss no doubt speaks to the sentiments of many conservation biologists when he states that ecologists are "cursed...with an ecological conscience" (Noss, 1991/2, p. 56). Thus enlightened, the path is unequivocal: "conservation plan[s] cannot give equal weight to biocentric and socioeconomic goals, or the former will never be realized" (Soulé & Noss, 1998, p. 25). John Dewey is helpful here, foregrounding the *effects* (the "smothering [of] argumentation" (Keulartz, 1999, p. 95), the denial of context and complexity) of foundationalist normative declarations:

The notion that a moral judgment merely apprehends and enunciates some predetermined ends-in-itself is, in fact, but a way of denying the need for and existence of genuine moral judgments. For according to this notion there is no situation which is problematic. There is only a person who is in a state of subjective moral uncertainty *or ignorance*" (Dewey, 1989, in Minteer, 2001, p. 69, emphasis added).

Whether Marxist (with the biocentric/socioeconomic split as "the ideology of nature" (Smith, 1998)) or pragmatist (with the split seen as "codes that set up fixed and unchanging ends" (Dewey, 1998b, p. 32)), the conclusion is consistent – the assumption that (biocentric) science and (socioeconomic) politics are separate realms is erroneous. Yet this assumption is internalized in nearly every normative proposal derived from the science, giving (this stripe of) conservation biology the appearance of being beyond politics, untainted by compromise. This scientific-ecocentric foundationalism is an integral component of a normative model that is unnecessarily divisive (Minteer, 2001) and may be severely limited in its potential effectiveness (Norton, 1991, 2003).

Alongside insisting that their proposal represented the 'best available science', proponents of the conservation biology proposal also voiced contempt toward the idea of a citizen committee being put in charge of the management of the reintroduced grizzly population. The typical complaint was that the management of the grizzly bears should be scientific' and not 'politicized'. The fear seemed to be that the committee members wouldn't have a sincere commitment to grizzly recovery and that the committee would therefore fail in its appointed mission. It should be mentioned that checks against this possibility were built into the CMC alternative: it was clearly stated that the committee members would base their decisions on the best science available; that at least two

scientists would sit in on the committee to make scientific recommendations; and that if the FWS judged that the committee's decisions were not leading to the recovery of the grizzly bear, the committee would be disbanded and the FWS would take over the management of the bears.

While there is plenty of mention within the conservation biology literature of the need for local *support* for initiatives, it's much more difficult to find calls for local *participation*. For supporters of the CB alternative, local *support*, it appears, meant educating the uninformed as to the wisdom of the proposal, and hopefully swaying them over to your side of the cause.

Local *participation* in conservation efforts would, of course, involve actually listening to others' concerns. The difference between garnering local support and enlisting local participation is the difference between a one-way transfer of knowledge and an actual dialogue. The wholesale disparagement of the citizen management idea showed that most proponents of the CB proposal had no such dialogue in mind. The strict but untenable separation between science and politics keeps proposals like this one from gaining anything close to a foothold of support within affected rural communities. Without a sincere commitment to local *involvement*, the only option for conservationists is an entrenchment and centralization of authority in environmental management.⁴⁹ In this context, I would concur with John Bellamy Foster that

An earth movement of this kind [may] contribute little to the overall green goal of forming a sustainable relationship between human beings and nature, and may even have the adverse effect – by splitting popular forces – of creating more opposition to the environmental cause (Foster, 2002, p. 105).

Too often, for conservation biology proponents, the "popular forces" are viewed as obstacles to progress instead of potential allies. That the conservation of biodiversity will necessitate some centralization of knowledge – as science *is* expert knowledge – is undeniable. The administration of this knowledge, however, "may be more or less democratic or authoritarian" (McLaughlin, 1993, p. 58). All the while extolling the virtues of the "devolution of … power … along bioregional lines" (p. 58) – a primary deep ecological ideal, endorsed throughout the issues of *Wild Earth* – conservation

⁴⁹ These two paragraphs serve as something of a prelude to Chapter 6, where this critique will be given empirical validation and worked out more thoroughly.

biologists display a profound mistrust toward the very people who would be the beneficiaries of such a devolution. There is little evidence that any abdication of power is in the making. This seems to be almost an institutional sentiment within conservation biology. In issue number one of the journal *Conservation Biology*, Soulé provides a telling (and representative) statement:

We assume implicitly that environmental wounds inflicted by ignorant humans and destructive technologies can be treated by wiser humans and by wholesome technologies (Soulé, 1987, p. 4).

The problem is ignorance, the solution is wisdom. Who are the ignorant? Well, the usual suspects – loggers, ranchers, (some) hunters, ATVers – to be certain. But some less-than-usual suspects are cast off as ignorant as well.

Dave Foreman writes in the journal Wild Earth that "deconstructionist scholars are ... an unusual group of wilderness foes ... who criticize conservationists out of ignorance" (Foreman, 1997, p. 4, emphasis added). The main target of Foreman's rant was William Cronon and the social scientists who conferred to produce the collection Uncommon Ground: Toward Reinventing Nature (Cronon, 1996). Instead of taking these nature-society essays to be potentially productive contributions, the good portion of a 1996 issue of *Wild Earth* was made up of essays that flatly, and in a sometimes very hostile fashion, rejected Uncommon Ground. Donald Waller, for example, acknowledges that wilderness is a human construct but insists that "wildness" is *really* what the new conservation movement is intent on preserving. His definitions of wildness - "that which is not, and cannot be, a human construct," that which falls on the wild side of "the gap separating the artificial from the wild" (Waller, 1996, p. 38, 39) – remain just as dualistic, tenuous, and vulnerable to attack as do those of wilderness. George Sessions – perhaps regrettably the Dean of American deep ecology, as he rarely shies away from bizarre, overreaching statements - opens his essay by portraying Cronon and his colleagues as espousing "postmodern deconstructionism, ... a 1960s spinoff of Marxism; a contemporary form of anthropocentric humanism which espouses cultural relativism, an antipathy to science, and a preference for cities" (Sessions, 1996p. 46). Sessions completely misses the point of the essays in Uncommon Ground, missing the irony and political intent of the subtitle "reinventing nature" - Sessions radically misreads the careful critiques of the commodification of nature in such places as Sea World (Davis,

98

1995) and The Nature Company retail stores (Price, 1995) as uncritical celebrations of nature consumerism. Dave Foreman opens the issue with a vitriolic renunciation of Cronon and his crowd of "deconstructionist colleagues" (Foreman, 1997, p. 4). He accuses Cronon of being scientifically ignorant and "careless about the consequences of his critique" (p. 4). But he closes by giving Cronon an opportunity to repent:

Cronon claims he cares about wild things. He says his criticism has been misunderstood. Let us now see if he can admit his poor understanding of the conservation movement. Half a century ago, Aldo Leopold warned us that there were those who could live without wild things, and those who could not. That still explains it (Foreman, 1997, p. 4).⁵⁰

The all-too-common hostility of the self-appointed ecologically enlightened is often and understandably taken to mark a generalized misanthropy within the movement. Soulé and Terborgh conflate the presence of humans with "ecological pathologies" (Terborgh Soulé, 1999, p. 200). Noss states that "humans are fundamentally a part of nature (though arguably a malignant part)" (Noss, 1994/5, p. 60). The eminent grizzly bear ecologist John J. Craighead laments the "disdain for life [that] appears to be innate in the human species" (Craighead et al., 1995). With an unqualified "human species" perceived as anti-ecological, anti-nature, the solution preexists any particular on-theground conservation problem. The enlightened few must develop a strictly segregating model of conservation reserves to protect nature from humanity. Noss defends the segregated reserve model when he states that "until we can bring our numbers down and learn to walk humbly everywhere, let us at least do so within our remaining wild areas" (Noss, 1994/5, p. 63). Such statements, I would argue, do a fine job of keeping the finger of blame pointed firmly away from the self-identified ecologically enlightened. As long as you are one who keeps "your numbers down" and "walks humbly," it appears that you are no part of the problem. Such individualistic sentiments reflect the crass idealism of

⁵⁰ This examination of the responses in *Wild Earth* to *Uncommon Ground* is not meant to imply that there is nothing of substance to any of these essays (though if pushed I would say that the Sessions piece is garbage and that the issue would have stood as a much more reasoned reaction without it). Even Foreman's tirade has moments that deserve consideration, and Waller's piece has strong points. Having made that disclaimer, my point in this chapter is to assess how conservation biologists and the conservation biology alternative fare in light of their critics, and these essays provide plenty of empirical evidence that the critics' charges are far from baseless. To restate my broader thesis: defensively rejecting all criticism not only eliminates potential allies, but also slams the door on opportunities to strengthen the movement's underlying justifications.

deep ecology, as the ultimate goal of Self-realization obviates immersion in the messy world of politics and social change.

The dualistic wilderness reserve model reinforces, and is reinforced by, the divisive and self-congratulatory rhetoric of its proponents. For every line drawn on a conservation proposal map, there is a rhetorical line drawn in the sand. Only under the strictly segregating reserve model does the proclamation "outside of biologically viable large reserves, ecological pathologies will continue to spread and take their toll" (Terborgh Soulé, 1999, p. 200) even make sense. "In wildness is the preservation of the world" (Turner, 1999). Perhaps so, but wildness cannot be conflated with (and confined to (Birch, 1999)) wilderness (Cronon, 1995). The cynical dismissal of everywhere *except* "a wilderness we ourselves can never inhabit" (Cronon, 1995, p. 83) leaves no *space* for positive social change. The unpeopled wilderness perhaps indeed is "not an auspicious position from which to evaluate the nature of human society and political life" (Taylor, 1992, p. 99).

4.6. Conclusion: Two Steps toward a Wider Path

My intent in this chapter is not to try conservation biology proponents on a set of charges (scientific foundationalism, social-scientific naiveté, interpretive hubris, misanthropy) and, finding them guilty on all counts, dismiss the entire endeavor. Quite the contrary. I fully and sincerely support the overarching goals of the rewilding movement. Life would be much richer – much wilder – if we worked to grant nonhuman nature more autonomy, to foster the free-flow of ecological and evolutionary processes. I do contend, however, that these 'charges' represent a (partial) list of deficiencies in the rewilding model – deficiencies not just to be highlighted and rebuked within academic journals, but that also serve to severely limit the movement's potential effectiveness. It may be the case that rewilding proponents present "ideals that are too lofty [and therefore] tend to lose their power to motivate and thus become divorced from the very practice they are meant to inform and guide" (Gunderson, 1998, p. 204). If this pragmatic critique is correct, it only makes sense to widen the "peculiarly narrow path" (Proctor, 1995, p. 285) of wilderness preservation.

How might this process of widening the movement begin? I will conclude this chapter with two suggestions. First, conservation biologists could do a better job of

recognizing sincerely sympathetic criticism as complementary and potentially helpful, instead of perceiving anything short of outright boosterism as "oppositional [and] fundamentally conflictive" (Birch, 1999, p. 447). As Bron Taylor argues, "deep ecology movements must open themselves to greater cross-fertilization with other perspectives" (Taylor, 2000, p. 287). It *is* a start to acknowledge, as Soulé and Noss have, that rewilding alone cannot "heal the wounds of the land," that "a diversity of approaches, often complementary and context dependent, will be needed" (Soulé & Noss, 1998, p. 26). But such pluralistic nods cannot just be tacked onto the end of proposals that offer simplistic, scientistic solutions to the terribly difficult problem of "satisfy[ing] the practical necessities of [the human] relationship with wild land, and with wildness itself" (Birch, 1999, p. 447).

Secondly, rewilding advocates will never mollify their sympatheticenvironmentalist critics until they steadfastly renounce the "authoritarian option for [ecological politics]" (Light, 1996, p. 173). There is a profound contradiction in professing the deep ecological commitment to "biospheric egalitarianism" (Fox, 2003, p. 257; Naess, 1973, p. 95) – which of course includes humans – and simultaneously stating that the conservation of biodiversity is "the most important war ever fought [and that] the enemy ... may ultimately be ourselves as a species" (Noss, 1991/2, p. 58). Thankfully, the leading theorists in the rewilding movement have, in recent years, substantially retreated from such openly misanthropic and masculinist warrior rhetoric. Nonetheless, they have yet to fully place an egalitarian commitment as central to their ecologicalpolitical theory and vision. This commitment, to be fully convincing, will need to be foregrounded in actual conservation proposals. Only then will conservation biologists have finally taken the teeth out of the claim that "there is always an authoritarian edge somewhere in ecological politics" (Harvey, 1993, p. 21). As I will argue in Chapter 6 and the conclusion, the conservation biology movement in the Rocky Mountain Northwest might do well to take these critiques seriously and rethink their political-participatory models. But before proceeding with an elaborated examination of the Conservation Biology proposal, in the next chapter I will examine in detail the FWS's preferred alternative for grizzly recovery in the Bitterroot – the Citizen Management proposal.

Chapter 5. The Citizen Management Alternative Marks its Place

5.1. Introduction

The main objective in this chapter is to critically evaluate the Fish and Wildlife Service's "preferred alternative" for grizzly recovery in the Bitterroots – the "Citizen Management Committee" (CMC) recovery alternative. As the initial analysis of the Conservation Biology proposal required a review of the philosophy of deep ecology and the science of conservation biology, so the CMC proposal justifies contextualizing through a brief history of public lands management culminating with a detailed assessment of the Endangered Species Act of 1973. With this policy and historical context provided, the remainder of the chapter is devoted to document analyses of promotional literature and a made-for-television film advocating the CMC proposal. The analysis focuses primarily on how the CMC alternative rhetorically and strategically negotiated the difficult middle ground of environmental debate. The CMC alternative deployed a radical simplification of the issue. My examination of this process of simplification was achieved, as well as to explain why it was deemed necessary.

5.2. A Geo-History of Federal Lands in Central Idaho

Historian Marion Clawson breaks up the history of Federally owned lands into five more or less chronological (but overlapping) eras, beginning with the "era of acquisition" in the early-to-mid-nineteenth century (Clawson, 1983). The Rocky Mountain Northwest was acquired through the Louisiana Purchase of 1803 (Montana and Wyoming east of the Continental Divide) and the Oregon Compromise with Great Britain of 1846 (Montana and Wyoming west of the Continental Divide along with what would become the States of Idaho, Oregon, and Washington) (Clawson, 1983). These lands were not purchased with any intent that the majority of these acquisitions would serve as or become the 'public domain'. Indeed, "the shared assumption was that the public lands – all of them, save the forts, the office-building parcels, and Yellowstone and some battlefields – would be disposed to new states, the railroads, homesteaders, and miners" (Wilkinson, 2003, p. xvi). Thus the "era of acquisition" was nearly immediately followed by the "era of disposal" (Clawson, 1983, p. 17). As is well known, the interior Rocky Mountain Northwest wasn't even "discovered" by Euro-Americans until 1805 when Lewis and Clark traveled up the Missouri River drainage and eventually over Lolo Pass⁵¹ west to the Pacific. The Northern Rockies may have been open for disposal during the nineteenth century, but due to the rugged, inaccessible terrain and arid climate, there was little to draw homesteaders to the region. Almost no Euro-Americans, save a few missionaries and scattered trappers, settled in the interior West in the first few decades after the Lewis and Clark expedition (Moore, 1996).

The first wave of settlers in the Northern Rockies west of the Continental Divide followed on the heels of Elias Pierce's discovery of gold at Orofino Creek in 1860 near present day Pierce, Idaho (Moore, 1996). Pierce was illegally prospecting on the Nez Perce Reservation, which had been officially established five years earlier at the Walla Walla Council of 1855. Even though the mines would play out in only a few years (Peterson, 1976), there was enough gold found quickly enough to spark a wave of tens of thousands of prospectors trespassing on Nez Perce tribal lands (Josephy, 1979). Under the auspices of not being able to guarantee the safety of the Nez Perce amidst the onslaught of settlement, the US government quickly began formulating ways to diminish or abolish the eight million acre 1855 treaty. In 1863, a small group of "Christianized" Nez Perce leaders - including the "Head Chief" Lawyer (a position invented by the Federal Government signifying a centralized system of governance alien to the Nez Perce) – signed a treaty that ceded roughly 90% of the 1855 treaty lands to the Federal Government for a payment of \$262,500 (Moore, 1996, p. 51). The Nez Perce were left with a 770,000 acre reservation, although they retained the rights to hunt and gather at their "usual and accustomed places" throughout their aboriginal territory. While the story of the Nez Perce is fascinating and tragic in its own right,⁵² it has direct relevance to a

⁵¹ Lolo Pass is where US Highway 12 crosses the Idaho/Montana border. It is also the epicenter of the potential new jobs proposed in the Conservation Biology Alternative's "habitat restoration area" and "habitat linkage corridor."

⁵² The signing of the 1863 treaty led to a rift within the Nez Perce between those who accepted the terms of the diminished reservation and those who would not. The oppositional band of Nez Perce, led by among others Looking Glass, White Bird and the mythologized Chief Joseph, remained outside the boundaries of the diminished reservation, living in northeastern Oregon. In 1877, the US Cavalry forced this band of Nez Perce to flee their home territory, and thus ensued one of the most famous Indian wars in US history, the end of which was marked by the Nez Perce surrender and Chief Joseph's famous declaration "I will fight no more forever." The oppositional band of Nez Perce were eventually moved to a reservation in

discussion of the history of the Federal lands in the region. As the mines played out and settlers moved north and west off the former Nez Perce reservation, all but a few hamlets in the river valleys and the remains of early mining towns remained basically devoid of settlement for the rest of the century.⁵³ Millions of acres of forested lands ceded by the Nez Perce in 1863 would wind up as early additions to the US National Forest System.

The establishment of the national forest and national park systems ushers in Clawson's third era of public lands history, the era of reservation (Clawson, 1983). There are no national parks or monuments within the grizzly bear recovery areas for either the CB or CMC alternatives, but even so they merit mention due to the significance of Yellowstone and Glacier National Parks to the Bitterroot grizzly debates. In 1872, Congress passed the Yellowstone Park Act creating Yellowstone National Park – America's (and the world's) first national park (Sutton & Sutton, 1965). Even though Yellowstone was not set aside for its wildlife, the establishment of the park created a refuge for many endangered species even as neither the funding nor the regulatory mechanism for their protection had yet to come about.⁵⁴ Most famously, Yellowstone provided a home for one of the last wild bison herds in the country, but even they were almost wiped out due to poaching before an official recovery effort was put into place (Zaslowsky, 1986). The bison would eventually become the symbol of the National Park Service.

Washington far from their aboriginal home, and there has been little interaction between the two Nez Perce bands since the 1863 split. The Nez Perce Tribe, incidentally, endorsed the Citizen Management Committee alternative.

⁵³ That the Idaho Gold Rush was short-lived is an understatement. In 1864, following a rush of prospectors seeking gold, Idaho's population had swelled to about 24,000. By 1870 Idaho's population had dwindled to about 15,000, as the majority of prospectors had left the State (Peterson, 1976, p. 60).

⁵⁴ A wildlife "refuge," yes, but not without qualification. Congress created Yellowstone but for the first quarter-century there was almost no Federal money appropriated for its management. Poaching of wildlife was one of the many problems park managers faced in the first few decades of Yellowstone's establishment (Zaslowsky, 1986). Even after the establishment of the National Park Service, and with it a mechanism to establish funding, regulations, enforcement procedures and the like for the national parks, the term "refuge" still deserved the scare quotes, as Yellowstone was the site of just as intense (and just as successful) an effort to exterminate its resident wolf populations as any other Federal lands in the region (McIntyre, 1995; Sellars, 1997). Yellowstone wolf eradication was only partly the product of the well-established Federal extermination programs for wolves, coyotes, and other predators. Many less well-knows animals that were perceived as keeping down numbers of more desirable species in national parks received similar treatment. In Yellowstone, for example, pelican eggs were taken from nests in the hopes of reducing the park's pelican population because pelicans preyed on trout, which were popular with Yellowstone fishermen (Sellars, 1997).

Another animal that would possess highly symbolic (and ecological) value for conservationists a century later, the grizzly bear, received *de facto* refuge in Yellowstone and Glacier, established in 1910 as the nation's tenth national park. As discussed in the Chapter 1, the grizzly bear populations in and around Yellowstone and Glacier are far and away the largest of the five remaining populations in the lower 48 States. Recovering grizzlies in the Bitterroot stands as the best opportunity for connecting the isolated Yellowstone population⁵⁵ to the other grizzly bears in Idaho and Montana (Merrill et al., 1999). In contrast to national parks, which only tangentially affect the Bitterroot Ecosystem grizzly recovery debates, national forests constitute the bulk of the region.

The legislation that launched the national forest system was the Forest Reserve Act of 1891. The act gave the president the authority to set aside forest reserves (what would later become national forests) from the public domain. The passage of this act, however, should not be viewed as an act of progressive conservationist foresight on the part of congress. The act was added to a larger land bill at the last minute in committee, and received almost no debate or consideration by either branch of congress. After passage, critics quickly arose in objection to this enormous unilateral executive privilege, but it would be almost twenty years before congressional approval was required to set aside national forests (Utley & Mackintosh, 1989). Benjamin Harrison, the original inheritor of this incredible line item power, and Theodore Roosevelt a couple of administrations later,⁵⁶ would exploit the privilege on an immense scale. Indeed, by the end of the Roosevelt administration in 1909, the vast majority of the current national forest system had already been established (Clawson, 1983). The aggressive use of the act by Harrison and Roosevelt would shape in large part the future of Idaho and western Montana (and later, quite directly determine much of the geography of the Bitterroot grizzly reestablishment efforts), as the vast majority of the sixteen-plus million acres of central and northwest Idaho national forests were established by 1909 (Runte & Steen, 1991).

⁵⁵ The Glacier, or NCDE (Northern Continental Divide) population is not an isolated population *per se*, as it is connected to grizzly bears in Canada.

⁵⁶ Theodore Roosevelt alone set aside roughly 80 million acres of national forests, including 16 million acres that were added after this executive privilege had been revoked by congress, but before it was effected into law (Utley & Mackintosh, 1989; Zaslowsky, 1986).

The interwar period – for Clawson, the era of "custodial management" – was one of small forest service staffs generally focused on visitor education, wildlife management, and wildfire suppression. Relatively little timber was cut from these (or any) national forests until after World War II. The early years of the New Deal heralded Clawson's fifth era of Federal lands history, the era of "intensive management" (Clawson, 1983, p. 37). The management of the national forests became a much more complex affair up through 1960, as national forest timber production increased dramatically:

The postwar housing boom created a market for timber from the national forests. The Forest Service suddenly faced an opportunity to expand national forest timber production... It changed from a custodial agency to one aimed at commodity production (Bolle, 1997, p. 163).

Nowhere was the transition more dramatic than in the Northern Rockies. Prior to 1950, no clearcutting of timber took place on the region's national forests. Most timber harvests were selective cuts of large Western white and ponderosa pines (Bolle, 1997). The era of industrial-scale clearcut forestry in the region began in 1950, after the Flathead National Forest in Montana launched the first-ever "salvage" logging operation, focusing on cutting down massive amounts of spruce to stop a bark beetle infestation (p. 164). The clearcutting model quickly took off in the region, especially in western Montana. Congress passed a resolution in 1956 to dramatically expand timber harvests on Montana's national forests – the model being cutting down the "low-quality old forests and replac[ing] them with desirable stands of high genetic quality planted in neat, orderly rows to produce the maximum amount of lumber for America's lumber-hungry people" (p. 165). The Flathead National Forest provides a startling example of the scale of the increase, as it saw a tenfold increase in timber harvest between 1945 and 1969 (Bolle, 1997). The increase in timber harvest resulted in dramatic job growth in the region, both for loggers as well as sawyers in the hundreds of new mills that popped up around the region. Even though a review such as this can only tap the complex socio-ecological history of the timber industry in the region,⁵⁷ any mention of timber in the Northwest must include a discussion of the nineteenth century railroad land grants.

⁵⁷ For anyone who's interested, Clary (1986) and Hirt (1994) are good places to start teasing apart the US Forest Service and the major role this agency has played in the history of timber here and elsewhere in the West.

The history of the railroad land grants begins

[i]n 1864, [when] President Lincoln signed into law the largest of the railroad land grants, the Northern Pacific Land Grant. This law conditionally granted public lands for the purposes of building a railroad from Lake Superior to the Pacific Ocean ... 40 million acres ... [were] granted in alternating square miles, which created a 'checkerboard' pattern of ownership that is still visible (Jensen et al., 1995, p. 3).

After a number of "illegal title transfers and negotiated territorial deals" (Robbins, 1997, pp. 128-9), huge swaths of valuable forest lands from the northern Rockies west to the Cascades became concentrated in the ownership of a few giant timber corporations (Jensen et al., 1995; Robbins, 1997). These corporations were "undoubtedly the primary force behind the expanding economic activity and the increase in population from western Montana to the Pacific coast" from around the turn of the century until World War II (Robbins, 1997, p. 192). Following World War II, under the sway of decision-making in the timber corporate headquarter cities of St. Paul, New York, Chicago, and Tacoma, timber in the Northwest became nearly as much of a boom/bust economic sector as mining:

Investors ... made the decisions to build new mills, to move on to fresh stands of timber, or to close operations when the market was tight, but the men and women in the small lumber towns suffered the social costs of those actions (Robbins, 1997, p. 130).

In addition to being able to dominate private lands timber harvesting in the region, the dominant timber corporations (which can be counted on one hand – Potlatch, Plum Creek, Boise Cascade, and Weyerhaeuser (Jensen et al., 1995)) have been able to constantly lowball smaller-scale timber producers for national forest timber bids, thus maintaining their timber oligarchy across the region's landscapes (Behan, 2001). In addition to the social costs, the ecological costs of the railroad land grants legacy have been enormous. Most of the checkerboarded square miles granted to the railroads have been clearcut, often without being replanted. Ownership checkerboards that show up on maps are often mirrored on the land as alternating square miles of forests and bare ground (see **Figures 5.1 & 5.2**).⁵⁸

⁵⁸ Recently, railroads have become a problem (for a reason unrelated to habitat alteration) for the ESA listed Northern Continental Divide population of grizzly bears. The Burlington Northern Santa Fe rail line that works its way through the heart of the NCDE population's habitat has had numerous grain spills that have caused local concentrations of grizzlies right along rail lines. Timely cleanup of these spills is

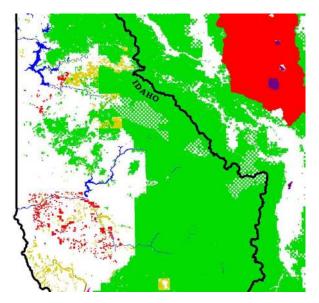


Figure 5.1 Land Ownership in north-central Idaho and western Montana, with the prominent white/green pattern representing the private/Federal ownership checkerboard – a legacy of nineteenth century railroad land grants, specifically here the Northern Pacific and Chicago, Milwaukee & St. Paul railroads (Schwantes, 1993) (map by Hintz).



Figure 5.2. Checkerboard clearcut in Idaho: private lands cutover and St. Joe National Forest lands forested. Note the extensive roading. This is a spectacular, but not atypical, example of railroad checkerboard landscape (Osborn, 2001).

difficult, however, due to the rugged, remote, relatively inaccessible terrain. In 2004 alone, three grizzlies were killed by trains near grain spillage sites (Keefe-Feldman, 2005).

The checkerboard legacy of the railroad land grants has resulted in massive habitat fragmentation between the Bitterroot Ecosystem and the north Idaho/western Montana grizzly populations, and indeed accounts for a good portion of the road removal and ecological restoration components of the Conservation Biology alternative.

At the same time that Federal lands timber demand and harvest was on the rise, tremendous increases in recreational use on national forests as well as the burgeoning science of ecology heralded in new calls for the conservation of public lands. The increasing, and often conflicting, demands put on the public lands culminated in the sixth and current era of Federal lands history, an era so complex and full of new regulations, uses, management strategies, and competing demands that Clawson doesn't even attempt to give it an all-inclusive name. Rather, he argues (quite reasonably) that the modern era of public lands management is best understood through a chronological review of the key Federal lands legislation passed since 1960.

5.3. Multiple Use, Wilderness, and Public Participation: The 1960s Federal Lands Management Revolution

The Multiple Use Sustained Yield Act (MUSYA) of 1960 act codified into law the longstanding Forest Service policy of multiple-use. The wording of the Act is very ambiguous. MUSYA has understandably been interpreted variously by different groups at different times. The Act, for example, refers to "the combination (of uses) that will best meet the needs of the American people; making the most judicious use of the land ... without impairment of the productivity of the land ... and not necessarily the combination of uses that will give the greatest dollar return of the greatest unit output" (US Congress 16:528, in Clawson, 1983, p. 35). MUSYA did little more than require the Forest Service to manage its forests for multiple uses. It gave "no specific guidance on policy issues and still less guidance for actual forest management in the field" (Clawson, p. 44). The new paper mandates of multiple use and sustained yield would do little to stem what had become an institutional Forest Service culture of "timber primacy" (Bolle, 1997, p. 170). Throughout the 1960s and 70s the Forest Service would come to be dominated by agents dedicated to increasing timber harvests. The agency became increasingly insulated and hostile in its reaction to critics of overcutting and clearcutting from local residents, scientific foresters and environmentalists (Bolle, 1997).

One law passed soon after MUSYA that was much more concrete in its policy and management directives was the Wilderness Act of 1964. The Wilderness Act – which upon passage established 54 wilderness areas covering some nine million acres of Federal lands – was passed after seven years of contentious Congressional debate (Rudzitis, 1996). Since its passage, the size of the Federal wilderness area system has grown more than tenfold to about 100 million acres, but "this figure is a little misleading since one State, Alaska, has the majority of wilderness lands with over 60 percent of the total wilderness acreage" (Rudzitis, p. 22). The idea was to release "pristine" lands from the multiple use mandates of the Federal land management agencies so as to ensure their wilderness character in perpetuity (passage from the Wilderness Act):

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions (Forest History Society, 2004).

There is no wording in the act that privileges ecologically significant lands,⁵⁹ but due to their large size (wilderness areas *must* be at least 5,000 acres and many are hundreds of thousands to over a million acres) and the fact that they are unroaded, the Wilderness Act created many *de facto* ecologically important reserves. This is especially true for large carnivores, for reasons discussed at length in the previous chapter. Wilderness areas have always required full congressional approval. Since wilderness designation prohibits nearly all resource extraction activity within their borders, few wilderness areas (and fewer still large wilderness areas) have been created in moist, lower elevation habitats that contain both the highest endemic biodiversity *and* the most valuable timber (Foreman, 1995a). Additionally, by 1964 many of the most ecologically and commercially productive national forest lands were already being intensively managed for timber and thus could not, and presumably can never, qualify as potential wilderness areas. The rugged inaccessible interior of central Idaho, on the other hand,

⁵⁹ Curiously, after listing the three criteria a wilderness area must meet, the act states that a wilderness area "*may* also contain ecological, geological, or other features of scientific, educational, scenic, or historical value" (Forest History Forest History Society, 2004, emphasis added).

remained unroaded and uncut up to the 1964 passage of the act and after. The Selway Bitterroot Wilderness was part of the original nine million acre system, while the equally rugged but more arid Frank Church/River of No Return Wilderness – designated in 1980 – was one of the last huge wilderness areas created in the lower 48 States.

The next major piece of Federal environmental legislation was the National Environmental Policy Act (NEPA) of 1969. It is almost impossible to overstate the importance of NEPA. As the Natural Resources Law Center at the University of Colorado puts is, "NEPA is the nation's formal declaration of environmental policy. NEPA affects every major land use and management decision made by the Federal government" (Natural Resources Law Center, 2000, p. 9). In sum, NEPA provides dozens of guidelines, some rather vague and reminiscent of MUSYA's multiple use mandates, but many others very specific in their programmatic and procedural requirements. NEPA requires all Federal Government agencies to assess the environmental impacts of their actions. Most importantly, NEPA requires the Federal Government to prepare environmental impact statements (EISs) "for all 'major Federal projects significantly affecting the quality of the human environment" (Wenner, 1993, p. 47) (even if, at the time NEPA was enacted, "no one knew what an Environmental Impact Statement should contain, or what constituted a significant action requiring such a statement" (Clawson, 1983, p. 51)). "Moreover, NEPA contained a requirement that EISs would be open to public comment," ushering in the era of environmental groups using the Federal courts in attempts to eliminate or forestall Federal projects perceived to be environmentally destructive (Wenner, 1993, p. 47).

The public comment component of the EIS process is substantial. In the initial "scoping" phase – where the EIS-issuing agency informs the public of its intent to prepare an EIS and the justifications for doing so – all affected Federal, State, and local agencies, Indian tribes, and "other interested persons (including those who might not be in accord with the action on environmental grounds)" are invited to comment on and participate in the EIS process (Natural Resources Law Center, 2000, p. 11, wording is from NEPA). Every EIS published has a "preferred alternative" alongside usually two or three other alternatives include a "no action" alternative (Killingsworth & Palmer, 1992; Lindstrom et al., 2002). The EIS publication process is comprised of two formal stages.

The first is the publication of a draft EIS. The lead agency must invite comments on the draft EIS, respond to the comments, and as such is liable to have incorporated relevant input into the final phase of the process, the publication of a final EIS (Natural Resources Law Center, 2000).

Although anyone would agree that NEPA and the EIS process have "totally revolutionized federal land management" (Clawson, 1983, p. 51), many authors question whether the revolution has been as substantive as it has procedural:

[EIS lead agencies] attempt to create ... a narrow path of action that has been chosen or created in advance of the document's production by hierarchically arranged powers. And though they may draw upon the conventions of democratic discourse that is open to information from diverse sources, [their] aim is never to treat deviant discourses with respect but always merely to take note of them, to record them, and ultimately treat them as 'noise' in the system, which needs to be ignored or expunged (Killingsworth & Palmer, 1992, p. 166).

Partly as a defense against possible legal actions, the federal agencies have made the Environmental Impact Statements so long, so filled with more or less meaningful figures, and so costly to prepare that even the Council on Environmental Quality has sough to shorten and simplify them (Clawson, 1983, p. 53).

But other authors are more positive about NEPA and the EIS process, seeing it as still the most democratic model for environmental decision making implemented on a national scale despite its flaws (e.g., Feldman, 1993). Perhaps the fact that over 3,300 comments were received during the scoping phase of the Bitterroot grizzly EIS and over 24,000 comments were received after the publication of the Draft EIS (USFWS, 1997a, 1998) is evidence of the scale of the public comment component of environmental EISs. To what degree this public felt empowered by their role in the process, however, is a matter of speculation.⁶⁰

⁶⁰ At least one of the attendees of the Draft EIS public meetings had a very specific critique of the Fish and Wildlife Service's commitment to true public participation. The Missoula, Montana meeting was scheduled at a lodge several miles out of town and there was no shuttle or other transportation set up for Missoulans without cars to get to the meeting. David Havlick, an adamant supporter of the conservation biology alternative, said he believed this was deliberately set up to exclude from the meeting as many of the radical environmentalists in the Missoula area as possible (many of whom do not own cars for environmental-ethical reasons) (Havlick, pers. comm.).

5.4. The Endangered Species Act of 1973

The final piece of legislation I will discuss is the Endangered Species Act (ESA) of 1973. The treaties with the Nez Perce, the creation and evolution of the US Forest Service and National Park Service, the Wilderness Act, MUSYA, NEPA – discussions of each of these help situate the Bitterroot grizzly recovery efforts in a geohistorical context. The ESA, however, is the most significant piece of legislation for the purposes of this dissertation, and for quite obvious reasons. The Bitterroot grizzly recovery efforts were one piece of the larger grizzly bear recovery plan that was a product of the grizzly bear's 1975 listing on the ESA. Without the ESA, grizzly conservation efforts would have proceeded,⁶¹ but the form they took would have been very different from the manner in which they played out.

In 1973, both houses of Congress passed the Endangered Species Act with overwhelming bipartisan support (an indication of how much things have changed in the arena of Federal environmental legislation in thirty years). Votes were 90-0 in the Senate and 390-12 in the House. The bill was not seriously debated or contested on either floor – none of the twelve representatives who voted against the bill even voiced opposition on the House floor or to the media (Petersen, 2002). Opposition would undoubtedly have been considerably higher if senators and representatives would have foreseen the "absoluteness" with which the ESA's uncompromising rhetoric would be interpreted by Federal judges (Sullins, 2001, p. 3). Although many who voted for the bill saw it as a formal extension of longstanding and rather uncontroversial efforts to save high-profile species such as the brown pelican, gray wolf, and American alligator (Burgess, 2001), the US Supreme Court would interpret it quite differently:

After an exhaustive review of the act and its legislative history, the Court stated that 'the plain intent of Congress in enacting this statute was to halt and reverse the trend toward species extinction, whatever the cost', and noted further that this conclusion is reflected 'in literally every section of the statute' (Sullins, 2001, interior quote is from US Supreme Court 437, *Tennessee Valley Authority versus Hill*).

The ESA provides regulatory protection for imperiled animals and plant species and "the ecosystems on which they depend" (NOAA, 2005, Section 2.b.). "Species" is

⁶¹ Indeed, Idaho and Montana each have State grizzly conservation plans that predate the ESA (USFWS, 2000a).

broadly (and somewhat awkwardly) defined in the ESA to include any species or subspecies of plant or animal, and, for vertebrate animals, "distinct population segments" (Stanford Environmental Law Society, 2001, p. 32).⁶² For the purposes of listing and conservation, "species," "subspecies," and "distinct population segments" are not given blanket definitions or specific biological criteria that must be met. Rather, those determinations are made on a case-by-case basis, based on "standard taxonomic distinctions and the biological expertise of [the FWS] and the scientific community" (Clark, 1994, p. 22).

The ESA provides two classifications of protected status, endangered and threatened. An endangered species is one "in danger of extinction throughout all or a portion of its range" while a threatened species is "by definition not yet in danger of extinction, but is likely to become endangered within the foreseeable future" (Sullins, 2001, p. 154). For ESA listed animals, this is mainly a terminological distinction, as threatened species are granted nearly the same level of protection as endangered species. The only exception to this is a species protected under "special rule" status (Sullins, 2001), an issue that would play prime importance in the Bitterroot grizzly debates.

Once a species is listed, the FWS⁶³ must "design and implement a recovery plan" for the species, with the ultimate goal being the recovery of the species and its removal from the ESA (Clark, 1994, p. 22). There are several specific components of the ESA worth mentioning because of their relevance to the Bitterroot grizzly recovery efforts. Following convention, I will refer to the components by the "section" of the Act in which they are written. Section 4 dictates the listing procedures for endangered and threatened species. Any individual or group, or the FWS itself, can petition to have a species listed (Clark, 1994). Once a petition is received, FWS has ninety days to decide whether ESA consideration is "warranted," after which it has another year to make a final listing

⁶² The original ESA extended protected status candidacy to any distinct population of animals, but a 1978 amendment to the ESA limited the population designation to only vertebrate animals (Czech & Krausman, 2001).

⁶³ The US Fish and Wildlife Service is actually one of two Federal agencies overseeing and administering endangered species protection. The other is the National Marine Fisheries Service (NMFS). NMFS administers marine species, so for the purposes of this discussion, I will refer to FWS responsibilities solely.

determination.⁶⁴ The decision on whether to list a species is to be made "solely on the basis of the best scientific and commercial data available" ⁶⁵ (NOAA, 2005, Section 4.b.). The key word in this phrase is "solely," added to a 1982 ESA amendment as to when and to what degree science determines ESA regulatory action. Although the "best scientific and commercial data" phrase appears in five sections of the Act, only in the listing process is this data the sole factor dictating action (Baldwin & Corn, 2002). In other sections, dealing with implementation and the planning process, economic considerations may be weighed against scientific considerations.

After a species is listed, there are two regulatory provisions that give the ESA its teeth, so to speak – that make it the "pit bull of environmental regulation" (Sullins, 2001, p. 13). The first is the interagency consultation required by Section 7:

Under Section 7, federal agencies are prohibited from engaging in any action ... that is 'likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species' (Clark, 1994, p. 23, internal quote is from ESA).

Section 7 consultation has been rigorously upheld by the Federal courts since the notorious snail darter controversy in 1978 that halted construction of a Tennessee Valley Authority dam on the Tellico River. Since *TVA vs. Hill* environmentalists have used Section 7 to sue Federal agencies to modify or halt countless Federal land management plans and development programs. The Court's upholding of Section 7 is likely the single greatest factor that has inspired so many environmentalist campaigns for endangered species listing for animals and plants found on Federal lands. One of the great controversies of Federal lands management is in what manner and how much (if any)

⁶⁴ Though the FWS regularly fails to meet the one year listing deadline. There is currently a backlog of over 200 petitioned species waiting for the FWS or NMFS to make a determination. The 1995 Congress even passed an ESA listing moratorium that was lifted about a year later. The Bush administration has repeatedly claimed that the Department of Interior simply does not have the hundred-plus million dollars that would be needed to make determinations on the ESA candidate species backlog. A Center for Biological Diversity report, however, shows that the administration's claims are patently false, that Interior Secretary Norton actually refused additional funding that was targeted by Congress for the ESA candidate species backlog (Nowicki).

⁶⁵ The word "commercial" in this phrase may seem curious and appear to connote economic considerations, but in this usage it refers to data on domestic and international trade of the species that affects its endangerment (Baldwin & Corn, 2002). Trade in animals and animal parts (legal and illegal) has been recognized for over a century as a leading cause of endangerment for many plant and animal species. A considerable amount of Federal laws and international agreements pertaining to endangered species predating 1973 were passed to deal with the endangered animal and plant trade problem (Petersen, 2002).

timber should be cut from national forests. Since the 1976 National Forest Management Act all national forests must publish "forest plans" which are subject to the full NEPA public participation process, and which must address, among other things, planned timber sales and endangered species conservation plans. Section 7 habitat prohibitions played a huge part in the well-publicized controversy over the endangered spotted owl and old-growth timber harvesting in Pacific Northwest forests (Petersen, 2002; Yaffee, 1994). Indeed, a prominent timber operator based in Kamiah, Idaho, a town of 1,160 people located not an hour from the Selway-Bitterroot Wilderness, supported the CMC alternative, stating that prior to its inception "most of the people – especially those in the timber industry – had a concern that if we weren't careful, the grizzly bear could become the spotted owl issue of our region" (Anderson, 2000).

Legal obstructionism, via NEPA and the ESA, is environmentalism's strongest weapon for challenging Federal lands management programs (Wenner, 1993). But this strategy is not without its problems. For one, environmentalists become increasingly at the whims of conservation-friendly presidential administrations, Congresses, and Federal judges (Wenner, 1993). Further, the endless-litigation strategy – even when victorious – usually aims only to forestall or block specific management actions, and as such does little to enact incremental or progressive change. The litigation model has also resulted in a polarization between environmentalists, who over the past two decades have increasingly opposed all public lands timber harvesting, and loggers and millworkers, whose livelihoods have become increasingly tied to Federal lands logging as private lands have been overcut. If Section 7 is a pit bull, many people employed in natural resource-extractive industries in the West must perceive the pit bull to be personally attacking them.

The other major "prohibitive" (Yaffee, 1982) provision in the ESA is Section 9, which prohibits the "taking" of listed species (Clark, 1994). True to form, "[t]aking was defined extremely broadly as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting organisms or *attempting* to do the same" (Yaffee, 1982, p. 57, emphasis in original). Whereas Section 7 requirements only apply to Federal agencies, Section 9 prohibitions apply to "all persons, agencies and organizations" (Clark, 1994, p. 23). Section 9 has particular import for species that prey

upon livestock, including gray wolves and grizzly bears. Predatory species can only be killed in defense of human life or safety. Listed endangered species cannot be killed or injured if they are threatening or even attacking livestock, horses, hunting dogs, pets or other 'property'. So there are cadres of adamant opposition to these "private take" (Fischer, 1995, p. 139) prohibitions of ESA Section 9, most notably ranchers, but also some horse packers and guides and hunting groups.

The other ESA provision that is significant for the purposes of my investigation is Section 10, which allows for (among other things) the FWS to propose reintroducing "experimental populations" of listed species to suitable but unoccupied portions of their former range (Sullins, 2001). Section 10 was not part of the original ESA, but added in a 1982 amendment to the bill. Prior to the flexibility introduced with Section 10's "experimental population" provision, the FWS could reintroduce listed species to portions of their former range, but "once relocated, the full panoply of ESA prohibitions applied to the newly established population" (Sullins, 2001, p. 131). As such, early efforts to reintroduce endangered species were nearly always met with fierce resistance (Sullins, 2001; USFWS, 1997a).

Experimental populations can be classified as "essential" or "nonessential" based on the following criterion:

An *essential experimental* population is one the loss of which would be likely to appreciably reduce the likelihood of survival of the species in the wild; all other experimental populations are to be classified as nonessential (Sullins, 2001, p. 135).

For a *nonessential* experimental population, Section 7 interagency consultation is not required (Sullins, 2001). Further, conservation plans for specific nonessential experimental populations can include relaxed Section 9 takings prohibitions (Fischer, 1995). The reintroduction of gray wolves to central Idaho and Yellowstone National Park – one of the most high-profile and arguably the most successful endangered species recovery program ever in the Northern Rockies – employed the nonessential experimental designation for the reintroduced wolves. This designation helped garner a relatively broad base of support (even if many only "grudgingly" supported wolf reintroduction) for this historically contentious issue (Fischer, 1995, p. 152). As will be

demonstrated, Section 10 concessions would play prominent roles in the CMC alternative and its opponents' challenges.

5.5. A Methodological Intervention: Environmental Rhetoric as 'Ecospeak'

My goal in the previous sections of this chapter is to have illustrated the unique context and confluence of geography, (human and natural) history, land-use and land-management policy which framed the Bitterroot grizzly bear reintroduction debates. In the previous chapter, I examined one outcome of this context, the ambitious efforts by Alliance for the Wild Rockies and other environmentalists in the region to reestablish grizzly bears in the Bitterroots as a fully protected species under the ESA. In this chapter, my primary objects of analysis are advocacy documents for the Citizen Management Alternative, including the official Federal document promoting the alternative, the environmental impact statement (EIS). Before I get into the dissection of the EIS and other CMC alternative promotional materials, I will discuss a useful methodological tool for making sense of bureaucratic and advocacy documents – Killingsworth and Palmer's (1992) theorization of environmental rhetoric as "ecospeak."

I include the Bitterroot Grizzly EISs⁶⁶ in this chapter's objects of analysis under the subheading "advocacy document." An EIS is not your standard environmental advocacy document. Then again, these are rather nonstandard EISs. Most EISs are written for mining, oil and gas development, and hydroelectric power projects on Federal lands (Bardach & Pugliaresi, 1977) – as well as national forest 'forest plans' as previously mentioned. All of these have clearly negative 'impacts' on the environment, and the congressional intent of the EIS mandate was defined by the Supreme Court as making sure Federal agencies take a "hard look" at the "environmental consequences" of their actions (Bardach & Pugliaresi, 1977). The Bitterroot EISs were part of a project that was designed explicitly to 'improve' the environment – by restoring a key native species to an ecosystem – markedly different from assessing the environmental impacts of, say, a

⁶⁶ I will use the shorthand titles "Bitterroot Grizzly EIS" or "Bitterroot EIS," (or EISs if I am referring to both the Draft and Final EISs), "Draft EIS," or "Final EIS" rather than the full "Grizzly Bear Recovery in the Bitterroot Ecosystem: [Draft or Final] Environmental Impact Statement."

new heap-leach gold mine near Yellowstone National Park.⁶⁷ Even so, the Bitterroot EISs did follow the standard EIS form, even though well under one hundred pages were devoted to assessing the "environmental consequences" of the four alternatives. The Bitterroot EISs also contrast sharply in form from the other advocacy documents analyzed in this dissertation – the more compact and slick pamphlets, mailers, and web pages produced by environmental groups advocating either the Conservation Biology or CMC alternatives.

Existing writing on environmental impact statements is scant in the critical social sciences or environmental rhetoric studies. It is not difficult to imagine why social scientists have, for the most part, left these documents out of their empirical and theoretical studies. They are tedious, dry, repetitive, and usually voluminous documents. And to be certain, all that is true for the Bitterroot EISs.⁶⁸ But, despite their dreary form, the Bitterroot EISs are the primary – and most thorough – documents produced advocating the reintroduction of grizzly bears to the Bitterroot ecosystem under a citizen management model.

Killingsworth and Palmer (1992) locate the EIS as one genre of environmental rhetoric. The "narrative outlines" of environmental discourse, over the past few decades, have been repeated enough ("contain[ing] similar plots and characters – the confrontation of environmentalists and land developers, for example") that we can now view environmental rhetoric as a

region of *ecospeak*, where public divisions are petrified, conflicts are prolonged, and solutions are deferred by a failure to criticize deeply the terms and conditions of the environmental dilemma. Ecospeak has emerged as a makeshift discourse for defining new positions in public debate (p. 8).

Environmental advocacy, as such, has become mired in us/them rhetorical framings, a process of intentional oversimplification on both sides of most debates. But this is understandable, as "a more complex view of the rhetorical situation is risky for either side, because it could result in what Jesse Jackson likes to call 'the paralysis of

⁶⁷ This refers to the 1995-6 EIS that assessed the potential effects of building the "New World Mine," a 19,000 acre gold mine that would have been very near Yellowstone National Park. The project was abandoned after the EIS publication, threatened litigation by ENGOs, a lot of bad press, and a land-swap deal between Crown Butte Corporation and the Federal Government.

⁶⁸ The Bitterroot Grizzly Final EIS totals 764 pages.

analysis'" (Killingsworth & Palmer, 1992, p. 10)⁶⁹. Complexifying the issues is risky (again, for either 'side' in a debate) for a variety of reasons.

One risk associated with acknowledging the complexity of environmental issues is it can make it impossible to focus on "the issue" itself (Evernden, 1999). After all, there are no solely *environmental* issues. The autonomy of 'environmental problems' qua environmental problems is itself a fiction – an artifact of the evolution of "ecospeak" (Killingsworth & Palmer, 1992). This parallels Raymond Rogers' radical critique of environmental discourse, where he declares that "the central goal of conservation is to challenge the assumptions of modern economy" (Rogers, 1998a, p. 1). These assumptions, as Rogers laments, rarely seem to be seriously challenged. In Northern California, for example, despite ample evidence that timber companies held little regard for their employees safety or long-term economic welfare, environmentalists fighting for increased forest protections failed to establish an alliance with timber workers because their discourse remained entrenched in a binary conservationist versus extraction rhetoric. Loggers and sawyers saw little more than unemployment lines waiting for them if such programs were implemented (London, 1998). Lacking the radical recontouring of environmental-political action that might enable such alliances, environmental problems tend to remain at the level of technicalities, glitches in an otherwise working system. Once 'fixed' (and all the while during the fixing), society kicks back into its unsustainable mode of production and new environmental problems arise around every corner (Foster, 2002; Kovel, 2002).

But oversimplification in environmental discourse is, of course, not merely a matter of missing the (arguably) necessary radical critique. There are more immediate practical reasons – from the strategic perspective of 'winning' or 'losing' specific environmental debates – that oversimplification tends to dominate the discourse. During the spotted owl controversy, for example, both sides had much to lose had they acknowledged the complexity of the issue. On one hand, if environmentalists had highlighted the effects of their proposals on rural timber workers (a 'community' already facing dire social and economic problems (Brown, 1995)) rather than demonizing a monolithic timber *industry* (Proctor, 1998b), their proposal would have been a much

⁶⁹ A reference citation for the internal Jesse Jackson quote is not given in the text.

more difficult 'sell' to the mainstream environmentalists across the country who were being courted to sign petitions and call congressmen. If the timber industry, on the other hand, acknowledged that its "sound forest management" policies were all about evenaged management of second-growth forests (Wenner, 1993), thus leaving the question of old growth protection out of the equation altogether (Proctor, 1998b), the industry's carefully crafted rhetorical commitments to environmental protection and sustainability might have appeared rather disingenuous (especially given the context).

The process of simplification also arises out of the scientific uncertainty that threatens to undermine many conservation proposals. Since at least Rachel Carson's Silent Spring, environmental problems and their solutions have traditionally been grounded in scientific argumentation - it has been science that, more than anything, informs environmental policy. And the scientification of environmental discourse has, if anything, intensified in the nearly half-century since Silent Spring, but not without cost to the environmental movement. As ecological knowledge has advanced, so has the awareness of the limits of our understanding. As Frank Fischer puts it, "[environmentalists] discovered that [science] could not answer the environmental questions with enough precision to be decisive. Indeed, it often tended to raise more new questions that it could not answer" (Fischer, 2000, p. 95). So environmentalists often back themselves into a corner when arguing that theirs is *the* scientifically sound case, or, as was argued so many times by advocates for the conservation biology proposal for Bitterroot grizzly recovery, that theirs and theirs alone represents the "best available science." The challenge, from a critical social science 'analytical' perspective, is first to tease out where and how these processes of simplification take place, but then secondly and perhaps more significantly to think about how these processes close off alternatives and circumscribe the possible paths of action. When closely examined, ecospeak can reveal "conceal[ed] sources of solidarity and conflict [which can] provide hints toward the kind of social reorganization needed to cut through the environmental dilemma" (Killingsworth & Palmer, 1992, p. 10).

Killingsworth and Palmer provide a typology of "human attitudes toward the natural world" and the social groups that espouse the attitudes. As with any allencompassing typology, its usefulness is less in employing it as a literal structure within which actual attitudes and groups fall, but more as a heuristic device to help tease out the relationships between rhetoric, perceptions, groups, individuals and social practice. Similar to Harré et al's discussion of metaphors in environmental discourse, typologies "are tools ... and as tools they are either useful, harmful, or useless but neither right nor wrong" (Harré et al., 1999, p. 109). Effective typologies can help us understand why things happen or happened the way they did, and ideally point toward alternatives as well.

In Killingsworth and Palmer's model, the "polarity" of environmentalist/developmentalist ecospeak is broken up initially by representing attitudes toward nature along a *continuum* from "nature as object" to "nature as spirit":

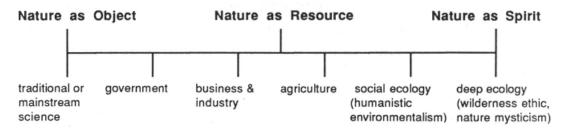


Figure 5.3. Continuum of Attitudes and Perspectives toward Nature (in Killingsworth and Palmer, 1992, p. 11)

The "science" depicted as holding nature as mere "object" represents "experimental science as it has developed since the seventeenth century, with its fabled detachment from all natural objects" (Killingsworth & Palmer, 1992, p. 12). The center represents mainstream "anthropocentric" attitudes that hold "nature [as] a bounty of resources for human use and enjoyment" (p. 12). But the environmental crisis has brought science (or at least a good bit of it) out of its isolated laboratory existence, and likewise brought much religion in line with science-based critiques of modern developmentalism. A growing sense of an "ecological holism" indeed blurs any distinction between scientific and spiritualistic attitudes toward nature (p. 14). History, then, has bent the continuum into a "horseshoe, … bring[ing] science and deep ecology into a closer relationship" (p. 14, reproduced as **Figure 5. 4** here).

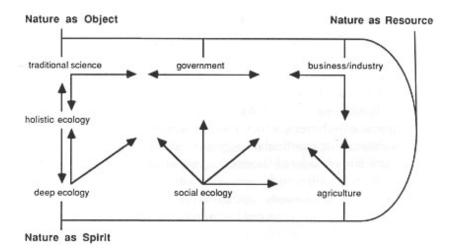


Figure 5.4. "Horseshoe" Model of Attitudes and Perspectives toward Nature (in Killingsworth and Palmer, 1992, p. 14)

The arrows in the horseshoe diagram represent the "direction of appeals" between the various groups/attitudes (Killingsworth & Palmer, 1992, p. 17). These "appeals" represent efforts to overcome the *power differentials* and fundamental *tensions* between any pair of perspectives. Any environmental debate will consist of various appeals. This is primarily strategic, as only rarely can a single party (e.g., environmentalists, a business interest, a governmental agency, a scientific community) bring about a desired outcome.

The typological component in the model is methodologically useful in two 'directions'. As mentioned above, the categories produce a helpful heuristic device to assist in logically assembling real-world events and entities. With the heuristic in place, alternative types and subtypes can modify the diagram when assessing particular debates. Looking at the typology in the other 'direction' – recognizing the limits of this, or any, pigeonholing structure – we can also recognize the real power of reified categories in environmental debate. Methodologically, that is, we can see how debaters attempt to "achieve a measure of control over an audience of an opponent on the basis of a dominant attitude" (p. 12). Similarly, one "may seek shelter from attack by claiming for themselves a breadth of attitudinal experience denied them by their opponents." In other words, (recognizing its limits) we can superimpose the structure onto rhetoric and real world events to aid in sorting them out. Conversely, we can assess how opponents deploy these and other categories to belittle their opponents experience and argumentation. Additionally, we can assess how these categories operate as identities that are falsely perceived to be rigidly incommensurable. I will now turn to the document themselves,

beginning with the "Grizzly Bear Recovery in the Bitterroot Ecosystem: Draft Environmental Impact Statement" from 1997.

5.6. It's as Easy as One (Reintroduce Grizzlies), Two ('Local' Management), Three (Grizzly Recovery in the Bitterroots!): The Bitterroot EIS

Environmental Impact Statements are published in two stages, a draft EIS and a final EIS. The draft document, however, should not be thought of as merely preliminary or of secondary significance to the entire process. Indeed, the draft document "is not a draft in the traditional sense of the word. The draft EIS must be complete, meet the regulatory requirements, and be capable of standing on its own merits" (Eccleston, 1999, p. 224). Much of the import of the draft EIS is related to its role in the public comment component of the NEPA process. After publication, the draft EIS is followed by live open house hearings in local communities and a written public comment period. Moreover, the issuing agency is mandated to assess, summarize, respond to and where necessary make changes to the draft EIS based on the submitted comments (Eccleston, 1999). The final EIS, as the name implies, is intended to be a final decision-recommending document. There is no mandated comment period after the publication of the final EIS, only a 30day period wherein agencies, groups and individuals can read and assess the document and notify the issuing agency of any intent to challenge the decision. After the 30-day period, the final decision can then be forwarded up the chain of command to the head of the agency and eventually the secretary of the agency's parent department. In sum, the draft EIS is a full-scale proposal for a specific action by the Federal Government, and the comment period following its publication is (in theory at least) the public's most empowered moment in the process – the best opportunity to influence the course of action.

At nearly five hundred pages, it is impossible to analyze, or even review, the entire Bitterroot Draft EIS. For the purposes of my analysis, there are two sections of the document that necessitate review. These are the introduction and the chapter outlining the recovery alternatives. I base this judgment simply in the assumption that these were the two sections that most readers of the document read first, and no doubt the only sections that many read.

Viewed through Killingsworth and Palmer's 'horseshoe' model (Figure 5.4) we realize that no environmental advocacy rhetoric is ever directed to all possible constituencies simultaneously. Conservation programs are always targeted to a specific constituency or groups of constituencies (as represented in the diagram by the arrows, the "direction of appeals"). Due to the ever-present tensions and incommensurabilities among the different groups (or "perspectives" (Killingsworth & Palmer, 1992, p. 11)) all such targeted rhetoric will invariably be found repellant by other groups. The CMC alternative appeals were directed to the timber industry, livestock industry, and other local skeptics of Federal lands managers and management. By directing the proposal to these groups, however, the potential for support from much of the regional environmental community was compromised. It should not be surprising that a proposal that unapologetically courts the timber industry would not appeal to many in the regional environmental community. The opening page of the document is the "Abstract," consisting of the following three paragraphs:

The U. S. Fish and Wildlife Service (USFWS) proposes to establish an experimental population rule and reintroduce grizzly bears into the Bitterroot Ecosystem (BE) in east central Idaho. The rule would allow liberal management of grizzly bears by government agencies and the public to minimize conflicts over uses of public lands, effects on domestic animals and livestock, and impacts on ungulate populations. A Citizen authorized Management Committee would be management implementation responsibility for the experimental population and would be tasked with implementing the Bitterroot Chapter of the Grizzly Bear Recovery Plan. Reintroduction could result in grizzly bear recovery in the BE (achievement of the tentative recovery goal of approximately 280 grizzly bears occupying suitable habitat) in a minimum of 50 years (4% growth rate), but would likely more than 110 years (2% growth rate) after bears were released.

The Bitterroot Ecosystem, as characterized by data from 10 counties in central Idaho and 4 counties in western Montana, is approximately 44,419 square miles and 76% federal land. The area has a population of 219,061, has a \$3.8 billion local economy, has 423,490 cattle and sheep (298,000 are grazed on national forests), has about 274,359 ungulates, with a hunter harvest of 38,007, and receives approximately 13,268,395 recreational visits annually to national forests in the area.

A recovered grizzly bear population would kill about 6 cattle (4-7) and 22 sheep (0-44), and up to 504 ungulates per year. This would not measurably impact ungulate populations or hunter harvest. Nuisance bear

incidents could be up to 59 (0-118) per year. There would be no anticipated impacts to land use activities on public or private land, to include timber harvest, mining, and public access/recreational use. Changes to hunting seasons could occur due to conflicts. Risk to human health and safety from a recovered grizzly bear population would be less than 1 injury per year and less than 1 human mortality every few decades. Economic analyses indicate grizzly bear recovery in the BE would lead to total net economic benefits of 40.4-60.6 million dollars per year and total costs of \$170,300-\$176,000 per year (costs during the initial 5-year reintroduction phase would be \$395,900-\$401,600 per year) (USFWS, 1997a, p. iv).

I have identified four dominant themes that run throughout the EISs - tirelessly

repeated justifications for the proposal. As would be expected, they all arise in the Draft EIS abstract:

theme 1: the hallmarks of the proposal are the experimental status of the reintroduced bears and the Citizen Management Committee;

theme 2: grizzly recovery in the Bitterroot ecosystem is a simple matter, just waiting to happen; the land and the habitat are there, the only missing variable is the bears themselves – end of story;

theme 3: the proposal is *safe, non-threatening*: "*no* anticipated impacts to land use activities on public or private land"; livestock losses will be minimal; ungulate losses won't affect hunter harvest levels; human safety risk is nominal; the economic benefits far outweigh the costs;

theme 4: the EIS is a thorough and scientifically sound document, as evidenced by the very precise (appearing) statistics on project recovery time and population size, livestock and ungulate losses, economic costs and benefits, etc.

The hallmarks – the experimental population status and the CMC – are foregrounded in the abstract and throughout the document for a clear reason: this plan is marketed as being new, and different. *New* in that it represents a coalition of business interests and conservationists working together *for* endangered species recovery. This is *different* from the Federal Government's traditional strongarm approach that pits locals against environmentalists, often alienating both groups. In the description of Alternative 1 in the first chapter (the "summary") of the Draft EIS, the FWS appears almost desperate in their repetitive trumpeting of the experimental population designation:

The purpose of this alternative is to accomplish grizzly bear recovery by reintroducing grizzly bears designated as a nonessential experimental population to central Idaho and implementing provisions within Section 10(j) of the ESA to conduct special management to address local concerns.

Section 10(j) provides for reintroduction of experimental populations under special regulations. "Experimental population" designation gives the USFWS more flexibility because such populations can be treated as "a species proposed to be listed" rather than "threatened or endangered". If a reintroduced population of grizzly bears is designated "experimental" and "nonessential" (refers to an experimental population whose loss would not likely reduce the survival of the species in the wild) under the ESA 10(j) amendment, other federal agencies are required only to confer with USFWS on federal activities that are likely to jeopardize the species. Management of a nonessential experimental population can thus be tailored to specific areas and specific local conditions, including meeting concerns of those opposed to reintroduction. Because reintroduced grizzly bears would be classified as a nonessential experimental population, the Service's management practices can reduce local concerns about excessive government regulation on private lands, uncontrolled livestock depredations, excessive big game predation, and lack of State government and local citizen involvement in the program. A Citizen Management Committee (CMC) would be authorized management implementation responsibility for the Bitterroot grizzly bear experimental population.

"Experimental population" appears in each of the first three sentences of the description of the recovery alternative. The avowed benefits of the experimental status are made clear from a short sample of phrases all found in merely the first paragraph of the summary of the description: "address local concerns"; "more flexibility"; "management ... can be tailored to specific areas and specific local conditions"; "meeting concerns of those opposed to reintroduction"; "reduce local concerns"; "excessive government regulation"; "lack of State government and local citizen involvement" (p. xii). Great! Who, really, could be opposed to any of these things anyway? Opponents of reintroduction, it is fair to say, would generally not.

Few of even the most vocal opponents of environmental conservation in the West openly espouse being *anti*-conservation. Indeed, even the notorious Wise Use movement has labeled its constituency – "the hunters and trappers, the fishermen and watermen … the miners and the loggers" – as "the true environmentalists" (Pendley, 1994, p. vii, in McCarthy, 1998, p. 135-6). The experimental nonessential population status was clearly written with the intent of bringing on-board those who would otherwise oppose grizzly recovery in the region (probably not many activist 'Wise Users', but certainly some of the many other Westerners who do not self-identify primarily *as* environmentalists). And the nonessential experimental status did just that. The experimental status and the CMC were

the clauses in the recovery program that secured the support of powerful otherwiseopponents, including regional timber industry groups and the Governor of Montana (Anderson, 2000).

The nonessential experimental population status exempts the public lands surrounding the recovery area (which is all Federally designated wilderness anyway) from Section 7 of the ESA: the otherwise required consultation for potential management effects (e.g., timber harvests) on the listed species and its habitat. The structure of the summary of the preferred alternative demonstrates that the FWS was not trying to hedge on the concessions made to 'local' opponents and the timber industry. The horseshoe model (**Figure 5.4**) works well here initially. The prominent "direction of the appeal" is (*from* government and) most directly to "business," specifically regional timber operators and workers; secondarily toward "agriculture," specifically stockgrowers.⁷⁰ In a personal interview with Hank Fischer, the primary architect of the CMC proposal, he admitted that this targeting was intentional, and primarily strategic: "What we did was we tried to engage some of the people who we thought would be the most vociferous and most effective opponents of bear restoration. In our view that was going to be the timber industry ... in Idaho" (Fischer interview).

The Citizen Management Committee is the second hallmark of the proposal. In the summarized Alternative 1 description, two shorter paragraphs follow the long initial paragraph trumpeting the experimental status. The first is a purely descriptive explanation of the "recovery area" and the larger "experimental population area." The second is a brief description of how many bears will be released over how many years, and where. Following this is a longer paragraph explaining the establishment and role of the CMC. It begins:

The CMC would be authorized management implementation responsibility by the Secretary of Interior (in consultation with the governors of Idaho and Montana) for the Bitterroot grizzly bear nonessential experimental population. The CMC would be comprised of local citizens and agency representatives from federal and state agencies and the Nez Perce Tribe. Grizzly bear management would allow for

⁷⁰ Within the 14-county "primary analysis area" that includes and surrounds the central Idaho wilderness areas and the recovery core, farm income accounts for only 3.8% of the total income in the region, but 72% of all farm income comes from livestock raising (USFWS, 1997a). The source of the data is not given in the Draft EIS, but from the demographic categories I would assume that it is 1990 US Census data.

resource extraction activities to continue without formal Section 7 consultation under Section7(a)(2) of the ESA. The CMC would be responsible for recommending changes in land-use standards and guidelines as necessary for grizzly bear management (USFWS, 1997a, p. xiv).

Clearly the CMC is a supplement to the experimental status – as evidenced by the FWS's unwillingness, even by this point in the document, to refer to the reintroduced bear as anything less than the cumbersome "Bitterroot grizzly bear *nonessential experimental population*." The experimental status provides the Section 7 exemption (thrown in here again for good measure) and additional management flexibility. Without the CMC, however, "locals" would have no assurance that the flexibility would be used to their favor. "Local citizens" (in this context, meaning residents "from communities within and adjacent to the recovery and experimental population areas" (USFWS, 1997a, p. 2-80) not affiliated with the Federal Government) would constitute a majority of the fifteen member CMC.

The fifteen members would consist of seven appointed by the Governor of Idaho, five by the Governor of Montana, one by the Nez Perce Tribe, one member of the US Forest Service, and one member of the USFWS. The Draft EIS states that the CMC was to "to consist of a cross-section of interests reflecting a balance of viewpoints, be selected for their diversity of knowledge and experience in natural resource issues, and for their commitment to collaborative decision making," but establishes no guidelines as to how this would be accomplished, judged, or enforced. This State-appointed, "local" majority would, it was hoped, allay fears that local concerns would be ignored despite the experimental status. The citizen management provision broadens the appeal to include 'locals' outside of timber circles, but who none the less oppose highly restrictive management of Federal lands.

There was, it should be mentioned, one significant clause in the proposal that assured that the reintroduced bears – or perhaps I should say the "Bitterroot grizzly bear nonessential experimental population" – would not suffer at the hands of a committee more committed to the management status quo than to sincere grizzly bear recovery: "All decisions of the CMC must lead to recovery of the grizzly bear in the BE (Bitterroot Ecosystem)" (p. 2-80). If the Secretary of the Interior (through the FWS representative on the CMC) determines that the actions of the CMC are not leading to grizzly recovery,

129

then the Secretary (through the FWS) can resume lead management responsibility of the reintroduced grizzly bears. Moreover, "[s]hould the Secretary resume management implementation responsibility, the CMC would be disbanded and all requirements identified in the proposed special rule regarding the CMC would be automatically nullified" (p. 2-80). So the assurances go both ways. On one hand, this is not a standard top-down Federal lands management proposal – "locals" have the say in the particulars of how the management proceeds. On the other, the management *must* lead to grizzly bear recovery; otherwise the CMC "experiment" is rescinded.

The Conservation Biology alternative, clearly, contrasts sharply with the CMC proposal. The CB alternative presented an elaborated and technical-scientifically justified conservation proposal. This scientific justification for space and habitat, and explanations of the large reserve design, land-use restrictions, and ecological restoration it attempted to demonstrate as necessary for "true" grizzly recovery indeed took up the bulk of the proposal. The CMC alternative, by contrast, presented a simpler and more concise case for the viability of grizzly recovery: the wilderness itself is large enough and the habitat is adequate; moreover, it is surrounded by national forests which can accommodate some grizzlies and buffer the wilderness recovery core. The case was so simplified that the narrative produced appears almost self-evident (this is the second theme mentioned above): The wilderness is huge; it contained grizzlies; we killed them. If we put them back in, they'll do fine. Once reintroduced, recovery may be accomplished "in a minimum of 50 years ... but would likely more than 110 years" [sic] (p. iv). The most striking aspects of this theme - the issue of recovery itself - is the lack of space it garners in the proposal description, the casual tone that accompanies it, and the brief space it receives. Recovery is basically assumed. Management and control, however, are meticulously described, planned, and projected.

Life with grizzlies, so goes the story, will be pretty much the same as it was without them. This is the third theme I found in the CMC alternative. The grizzly recovery proposition is safe; it is non-threatening to the status quo. Much of this safety is established through the experimental population designation, the Section 7 exemption, and the "local" control over management decisions, as discussed at length already. These clauses, as shown, were primarily (and effectively) established to appease the group

perceived to be most powerful potential opponent of recovery – the timber industry in Idaho. Potential economic objections from the livestock industry were accounted for as well. Defenders of Wildlife would reimburse any rancher whose livestock was killed by a member of the experimental grizzly population. Beyond the matter of direct kill, "if significant conflicts occurred between grizzly bears and livestock within the experimental area, these could be resolved in favor of the livestock by capture or elimination of the bear" (p. xiv). Sounds pretty straightforward. The promise of continuing existing economic activities *unchanged* within the experimental population is made without qualification: "*no* anticipated impacts to land use activities on public or private land" (p. xvii). None.

Grizzly bears, of course, do not present a mere economic nuisance. They are (justifiably) perceived as dangerous, unpredictable, and potentially aggressive animals. To allay concerns of safety risks to persons and personal property, the wild, uncontrollable grizzly had to be rhetorically fenced in (geographically bounded within public lands), continually monitored, and disciplined when unruly. How to establish the complete controllability of the bear population? Strikingly similar to felons on probation⁷¹:

Each individual reintroduced grizzly bear would be radio collared and monitored to determine their movements and how they use their habitat, and to keep the public informed of general bear locations and recovery efforts (p. xvi).

Despite the best efforts to keep track of each and every bear in the experimental population, it is acknowledged that the bears will not respect the recovery area and experimental population area boundaries drawn on maps. Grizzly bears leaving the confines of the Federal lands (the experimental population area) and trespassing onto private lands "would be discouraged in these areas and grizzly bears would be captured,

⁷¹ The bears-as-criminals metaphor has an interesting history of its own. In nineteenth and early twentieth century America, predators were often perceived and represented as criminals, outlaws, bandits and the like. Bears with human conflict problems were officially classified by the early Park Service as "criminals ... of bad character" (Mighetto, 1991, p. 99). This perception of predators, right down to the specific metaphor, has persisted to the present day. Responding to a local rancher-critic of the grizzly reintroduction program who likened reintroducing grizzlies to releasing a prisoner ("maybe rape to child molestation to pure murder") into a neighborhood, FWS grizzly bear recovery coordinator Chris Servheen remarked "grizzly bears aren't criminals, so that's a nonsense argument" – no doubt fully aware that he worked for a government agency which had helped sediment and perpetuate this unfair anthropomorphic characterization of predators (Anderson, 2000).

destroyed, or returned to the recovery area" (p. 2-90). For those unconvinced that the monitoring and control program transforms this dangerous animal into a more benign presence, we are assured that the risk is infinitesimal in the short term and statistically nominal even after the recovery goal (approximately 280 bears) is met:

During the first several decades following establishment of a breeding population of grizzly bears, chance of injury caused by bears would be exceedingly small due to the low density of bears in the area... [P]rojections for human injury, once bears are recovered ... are less than one injury per year and less than one grizzly bear-induced human mortality every few decades (p. 2-96).

The EIS includes many very precise statistical projections of the resulting impacts of grizzly recovery (the fourth and final theme listed above). These statistics give the document quantified, scientific validation for the broader claim that recovering grizzlies won't stop a thing. Perhaps the most striking thing about the use of precise projections is how early they appear in the Draft EIS. In the one-page abstract – the first page of the entire document – we are assaulted with the following figures about the Bitterroot Ecosystem. The Ecosystem contains:

423,490 cattle and sheep (298,000 are grazed on national forests), has about 274,359 ungulates, with a hunter harvest of 38,007, and receives approximately 13,268,395 recreational visits annually.

A recovered grizzly bear population would kill about 6 cattle (4-7) and 22 sheep (0-44), and up to 504 ungulates per year... Nuisance bear incidents could be up to 59 (0-118) per year.

Risk to human health and safety would be less than 1 injury per year and less than 1 human mortality every few decades.

[G]rizzly bear recovery in the BE would lead to a total net economic benefits of 40.4-40.6 million dollars per year and total costs of \$170,300-\$176,000 per year (costs during the initial 5-year reintroduction phase would be \$395,900-\$401,600 per year) (USFWS, 1997a, p. iii).

Certainly, the barrage of statistics and numerical projections is partly formulaic.

Ever EIS contains a barrage of statistics, projections, and other various quantitative 'data' (Killingsworth & Palmer, 1992). It is also easy to see how quantitative data is needed to validate the qualitative claims made throughout the EIS - e.g., recovery will be successful; livestock losses will be minimal; hunter harvest will be unaffected; the regional economy will benefit.

Any EIS is also undeniably written as an 'expert' document. Historian Samuel Hays writes about the growing rift since the 1970s between experts and non-experts within the environment movement. Environmentalism in the 1960s developed as a more traditional grassroots movement but gradually built strong (and necessary, from a practical standpoint) alliances with, and within, scientific and bureaucratic circles.⁷² Scientists and resource managers, the two dominant expert cadres, often perceive "the political context as one of 'us' versus 'them', of the knowledgeable and rational expert and the uninformed and emotional public" (Hays, 1987, p. 9). For the FWS and the Bitterroot EIS preparers, the case was even more complicated by the fact that they had adversaries on two sides. One side, the outright opponents of grizzly conservation, yes, was perceived and treated as 'the uninformed and emotional public'. But the other, supporters of the CB alternative, comprised a rival expert community producing a quantitative analysis that counters many of the claims made in the CMC alternative. Clearly, CB supporters were going to challenge the CMC's assertions based on their own analyses, including the PVA modeling discussed in the previous chapter. By law, the FWS needed to defend its proposal against such assertions, so quantitative data that could back the claim that recovery was possible within the CMC recovery area were needed.

Perhaps not surprisingly, the 'data' presented in the Draft EIS is even easier to poke holes in than was the CB data as assessed in Chapter 4. For example, on what is the assertion that a recovered grizzly bear population "would kill about 6 cattle (4-7) and 22 sheep (0-44), and up to 504 ungulates per year" based? For the livestock mortality estimates, we have to go to page 182 of Chapter 4, where we finally find the formula from which this figure was calculated:

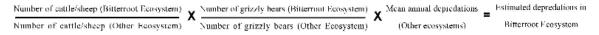


Figure 5.5. Livestock depredation estimation formula from page 4-182 of the Bitterroot Draft EIS

This formula seems reasonable enough for getting a ball park estimate as to how many cattle and sheep will likely be killed by a recovered grizzly population. The ecosystems

⁷² Chapter 6 includes a much more elaborated discussion of experts and expertise. For my immediate purposes, Hays' review of the historically developing expert nature of environmentalism adequately treats the subject.

from which the depredation statistics were taken were the NCDE and the GYC, the two (by far) largest subpopulations of grizzlies in the Lower 48. And, if you go to the trouble to dig through several hundred Draft EIS pages in search of the source of these figures, the estimates are fairly well-qualified: "These predictions are statistical in nature and are not intended to show exact depredation expected in the BE, but should provide an indication of what may occur based on other ecosystems" (USFWS, 1997a, p. 4-182). This does not, of course, explain the way in which the assertion was worded in the Draft EIS abstract: "a recovered grizzly bear population would kill about 6 cattle..." Granted, "about" is a qualifier, but why give an exact estimate followed by a bounded range (e.g., "6 cattle (4-7) and 22 sheep (0-44)")?

Whether this was just sloppiness on the part of the EIS preparers, or whether they actually thought they were presenting a more convincing case by providing firm figures, or whatever other possible reason might explain it, what is undeniable is that so many of the figures themselves – when held to really any scrutiny whatsoever – are bizarre to the point of being almost comical. Did the preparers not have any knowledge about the rules of significant digits when presenting estimates based on means and averages? By convention, it is *wrong* to claim that an ecosystem could contain "*about* 274,359 ungulates" or that "[n]uisance bear incidents could be *up to* 59 (0-118) per year." The absurdity of the range of 0-118 possible nuisance bear incidents could not have been lost on most readers of the EIS. As one commenter in Missoula, speaking on behalf of the Montana Stockgrowers Association, protested:

[T]he EIS concludes that private property incidents involving bears would range between zero and 118. What kind of science is that? I mean, it just says we have [zero here], 26 here, [and] 118 there, so we are going to be somewhere between zero and 118. And we don't think that was an adequate analysis (USFWS, 1997e, p. 61).

A more skillful articulation of these statistics and projections certainly could have helped ward off the objection that the statistics were meaningless – an overstated objection, to be sure, but one that none the less holds water due to the way in which the figures were presented.

All of these themes – even as they may have been more or less necessary to construct the narrative desired by proponents of the CMC alternative, as well as to fill out the formulaic requirements of an EIS – create spaces for challenges to the validity of the

document, and these spaces were indeed exploited by opponents on both sides of the issue. The CMC alternative cannot be judged or assessed adequately, surely not keeping in mind the broader goal of producing an analysis of the entire debates, without assessing the opponents' challenges. That task will be handled in the following chapters. To complete this initial review and analysis of the CMC alternative, I will now review promotional literature and a television special produced by the CMC's most powerful voice in the national environmental community, the National Wildlife Federation.

5.7. Establishment Environmentalism Makes its Case

What do grizzlies need? Large amounts of suitable habitat where people won't kill them and where the grizzly bears won't be tempted to mix with people. For that much there is consensus. As I have demonstrated, exactly how much space is necessary for a "recovered" or "stable" grizzly population is debatable. What constitutes suitable grizzly bear habitat is debatable – and debated – as well. As is what is necessary to keep humans and grizzlies out of conflict. For both CB and the CMC supporters, the challenge (or at least a good part of it) was to convince doubters and potential supporters that their proposal provided the space, habitat, and protection necessary. It is undeniable that the CB alternative made a sounder case that their proposal provided the means for grizzly bears' long-term survival. The case that was not made by CB supporters was how on Earth their proposal was going to pass into law.⁷³ For the CMC alternative, it was closer to the inverse case. They made a convincing case for how their proposal was going to pass and be implemented (after all, going in it was the FWS's preferred alternative). But they still needed to make the case that the area was large enough, the habitat was suitable and that human/bear conflicts would not jeopardize recovery. To accomplish this, in every promotional flyer, website, and film supporting the CMC, the Bitterroot Ecosystem was represented as vast, teeming with wildlife, yet incomplete without the grizzly bear.

⁷³ And "pass into *law*" is not a misstatement here. It would not have been a mere manner of the FWS selecting the CB alternative as the preferred alternative and having the Secretary sign on after the NEPA process was completed. The habitat restoration and road demolition components of the project would have required new supporting Federal legislation to commence. The FWS exploited this potential implementation snag in the CB alternative. Their "summary" of Alternative 4 in the Final EIS *began* with the statement "Of importance is the fact that the principal laws that govern land management on Federal lands would have to be changed for the USFWS to implement this alternative" (USFWS, 2000a, p. 2-57). The exact sentence is repeated *one page* later as the first "actions that would be implemented" if Alternative 4 was selected.

The case was not made in the scientific fashion of the PVA modeling the CB proposal was built around, but instead 'common sense' appeals were employed through repeated mixed qualitative and quantitative references to, on the one hand, the vastness, space, and wildness of the recovery area, and on the other, the need to find new ways to do endangered species conservation.

The National Wildlife Federation's small (eight four-by-nine-inch pages) color flyer (hereafter, 'the NWF flyer') urging citizens to write to the FWS in support of the CMC alternative (and send money to the National Wildlife Federation!) begins:

In the heart of Idaho and far western Montana lies the greatest area of wild country left in the lower 48 states. At the center of this vast region are the Selway-Bitterroot and Frank Church River-of-No-Return Wilderness areas, which include more than four million acres of public land... Ranging across this magnificent landscape are tens of thousands of elk, deer, black bear, moose and cougar... In 1995, wolves were brought back to this vast wilderness. But the forests and mountains of this immense land remain empty of one of North America's most impressive creatures – the grizzly bear (NWF, 1997a, p. 2).

This passage, clearly asserting the enormity and 'wildness' (that is, devoid of human presence) of the place, is accompanied by a supporting image (**Figure 5.6**).



Figure 5.6. "Selway-Bitterroot Ecosystem Photo" from the National Wildlife Federation promotional flyer for the Citizen Management Alternative for Bitterroot Grizzly Reintroduction (NWF, 1997a, pp. 3-4).

This is an impressive image of a classic Western alpine landscape, with three mountain ridgelines, a spectacular mountain peak, and vast amounts of terrain above treeline. As the image itself is spectacular, it must have been (at least partially) chosen to draw up a resonant image for Americans – to make Americans generally unfamiliar with the Bitterroots realize that, yes, the Bitterroot Ecosystem is what they think of when they envision the West: "spectacular open spaces" (Guthman & McCarthy, 1998, p. 67), vast, alpine, *wild*. The dry alpine and subalpine habitat represented in the photograph, however, is not likely to contain many elk, deer, black bear, moose, or cougars, nor does it make particularly good grizzly bear habitat.⁷⁴ There is nothing disingenuous about the use of this image. The landscape picture is within the recovery area and portions of it (though most likely lower elevation portions of it, out of sight in the picture) would likely be used by a recovered grizzly population. The canyons of the Bitterroot country are generally steep and narrow, and there would be no way a lower elevation photograph (or

⁷⁴ At least certainly not on its own. Grizzlies utilize similar high talus slopes for winter denning, but when out of hibernation would spend little time in this habitat.

one of the less arid portions of the recovery area to the north, either way – one actually of prime BE grizzly habitat) could give a sense of the enormity of the region.

The CMC alternative was largely modeled along the lines of the similar and successfully implemented plan to reintroduce gray wolves to Yellowstone and central Idaho as an experimental population (Fischer, pers. comm.).⁷⁵ But the Bitterroots, by name alone, clearly do not carry the cachet of Yellowstone, so marketing the reintroduction had to include much more deliberate constructions of a familiar and resonant image to elicit concern and support from non-locals.

People do not care about 'ecosystems' any more than they care about 'watersheds' or 'continents'. These are dry, abstract concepts that denote purely objectively delineated asocial areas or regions. Care and concern from people begins when watersheds or ecosystems or portions of them become *places*. Yellowstone is a place – most Americans can immediately draw upon images of hot springs, geysers, spectacular waterfalls, wildlife, and tourists in awe of the same. The Bitterroots, however, are much less well known. Indeed, in a survey conducted as part of the FWS's planning process, 63% of "regional" respondents⁷⁶ and 82% of national respondents were "not at all familiar" with the Bitterroot area of central Idaho (Duda & Young, 1995, p. 6). For most people, then, and almost anyone from outside the region, the placeness of the Bitterroots had to be produced.

Producing the BE as enormous also helps validate the FWS's claims that the recovery area is large enough to more or less 'contain' a grizzly recovered grizzly bear population, thereby allaying concerns that bears would regularly be wandering into populated areas and causing safety risks to humans and pets. In a radio show interview affiliated with the regional environmental newspaper High Country News (a paper "for people who care about the American West" (High Country News, 2005)), two of the most prominent advocates and spokespersons for the CMC alternative – Hank Fischer of Defenders of Wildlife and Chris Servheen, Grizzly Bear Recovery Coordinator for the USFWS – do not miss the chance to develop this narrative. Servheen describes a previous

⁷⁵ Hank Fischer was indeed one of the primary architects of both plans.

⁷⁶ Defined as residents of Idaho, Montana, Wyoming, Utah, Oregon and Washington, not including Idaho and Montana residents living in counties containing and immediately surrounding the recovery – these were "local" residents (Duda & Young, 1995, p.2).

reintroduction effort – in the Cabinet Mountains of northwestern Montana – where local fears were quelled only after a few years of experience showed local residents that grizzlies tend to keep to themselves, away from humans; and this is followed by the following exchange:

Betsy Marston (High Country News interviewer): So you really hope the bears disappear into the wild?

Servheen: That's exactly right.

Fischer: Betsy, keep in mind this is really an expansive area. The wilderness areas themselves are over two million acres and they're surrounded by another three million acres of roadless area. This is the biggest roadless expanse in the lower 48 States and there's just no place better to put grizzly bears with minimal conflict than this area (Servheen & Fischer, 2001).

The images of grizzly bears in the NWF Flyer also represented them as gentle, cuddly animals, hardly the "bloodthirsty killers lying in wait to eat you as you pass by"⁷⁷ feared by an "uninformed and emotional public" (Hays, 1987, p. 9). The top two images in **Figure 5.7** are from the NWF Flyer. For the sake of comparison, they are followed by two images of grizzlies put forth in hunting/adventure publications. The one at bottom left is the cover of *Some Bears Kill*, a book of "exciting, hair-raising tales of bear encounters" in the wild (Kaniut, 1997). The book is published by Safari press, a publisher dedicated to publishing "exceptional-quality hardcover books on big-game hunting, wingshooting, & sporting firearms" (Safari Press, 2004). The image on the bottom right is from a similarly sensationalist real-life outdoor adventure book. These images, intentionally sensationalized as they seem, are rather standard representations of the grizzly bear in 'sporting' publications (keeping in mind that hunters were one of the groups who remained mostly opposed to grizzly reintroduction throughout the debates).

⁷⁷ For Kate Kendall, a biologists who works around grizzlies in the Northern Continental Divide Ecosystem, this is the common but false perception of grizzlies (Anderson, 2000).



Figures 5.7. Which of these bears would you like to see reintroduced into your 'backyard'? The top two images are from the NWF Flyer (NWF, 1997a); The ones at bottom (from left) are from the book covers of the real-life outdoor adventure tales Some Bears Kill (Kaniut, 1997) and Man eaters: true tales of animals stalking, mauling, killing, and eating human prey (Underwood, 2000).

The task at hand was, of course, more than just producing the Bitterroot Ecosystem as a vast, wild place and representing grizzly bears as charismatic, unthreatening animals. The CMC promotional literature also produces a deliberate rhetoric of *inevitability*. If the elaborated production of the Bitterroots placeness was directed at regional (producing the BE as big enough to safely contain a recovered grizzly population) *and* extra-regional (producing the BE as a classic wild, Western *place*⁷⁸) audiences, then the rhetoric of *inevitability*, I would argue, was directed more so at a

⁷⁸ And the NWF and Defenders of Wildlife did work to garner documented support for Bitterroot grizzly reintroduction from their large, affluent national constituencies by sending out mailers with form letters to send to the USFWS.

subset of the regional audience – those regional residents who still felt outright opposition was a viable strategic standpoint.

Still on page one of the NWF flyer, the ESA mandate for recovery is invoked, but in a very curious way.

Under the Endangered Species Act, the U.S. Fish and Wildlife Service listed the great bear as a *threatened* species in 1975. If grizzlies cannot be reestablished in this vast wilderness, then the species cannot be recovered in the lower 48 states (NWF, 1997b, p. 1, emphasis in original).

The first sentence is straightforward and correct. The second sentence is inconsistent with the logic of the CMC alternative; it actually makes a better argument for the Conservation Biology proposal. The CB alternative is the plan that argues that *only* with the Bitterroot population recovered – and connected to the existing populations to form a healthy metapopulation – can the grizzly ever be considered truly recovered in the lower 48 States. A nonessential experimental population, however, you will remember is defined as one "the loss of which would [not] be likely to appreciably reduce the likelihood of survival of the species in the wild" (Sullins, 2001, p. 135). It is difficult to convincingly argue in the same breath that a recovered Bitterroot population is necessary to lower 48 recovery and at the same time acknowledge that loss of the Bitterroot population does not reduce the likelihood of the survival of the survival of the species.⁷⁹

Instilling an effective rhetoric of inevitability was important for proponents of the CMC alternative. The main *regional* supporters they were courting (primarily the timber industry but others as well) were not, for the most part, environmental advocates who needed to be sold on the ecological legitimacy of the proposal. Bill Mulligan, the timber operator from Kamiah, Idaho, had a "*concern*" that the grizzly would become the spotted owl of the region. This is not concern for the grizzly's ecological viability (though it does not preclude such concern). This is a fear of intrusive Federal management that could shut down logging in the region's national forests. At an early (1993) Interagency Grizzly Bear Committee meeting convened to discuss the possibility of Bitterroot grizzly reintroduction (well prior to the development of the CMC alternative) a representative from Resource Organization on Timber Supply (or 'ROOTS,' one of the two main timber

⁷⁹ Additionally, all the while the Bitterroot grizzly debates were taking place, the FWS was examining the possibility of delisting the Yellowstone population of grizzly bears altogether.

industry groups that winded up endorsing the proposal) publicly expressed "the timber industry's ardent opposition to bringing bears back to Idaho" (Anderson, 2000).

Sure, some with similar vested interests in continued resource extraction on the national forests might have had the ecological sensibilities to support a compromise grizzly recovery plan *whether or not* it was going to happen anyway. If grizzly recovery in the Bitterroots was perceived as *inevitable*, however, then every such interested party would be wise seek some sort of compromise plan that assures that grizzly recovery will not halt resource extraction activities on Federal lands. Indeed, many who spoke at the DEIS public meetings echoed such sentiments:

I fully believe that the Federal Government is going to reintroduce bears over all objections from citizens of Idaho. I don't believe there's a thing we can do about that... So then for me the question became, who's going to be managing these bears that we're going to have? (USFWS, 1997b, p. 78)

I believe this is what Congress had in mind when it passed the Endangered Species Act ... So the question today is not ...whether we like grizzlies or not, it is how are we going to recover grizzly bears? (USFWS, 1997b, p. 95)

I've gone to all these bear meetings. Ninety percent of the people don't want it, but they're going to do it anyway. (USFWS, 1997b, p. 140-1)

Should the ultimate decision be to introduce this grizzly bear without question, the most viable alternative is the alternative that says we will do it with local people... I think that if we are forced to take them, then we should take them with the [citizen] management system. (USFWS, 1997d, p. 103)

Current law leaves decisions regarding reintroduction to the US Fish and Wildlife Service – the agency that proposed the reintroduction scheme and appears intent on following it through. For that reason, and despite our own doubts about the wisdom of reintroducing the grizzly, Potlatch Corporation supports... the preferred alternative in the Draft EIS. (USFWS, 1997d, p. 33)

Perhaps here we have the seeds of a productive tension between national priorities and local practice (Cooper, 1996) – a national citizenry committed to protecting endangered species (and committed to other environmental issues as well) but one at the same time willing to experiment with some devolution of authority and flexibility in the manner in which this commitment is accomplished. I will have much more to say on this in the following two chapters. "Bear Wars," a quasi-documentary television production produced by the National Wildlife Federation and Turner Original Productions, employs both the production of place and inevitability rhetorics as well. The first thing that is established in the film is the setting of the controversy, the *place* – the heretofore little-known Bitterroot Ecosystem. In the opening sequence, viewing the Bitterroot Ecosystem in dramatic broad-scale aerial shots from a handheld camera in a small plane, we are told:

Bear used to live here, on the Idaho/Montana border in the Bitterroot Mountains, but the last grizzly in the area disappeared in the 1940s. Now there's a plan to reintroduce grizzly bears here, to start a new grizzly population in the last pristine place in the lower 48 states... These are the Bitterroot Mountains. They form the core of a huge wilderness area that crosses the Idaho/Montana border... I am here now to explore the last best hope for grizzlies in the lower 48 states... In fact, there haven't been grizzlies in the Bitterroots for half a century. People keep looking, but they haven't found them.⁸⁰ But it is prime grizzly country. 5,600 square miles of protected wilderness, that's the size of Rhode Island and Connecticut combined, surrounded by 20,000 square miles of national forests. Throw in New Jersey, twice... Flying east to west, we saw no human development for over an hour; from north to south, it takes twice as long. And it's a six day float on the Salmon River (Anderson, 2000).

There is little need for me to rehash what I just argued about the production of the Bitterroots as a classic western landscape, as a *place*, but a place *lacking* without grizzlies. That is all quite clearly here as well. The chosen reference marks for the size of the place (Rhode Island, Connecticut, New Jersey) seem to point to a extra-regional audience, consistent with my previous observations. Mark Van Putten, President of National Wildlife Federation, sent a letter to every NWF member with an enclosed petition urging them to write the USFWS director pledging their support for the CMC alternative. His letter draws on the same familiar imagery:

⁸⁰ This is a reference to one of the many subplots of the Bitterroot grizzly debates that I will not be discussing at any length. Many environmentalists – CB alternative supporters all – argued for years that the nonessential experimental reintroduction was illegal on the grounds that there were still grizzlies living in the Bitterroots. Many people on both sides of the debates (meaning the FWS, out to prove that there were no grizzlies, and CB supporters, out to prove that there were) spent a lot of time trying to assess the possibility that a few grizzlies remained in the BE. Despite the efforts, no verifiable evidence of a grizzly – no tracks, scat, prints, hair, photograph, etc. – was ever produced. The FWS eventually made the determination that there were probably zero grizzlies in the BE, and that there was no reason to believe that there was a viable reproducing population of grizzlies in the ecosystem – the presence of which would have made the experimental reintroduction efforts housed at the US Fish and Wildlife Region 6 grizzly bear conservation office in Missoula, Montana).

The Bitterroot sits high in the Rocky Mountains of Idaho and Montana. It's an isolated place. No highway exit ramps reach its lonely, grassy slopes. No paved roads come within miles. No telephone lines. No fancy homes to take in its finest views.⁸¹ No sign of civilization at all! But the sad truth is this. A grizzly hasn't been seen in the Bitterroots since the 1940s. And without this area as a haven, grizzly bears come closer to extinction in a part of our nation where they once roamed freely. *Without the grizzly, the Bitterroot Wilderness area can never be complete!* (NWF, 1997b, p. 4, emphasis in original).

The CMC advocacy literature as such employs a deliberate and effective "production of place" (Miewald & McCann, 2004). As Miewald and McCann argue, "some places, rather than others, are defined as the appropriate and legitimate locations for particular activities while being connected with and set in relation to other scales" (Miewald & McCann, 2004, p. 1046). The wilderness is a place for grizzlies (and people); the surrounding national forests are a place for people (and grizzlies); the surrounding private lands are for people only, a "grizzly bear exclusion area" (USFWS, 2000a, p. 2-5). Such scales and appropriated places are produced, and often contested. What scale(s), what place(s), are necessary for grizzly recovery in the Lower 48? Well, clearly we don't really *know*. The CB and CMC alternatives both produce the BE as necessary, but in very different ways, diverging radically on the question of which "particular activities" are "appropriate and legitimate" on Federal lands.

"Bear Wars" also asserts the inevitability of Bitterroot grizzly recovery, but it is snuck into the narrative in a clever way. Early in the film, the narrator compares the grizzly reintroduction debates to the earlier controversies over wolf reintroduction. The story begins by citing the differences between the two plans, highlighting the CMC advantages of the grizzly plan. The story is told along these lines: Wolves were reintroduced to central Idaho and Yellowstone as a nonessential experimental population, but without citizen management, and the whole issue was still perceived as a very federal affair. Local papers jumped on the chance to ridicule (Democrat) Interior Secretary Bruce Babbitt flying in for the photo-op of carrying a wolf (in a kennel) to the reintroduction site and personally releasing the wolf from its kennel back into Yellowstone. Wolves

⁸¹ Though this statement is not really accurate at all. There may be no "fancy homes" along the ridgetops of the mountains themselves, but Hamilton County, Montana, in the Bitterroot Valley just east of the wilderness (and containing some of the "finest views" of the east flank of the Bitterroots you will find) is home to some of the most expensive and outlandish trophy homes anywhere in Montana.

have long been a hated and literally demonized species by many Americans, but they are charismatic animals and their conservation is widely supported throughout the environmental community. Wolf reintroduction succeeded despite fierce local opposition to the plan, but the lack of citizen control made the issue very polarizing within local communities. Stressing the polarized outcome is a plug for the CMC – an appeal to locals and moderate opponents. This audience now more at ease – this hole opened – the inevitability rhetoric is quickly inserted. Grizzly reintroduction in the Bitterroots, we are told, will succeed as well. Pam Houston, the narrator of "Bear Wars," paints wolves and grizzlies as

symbols of conflict between national conservation policy and local concerns. But bringing back a threatened or endangered species, isn't a faint hope or a nice idea, *it's the law*. The American people have made it clear that we're going to recover species, like the wolf, the grizzly bear, and the spotted owl (Anderson, 2000).

Notice what species bookend the grizzly bear. The wolf: recovered via the ESA over the protestations of ranchers. The spotted owl: recovered via the ESA over the protestations of loggers. The discourse of inevitability is a subtle strongarming technique designed to make outright opposition appear to be a futile standpoint. Later in the film, while whittling away at the bear/human conflict issues, the inevitability is reasserted:

It's really not a problem between people and bears. It's a problem between people. Maybe once we realize that Bitterroot grizzlies aren't going to ruin our economy or eat our children, maybe then we can start to get along. Bears are coming back. *It's going to happen* (Anderson, 2000).

As in the EIS, the CMC emerges as a hallmark of NWF's advocacy campaign. In the EIS, the CMC was foreground both by its location in the document (being the first component of the alternative explained) and through the considerable allocation of space it was given. The flyer and the film each foreground the *place* of the Bitterroot Ecosystem first, but that is an understandable strategy, as was argued. The reader/viewer must be made to care about the place before they'll ever care about the issue. That headline status noted, the CMC still commands the majority of the space in the NWF flyer, with fully three columns devoted to its explanation – compared to one column total discussing the place, the bear's conservation status, and the ESA mandate for recovery. In the flyer's description of the CMC, there is no mention of the CB alternative or of outright opponents of BE grizzly recovery. The CMC coalition is represented as a collaborative effort between conservation and timber industry groups. The two are represented as historical adversaries who have come together to develop "a commonsense solution to grizzly recovery [that would] bring local communities together, rather than polarizing them around yet another endangered species debate" (NWF, 1997a, p. 3). Common sense itself is rather difficult to demonstrate – common sense merely *is* what is reasonable. What *can* be demonstrated, however, is a lack of common sense. Appeals to common sense work best when it can be demonstrated that existing alternatives are *un*reasonable. The flyer merely tries to assert the case for the CMC proposal on its own terms. The television special "Bear Wars," however, provides vivid imagery of those who lack the common sense to support the proposal.

5.8. Conclusion: Marking the 'Radical Center'

In the "Bear Wars" television special, FWS Grizzly Bear Recovery Coordinator Chris Servheen refers to the CMC proposal as the "radical center" (Anderson, 2000). This "radical center" moniker was clearly deliberately deployed. On National Wildlife Federation's promotional websites advocating the CMC proposal that were online until some time after Norton shelved the proposal, NWF attorney Tom France marks the NWF position as "the radical center – the place where long-term solutions get constructed by finding common ground instead of nurturing old differences" (NWF, 2001, paragraph 19). Radical, I assume, connoting that the CMC is cutting edge, experimental, threatening to the uninformed. Not surprisingly, after Servheen places the FWS and CMC alternative in the "center," the groups on either side of the center are immediately represented, as would be expected, as rather unreasonable. Here we have a perfect demonstration of the exhibition of an expert program where the supporters (the CMC-supporting interviewees in the film, the self-identified "center") are "knowledgeable and rational experts" while their counterparts are represented as "the uniformed and emotional public" (Hays, 1987, p. 9). First we are shown a video clip from a public meeting organized by the FWS where timber representatives were making their case for supporting the CMC and being committed to grizzly recovery. "Left" of center is then represented by a young, bearded hippie-looking man pounding his fist into his palm while shouting at the timber industry representatives:

How are we to trust you as a player in this grizzly bear recovery game, when you as an industry can't even commit to sustainability on the land that's already been logged? The industry has cut and run in the East. It has done the same in the Midwest. It intends to do the same here. And then go to Siberia if necessary (Anderson, 2000).

Immediately following this clip, Servheen calmly states that "extreme environmentalists think we're not doing enough. Many people who are against grizzly bears and concerned about Federal Government activities think we're doing way too much." The critic is located well-off center when branded an "extreme environmentalist."⁸² This is an economical way of dismissing a critique of the plan that – when fairly assessed – is not historically inaccurate, uninformed, or really unreasonable sounding whatsoever. This shot was likely chosen less for its content (which is not self-evidently dismissible) and more due to the "emotion" displayed and perhaps also that the person looked the part of an Earth First!er. After the "extreme environmentalist" and Servheen's response, we are treated to a video shot of an outright opponent of grizzly recovery in the BE. A grizzled (pardon the pun) "Old West"-looking type (rough, windblown and sun-scorched skin, blue collar cap with an Idaho agricultural group logo, western-style shirt, beard, gruff voice) makes his case against grizzly reintroduction:

I am *against* grizzly bears. [long pause] And a bunch of people I know are against grizzly bears, and if you introduce them – *which you will, we know that* – they won't last very long. I can assure you of that. They'll be wherever their collar is. You'll be able to track them real easy. And that's not a personal threat against them, I'm just saying I've heard a lot of comments and I believe that's true (Anderson, 2000).

Servheen does not comment on this threat. We are left to decide for ourselves the validity of being "against grizzly bears." And I would say that this sentiment in itself does come across as, well, unreasonable. And when followed by the "frontier justice"⁸³ threat of vigilante-style shooting of the reintroduced grizzlies, the perspective flies right off the radar of reasonableness. When you hear considerable applause from the sizable crowd assembled as the speaker left the podium, the impression is quite effective: There

⁸² It is interesting how "radical," when part of the label "radical center," takes on a positive connotation, but "extreme" when part of "extreme environmentalist" takes on a negative connotation. No one, of course, self-identifies as an "extreme environmentalist."

⁸³ That clip was followed by the narrator describing the "frontier justice" attitude of some opponents of recovery: "Among those who've got a grudge against grizzlies, you'll hear talk about the '3 S's', shoot, shovel, and shut up. That kind of frontier justice – killing a Federally protected species – is pretty rare, very illegal, and incredibly stupid."

are opponents; they are not necessarily only few and far between; they are angry; *they are unreasonable*.

In the assessment of the EIS, I argued that foregrounding the experimental nonessential population status and the CMC – perhaps even at the expense of making a clear case for grizzly recovery itself - showed that the CMC supporters were unapologetic in courting the timber industry. "Bear Wars" mirrors this forthrightness regarding the concessions and compromises, but in addition provides two subtle images that further mark their allegiance to the timber industry (and against anti-timber "extreme" environmentalism). The first of these is during the interview with Kamiah, Idaho timberman Bill Mulligan. When he mentions the perceived threat of the grizzly becoming "the spotted owl of the region," a clip of a spotted owl perched in a tree is shown for a few seconds – long enough for many viewers to recognize that the stand of trees where the owl is perching is not old growth but second growth, with the largest trees being maybe ten-to-twelve inches in diameter. I see this as something of a nudge-and-awink to timber interests, and I am quite sure that few environmental groups in the region would use this image in an advocacy documentary. During the spotted owl debates in the 1980s and 90s, a large amount of the controversy surrounded the question of the ecological relationship between spotted owls and old growth forests. Environmentalists argued that spotted owls required old growth trees to reproduce and hence spotted owl protection necessitated old growth protection. Timber groups, on the other hand, had their own sets of studies (many developed too late to influence the outcome) that presumed to show that spotted owls were beginning to utilize second growth forests as well (Proctor, 1998b). A spotted owl perched in what is clearly a relatively young second-growth forest - and this was the only spotted owl image in the film - employs a powerful symbol but does so in a way unthreatening to timber interests. It is possible of course that the choice of this particular spotted owl imagery was accidental, but I doubt any astute environmental filmmaker would have casually and/or accidentally done so.

A second image in the film just as directly favors timber over environmentalism (at least "extreme" environmentalism) and must have been chosen intentionally as so by the Bear Wars filmmakers. Pam Houston's final narration in the film: Next time I ride through this wilderness, all my senses will be working overtime. It's a feeling we all deserve. Of begin alive and attuned to the world around us. A feeling you always get [long pause] in bear country (Anderson, 2000).

How is "bear country" represented in the finale of the film? After the final narration we are taken to another aerial pan of a landscape, presumably somewhere in the Bitterroot Ecosystem, but the shot is dominated by an older clearcut covered with young regrowth. We then pan out to see this second-growth as just a small part of a huge forest with spectacular mountain peaks in the background. If this *is* bear country, then the CMC alternative will work – wilderness areas and 'multiple use' forests *taken together* comprise bear country. The image and attendant claims also work to directly counter the main thesis of the Conservation Biology alternative – that grizzlies require "true" wilderness and all compromise plans are insincere efforts at recovering the species.

Chapter 6. Reconsidering the Conservation Biology Alternative: Ethics, Science, and the Paradox of Saving Wild Nature

6.1. An Introduction to a Problematic Situation

This chapter raises the difficult question of how to begin judging the rival conservation alternatives for grizzly recovery. We can view them as moral-ethical projects. We can assess which effort would represent the 'best available science'. We can assess their practicality – would effort 'x' have a chance at ever being implemented? Was the Conservation Biology alternative too 'extreme'? Did the Citizen Management Committee alternative represent (yet another) unacceptable compromise? The myriad – seemingly infinite – angles from which to assess environmental debate point to the sheer complexity of environmental issues, but also open up avenues for empirical analysis. This is, after all, the pockmarked ground from which 'environmental problems' arise – the same ground upon which solutions are crafted and our environmental opinions formed. Even with over seventy percent of grizzly recovery supporters endorsing the Conservation Biology alternative, this critical mass of support could not escape the tensions and contradictions that the complexity of the situation produced. Through an analysis of ethical considerations and political models within the debates, I seek to explain both the presence of the near-consensus in favor of the Conservation Biology alternative and the persistence of ambivalence among its most vocal opponents.

6.2. The Best of Both Worlds?: Grizzly Recovery, Rewilding, and Environmental Ethics

Environmental ethics involves thinking about *what* nonhuman nature(s) we care about and *why* (and to what degree) we care about them (Proctor, 2001).⁸⁴ Whether their

⁸⁴ Here Proctor is referring to what he calls "popular environmental ethics" and not the more arcane academic environmental ethics, which might be better thought of anyway in the broader sense of "environmental philosophy." These are not, of course, exclusive realms. Much popular environmental ethics is informed and influenced by environmental philosophy. Venn diagrams of the two would, I suppose, overlap. Deep ecology, even, to draw on an easy example that's already been discussed in this dissertation, represents this well. It has a (more or less) scholarly form (Katz, 1997; Katz et al., 2000b; Mathews, 2001; Naess, 1973) as well as (again, more or less) popular writings tying its 'philosophy' directly to personal and occasionally political action/choice (Naess, 1989; Turner, 1996) – the two 'forms' of which inform each other and are not exclusive of one another. Due to the degree to which deep ecology, biocentrism, moral monism, et cetera influence and persist as the dominant readings/applications of environmental ethics for environmentalism in the Rocky Mountain Northwest (a point I hope to have

bases be utilitarian, economic, aesthetic, scientific, religious, or whatever, it is undeniable that 'our' (if I may, people with definitive feelings toward one or more environmental 'issue') environmental ethics – these selective concerns for nature – go a long way to determining which environmental causes we rally around, and what stances we take in these causes. This is, of course, no secret to those who solicit public support for environmental causes. As such, every "conventional [environmental] account cries out for our moral attention" (Proctor, 2001, p. 236).

What are the moral aspects of the arguments for recovering grizzly bears in the Bitterroots? Indirectly, most of these have been established in previous chapters, but it is worth initiating this specific discussion of the environmental ethics of Bitterroot grizzly recovery by reexamining how, exactly, different groups demanded our 'moral attention', plead for us to care. For CMC proponents,

Grizzlies were shot, poisoned, and trapped out of the Selway-Bitterroot country, and by the 1940s [they] had been eliminated... [T]he forests and mountains of this immense land remain empty of one of North America's most impressive creatures (NWF, 1997a, p. 2).

As the sun rises over the snow-capped peaks of the Bitterroot Mountains ... a grizzly bear lumbers up to the bank of the Selway River. She is followed by a pair of cubs... This is the goal, now close within reach, of the Citizen Management Committee Alternative ... to return the magnificent grizzly bear to its native habitat in the Bitterroot Mountains (NWF, 2001, paragraph 1, italics in original).

Humans eliminated grizzlies from this vast wild area. This is a moral wrong that can be righted by returning 'the grizzly bear' (in the abstract, as a 'species'⁸⁵) to this part of its home. Until this wrong is righted, the Bitterroot Ecosystem is incomplete. Alliance for the Wild Rockies' "Citizen Guide to Grizzly Bear Recovery" similarly cries out for our moral attention:

established within this dissertation) I will not employ a popular/scholarly environmental ethics split, but rather work under the assumption that the two determine each other dialectically.

⁸⁵ Here acknowledging the slipperiness itself, the questionability, of thinking of the grizzly bear in the lower 48 States as a "species." Do people care about *species*? Many if not most probably do. A species is, by definition, something objectively unique. Uniqueness is the source of diversity, a concept widely accepted as positive and good (Takacs, 1996). Do people care about *subspecies*? Maybe, but the case is not as clearcut. It would, I think, depend on the context and the way it was presented. Stated another way, fewer people would espouse a concern for the protection of subspecies than species in the abstract. Do people care about *populations*? Considering that every tree contains distinct populations of this or that species of insect, for example, the answer would almost have to be 'no'. Individual populations can be endangered, and popular concern for particular populations can arise, but it takes considerable work on the part of environmentalists to make it happen.

Through unrelenting manipulation and destruction of grizzly bear habitat and a vigorous shooting, poisoning and trapping campaign, the bears were eventually extirpated from most of their historical range... The grizzly bear is known as a keystone or umbrella species, serving as a natural barometer of ecosystem health. If grizzlies are present, it means that the land itself is healthy and productive (AWR, 1997).

Emphases vary, but both narratives tug at the same heartstrings. This common ground of concern was shared by supporters of the Conservation Biology Alternative and many (one would hope *most*) of the supporters of the CMC Alternative as well.⁸⁶ While the supporters of the two alternatives diverged beyond this common ground on many points of contention, one point of divergence that is relevant and interesting in the context of environmental ethics centers on the question of how, exactly, the different alternatives proposed getting bears back into the Bitterroot, and additionally, how to manage them once they were there. The major point of contention centered on whether reintroduction or recolonization should be the preferable and primary means of promoting recovery in the Bitterroots. For CMC proponents, it was (on paper) a straightforward matter: at least five bears per year would be taken from existing populations in the lower 48 states and southern Canada to form a seed population from which the nonessential experimental population would grow (USFWS, 2000a). For supporters of the CB alternative, the primary means of reestablishing a Bitterroot population would be through natural recolonization, enabled by reopening of the corridor to the northern Idaho grizzly populations (though reintroduction was included as a potential supplement if deemed necessary). Supporters of the CB alternative voiced two main gripes with the forced reintroduction and management presented in the CMC alternative.

The first revolved around the following claim put forth in the CMC alternative as published in the Draft EIS:

Subadult grizzly bears of both sexes would be trapped, each year for 5 years, from areas in Canada (in cooperation with Canadian authorities)

⁸⁶ In this "many if not most CMC supporters" I would include Hank Fischer and Chris Servheen and their cohorts at Defenders of Wildlife/National Wildlife Federation/USFWS. I would also include the tens of thousands of supporters that were drawn from the ranks of these powerful organizations. Additionally, I would include those with interests in the regional timber economy who also held sincere interests in seeing Bitterroot grizzlies recovered, as well as the non-timber-related groups who endorsed the CMC Alternative, most prominently "sportsmen's" organizations such as the Montana Wildlife Association. Excluded would be those timber-allies who signed on merely to ward off the potential of a fully protected ESA grizzly population in the region, either through reintroduction, recolonization, or rediscovery.

and the United States that presently have healthy populations of grizzly bears living in habitats that are similar to those found in the Bitterroot Ecosystem. Three sources of grizzly bears for the BE have been identified: southeast British Columbia, the Northern Continental Divide Ecosystem (NCDE) population in northwest Montana, and the Yellowstone Ecosystem (YE) population. Specific numbers of bears that could be obtained yearly from potential source populations is [*sic*] unknown at this time. Some undetermined level of mortality is expected among transplanted bears (USFWS, 1997a, p. xvi).⁸⁷

This claim is riddled with logistical and logical problems, both of which were exploited by opponents. For one, "Canadian authorities" had never acquiesced to the idea of being able or willing to hand over any young bears for the project, much less the five per year that would have been needed if they were not to resort to taking bears from ESA-listed populations in the lower 48 states.⁸⁸ If the transfer had been approved, Canadian environmentalists were considering mounting a campaign against it (Dee, 1997). Without the assurance that Canadian bears would be available, the FWS had to find additional source populations. So the NCDE and Yellowstone populations were recast as "healthy populations of grizzly bears." This move puts the FWS, and any environmentalists who would choose to endorse it, in something of a quandary. It is difficult to claim that the NCDE and Yellowstone grizzly bears populations are 'threatened' – needing and deserving their fully protected status under the ESA – and at the same time claim that these populations are "healthy" and include expendable, surplus bears.

There is no absolute contradiction, here, of course. It could undoubtedly be argued, and probably even scientifically demonstrated, that these populations are 'threatened' ("not yet in danger of extinction, but ... likely to become endangered within the foreseeable future") yet still able to withstand the loss of one or two subadult grizzlies per year over a period of only five years. But as any grizzly ecology study will tell you, human-induced mortality is one of the greatest, if not *the* greatest threat to the grizzly bear's long-term viability (Craighead, 1979; Craighead et al., 1995; Maguire & Servheen, 1992; Mattson et al., 1996; Mattson & Reid, 1991; Pease & Mattson, 1999; Primm,

⁸⁷ This entire passage is repeated in three places of the Draft EIS, on pages xxii, 2-82, and 2-106. The wording was nearly unchanged in the Final EIS.

⁸⁸ This was made clear in a number of memos and written correspondences between USFWS and Canadian wildlife managers, many of whom were members of the binational (US and Canada) Interagency Grizzly Bear Committee.

1996). As an animal with a very low reproductive rate (females reproducing on average every 3-5 years with an average litter of only two cubs (Craighead et al., 1995)), small losses of young bears and reproductive-age females can have dramatic effects on the population as a whole.⁸⁹ Therefore, it is quite easy to contend that *if* the NCDE and Yellowstone grizzlies are threatened, then they can ill afford to be losing the very bears (especially young females) that are the key to their survival.

Moreover, the Yellowstone/NCDE "healthy populations" claim can only be taken so far and still work logically for Bitterroot grizzly reintroduction. For if these populations are indeed 'healthy' *enough* to be considered *recovered*, the FWS should be moving toward delisting these populations – removing them from the ESA altogether.⁹⁰ If the lower 48 grizzly bear is not indeed in danger of becoming extinct, the justification for reintroducing grizzly bears to the Bitterroot is weak at best. These inconsistencies were not lost on opponents of the FWS's preferred alternative. This is one of the six bulleted "problems with the government's preferred alternative" listed in AWR's "Citizen Guide" pamphlet.⁹¹ Nearly every CB alternative supporter who testified at the Draft EIS public hearings made explicit their objections to the possibility of taking bears from existing endangered populations. This line of argumentation was not, however, the exclusive domain of CB supporters. Several outright opponents of reintroduction used this as evidence that the premise of the entire project was unsound.

Some testimonials objected to the concept of translocating bears on more explicitly ethical grounds. There has long been noted an "animal rights *versus* species preservation" (Wenz, 2001, p. 132) dilemma in environmental ethics. The relocated grizzly bears were being subjected to management practices that can be questioned on animal rights grounds. Being drugged, captured, radiocollared and released far from

⁸⁹ Indeed, 2004 was a rough year for grizzly bears in southern Alberta as well as the NCDE population. Each of these populations suffered unsustainable losses, particularly of reproductive-age females, due to human-caused mortality. 31 bears, including 19 females, were lost from the NCDE population, the most since 1974, the year prior to the bear's ESA listing (Mann, 2004). It is difficult to imagine that, had the reintroduction efforts proceeded, NCDE grizzlies would have been available for transplant in 2005.

⁹⁰ The Greater Yellowstone population may be delisted as early as this year (2005) (Black, 2005; Gearino, 2004).

⁹¹ This problem was headlined "Source Bears May Not Be Available" in the pamphlet, and referred to the possibility of taking bears from lower 48 populations as "an alarming move" (AWR, 1997, p. 8).

home *must*, it seem, be traumatic to some degree to these highly intelligent animals.⁹² And this does not even consider those bears whose death would result from complications associated with the translocation process (as acknowledged will happen to an unspecified number of bears in the above passage). Individual bears, in other words, are being asked at best to suffer and at worst to die for the cause of reintroducing bears to the Bitterroots. Perhaps this is an unnecessary dilemma as, according to CB supporters, an alternative exists that does not subject bears to these cruelties and dangers. The objection to intensive and intrusive management was most colorfully argued in one testimonial at the Lewiston hearings:

The grizzly is a beautiful animal ... but one of the grossest acts of animal cruelty that I have seen in Montana [has been fitting] grizzlies with radio collars. Imagine yourself going out here in the parking lot, somebody shoots you in the rump with a hypodermic needle, puts you in a cage behind a pickup, two hundred miles across bumpy roads, into a helicopter, flies you some place, you are penned up for six weeks and they dump you in Little Rock, Arkansas. Are you going to be happy? Are you going to be stressed out? (USFWS, 1997d, p. 79)

Here, it seems, is one area where the CB alternative makes a more (eco)logically sound and less ethically questionable case. Consistent with the rewilding goal of (re)granting nature autonomy (Noss et al., 1999), this critique of intensive and intrusive wildlife management represents a laudable ideal for possible future human/nonhumannature relations. From where do these objections arise? Is traditional wildlife management an ethically defensible practice? The grizzly bear management literature is replete with techniques that might well appear objectionable to many.

I will draw my examples from the work of Frank and John Craighead, inarguably the most innovative and influential early grizzly bear researchers. The Craighead brothers studied grizzly bears in Yellowstone National Park between 1959 and 1971 and continued to research grizzlies in the Yellowstone Ecosystem (but outside of the national park) for more than two decades thereafter.⁹³ The Craigheads' "pioneering grizzly bear

⁹² And I understand the metaphor of trauma here is anthropomorphic, but it seems like the only logical descriptor.

⁹³ They left Yellowstone National Park after a heated dispute with park bear managers over artificial feeding of grizzlies at the park's garbage dumps. Grizzly bears had been encouraged to feed at these dumps for generations (going back at least to 1916) (Craighead et al., 1995, p. 328). In 1971, a new park management staff responded to pressure from scientists and interest groups who argued that grizzlies' feeding on garbage was unnatural and should be stopped. The Craigheads vociferously disagreed with this

research ... [was] the first to relate bears' use of habitat ... to a greater ecosystem model" (Clark et al., 1999, p. 3). In 1961 the Craigheads invented the radiocollar, a signalemitting device that fits around the neck of an animal. Radiocollars allow researchers and managers to locate and track grizzly bears. For an animal as elusive to human presence as the grizzly, radiocollaring and tracking enabled the Craigheads to amass in a few years more data on grizzly bears than all that previously existed. Frank Craighead's 1977 popular natural history *Track of the Grizzly* describes their experiences in the field. Chapter 1 of the book, "The Bear Marian," details the process of radiocollaring their first Yellowstone grizzly. The following image (**Figure 6.1**) is from the chapter's first page.

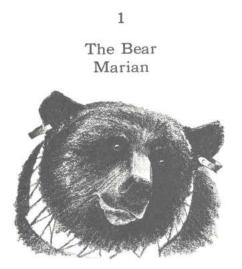


Figure 6.1. "The Bear Marian," cover page from Chapter 1 of Frank Craighead's 1979 popular natural history book *Track of the Grizzly* (Craighead, 1979, p. 13)

In this drawing, the bear is represented (rather gratuitously, it seems) as gentle and feminine. The radiocollar, in tandem with the ear tags, augments the feminized aesthetic by appearing almost as jewelry. This imagery is hardly played down in the text, where Marian is described in as "fickle," a "timid young female," and displaying "coyness" before a potential suitor (Craighead, 1979, pp. 50, 54, 53).⁹⁴ The radiocollar, however,

proposal, pleading with the Park Service to at least phase out the dump closures over several years. The Park Service ignored the Craigheads' advice, and the resulting hostility led to the end of their research in Yellowstone. The grizzly population in Yellowstone declined significantly after the dump closures, as the Craigheads predicted would happen (Craighead et al., 1995).

⁹⁴ Lest I be accused of mocking this rhetoric with my use of the term "suitor" for her mate, let the record show that the author was equally anthropomorphic, as Marian's "flirting" with the male bear Inge was followed by twenty minutes of "lovemaking" (p. 54). For a considerably more detailed examination of the Craigheads' fascinating yet curious anthropomorphic gendering of the Yellowstone grizzly bears, see my "Grizzly Conservation and the Nature of Essentialist Politics" (Hintz, 2003).

does not play second fiddle to natural history (or the "love" story for that matter). Marian was not just a coy and timid female grizzly bear. As of September 22, 1961 she became "a free-roaming electronic instrument of science" (p. 14). *Track of the Grizzly* and brother John's *The Grizzly Bears of Yellowstone* (a much larger book published almost twenty years later, and one geared more toward a scientific than popular audience) provide plenty of photos graphically depicting the often-intrusive nature of grizzly bear fieldwork.



Figure 6.2. Grizzly bear fieldwork practice 1: "Taking a milk sample from a lactating female grizzly" (Craighead, 1979, p. 86+).



Figure 6.3. Grizzly bear fieldwork practice 2: "John and Frank Craighead remove a young drugged grizzly from a culvert trap" (Craighead, 1979, p. 86+).



Figure 6.4. Grizzly bear fieldwork practice 3: "Each marked animal was given permanent lip (right) and underarm (left) tattoos" (Craighead et al., 1995, p. 61).



Figure 6.5. Grizzly bear fieldwork practice 4: "To establish the age of adult bears, one of the fourth premolars was removed, thin-sectioned, and stained to reveal annuli..." (Craighead et al., 1995, p. 59).

My point in providing these images from the Craigheads' popular and technical natural history monographs is not to establish grounds for ethical judgments regarding the rightness or wrongness of these (or any other) wildlife management fieldwork practices (that would be the subject of a different, but potentially very interesting, research project altogether). Rather, my intention is to illustrate through these images that wildlife management does consist of practices that *could be* perceived as ethically questionable at the very least. If one was to make this contention, however, it is important to note that the object of ethical concern is not *Ursus arctos horribilis*, 'the grizzly bear', the 'species' listed under the ESA for which recovery plans are being debated. The object of concern, rather, is *individual* grizzly bears, those particular animals who would 'suffer' for the greater good of species recovery. But is there an incompatibility between arguing for the good of species and the rights of individual animals?

Mark Sagoff, a well-respected theorist of environmental policy and law, answers this question in the affirmative. He justifies his claim of absolute incommensurability between animal rights advocacy and environmental ethics by pitting his model for (apparently all) environmentalism, Aldo Leopold's "land ethic," against Peter Singer's "animal liberation" thesis. Effectively conflating conservation biology and environmentalism, Sagoff argues that "environmentalists" are concerned with preserving evolutionary processes and are not, *cannot*, be concerned with the welfare of individual animals (Sagoff, 2001, p. 94):

An environmentalist's "obligation to preserve the 'integrity, stability, and beauty of the biotic community'⁹⁵ ... implies *no duties whatsoever to individual animals* in the community, except in the rare instance in which an individual is important to the functioning of that community. For the most part, individual animals are *completely expendable* (p. 94, emphasis added).⁹⁶

Sagoff concludes that "a humanitarian ethic" (from which arguments for animal rights arise) "will [neither] help us to understand or justify an environmental ethic [nor will it] provide necessary or valid foundations for environmental law" (Sagoff, 2001, p. 94).⁹⁷

Reconsidering Killingsworth and Palmer's horseshoe diagram (Figure 5.4), Sagoff seems to be endorsing the "new" deep-ecology/science/government alliance (Killingsworth & Palmer, 1992, p. 14). But, as I mentioned in the previous chapter (and as I would argue is exemplified by Sagoff's reasoning) perceiving ecopolitical identities as preexisting and mutually exclusive can result in an unnecessary and unproductive circumscription of possible paths of action. Luckily, whether or not and to what degree this problem exists in the 'real world' of environmental politics can be empirically examined, even as the results and the implications may or may not be crystal clear. For example, when a deep ecologist, in assessing the AIDS crisis in Africa, suggests (as many have) that "nature" should be allowed to take its course (i.e., that we shouldn't try to medicate and prolong the lives of African AIDS patients) the connection between

⁹⁵ The internal quote is the most oft-quoted single passage from Aldo Leopold's seminal essay "The Land Ethic" from *A Sand County Almanac* (Leopold, 1949).

⁹⁶ And from this passage it is certainly easy to imagine how this concern with wholes over parts would be, to put it mildly, problematic in the context of human society. Taken literally, as such, not only would the rights of human individuals be sacrificed for the ecological functioning of the whole society, but the concerns of humans as a species would have no grounds for preferential treatment over any other species. I have addressed and will address further the political problems that arise from such "holistic" thinking. I will not, however, consider to any real degree the potential "problem of ecofascism" (Callicott, 2001b), the fundamentalist literal reading of ecological holism taken to its logical extreme (Ferry, 1995; Fischer, 2000, see pp. 111-112 for an excellent and concise summary).

⁹⁷ It should be noted that Sagoff is no outlier here as well. The animal rights *versus* environmental ethics 'problem' is a well-trodden path within environmental ethics (e.g., Callicott, 2001a; Varner, 2003; Wenz, 2001). Even so, I am not attempting any degree of a systematic review of the environmental ethics literature here. Rather, my point, as it has been all along, is for environmental and social theory to inform my assessment of the Bitterroot grizzly debates and, secondarily, for my empirical observations of the debates to inform, as they can, environmental and social theory.

ideology and action is as straightforward as it is objectionable. In this case, holistic thinking leads to an ethically objectionable conclusion – the welfare of individual AIDS victims (and their dependants), sad as the situation may be, must be sacrificed for the greater good of solving the larger problems of overpopulation, famine, and ecological degradation.⁹⁸

In the case of the Bitterroot grizzly debates, however, it appears that an inverse correlation is at work. The ethically preferable course of action appears to come down in favor of the Conservation Biology alternative, the recovery alternative most fully (some might say self-righteously) informed by holistic ecology. In other words, the holism/concern-for-individuals divide does not empirically hold up in this case. There was plenty of evidence of deep felt care for grizzly bears (that is, not just 'the grizzly bear') from within the ranks of the Conservation Biology alternative supporters:

I'd like to see grizzly bears in the Bitterroot Ecosystem during my lifetime, but it's far more important that we allow bears to return to a place that provides them with the habitat security and a prospect for long, undisturbed, lives. We need to grant the bears the respect they deserve and recover the ecosystem properly even it takes decades or centuries instead of months (USFWS, 1997e, p. 104).

Our goal should be to restore these magnificent creatures as God intended them to be; wild, and not as collared and tracked shadows of their natural selves (USFWS, 1997e, p. 91).

Out of holism, or at least in tandem with holism, has arisen an environmental ideal (rewilding; the CB alternative) that exhibits what Suzanne Michel calls a "politics of care" (Michel, 1998) – a way of interacting with, all the while learning about, animals (individuals *and* species); a politics that might well be judged ethically preferable to mainstream, intrusive wildlife management. Michel is part of a small group of "animal geographers" attempting to envision and enact more preferable modes of human-animal relations in the "nature-culture borderlands" (Wolch & Emel, 1998). Following this spirit, it could be argued, for example, that the Craigheads' field routine of drugging, milking, tattooing and tooth-pulling is a paradigmatic example of modernist science. The disabled grizzly bears depicted in the images are, it seems, treated as little more than bits of

⁹⁸ And for good measure let me note again that political ecologists have done a fine job of debunking the popular "tragedy of the commons" causal chains of explanation, for example, overpopulation \rightarrow famine \rightarrow ecological degradation.

"nature – an external, material reality to be classified and quantified" (Michel, 1998, p. 164). The CMC alternative could be critiqued as reinforcing the "modernist ... denial of nature's agency" through its command-and-control surveillance techniques (Michel, 1998, p. 169). Or, as Michel's fellow animal geographer William Lynn challenges us to ponder, somewhere along the line do scientifically managed grizzly bears become mere objects, "animals [that] lay beyond the boundary of the moral community" (Lynn, 1998, p. 280)? Who, after all, could argue that drugging/tattooing/tooth-pulling/radiocollaring is preferable to the rewilding ideals of "[forging] a more comprehensive approach to protecting whole ecosystems" (Wilcox, 1998, p. 18) or envisioning an Earth "where nature reigns" (Noss et al., 1999, p. 99)?

This question is only partially rhetorical. Rhetorical, yes, in that rewilders have presented us with laudable ideals that are, in principal, preferable to establishment wildlife management. This is one line of inquiry that, however it might be drawn out further, would seem to invariably fall in favor of the CB alternative. Employing a methodological environmental pragmatism, however, can lead to a reworking of this very line of questioning. I will introduce this reworked, pragmatist line of inquiry by tying a small but representative selection of the environmental pragmatist literature directly to the issue, the *problem*, of the grizzly reintroduction debates.

6.3. The Bitterroot Ecosystem: Imperfect Wilderness or Problematic Situation?

As Andrew Light has noted on multiple occasions, any environmental pragmatism worthy of the name – whether it be the methodological (Light, 2004; Light & Katz, 1996a), political (Minteer, 2002; Reid & Taylor, 2003), or philosophical (Hickman, 1996; Robert, 2000) – "accept[s] the public task" of translating what may appear on the surface as arcane scholarly debate "into terms more likely to morally motivate policy makers and the general public" (Light, 2004, p. 124). The dominant stance within (at least) the regional environmental community on the Bitterroot grizzly reintroduction debates was, as I have demonstrated, supporting the CB alternative and admonishing the CMC alternative. All signs seemed to point to the CB alternative as being the more scientifically validated, expertly managed, ethically desirable, even economically

beneficial⁹⁹ recovery alternative of the two. I will use environmental pragmatism to productively challenge this received wisdom on the issue of Bitterroot grizzly recovery. I find an essay by the environmental pragmatist Ben Minteer particularly helpful as a springboard from which to reformulate the environmental-ethical and -moral components of the grizzly reintroduction debates.

In the essay "Beyond Considerability," Minteer "suggest[s] ... that we should recognize the virtues of an environmental ethical approach that moves beyond attributions of considerability, one that focuses more of its attention on the experimental method of moral inquiry and dispute resolution that figures prominently in Dewey's work" (Minteer, 2004, p. 98). "Attributions of considerability" refers to the aforementioned debates within environmental ethics over what bits of nature (e.g., individual animals, ecosystems, evolutionary processes) are to be attributed moral standing. This focus on "general normative principles and broad conceptual issues of moral standing and moral significance" (p. 104) has led to the articulation of competing and exclusionary environmental-ethical metatheories, the most prominent of which have been outlined in this chapter (animal rights versus ecological ethics) and Chapter 4 (anthropocentrism versus ecocentrism). These metatheories are then perceived to map directly onto (again, competing and exclusionary) environmentalist identities, for example, the seemingly intractable divide between deep ecologists and social ecologists (see Figure 5.4).

Instead of assisting our ability to make informed decisions on specific environmental debates, the rise of these 'ideal type' theories and corresponding identities produces a number of litmus tests (e.g., 'Is this proposal biocentric?') that few natural resource management proposals could ever hope to pass. Imagine if you will what a biocentric timber sale would look like! (I couldn't think of one either.) How about a biocentric proposal for recovering grizzly bears in the Bitterroot Ecosystem? That's a little easier to imagine, since that's exactly what the CB alternative presented. The CB alternative is untainted by compromise from its biocentric perspective (a point vocally celebrated by its proponents). The CMC alternative, however, is a literal product of compromise. The CMC proposal was written first and foremost to succeed, while the CB

⁹⁹ See Chapter 7, section 2 for a comparative discussion of the economic components of the alternatives.

alternative was written to live up to an ideal in uncompromising fashion. Comparatively judging these proposals vis-à-vis "general normative principles and broad conceptual issues of moral standing and moral significance" (Minteer, 2004, p. 104), as I have shown, falls in the favor of the CB alternative. It is difficult, for example, to make the case that the CMC alternative is *more* ecocentric, or *more* holistic, or *more* scientific than the CB proposal. Similarly, the CMC alternative *fails* the ecocentric, holistic, and scientific litmus tests produced by ideal type models.

An "*environmentalist*" (and who, really, would want to be excluded from this company?), one who advocates exclusively for ecological processes as per Sagoff (Sagoff, 2001, see above, this chapter), can *only* choose the CB alternative. Recalling the discussion in chapter four, this is Dave Foreman's (Foreman, 1997) with-us-or-against-us rhetoric materialized. To drag the George W. Bush metaphor along for one more sentence, the CMC coalition became the CB supporters' axis of evil. *Debate* was effectively closed.

Minteer's Deweyan model of environmental pragmatism, by contrast, brings informed decision making back into the realm of environmental *activ*ism. Minteer begins with Dewey's "view of moral reasoning as an experimental activity carried out in the context of specific 'problematic situations'" (Minteer, 2004, p. 106). Writing in the first half of the twentieth century, Dewey was offering a corrective to dominant trends in moral philosophy that are strikingly similar to the obsession with debates over the locus of moral standing within environmental ethics. Totalizing perspectives – for Dewey, "[theories] outside of the contingencies of existence and untouched by its vicissitudes" (Dewey, 1998a, p. 100) – steamroll over context when applied to specific situations. This critique is by no means specific to Dewey or even to pragmatism – any application of 'critical theory' (for example, I hope, this study) would carefully consider the social/historical/ecological/etc. context of the issue at hand. Neither biocentric ethics nor ecology challenges their own or each other's assumptions (Proctor, 2001; Taylor, 2000); the result being a rather *un*critical¹⁰⁰ theory (the rewilding model) and practice (the CB alternative).

¹⁰⁰ Paraphrasing Friedrich Sixel, critical perspectives examine the implicit and explicit *assumptions* of their objects of analysis (Sixel, 1995). Good science can do an excellent job of scrutinizing its methodological

The Deweyan model is, by contrast, self-critical and sensitive to context. Pragmatism embraces value pluralism, recognizing it as an empirically verifiable condition within and across human societies (Minteer, 2002; Parker, 1996). This latter point deserves a little elaboration. If, as pragmatism (empirically) finds to be the case, value pluralism exists everywhere in the world, then pluralism becomes the grounds upon all which methods of inquiry must begin. Pluralism becomes a necessary methodological assumption; *not*, as some might have it, an obstacle to progress.¹⁰¹ Dewey recognized further that "problematic situations" can only be resolved democratically if they are solved *experimentally*. Advocating a "reflective morality", Dewey argued against "fixed adherence to a priori principles." Rather, he insisted that

free inquiry and freedom of publication and discussion must be encouraged and not merely grudgingly tolerated... It is, in short, a method of democracy, of a positive toleration which amounts to sympathetic regard for the intelligence and personality of others, even if they hold views opposed to ours, and of scientific inquiry into facts and testing of ideas (Dewey & Tufts, 1932, p. 329, in Minteer, 2004, p. 107).

Pragmatism opposes, then, "addressing only a like-minded audience" (McKenna & Light, 2004, p. 11) or addressing others solely for the purposes of expanding your like-minded community. Moral and/or¹⁰² scientific absolutes cannot, in this model, provide an *a priori* unquestioned and unquestionable basis from which to devise programmatic, normative

assumptions (with Pease & Mattson (1999) being an exemplar from the grizzly ecology literature). But as studies in the philosophy of science (and more recently "science studies") have demonstrated, natural science does not tend to include a robust internal critique of its philosophical assumptions or the social context that at least partially determines scientific practice.

¹⁰¹ Recall George Wuerthner's (1999) "Selfish Genes, Local Control, and Conservation" essay describe in Chapter 4, footnote 38.

¹⁰² "Or" more often than "and," to be certain, but conservation biologists do sometimes make the case that theirs is a simultaneously (infallible) moral-scientific enterprise. Paquet and Hackman, for example, in a 'gray literature' pamphlet promoting large carnivore conservation in the Northern Rockies, state that the "philosophical context within which we are promoting this agenda is that natural systems and biological diversity are good and should be preserved" (Paquet & Hackman, 1995, p. 3). Conservation biology is the integration of this philosophical context and scientific ecology and "define[s] the ethical foundations for the[ir] proposed strategy" (p. 3). Their proposal is not insensitive to social context, as the document includes a separate "sociological context" wherein rural communities should not unfairly shoulder the costs of conservation programs. I would argue, however, that placing the "ethical foundation" in a unified philosophical-ethical context wholly separate from the sociological context still fails to completely remove the "authoritarian edge [from] ecological politics" (Harvey, 1993, p. 21). That is, conservation biology retains sole possession of ethical right *and* scientific authority. The social situation is certainly more complex than the "white hats valiantly fighting black hats" (Luke, 2002, p. 302) narrative, such as when Paquet and Hackman witness "a growing tension between forces promoting exploitation of natural resources and those acting to preserve them" (Paquet & Hackman, 1995, p. 21).

solutions. The Deweyan model of inquiry forces each party to investigate and articulate the particular points fundamental to their support or opposition to a proposal.

I want to close out this section by thinking about some ways in which Deweyan pragmatism – as both a model of investigation into problems and a 'spirit' of humility and experimentalism – could have productively informed and guided a follower of the debates, particularly one leaning toward supporting the CB alternative on environmental-ethical grounds. One thing a pragmatist approach could not provide, of course, is an out-of-the-box answer to whether specific management practices (e.g., translocation, radiocollaring) are ethically right or wrong. Rather, it would force us, as concerned individuals (*environmentalists*), to think about the specific objections we hold, question the grounds of these objections, and weigh these considerations in light of the 'problematic situation' at hand.¹⁰³ Stated another way, it provides a method of forging an intelligent inquiry into our beliefs, which may or may not stand up as truths in particular situations.

I will take as my example the case of the radiocollar, the most commonly voiced explicitly ethical objection to the CMC alternative. In the self-critical pragmatist spirit outlined above, one would first want to scrutinize why one felt offense at the idea of radiocollared grizzlies. Is the objection to radiocollaring and monitoring an ethical concern for the welfare of the individual grizzly bears wearing the collars? If so, an examination of the grizzly bear management literature could reveal that the Craighead brothers – inventors of the radiocollar and (as was demonstrated earlier in this chapter) unapologetic promoters of its use and usefulness – shared the concern that wearing a radiocollar might bother individual bears or inhibit their natural proclivities. Indeed, the Craigheads comparatively analyzed the behavior of collared and uncollared bears (as well as the behavior of individual bears before and after collaring) and found no generalizable differences in behavior. Moreover, none of the 23 bears collared every attempted to remove their radiocollar (Craighead et al., 1995). This 'data' on radiocollared bears,

¹⁰³ If all this talk of values and individuals has raised the red flag of "Idealism!," please note that issues of material social conditions and their relations to environmental perspectives, problems of power differentials within the communicative model espoused, and the like will be central in the discussions that comprise the following sections. I do think, however, that it is fair to give due weight to the importance of environmental values and environmental ethics in individuals environmentalists' perspectives on particular issues. And, as I hope to have argued effectively, an uncritical environmental ethics can at the very least buttress a politically problematic environmental ideology.

discovered through an open inquiry into the foundations of our objections, might then either lead us to drop our objection or to rethink why we cannot *not* feel offended by the collar. To be clear, my intention is not to signal closure on the issue of the ethics of radiocollaring bears. What I have presented is one hypothetical investigation and conclusion.

Reading different literature or entering into a different discussion on the matter could lead to critiques of radiocollaring rather than defenses of the practice. One might object, for example, on the grounds of adding one more mortality variable (intensive management) to an already 'threatened species'. This objection could be countered by historicizing the utility of the radiocollar, for example, by noting that without the massive amounts of data (much of it acquired through the aid of radiocollars) gathered by the Craigheads on Yellowstone grizzlies, we may have gone unaware of the sharp population decline of the population in the early 1970s that prompted the grizzly's ESA listing. Again, any similar hypothetical example could go on *ad infinitum*, and hoping the point is taken, I will terminate this thread here.

The purpose of the preceding section is to serve up hypothetical examples of pragmatist-spirited inquiry. In the broadest sense, an environmentalist-pragmatist would (ideally) hold herself to a spirit of openness and inquiry which would include a willingness, even a commitment, to undertaking dialogical scrutiny of the foundations of her beliefs and activism, recognizing their inherent dynamism and fallibilism. Those beliefs that smack of a purist sensibility perhaps would be the ones in need of the deepest scrutiny. For this example, the beliefs "I am opposed to radiocollaring grizzly bears" or "radiocollaring grizzly bears is unethical" would (at least) border on such purist sensibilities – they determine a right course of action without considering the basis for the beliefs.

Michael Soulé – the conservation biologists whose biocentrism I critiqued at length in Chapter 4 – provides the closest thing to a pragmatist account of wildlife and wilderness management I have found. This essay is also significant for my purposes because Soulé's inquiry into this problem points to what I will argue is one of the most fundamental conceptual-practical obstacles to the productive development of environmentalism in the Rocky Mountain Northwest.

Tackling the question "Should Wilderness Areas be Managed?", Soulé sounds very much the pragmatist in the opening section — admonishing perfectionist ideals for practical reasons, embracing value pluralism, and calling for a more communal, dialogical and empathetic environmentalism:

Perhaps it is the quest for perfect freedom that leads many people to wish for perfect wildness in Nature. But even as we are inspired by this ideal, the "real work" – as Gary Snyder calls it – is our communal struggle to protect the beauty and integrity of nature, a project that is necessarily sullied by the expediencies and compromises of politics. The ideologically diverse participants in this work are often tempted to circle the wagons and shoot inward – a habit of conservationists. Instead, we might consider riding a mile in each other's wagons (Soulé, 2001, p. 136-7).

Soulé offers a heuristic typology (admitting the "archetypes are arbitrary; most of us probably fit at least two") of environmental activism – "ways of perceiving and saving the wild": (*a*) managerial/political; (*b*) ecological/process; and (*c*) heroic/experiential (p. 141). Not surprisingly, Soulé places himself in the second category, ecological/process, not accidentally represented as a middle ground between the poles of resourcism and radically restrictive but wholly 'unmanaged' wilderness preservation. I find Soulé's typology and its extended elaboration helpful, not because I draw all of the same conclusions from it that he does,¹⁰⁴ but because it provides specific and general lenses through which to assess the grizzly reintroduction debates and the regional environmental movement in the Rocky Mountain Northwest.

Each archetype has a different nature-management ideology based on differing preferred ends. "Managers" are Benthamite utilitarians always seeking to maximize resource output to achieve the greatest good for the greatest number. "Ecologists" manage solely to enhance or restore ecological processes. "Heroics" are opposed to all

¹⁰⁴ From this typology, for example, he winds up back at the core area/buffer/corridor rewilding model, still seeming to hold onto a fairly purist idea of 'management' for natural areas, that is, all management would be for the purposes of enhancing ecological processes. The litmus test for cutting trees, then, I think it is fair to deduce, is that the cut would be done for the purposes of restoring or enhancing ecological processes (and so it seems that sylvan ecologists would be put in charge of planning tree cutting). *Timber harvest*, on the other hand, is an 'anthropocentric' management action and therefore unacceptable within reserves. What is missing here, I would argue, is recognition of the overlap between these two 'forms' of cutting trees – problematically represented in the rewilding literature as incommensurable activities.

management as it offends their aesthetic ideal of free nature. The heroics are implicated as at times blockading effective ecological restoration through passionate, articulate admonitions against, for example, radiocollars. Soulé adds a temporal twist to this particular objection:

How long should we tolerate an invasive intervention for the sake of longterm benefits? For example, are the visual or ethical effects of seeing a bear with a radio collar or tattoos in its ears ... so egregious that they should not be tolerated for ten or twenty years, even if these interventions are essential to restore a high degree of naturalness to a wilderness? (p. 146)

There is quite a lot to chew on here, even if this is still a pretty loaded question. Loaded in one sense in that it denotes that these considerations apply primarily (or perhaps solely?) when managing "wilderness." Even as Soulé shelves the managed/unmanaged dichotomy, the wilderness/non-wilderness divide is left intact – wilderness persists as the ideal. But I have covered this territory at length in Chapter 4 and will return to it later, so I will leave my 'deconstruction' of this paragraph at that. There are pragmatic and positive things to take away from this passage as well. For one, it raises the idea that some people's primary objection to a radiocollar on a bear is aesthetic.

The radiocollar, or presumably any visible management artifact, violates what some people feel that wild nature, literally, should *look like*. As one testifier at the Salmon, Idaho Draft EIS hearings put it, "I really don't want to see a grizzly bear, which is a symbol of wilderness ... with a radio collar" (USFWS, 1997f, p. 109). Certainly, using Soulé's terminology, it is easy to imagine how a backcountry experience viewing an artifactual collared grizzly would be much less "heroic" than viewing a grizzly that (at least) *appears* totally wild.¹⁰⁵ But, even as this position makes an easy target for derision, to end the discussion by assuming that all radiocollar opponents are macho hikers seeking a wild and dangerous backcountry experience would be to unfairly diminish the aesthetic component in human-nonhuman relations. While I am not qualified to write on the issue,

¹⁰⁵ And the popularity of backcountry "heroism" (i.e., its influence on environmentalism in a region where "extreme sports" are quite popular) probably shouldn't be discounted. A recent documentary film about the exploits of grizzly writer and photographer Timothy Treadwell, who with his girlfriend was killed and eaten by an Alaskan brown bear last year, has prompted a spate of copycat hobbyists who push well past the level of safety to get up-close experiences with wild bears, endangering both themselves and the bears (Mann, 2005). Similarly, backcountry rangers in Glacier National Park have noted numerous hikers wanting to visit "the grizzly Hilton" (an area of the park with an unusually high density of grizzlies) made famous in Doug Peacock's novel *The Grizzly Years* (Mann, 2005).

there is certainly a world of interesting (existing and potential) discussion centering on the aesthetic, dialogical and dialectical relationship between humans and nonhuman nature (and this wouldn't be lost on all pragmatists, as Dewey, for one, wrote extensively on the foundational nature of the aesthetic in organizing and determining human experience).¹⁰⁶ One thing I find positive about Soulé's line of inquiry here is not so much the specific conclusions he draws as much as the openness produced through his willingness to take on and tease apart given dichotomies and deeply-held beliefs. He draws conclusions, yes, but he also opens up rather than closes down avenues for dialog with his spirit of empathy and pragmatic methodology.

Another component Soulé's typology worth examining, but this time a point where pragmatists would diverge from his model, is the inclusion of the relations between means and ends engendered by different environmental ideologies. Soulé sees each of his archetypes as employing specific methods of dealing with means-ends dilemmas. For managers, "the means are the ends," meaning I suppose that actions proposed are so immediate and utilitarian that there is no place for long-term thinking. For heroics, "ends never justify imperfect means" (Soulé, 2001, p. 141). This is another not-so-subtle jab at wilderness purists, accusing them of having zero tolerance toward anything that might rail against their impossible-to-uphold-in-the-real-world sensibilities. For ecologists, "ends justify less-than-perfect means." This is consistent with his treatment of the radiocollar – the less-than-perfect means in the service of the (perfect?) ends. Stated another way, this line of reasoning still harbors the notion that an ideal endstate (e.g., a restored ecosystem, or wilderness) can be reached. The *result* in this case is, in my opinion, preferable to blanket opposition to radiocollaring grizzlies. An even "more" pragmatist methodology, however, would move toward the dissolution of the mean/ends dichotomy altogether.

As Josh Whitford argues, the dualism between means and ends is untenable. It is not that the two cannot be empirically established in specific situations, but "it is clear that the categories of means and ends are not a *dualism*; there is no end that is always and only and end, but never a mean" (Whitford, 2002). The dissolution of the dualism imparts

¹⁰⁶ Significantly, the aesthetic was a fundamentally relational rather than contemplative construct for Dewey, and as such was integrated into and not separate from his work on politics and social change (Alexander, 1987; Dewey, 1934; Hoy, 1998; Reid & Taylor, 2003).

two key conceptual interventions for my immediate purposes. First, "there are no final ends, there can be no *end-in-itself*, only *ends-in-view*" (p. 338). We *work* toward goals (ends) but we never 'arrive'; the "end<u>s</u>-in-view" are just that, always temporally ahead, always plural, always determining new ends-in-view. Secondly, the 'work' itself is dynamic – altering the course of events: "an end-in-view is a means in present action; present action is not a means to a remote end" (Dewey, 1922, in Whitford, 2002, p. 338). The "means" is what effects "some change in the present state of affairs" (Whitford, 2002, p. 338).

The difference between Soulé's means/ends and pragmatist means-ends is significant in the context of assessing the CB and CMC alternative for Bitterroot grizzly recovery. Under what I think would be the dominant application of Soulé's model to the Bitterroot debates, the CMC alternative would be rejected because its stated end – the establishment of a nonessential experimental population of grizzly bears - falls well short of the rewilding ideal. The CB alternative, of course, did not suffer from this shortcoming. Being all about ends, it could be sheltered from the vagaries of means (that is, since the ends were presently unattainable, it could articulate equally unattainable means). Turning the dichotomy on its head ("an end-in-view is a means in present action"), the rewilding-ideal/CB-alternative was the means to an end - aiding the blockading of the CMC alternative.¹⁰⁷ As Michael Soulé urged against, the CB advocates circled the wagons, and quite effectively shot inward. Soulé is (in this case) advocating, as I am throughout, a strategy of intra-environmental "convergence"¹⁰⁸ (Norton, 2003, p. 11) when possible. This is not to say that divergence is never a defensible tactic, but I would (and will further) argue that the militancy with which the CB supporters diverged may well have done more harm than good. To wrap up this section with a brief return to the issue of radiocollaring, thinking of radiocollaring grizzlies as a "less-than-perfect means" does nothing to answer its ethical questionability. This logic would have as little

¹⁰⁷ And as I have indicated, there are always plural ends. Another end would be what I termed rather harshly in Chapter 4 as "the maintenance of an ideological and pragmatically stifling purity of purpose."

¹⁰⁸ That is, the ability to recognize common ground where it exists between different environmental ideologies as well as between different 'camps' within the environmental movement; then capitalizing on this common ground by collaborating for effective and progressive policy advances and issue resolution. This, in contrast to the all too common tendency within academic and advocacy environmentalism of eschewing common ground in favor of perpetuating, even exacerbating, (more or less) intramural differences.

to say about the ethics of radiocollaring as it would about the ethics of bombing Baghdad to spread democracy. Only as an end in itself, a change in the present state of affairs, can any action be judged. Perhaps a recognition of the "irony" (Keulartz, 1999, p. 87, see below) of the entire situation – a recognition of the fallibility and imperfectability of all attempts at mitigating the problem (all the problematic situation<u>s</u>) of humans-in-nature – would drive an environmentalism that is less hostile to programs and reforms that fail to live up to perfectionist ideals.

Jozef Keulartz, writing about a large-scale effort at rewilding¹⁰⁹ a landscape in a radically different social/political/ecological context (the Netherlands), articulates the irony of that situation in a strikingly resonant passage: "This attempt to drive the devil of technology out of nature with the help of Beelzebub reveals the profoundly ambivalent character of nature development" (Keulartz, 1999, p. 84). In 'reality' – Soulé and Snyder's "real work" of conservation – this irony is not lost on wildlife biologists and no doubt the majority of rewilding activists. As the nature-writer Charles Bergman noted in *Wild Echoes*, his fabulous book on contemporary North American endangered species conservation:

The wilder and more spectacular a creature is, the greater the likelihood in America that it is tagged or radio-collared, even surviving on dosages of medicine. Few wild animals are seen anymore except by those biologists who make it their living to chart—and save—these creatures' lives with all the paraphernalia of high technology. The reality is that much of our wildlife has been lost and most of what is left wears collars (Bergman, 1990, p. 104).

That this observation is undeniable does not mean that it is not justifiably lamentable. But this reality cannot be undone with any single action, despite the best and purist intentions of so many CB alternative advocates. Rewilding (the already *pretty darn wild*) Northern Rockies to any degree will be a complex and difficult social experiment. If, as Soulé warned early in his career, that "the risks of non-action may be greater than the risks of inappropriate action" (Soulé, 1986, p. 6), the purity of purpose of the conservation

¹⁰⁹ The term "rewilding" was not used in his essay to refer to the restoration efforts that were underway in the Netherlands, but it is appropriate. The program aimed to return portions of the Dutch landscape to conditions of ecological functioning that mirrored the landscape "as it is assumed to have existed in the last interglacial era," before humans "possess[ed] long range weapons," domesticated and sanitized the landscape and became the primary regulators of ecological functioning (Keulartz, 1999, p. 87).

biology movement may have produced an unfavorable course that (ultimately) enabled non-action.

6.4. Science versus Everything Else: The Scientific Committee and the Persistence of Hierarchy

The preceding section introduced the issue of environmental ethics for three primary purposes. First, it brings to light the inherent ambivalence of an environmentalism that simultaneously eschews the technocratic management of nature all the while advocating its own profoundly technologically- and instrumentally-founded program. Secondly, it provides one example of how the CB alternative, when judged solely in comparison to the CMC alternative, seems to rise naturally to the position of the obviously preferable course of action. Finally, my environmental pragmatist intervention raised the objection (following much of what was discussed in chapter four) that the rather purist ideology employed and idealized end-state envisioned by many CB supporters might in fact be hindering a broader understanding of the context of the reintroduction debates. The rest of the dissertation will follow all three of these lines of analysis. In this section, I undertake a critical assessment of what may have been the single most profound objection to the CMC alternative by CB alternative advocates – the idea of the Citizen Management Committee itself. My primary objects of analysis come from the two components of the Draft EIS public comment component: statements made at the public meetings as well as formal letters written to the FWS. I will also draw again on promotional materials put forth in support of the CB alternative (particularly the AWR handbook that was the target of scrutiny in Chapter 4).

The ubiquitous disdain on the part of CB supporters toward the Citizen Management Committee is rather easy to empirically establish. In the Draft EIS public hearing testimonies, many CB supporters voiced opposition to the Citizen Management Committee, often couched in a rhetoric of an objection to the infiltration of politics into science. Representative examples include:

Alternative 4 [the Conservation Biology Alternative] is good science. It's not politically motivated. It's motivated by the best interests of the animal, you know, the grizzly bear... Alternative 1 ... is a politically-driven management committee. Again, this is a decision that has been made *based on politics, not on science* (USFWS, 1997b, p. 117, emphasis added);

[The citizen management] alternative allows politically-nominated, extractive-industry staff to decide the management and the fate of the bruins. Those decisions need to be made by independent scientists and good, objective science, not for bottom-line profit, and not for political interests (USFWS, 1997b, p. 38);

Concerning Alternative number one [the CMC alternative], a proposal submitted by a *biased* extractive industry and supposedly environmental organizations that once worked with the best interest of wildlife at their roots... (USFWS, 1997d, p. 29, emphasis added);

Alternative Number one is not only inadequate in effectively protecting and restoring the grizzly bear and its habitat, it is a bureaucratic and political operation where those who lose are the citizens and their expectations of thoughtful government, the environment, the grizzly bear and other species of animals and plants that are already threatened by the destruction of their natural habitat (USFWS, 1997e, p. 41);

I am not idealistic enough unfortunately yet to believe that we can allow a group of citizens with strong political and financial interests to agree on what's best for the future of the grizzly bear (USFWS, 1997e, p. 82);

The so-called Citizens' Committee will not be made up of citizens like you or your neighbor, but rather appointees of the governors of Montana and Idaho ... Management decisions about grizzly bears should be based in the best available science with input from all interested citizens, not just a small politically-driven management committee (USFWS, 1997e, p. 97);

My ... concern is with this so-called Citizen Management Committee. What may sound like a great bottoms up strategy on paper would actually be a quasi-political committee appointed by public officials who are heavily influenced by the timber industry. Wouldn't it make more sense to put the management of bears in the hands of scientists and bear biologists who are sensitive to the needs of grizzlies rather than citizens who know little about grizzlies and are appointed by politicians more sensitive to bureaucracy than bears? *We should put our bears in the hands of experts* (USFWS, 1997e, p. 109, emphasis added).

These statements, at least for my immediate purposes, pretty much speak for themselves. CB supporters were not "idealistic" or optimistic enough to entrust the management of the reintroduced (or recolonized) bear population to the Citizen Management Committee. Although some proponents of each recovery alternative voiced critiques of or apprehension toward certain specific aspects of the alternative they were supporting, in the Draft EIS public testimonies only one supporter of the CB alternative even remotely challenged the management structure presented in the CB alternative.¹¹⁰

What management did the CB alternative propose?

In the AWR pamphlet (and mirrored in the EISs) The CB alternative intentionally countered the Citizen Management Committee model by establishing a ten member

Scientific Committee ... to carry out additional research, implement translocations of grizzly bears, and monitor the results of the project. This interdisciplinary team shall have participants employed by state and federal governments and members from the non-governmental, independent scientific community (Bader & Bechtold, 1996, p. 12).

The "interdisciplinary"-expert character of the committee was to be fulfilled through the

following mandate:

Each [member will be] an acknowledged expert in one or more of the following disciplines—

A) the design and implementation of grizzly bear recovery plans (private sector appointment);

B) economic analysis of forest ecosystems (private sector appointment);

C) landscape ecology;

D) grizzly bear habitat requirements and habitat use patterns;

E) plant ecology and the remote sensing/GIS based analysis of vegetation on a regional scale;

F) population viability analysis;

G) fire ecology;

H) conservation genetics;

I) restoration of fire ecosystems; (Bader & Bechtold, 1996, pp. 11-12)

Three other components of the Scientific Committee proposal are worth noting. First, the appointment would be made by the Secretary of the Interior in consultation with the National Academy of Sciences. Secondly, the membership of the committee was to consist of "not more than 5 … employees of any Federal or State agency or from any agency involved in resource extraction [and] not less than 5 … persons from the nongovernmental, independent scientific community and academia" (p. 12). Lastly, "sole authority and responsibility for implementing recovery efforts pursuant to the Endangered Species Act" shall reside with the Secretary of the Interior, who will act "in good faith" on the recommendations of the Scientific Committee (p. 12). This committee very clearly countered every skepticism, fear, and admonition that CB supporters voiced toward the FWS-proposed Citizen Management Committee. The exclusively expert-

¹¹⁰ One testimonial at the Missoula meeting endorsed the Conservation Biology Alternative but said he liked the idea of citizen management and thought that it should somehow be integrated in Alternative 4.

scientific membership; the National Academy of Sciences appointment consultation mandate; the inclusion of "independent" scientists (and the resultant guarantee that bureaucrats could never hold a majority) – all of these components ensured the scientific purity of the management committee.

Frank Fischer's¹¹¹ *Citizens, Experts, and the Environment* (Fischer, 2000) serves as the primary text that will abet my explanation and catalyze my critique in this section. To preview my argument (and following on much of what has been argued already), it is my contention that the CMC alternative was perceived by many CB supporters as a deplorable manifestation of bureaucratic-"technocratic" (Fischer, 2000, p. 92) environmental management, a model perceived by many to be more complicit in causing and continuing environmental problems than in ameliorating or solving them. The CB alternative/movement, however, exhibited ambivalence and even contradiction because it failed to offer a viable alternative to many of the perceived deficiencies in the dominant model.

Neither of these features of the Bitterroot debates (the tension or the resulting ambivalence) is new to environmentalism:

Tensions between science and politics have been intrinsic to environmental struggles from the outset. On the one hand, science and technology have been identified closely with the major causes of environmental degradation; on the other, they have served as the primary methods for both detecting environmental problems and searching for effective solutions (Fischer, 2000, p. 89).

But there is a history to the development of this tension. In its first-phase (rising to real prominence in the 1960s), environmentalism was primarily a citizen-based movement, where the (known) demons and dangers were obvious (e.g., nuclear power, pollution from increased automobile use) and usually perceived as science- and technology-based. The second phase, however, is characterized by less visibly and intuitively obvious environmental problems.¹¹² As such, these new problems (e.g., the ozone hole, global warming, biodiversity decline) were reliant upon articulation by science to make them

¹¹¹ For clarity's sake, Frank Fischer is an environmental-political theorist; not to be confused with Hank Fischer, Defenders of Wildlife activist and architect of the wolf and grizzly reintroduction campaigns in the Rocky Mountain Northwest.

¹¹² I employ Fischer's first-phase/second-phase narrative because it is useful for my purposes of explanation, not because it is necessarily 'better' or more accurate than, for example, Hays' (1987) or Soulé and Noss's (1998) historical accounts that mark different signal phases at different times.

known to the public, and their attendant solutions were no less science-dependent (but the current 'obviousness' of these problems/attendant-solutions, it seems, is testament to just how effectively this sophisticated information has been disseminated to the public). "The result has been an increasingly technocratic environmentalism, in the environmental movement as well as the corridors of governmental decision making." What in the 1960s smacked of a "street politics" saw its discourse increasingly articulated "through the languages of environmental management" (Fischer, 2000, p. 93).

Once environmental issues became part and parlance of the national political scene "the struggle over environmental policy shifted from the public arenas of protest to the institutional [governmental, academic] arenas of expertise" (p. 94). This transition has resulted in an enormous growth industry of environmental science and activism, but many problems have accompanied this growth. Most profoundly, the initial euphoria over the promise of the technoscientific fix for environmental problems quickly abated as science proved to be quite "underdetermined" (p. 94). An overdetermined science, by contrast, the evanescent dream, "could [have] answered questions in such a way that would eliminate or at least significantly reduce potential conflict among affected parties" (p. 94). The underdetermined nature of science, however, with an increasingly obvious inability "to answer the environmental questions with enough precision to be decisive … opened up – unintentionally – the space for the politicization of science" (p. 95). Beginning in the Reagan years, science – as "counterexpertise" (p. 100) – has been increasingly effectively used¹¹³ to counter the findings of environmental science and forestall the implementation of aggressive environmental policy.

Another concomitant event was the rise of "professional specialization, [where] each group of specialists came to know more and more about less and less" (p. 95). Different specialties studying, for example, biodiversity decline or groundwater contamination, articulated different but equally challenging (and expensive) remediation programs. This made it more and more difficult for environmental science and environmental activism to speak in a unified voice (even if 'the opponent' – pro-growth

¹¹³ Many critics would no doubt feel this characterization is too generous. Paul and Anne Ehrlich, for example, see pro-growth industry-friendly science not as a *use* of science but rather a "*betrayal* of science" (Ehrlich & Ehrlich, 1996, book title). Whether or not there is *a* science that can be "betrayed" would, of course, be an entirely separate issue to tackle.

industry – did not suffer from this same problematic lack of unity), as different specialties/disciplines competed for both scarce government funding dollars and public support (in the form of monetary contributions and activism). Stated another way, as an increasingly professionalized and specialized environmentalism splintered, a more unified opposition – armed with the very same tools, and much deeper pockets – effectively obviated much of the political change environmentalists desired.

This historical narrative of the development of contemporary environmental science and activism helps explain three important components of the Bitterroot debates, each of which is given representation in the quotes above as well as the excerpts from the "Scientific Committee" section of the AWR handbook. The first is the persistence of the rigid science/politics divide and a resultant reproduction of dominant roles for science and politics (with politics as *everything-else*) in the CB model. The second is an ambivalence toward this very reproduction of the dominant model. Finally, we can see and understand the sources of the disdain toward the CMC alternative and a general unwillingness to view "compromise" as an acceptable path.

Initially, Fischer's historical explanation as summarized above points to a genealogy of environmentalism that connotes two divergent, but (significantly) not mutually exclusive, paths which different environmental movements have taken. The first is a move away from technocratic explanations and programs of action toward (or *back* toward) more openly progressive, citizen-activist, *grassroots* environmentalism. The classic example of a laudable and at times quite successful contemporary progressive grassroots environmentalism is the environmental justice movement (e.g., Bullard, 1990, 1994; Di Chiro, 1995; Dowie, 1995; Fischer, 2000; Gottlieb, 1993; Schlosberg, 1997; Smith, 1998; Williams, 1999). The environmental justice movement is "loosely organized into local, regional and national coalitions ... coalesced around a shared argument: environmental burdens (e.g. proximity to hazardous sites) tend to be inequitably borne by poor Americans in general, and by Americans of color in particular" (Williams, 1999, p. 57, 50). The role of science is central in the environmental justice movement justice movement is programmatic application contrasts radically to more technocratic environmentalism:

One of the most innovative features of the environmental justice movement's efforts to empower citizens and thus revivify democracy has been to help local citizens understand their own needs and interests. In the case of toxic wastes, this effort has almost always involved confronting and coming to terms with scientific information about risk and exposure. Rather than merely accepting information provided by scientists and experts ... the movement assists communities in a variety of ways to collect and interpret their own information ... It involves a method and practice of participatory research that goes considerable distance toward democratizing the otherwise hierarchical relationship between scientists and the communities they attempt to assist (Fischer, 2000, p. 121).¹¹⁴

The other path is environmentalism that sticks more to the second-phase technocratic-expert model, digging in its heels beneath the authority of scientific argumentation. For both models of environmentalism, "the main job of the movement, as with any movement, is to organize people to get involved" (Fischer, 2000, p. 110). A sharp contrast between the two, however, is found in the role of the citizen-advocate within the movement. The environmental justice movement seeks to develop a base of "lay expertise" (p. 121) from which nonprofessional citizen-advocates can articulate the complexities of the situation and effectively *lead* campaigns. Promoting and courting lay expertise is not exclusive to the environmental justice movement, of course. Andrew Light sees community-based ecological restoration projects as one vehicle for "restoring ecological citizenship":

A direct participatory relationship between local human communities and the nature they inhabit or are adjacent to is at least a necessary condition for encouraging people to protect natural systems and landscapes (Light, 2002, p. 157).

The technocratic converse of these participatory models is one where citizenactivists serve as mere mouthpieces for professionalized organizations, giving a public face to a company line. Now it would be extremely unfair to characterize the entire

¹¹⁴ I am not holding up environmental justice *per se* as the exemplar that all environmentalism need strive toward, as some authors do explicitly (Pepper, 1993; Smith, 1998). This would be unfair to (for one) the conservation biology movement, as it would conceal the real differences between the problematics faced by each movement's practitioners. There is a world of difference, for example, in helping people fight toxic waste dumping in their communities (a textbook environmental justice campaign) and convincing people in a rural timber-dependent community that grizzly bear habitat protection should take precedence over timber production on neighboring national forests. This is not to say that the conservation biology movement, but rather to say that holding the former up as a political model for the latter would be, well, to ignore context.

conservation biology movement¹¹⁵ so harshly. There is considerable literature promoting the benefits of local, lay ecological knowledge for conservation (e.g., Fairhead & Scoones, 2005; Goldman, 2003; Harrison et al., 1998; Myers, 2002; Scholz et al., 2004; St. Martin, 2001). Even *Wild Earth* ran a special issue championing "citizen science" (*Wild Earth*, 2001), and many if not most lay advocates of conservation biology are no doubt fairly well versed in ecology. But when assessing the CB alternative, it is difficult to judge it as anything other than an example of the crudest form of *non*-participatory, technocratic expert management. This is most explicitly represented by the makeup of the Scientific Committee – an exclusive domain of credentialed scientific experts.

Frank Fischer raises another relevant point, noting the problematic assumption that the rise of ENGOs qua "public interest groups" represents real change in institutional practice or culture from previous models: "Although interest groups represent citizens … they are themselves hierarchical organizations frequently quite removed from the citizens for whom they speak" (Fischer, 2000, p. 113). Within the conservation biology movement in the Rocky Mountain Northwest, hierarchy is the norm. There is a wellcrafted intra-movement hierarchy among the internally hierarchical professional interest groups. Science, not surprisingly, remains atop the hierarchy. The following is one example from the region that I would argue is representative.

Predator Conservation Alliance, based in Bozeman Montana and dedicated (as the name would suggest) to the conservation of the region's predators, does not produce science itself, but rather serves as a "clearinghouse" for the organization and dissemination of scientific findings to the regional community. Additionally, they craft and propose programmatic solutions to the problems of predator conservation.¹¹⁶ The science comes from a combination of research-oriented nongovernmental organizations

¹¹⁵ The term "conservation biology movement" is courtesy of Dave Gaillard, Project Coordinator for Predator Conservation Alliance in Bozeman. During my interview, he used this term casually on multiple occasions to reference the broader movement of which his organization was a part.

¹¹⁶ And in the interest of fairness to these very sincere and valuable organizations, every program they advocate is not a grand-scale utopian regional or continental rewilding. Predator Conservation Alliance and American Wildlands are working diligently, for example, toward a solution to the problem of wildlife roadkill along the Bozeman Pass stretch of Interstate 90. They are working with private landowners, State and Federal agents, transportation planners, and the like to figure out what combination of re-fencing, speed limit reduction, overpass/underpass construction, et cetera might be achievable and facilitate wildlife movement less dangerous to wildlife. Bozeman Pass lies along a key northward dispersal corridor for Yellowstone wolves.

such as American Wildlands (also headquartered in Bozeman, MT) and the Ecology Center (headquartered in Missoula)¹¹⁷ and scientific conservation biology (Gaillard interview). This scientific-activism network structure allows for the science/politics divide to persist in its fully reified-divided form.¹¹⁸

This division of labor is profoundly represented in the AWR handbook promoting the CB alternative. Along with the scientific justification for the proposal (justified via peer-reviewed conservation biology as well as regional gray literature, all formally cited), the AWR handbook presents an economic case for the CB alternative as well. The ecological restoration "jobs creating proposal" (Garrity, 1996, p. 19) and its economic justification were cited in the handbook (emphasis on the citation itself here) as in the following example: "In terms of net cost, more jobs can be created in wildland restoration at far less cost to the treasury than below-cost logging operations within roadless areas (Garrity 1995)" (Bader & Bechtold, 1996, p. 8). What is the "Garrity, 1995" (*sic*)¹¹⁹ piece that this economic validation is based upon? It is the Appendix to the very handbook in which it is cited, authored by "Michael Garrity, Research Fellow, Economics Department, University of Utah." Even as the cover of the pamphlet makes it appear as a single report – titled "The Conservation Biology Alternative for Grizzly Bear Population Restoration in the Greater Salmon-Selway Region Central Idaho and Western Montana" – on the inside cover we find that it is actually two reports, and are instructed:

These reports may be cited as follows:

Bader, M. and Bechtold. 1996. The Conservation Biology Alternative for Grizzly Bear Population Restoration in the Greater Salmon-Selway Region Central Idaho and Western Montana: Alliance for the Wild Rockies Special Report No. 8. Missoula, MT. 32 pp.

Garrity, M. Economic Analysis of the Conservation Biology Proposal for Grizzly Bear Restoration in the Salmon-Selway Region. <u>In</u>: Bader, M. and Bechtold. 1996. The Conservation Biology Alternative for Grizzly Bear

¹¹⁷ These regional scientific research groups publish most of their findings in the so-called gray literature, non-peer-reviewed outlets such as 'scientific working papers'.

¹¹⁸ Lest I be accused of distorting this feature of the regional environmentalist community, I will note that the division is not strict and that the scientific groups do not hide their advocacy positions. I do believe, though, that it is a prominent enough component of the movement to warrant it as evidence in support of my more general argument – that the movement contains and upholds traditional lay/science, advocacy/objective, and citizen/expert dichotomies, all which work toward the reification and *ultimate authority* of the products of the right halves of these dichotomies.

¹¹⁹ I use the "*sic*" qualifier here because the publication date is 1995 in some places in the handbook and 1996 in others.

Population Restoration in the Greater Salmon-Selway Region Central Idaho and Western Montana: Alliance for the Wild Rockies Special Report No. 8. Missoula, MT. 32 pp.

This is a curious, if not unique, structure for a formal document. Nowhere else have I ever seen a paper reference its own appendix as if the appendix was a wholly independent document. As far as I can tell, Garrity's economic analysis appears only as Appendix A in this handbook. The only reason I can see for granting the Garrity analysis an air of quasi-independence is to make it appear as an independent, scientific, objective piece of research bolstering the *separate* conservation-advocacy program set forth in the first half of the handbook.

This is representative of the hierarchy (between as well as within organizations) within the regional conservation biology movement in the region: science supporting politics – separate realms, each with its own epistemology (objective/social), methodology (scientific method/advocacy), and division of labor (professional scientists/professional activists). This division of labor *does work* for the movement: It allows the science to remain unsullied from the taint of politics; this helps maintain science's status atop the movement hierarchy. This division of labor also reestablishes and reinforces the science/politics divide, enabling and making intelligible the rhetorical admonitions of "politicized science" as represented in the above comments from the Draft EIS public testimonies.

Judging from the formal letters written by regional ENGOs to the FWS in support of the CB alternative, both scientific and lay groups were equally enthusiastic in their endorsement of the Scientific Committee and their condemning of the idea of citizen management. The Craighead Wildlife-Wildlands Institute (CWWI), headquartered in Missoula, based their support of the CB alternative "on our opposition on philosophical and scientific grounds to management by a local citizen committee" (USFWS, 2000a, p. 5-129) (they never, it should be noted, defended the "philosophical" component of their objection). Apparently, the work of grizzly bear management was completely beyond the grasp of the non-scientist: "a lay committee cannot identify and keep pace with the best available science nor is such a committee likely to identify the need to *develop* the best 'available' science" (p. 5-12, emphasis in original). On the former point, critics would argue that empirical evidence refutes this claim. Fischer, drawing on case studies from

citizen groups involved in nuclear power and toxins epidemiology campaigns, argues that "there is no reason to believe that citizens are incapable of mastering the necessary science, at least if they are willing to devote sufficient time and energy to it" (Fischer, 2000, p. 149). On the latter point, it could be argued even as a citizen management committee might not *develop* new "best available science," its presence would by no means slow the wheels of conservation science. Consigning the role of non-scientists to pre-implementation-activists, the letter states that "We have no objection to encouraging citizen involvement in endangered species recovery programs ... Some of the ESA's most notable successes (e.g., the peregrine falcon) owe much to the efforts of the civilian proponents of recovery" (USFWS, 2000a, p. 5-129, emphasis in original). Noting the very intentional emphasis in this passage, it is clear that the role for the public is to be a proponent (or more harshly, 'mouthpiece') for the experts. I am quite confident that if asked "are you an environmentalist or do you work for a living?" (White, 1995), staff scientists at CWWI would reply "both, of course." Yet apparently missing the irony of their own assertions, or feeling immune to the charge of hypocrisy, these professional bear biologists believed that "citizen participation in recovery (whether advisory or otherwise) ... should not include those with direct economic interest in these lands" (USFWS, 2000a, p. 5-129, emphasis added).

Friends of the Bitterroot, a local conservation activist organization headquartered in Hamilton, Montana, no less enthusiastically drew a science/citizen line in the sand: "Reestablishment of a viable grizzly bear population can occur within this habitat preservation program subject to scientifically-based information from a committee of scientists" (USFWS, 2000a, p. 5-124). On the role for local citizens: "Local input, yes; local control, no" (p. 5.125). The line is drawn at the devolution of authority. The letter even admits that this is as much an objection on grounds of precedent as it is specifically an objection to the Bitterroot CMC. The centralized *model* itself must be kept in place.

To intervene with one slight digression from my immediate thread, I think that these letters uphold what may have sounded like a rather harsh accusation of the "doublyuncritical" nature of the CB movement (as above, this chapter). The professional scientists advocating the CB alternative were undeniably "professional and managerial elites" who, if employing a reflexive, self-critical attitude toward the elitism inherent in their knowledge production, would have acknowledged and accounted for their "segregation ... from the majority of the population" (Bromley, 1999, p. 11, in Reid & Taylor, 2003, p. 84). Elites operate within "spaces of flows," wired (in this case) into institutional methods and networks of knowledge validation while the majority of regional residents are "confined to the space of places," arguing (very subjectively), for example, that they should have a stronger voice in Federal lands management decisions. Following this line of argumentation, I would argue that it is radically *uncritical* to exploit this elite positionality to argue for exclusive (rhetorical *and* practical) authority on the subject.

Here Foucault's (1980) notion of "power/knowledge" is quite helpful. The crux of the construct is that "the exercise of power perpetually creates knowledge and, conversely, knowledge induces effects of power" (Foucault, 1980, p. 52, in Forsyth, 2003, p. 104).¹²⁰ Practicing a "critical" politics means (among other things) being aware of and accounting for privilege arising from the inescapable imbrication of power and knowledge. The converse – exploiting the power/knowledge nexus – represents resolutely uncritical practice. But consistent with the general thrust of this chapter, there is a detectable countercurrent to the uncritical embrace of power/knowledge in these debates. Science (employing Bromley above¹²¹) maintains its power/knowledge privilege by "segregating" its knowledge from subjective, place-based reasoning; this is the source of the exclusionary claims of CB supporters. Yet, all the while championing the *need* for a solely-scientific management structure, countless CB supporters echoed their opponents by establishing their credibility to speak on the subject via claims of place-based knowledge and experience. As one testimonial at the Missoula Draft EIS hearing put it,

¹²⁰ In light of the more general case made in chapters two and three against the appropriateness of Foucault for an environmental pragmatist framework, I should probably insert a quick defense of this selective and fleeting appropriation of Foucault. I find a sharp difference between deployments of Foucault's constructs of power/knowledge and governmentality (with Tim Luke's (1997; 19999a; 1999b; 2001; 2002) works as exemplars) and deployments of Foucault that argue for a radically anti-naturalistic and "fervent[ly] anti-utopian" (West, 1989, p. 236) analytical and practical politics (e.g., Braun & Wainwright, 2001; Darier, 1999a, 1999b; Haraway, 1997; Levy, 1999; Quigley, 1999). While the former could be consistent with an environmental pragmatist framework (even if I have employed it quite sparingly), I find the latter analytically disabling and politically "nihilistic" (West, 2004).

¹²¹ And Bromley here is drawing on Manuel Castell's book *The Information Age*. I thank Herb Reid for pointing me to this reference, first through personal communication and, later, courtesy of his essay (co-authored with Betsy Taylor) "John Dewey's Aesthetic Ecology of Public Intelligence and the Grounding of Civic Environmentalism" (Reid & Taylor, 2003).

"my family has lived in Montana for four generations. Having established *that questionable bit of credibility...*" (USFWS, 1997e, p. 64) (and then she went on to argue for the CB alternative). "Questionable" indeed, because *if* local experience *counts* (no matter how and to what degree), then the argument for exclusive scientific authority is (in some manner and to some degree) compromised. And so here we find another source of tension and ambivalence within the conservation biology movement. Tim Luke economically sums up this tension:

The action of expert elites inside of formal organizations ... remakes ... contradictions by presuming the inaction of lay populations outside of these complex organizations. The elites' presumptions about mass acquiescence before their scientific and managerial authority, however, have never held entirely true (Luke, 2002, p. 304).

I will return to the issue of science "smothering" (Keulartz, 1999, p. 96) place in the conclusion, but for now I will terminate this digression and return to the discussion of hierarchy in the conservation biology movement.

The CB alternative was not, then, the replacement of a hierarchical model with a non-hierarchical model, but rather the replacement of an undesirable hierarchical model (politics over science, the Citizen Management Committee) with another (science over politics, the Scientific Committee¹²²). Science and politics are represented (through the CB alternative and its supporting constituency) in both the Citizen Management and Scientific Committee models as separate, discrete entities. The sole role of the lay public in the CB proposal – *once implemented* – is the opportunity for public comment on the Interior Secretary's committee nominations. Apparently, this authoritarian management structure made few CB proponents uneasy; at least, few felt compelled to vocally critique it, much less object to it.¹²³ The doctrine of "science knows best" seems to define the culture of the conservation biology movement. The activists, I do not think it would be

¹²² Notice as well the absence of the word "management" in the "Scientific Committee."

¹²³ As per individuals representing themselves, literally one testimonial supported the CB alternative but critiqued the management structure, advocating instead a CB-style reintroduction (with full ESA protection and with the experimental status) but with a CMC in charge of management. Elected officials and environmental organizations were in a similar near-consensus regarding unqualified support. Only the Missoula Board of County Commissioners supported the CB alternative but pressed for modifications, and similar to the commenter referenced prior, they were significant modifications, such as CMC management and the removal of the roadless are road-building and logging prohibition. Judging from the adamant opposition to the CMC (as shown in this chapter), and the repeated incantations of roadless area habitat protection found in the CB promotion literature and recited in the public comments, I strongly believe that these concessions would have been judged unacceptable by the majority of CB supporters.

unfair to say, toed the company line very effectively. The conservation biology movement, in this case at least, spoke in a surprisingly singular voice.

6.5. The Uncritical Embrace of Scientific Authority: Three Explanatory Takes

In this section I will attempt a degree of explanation for both the existence of and the uncritical stance toward the hierarchical model. There is no doubt some continuation of the historical lineage of Fischer's second-phase scientific-technocratic environmental management to the contemporary conservation biology movement in the Rocky Mountain Northwest – especially in light of the under-social-theorized nature of many of the assumptions of conservation biology, as discussed in this chapter and in Chapter 4. But the conservation biology movement is not, of course, a mere relic of 1970s technocratic management (and mouthpiece activism). There has been a development of this movement through time, and more specifically of this movement in this region, that has somehow enabled the persistence of a culture wherein what is considered by many to be a rather outmoded method of politics could be so uncritically embraced (e.g., it seems reasonable to deduce that the Scientific Management stands as the ideal model for participation/management within this movement). In this section, I will make three 'cuts' at explaining the existence and persistence of this institutional culture.

My first avenue of explanation considers the question of how this model could be so widely and uncritically embraced by so many. Part of the appeal of the CB alternative – its apparent intelligibility as well as its 'obvious' superiority to the CMC alternative – was that it spoke in only one language, one "genre" – scientific conservation biology. As I have argued throughout, framing the issue of grizzly bear conservation as primarily a scientific problem obscures the fact that it is 'really' a much more complex social issue. As Keulartz argues,

In both environmental philosophy and nature policy, a social dispute is constantly in danger of being smothered by scientific argumentation, with the result that all considerations not based on ecology are systematically brushed aside. But argumentation is repressed as well, since [environmental advocates] base themselves one-sidedly on the image of nature emanating from ... ecology (Keulartz, 1999, p. 95).

Speaking in the (seemingly consistent) language of scientific ecology, the argumentation can be rather easily judged favorably because it follows one set of (interpretivemethodological) rules. Trans-generic rhetoric, such as that of the CMC alternative, is not so easily or fairly judged due to the absence of trans-generic rules or a language that would make a judgment clear. As long as the problem could be continually reframed in scientific terms, the result would fall out in favor of the CB alternative.

My other two routes of explanation appeal more directly to the previouslymentioned trends of specialization and professionalization within environmentalism. Timothy Luke writes about the relatively recent proliferation of university environmental studies undergraduate and graduate degree programs, and the incredible growth industry of professional environmental management. While he is careful to qualify his generalizations with the note that his sample of programs was necessarily arbitrary and that his generalizations cannot account for the presence of renegade, stealthily subversive professors and courses, Luke finds environmental studies programs remarkably bereft of reflexivity and lacking a self-critical culture. Moreover, he finds "the environment" is consistently theorized in thoroughly reductionist and mechanistic yet highly complex terms: "[these programs consistently] reframe 'the environment' as a highly complex domain far beyond the full comprehension of ordinary citizens or traditional naturalists" (Luke, 1999a, p. 105). Luke appears to have located a possible institutional source of the "interpretive hubris" (Taylor, 2000, p. 275) I discussed in Chapter 4. If Luke is correct (and I think he is) then the culture of hubris and the "technoscientific discourses" (Luke, 1999a, p. 104) that dominate university environmental studies curricula would certainly find their way into an increasingly professionalized environmental movement. The result would not, it is fair to say, clash with the Scientific Committee management model espoused in the CB alternative.¹²⁴

My third and final stab at explanation centers on the widely-held environmentalist disdain toward compromise. The Citizen Committee and the experimental nonessential status together were perceived by CB supporters as unacceptable compromises for Bitterroot grizzly reintroduction. Environmentalists have strong and well-founded reasons to be skeptical of purportedly middle-ground paths that smack of compromise.

¹²⁴ Where and to what degree this is occurring is, of course, an immediately unanswerable empirical question (really requiring an in-depth ethnographic analysis of environmental studies programs and their graduates in environmental NGOs). But after my own small dose of university coursework in environmental studies, I can personally attest to the existence of a very self-assured, unreflexive student culture.

Probably the most famous case comes from the early 1960s, very early in American establishment environmentalism, when David Brower (the "arch-druid" of American environmentalism (McPhee, 1971)), then executive director of the Sierra Club, brokered a deal with the Bureau of Reclamation. Brower agreed to "trade" the damming of Glen Canyon on the Colorado River for the cancellation of two planned dams in Dinosaur National Monument (Dowie, 1995). Before the Glen Canyon dam was built, he floated through it and was awestruck by its magnificence (he had never visited Glen Canyon prior to the compromise). He later said that he instantly regretted his decision to compromise away such a natural wonder and – in what has since become a legendary admonition – urged environmentalists to eschew compromise. With the rise of professionalized environmentalism in the 1980s, some groups held fast to Brower's plea while others found it idealistic and impractical.

For the mainstream national ENGOs, compromise is (literally) the way their business works. Unapologetic regarding compromise, Jay Dee Hair of the National Wildlife Federation once stated "We're not selling out, we're buying in" (Dowie, 1995, p. 75). What were they buying into? A place at the Federal table in Washington, DC. During the 1980s six of the ten largest US environmental organizations had moved their headquarters to DC and their memberships and budgets swelled, as they hired professionally trained financial specialists, marketers, and advertisers. The Wilderness Society, the Sierra Club, and the National Wildlife Federation, for example, all saw their budgets grow tenfold or more during the decade (Dowie, 1995). Lobbying – for policy and issue-resolution compromise – became the model. As Jeffrey St. Clair, "the maverick editor of *Wild Forest Review*" (Schlosberg, 1997, p. 273), railed:

Somewhere along the line the environmental movement disconnected with the people. Rejected its political roots, pulled the plug on its vibrant tradition. It packed its bags, its starched its shirts and jetted to DC where it became what it once despised: a risk-averse, depersonalized, overly analytical, humorless, access-driven, intolerant, statistical, centralized, technocratic, deal-making, passionless, sterilized, direct-mailing, jockstrapped, lawyer-laden monolith to mediocrity (St. Clair, 1995, in Schlosberg, 1997, p. 275-5).

This institutional transition has opened up a wide rift between a new "corporate environmentalism" (St. Clair, 1995, paper title) on one 'side' and local and regional groups on the other (with the latter perceiving their power as intentionally and

increasingly marginalized by the former (Dowie, 1995)). CB supporters didn't have to look far, or far back in time, to see evidence they might be wise to greet the CMC coalition with skepticism. The National Wildlife Federation, with attorney Tom France as its spokesman, helped broker the "Option 9" compromise plan in the Pacific Northwest spotted owl controversy – a compromise perceived nearly unanimously as unacceptable to Northwest forest protection activists (Proctor, 1995; St. Clair, 2004). This was the same Tom France who would just a few years later be touting the CMC alternative for Bitterroot grizzly bear recovery as "the radical center." Like Option 9, the CMC alternative was a compromise deal brokered between national environmental NGOs and the timber industry. For many CB supporters, this was evidence enough that the CMC was yet another deal with the devil. Montanans and Idahoans, to be sure, have good reason to be wary of compromise plans that have loopholes big enough to drive a logging truck through.¹²⁵ For most environmentalists in the region, it seems, there was no real choice to deliberate. Armed with 20/20 hindsight, however, lamenting the ultimate derailment of the recovery efforts, I will argue in the following chapter that the CMC alternative may have deserved a second look.

6.6. Conclusion: the Paradox of Saving Wild Nature

In conclusion, I want to (re)focus on two features of the conservation biology movement and the CB alternative: paradox and ambivalence. It might be tempting, as some seem content to do (e.g., Kovel, 2002; Smith, 1998), to write off the efforts of the conservation biology movement as holding irresolvable *contradictions* and therefore representing an indefensible "ideology of nature" (Smith, 1998) in both theory and practice. But, in a feat of understatement, I would argue that this would, for starters, ignore the key role this movement plays within the broader environmental movement as well as ignore its commendable successes. It has been local and regional groups, after all,

¹²⁵ The oft-voiced mistrust toward the intentions of the timber industry is also understandable. For example, timber battles in the Northwest supplied much of the proving grounds for the early Wise Use movement (Brick, 1995). In the cases of the CMC coalition, then, corporate timber's about-face from unapologetic 'anti-environmentalism' to a new spirit of collaborative conservation was understandably viewed with suspicion. (But it should be noted that although the conflation of corporate timber/Wise Use/anti-environmentalism is probably fair, a similar conflation of anti-environmentalism with timber workers, their families, their communities, et cetera certainly obscures more than it reveals, including the possibility that anti-environmentalism is/was a shallow, opportunistic, and *alterable* political identity (Brick & Weber, 2001). "Anti-environmentalism" is no more consistent and no less riddled with ambivalence than the environmental ideologies critiqued in this chapter.)

that have been the most active and (often) successful in holding Federal land management agencies accountable for unsustainable timber cutting that is in violation of Federal law; the "mainstream nationals" are conspicuous by their silence in challenging Federal forest policy and practice (Dowie, 1995; St. Clair, 2004). Noting empirically the contradictions within the movement (as I did in this chapter and Chapter 4), seeing them in a broader view as manifestations of "paradox" can help explain them as well as understand their productive role.

A paradox, quoting James Proctor, "is a contradiction that is none the less true, i.e., a contradiction whose truth resides in the paradox and is not revealed by resolving it in some way" (Proctor, 2001, p. 235). Perhaps the fundamental paradox in nature politics in the West is the ideal (and the 'reality', as legislative mandate) for "multiple use" of our public lands. Just as bears and logging roads may not be compatible,¹²⁶ environmentalists and loggers will remain, to some degree, necessarily at odds. Each group espouses conflicting, but often "irreducibly" legitimate, claims to right and good (Parker, 1996, p. 32). This tension would be impossible to resolve without one group completely doing away with the other (without, for example, a radical rewriting of Federal lands management legislation that exclusively favors either conservation or extractive production over the other¹²⁷). The CB alternative can be viewed as both manifesting paradox (a grassroots environmentalism promoting authoritarian management) and as an outcome of paradox (protecting an idealized wild nature that wears radiocollars).

As Keulartz found in the Dutch eco-restoration movement, I find a striking ambivalence exhibited throughout the conservation biology literature, as well as its products in the promotional materials and the public testimonies. Many of the sources of this ambivalence have already been noted, for example, the wary embrace of technology as a "less than perfect means" to an idealized ends. There is also an ambivalence that arises as prominent groups like The Wildlands Project and Alliance for the Wild Rockies are unable to point to many successes that match the scale of their ambitions.¹²⁸ Perhaps

¹²⁶ Though the degree of this incompatibility is widely disputed.

¹²⁷ Which each side has, of course, tried unsuccessfully to do.

¹²⁸ The Wildlands Project, for example, has recently announced that the cancellation of *Wild Earth* due to lack of funding (publication of the journal is said to recommence when funding allows). The Spring 2003 issue included a list of accomplishments from the 2002 year. Without wanting to denigrate their accomplishments, the list is not very impressive. For example, they listed three bulleted "highlights" of

this is partly a result of their model, which (scientifically) mandates grand scale programmatic goals (e.g., The Wildlands Project's "continental conservation" (Soulé & Noss, 1998; Soulé & Terborgh, 1999b)) but also eschews the "beltway" compromises that might be necessary to effect them. The purist goals and sense of unjust disempowerment can even help to reinforce each other. TWP and AWR, "partly because they never exercised [any] real authority, maintained their greatest revolutionary purity" (Douglas, 1992, p. xiii).¹²⁹

One additional source of ambivalence and tension is worth noting. CB advocates were rarely comfortable referring to the Citizen Management alternative by name, often lobbing at the CMC subtly disparaging monikers such as "the ROOTS proposal" (highlighting only one of the four main partners in the "coalition," the forestry industry group Resource Organization on Timber Supply) or the oft-voiced "*so-called* Citizen Management proposal." By disavowing that "real citizens" would comprise the panel, they attempted to affix a singularly corporate stamp (moreover, a corporate timber stamp) onto the CMC. Whether the target was 'really' citizens or corporations, it is undeniable that the CB alternative attempted to "exclude … certain groups from nature policy" (Keulartz, 1999, p. 91). Many CB supporters could never, it seems, escape the ambivalence of their profoundly non-participatory "exclusion position" (Proctor, 2001, p. 234) knowing all the while the complexities of the issue at hand.¹³⁰

Considering paradox, however, stopping at the accusation of exclusion might obscure one considerable prospect. If the CB alternative represented an "exclusion position" – one 'side' of the paradox of managing a disappearing nature – then perhaps it could be given as much credit for producing the CMC alternative as blame for the CMC's eventual failure. After all, by "refusing to reduce itself to a weakened version and at

their "Rewild the Rockies" project: (1) "helped convince wildlife agencies in Idaho, Montana, Wyoming, Colorado, and New Mexico to ask the Secretary of the Interior to make significant changes to the current delisting process for wolves..."; (2) "conducted a two day workshop to review our New Mexico Highlands conservation plan"; and (3) "collected signature of more than 50 top scientists" to convince the Bush administration not to delist the gray wolf (Wildlands Project, 2002, p. 6). It is not difficult to imagine why it is hard to keep money flowing in when those are the types of keystone successes foregrounded in an annual review.

¹²⁹ I borrow this quote because it says this so clearly and succinctly, noting though that it was put forward in an profoundly different context, that of French Fascism in the 1920s!

¹³⁰ Though not all CB supporters shared in this ambivalence. The folks at the Craighead Wildlife-Wildlands Institute, for example, exhibited a rather unapologetic stance in defense of unchecked scientific management.

worst a mere shadow of [its] core argument" (Proctor, 2001, p. 235), the CB alternative represented one "extreme" (in a non-disparaging sense) from which a position "nearer the middle, the compromise position," is crafted (p. 235). The CMC alternative can be seen, then, as *this* 'real world' policy reconciliation¹³¹ of the grizzly bear/logging paradox.¹³² Does the CB alternative, then, deserve blame for helping grind the grizzly bear recovery process to a halt, or credit for helping define the grounds for the program that almost came to pass? This, I suppose, is an unanswerable empirical question, another paradox that will fuel future environmental debate.

Regarding the role of 'critical' analysis, critiques can help point toward stumbling blocks within the movement, all the while recognizing that the larger inherent paradox of environmental protection can never be wholly resolved. If my critiques are construed as highlighting actual weaknesses in the movement (my intent) – as resolvable inconsistencies and/or practical impediments – then bringing them to light might (hopefully) productively assist in the positive development of the movement. On that note, I turn to my concluding chapter, my last "critical" offering to the conservation biology movement. In the concluding chapter I offer a critical, if generous, reading of the CMC alternative, in the belief that we can learn even more from considering what could have been.

¹³¹ To explain the emphasis, "*this* reconciliation" as opposed to *the* reconciliation. That would imply a *resolution* of the paradox, an oxy-moron that would destroy the theoretical purchase of the concept.

¹³² Conservation biologists can not, as Neil Smith reminds us, provide us with the goods and services that make society possible. They simply do not produce *that* nature. Capitalist logging, on the other hand, as many equally-Marxist theorists would have it, is not sustainable (e.g., FitzSimmons et al., 1994; O'Connor, 1994; Salleh, 1994). Short of a truly *eco*-socialism, I suppose the best we can hope for is a productive bears/logging or (more broadly) conservation/development tension that manages to do "justice" to both sides. To terminate this footnote, I will add the understatement that environmentalists truly are marginalized in our contemporary political economy; that is, the bears/logging tension should not be seen as one played out on the mythical level playing field.

Chapter 7. Conclusion: Revisiting the 'Radical Center': a Generous Reading of the Potential of Citizen Management

7.1. Introduction: Lamenting Failure with the Aid of Hindsight

I have say that we (Predator Conservation Alliance) were very disappointed that the reintroduction did not proceed, because for grizzly bears to colonize the Bitterroots on their own seems like a real long shot. Because they're a slow reproducing species, they don't have a natural recolonizing behavior like wolves do... And we're just concerned that the trends are going away from connectivity instead of toward it so the more time we waste in waiting for them to get there the worse the situation looks in terms of ability for them to do that (Gaillard interview).

Thus lamented Dave Gaillard of Predator Conservation Alliance, former Conservation Biology alternative stalwart, after being asked how he felt about Gale Norton's "reevaluation" of the Record of Decision on Bitterroot grizzly bear recovery – the action that effectively halted the reintroduction efforts (US EPA, 2001). The bottom line, for Gaillard, was pretty clear. Reintroduction – even with the CMC alternative – would be a world more desirable than the current situation. This sentiment was echoed by all but one of my interview subjects representing seven environmental organizations in the region. The sentiment was also expressed by the general public, judging from comments made during the 60 day public comment period following the Secretary's action.¹³³ 97.9% of all respondents opposed Norton's reversal. Counting only original letters written by individuals,¹³⁴ that is, even disregarding the email and post-card form letters solicited by Defenders of Wildlife, the National Wildlife Federation, and other environmental organizations, a full 82% were still opposed to the decision (USFWS, 2001, p. xiv).

Now it cannot be assumed that opponents of the reversal (especially those who wrote original letters) represented the same 70%-pro-CB/30%-pro-CMC split from the Draft EIS comment period. It would also be false to read every objection as *explicit* support for the CMC alternative.¹³⁵ But it is quite fair to state that the overwhelming

¹³³ Courtesy of NEPA, this was still part of the EIS process.

¹³⁴ Identical letters written by as few as 8 people still counted as form letters.

¹³⁵ Many respondents (i.e., unwavering CB supporters), in fact, seemed to want to have it both ways – they objected to the reversal of CMC alternative implementation, but on the grounds that the FWS should

majority of environmentalists, including many former CB alternative supporters, felt personally disappointed and (as environmentalists) betrayed by the administration's decision. So this in itself, I believe, warrants a close, but perhaps generous reading, of the potential of the CMC proposal, acknowledging the fact that it was this proposal that $almost^{136}$ resulted in the reintroduction of grizzlies to the Bitterroot – a situation much preferable to where we find ourselves today. Further, a critical-yet-generous reading might go some ways toward the environmental pragmatist goal of contributing to the development of environmental policy and politics. Even Louisa Wilcox – the only CB supporter I interviewed who did not flatly declare that she would have preferred CMC implementation to the reversal – acknowledged that things would have to be done differently next time, that the near-success of the CMC proposal changed the terms on which future efforts should proceed (Wilcox interview¹³⁷). After stating that CB alternative advocates could have benefited from doing a better job in community-scale organizing and education, specifically going out into the Idaho communities who felt marginalized by the process, Wilcox added "I really do think you have to unravel this enough to recreate it in a more grassroots kind of way" (Wilcox interview). Hopefully, this analysis of the CMC alternative (and the dissertation more broadly) can aid in that process.

7.2. Reintroduction in Idaho, or, It Isn't Just the Bitterroot Ecosystem

As mentioned in the previous chapter, the CB alternative touted itself as a "jobs creating proposal" (Garrity, 1996, p. 19). As such, and especially in light of the fact that the CMC alternative was designed expressly to quell economic concerns, I think it is fair to comparatively assess the economic components of each proposal. Any essay from the "new west"/regional-transformation literature, whether a triumphant or critical assessment, will highlight the problem of job losses within rural counties as extractive industry employment declines (see any of the "new west" references in section 4 below).

instead switch to the CB alternative. This is the equivalent of objecting to a proposed impeachment of a president on the grounds that the candidate who originally lost the election should be instated.

¹³⁶ I think it is fair to assume, for example, that if Al Gore had become President, the Record of Decision would have been upheld and reintroduction would have proceeded apace.

¹³⁷ Louisa Wilcox is Wild Bears Project Director for the Natural Resources Defense Council. She works in NRDC's Livingston, Montana office. She is a 25 year veteran of conservation in the region and longtime grizzly bear conservation activist (Rocky Mountain College, 2005).

And only the most unapologetically boosterist reading will also highlight the wage discrepancies between the higher paying but increasingly scarce extractive industry jobs and lower-paying unskilled 'replacement' jobs in the service sector – discrepancies as great as sixty percent in some counties (Snow, 1997).¹³⁸ As such it is understandable and commendable that both the CMC and CB alternative included economic components intended to help mitigate the hardships felt by many locals in the region.

Admirable in intent, the "jobs-creating" component of the CB alternative directly buffers extractive industry workers' economic hardship:

Local residents would be hired to carry out restoration work, directly investing them in grizzly bear restoration. In total, more than 1,501¹³⁹ new jobs would be associated with the restoration work ... Moreover, these jobs are largely compensatory for jobs that are foregone as a result of not building roads and logging roadless areas within the population recovery zone. The same heavy equipment operators who are used to build roads can also be hired to take roads out (Bader & Bechtold, 1996, p. 8).

While I will have multiple points to make regarding the CB alternative's "compensatory" employment component, the issue I will address now is the question of *where* these jobs would be located.

¹³⁸ Many are quick to point out that statistics like those cited in (Snow, 1997) – where dwindling mining jobs in Butte average around \$50,000 while increasing jobs within the hospitality sector average only around \$20,000 – mask the fact that the average wages in most rural western counties, even within just the service sector, do not fall below, or at least significantly below, average wages for extractive industry workers. Fair enough. There has been an incredible regional job growth in, for example, real estate, engineering, environmental consulting, financial advising, and various professions that are amenable to telecommuting, and this job growth has offset the job losses in extractive industries – more than offset it in many places. But few un- or underemployed loggers or miners are qualified (or necessarily desire) to make the switch to employment as, say, an environmental consultant. So there remain many individuals, subcommunities, and entire towns that have been negatively impacted by the decline in extractive jobs but have yet to enjoy the benefits of the economic transition.

¹³⁹ This claim is careless and weakens their argument. The phrase "more than 1,501 new jobs" – like so many of the projections in the EISs (see chapter 5) – smacks of a transparently false precision that undermines the intended impression of accuracy.

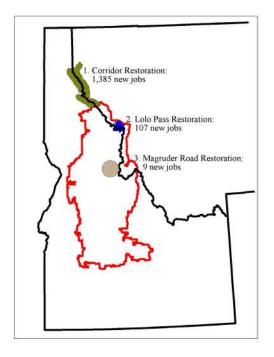


Figure 7.1. Jobs-Creating Ecological Restoration Areas in the Conservation Biology Alternative (map by author)

Two (related) things jump to the forefront when assessing the geographic location and distribution of the potential jobs created in ecological restoration work as part of the CB alternative. The first is the dense spatial concentration of the new jobs. Over 92% of the jobs created lie within the "corridor restoration area" along the Idahopanhandle/Montana border. The second is that all three areas are along the Montana border (along the east slope of the mountains) and would be much more easily accessible workplace locations for Montana residents than for Idaho residents. Even more significantly, only the 9 jobs in the Magruder Restoration Area would be readily accessible to *any* of the communities in central Idaho's "Isolated Timber Dependent Area" (hereafter ITDA) as defined by the Interior Columbia Basin Ecosystem Management Project¹⁴⁰ (ICBEMP, 2001a). The jobs component of the CB alternative vastly favors workers from western Montana's ITDA.

¹⁴⁰ Initiated in 1993 under a directive from President Clinton, the ICBEMP's purpose was to "develop a scientifically sound and ecosystem-based strategy for management of [interior Columbia River Basin] forests" (ICBEMP). The project lasted for eight years, and its products include two Draft EISs, a Final EIS,

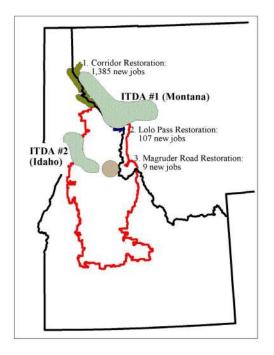


Figure 7.2. The Conservation Biology Alternative with Montana and Idaho's Neighboring "Isolated Timber Dependent Areas" Added (map by author)

The spatial segregation of the new jobs becomes apparent when the two ITDAs are added to the previous map. ITDAs are defined in the ICBEMP as "areas ... where timber related management issues have the potential for the largest influence on isolated communities" (ICBEMP, 2001a, abstract).¹⁴¹ One conclusion is easy to deduce: This jobs program would be rather unimpressive to any of the approximately ten thousand residents of the "mill towns" within the central Idaho ITDA (ICBEMP, 2001b).¹⁴² A resident of Peirce, Idaho, for example, would probably not feel like this jobs program was at all "compensatory" (Bader & Bechtold, 1996, p. 8) toward his or her personal situation when 7% of the jobs (the Lolo Pass jobs) were going to be *at least* 3 ¹/₂-4 hours away, while 92% of the jobs (the Corridor Restoration jobs) would be 5-8 hours away (in both cases,

dozens of technical reports, and a wealth of regional GIS data that is available free to the public via download from the ICBEMP website.

¹⁴¹ And it is probably worth reemphasizing that the ICBEMP and the Bitterroot grizzly debates were concurrent. So the Bitterroot recovery alternative architects were working with the same demographic and economic data as were the ICBEMP staff.

¹⁴² "Mill towns" are defined by ICBEMP as towns "with mills or jobs related to the timber industry" (ICBEMP, 2001b, abstract). The seven mill towns in the central Idaho ITDA are Grangeville (pop. 3,226), Orofino (2,868), Kamiah (1,157), Pierce (746), Kooskia (692), Craigmont (542), and Weippe (532) (ICBEMP, 2001b)

the figures represent approximate one-way driving times). Now I realize that this is only one (rather crude) 'spatial analysis' of the CB jobs program. I would argue, however, that (*a*) the analysis is fair in that it represents what would likely be the most severely and quickly impacted communities within the region; and (*b*) this analysis sufficiently grounds the larger point I want to draw out of this. I will take each of these in turn.

Point 'a': the central Idaho ITDA includes the communities that would likely be the earliest and most severely impacted by implementation of the CB alternative. All habitat analyses of the region were in consensus that the national forests north of the wilderness recovery/reintroduction area contained some of the best grizzly habitat in the region. Logging within roadless areas of these national forests was prohibited by fiat in the CB alternative. As they lay within the CB "grizzly bear recovery area," all national forest timber harvests in roaded portions of the forests (i.e., outside of roadless areas) would have been subject to full Section 7 consultation to ensure that they did not adversely affect grizzly habitat. It can further be assumed that environmentalists in the region would have challenged *all* approved timber harvests in the recovery area. Judging by the experience of timber harvesting on the Targhee National Forest (another Forest in grizzly country, but home to the Yellowstone subpopulation of bears), the combination of Section 7 requirements and litigation in grizzly habitat is a potent tool for stopping or drastically reducing national forest timber harvests. This is not to argue that Idaho residents (especially grizzlies) have not ultimately benefited from reduced harvests on the Targhee or that curtailing timber harvest on the central Idaho forests would not impart benefits of its own.¹⁴³ It does, however, support my argument that these communities would have been the most severely impacted by the implementation of the CB proposal (at least in its initial stages).

And this brings me to point 'b': the CB proposal represents an insensitivity to the communities that will bear the most immediate burdens of its implementation. Adding insult to injury, it seems, a "compensatory" job program was established that failed to offer *anything*, really, to the residents of these communities (and more broadly, all of Idaho west and south of the ITDA). I can only conclude, then, that the CMC alternative

¹⁴³ The idea that increased Federal lands protection is ultimately beneficial to local communities and regional development is central to the "new west" narrative (e.g., Power, 1996b; Power & Barrett, 2001)

was a much more socially sensitive – perhaps even *just* – conservation proposal.¹⁴⁴ Despite rampant misinterpretation by so many of its critics, the CMC alternative did not guarantee the residents of the central Idaho ITDA continued timber employment or unchecked harvests on national forests. It did, however, extend something of a 'deal' along the lines of "we will not use grizzly recovery as an avenue to blockade timber harvest in the national forests surrounding the recovery area (though we do ask that it be taken into account when planning timber harvests)." The CB alternative, for residents of central Idaho, extended no similar offer.

So how was it that the CB jobs component - the 'good faith' offer toward economically squeezed timber workers – fell so blatantly in favor of Montana residents? I think it is primarily an artifact of the naturalistic framing of the region as *merely* comprised of multi-scalar, nested, "ecosystems." Now while there is plenty to be commended in the "bioregionalism" literature that foregrounds the ecological and social advantages of "dwelling" within 'naturally' bounded areas (e.g., watersheds, ecosystems) (Fox, 2003, p. 253) over being political subjects within arbitrary and 'artificially' bounded spaces, a wholly naturalized conception of space that omits "place" (McGinnis, 1999)¹⁴⁵ from the bioregional narrative can produce problematic results. Case in point: the CB alternative – framing the space in question as Bitterroot-Ecosystem-within-Northern-Rockies-Ecosystem – "smothered" (Keulartz, 1999, p. 95) the real social, political, and economic differences between (and within) central Idaho and western Montana, or Idaho and Montana more broadly. The result? Yet another centrally-planned and -administered conservation program that fails to integrate into the conservation equation the concerns and considerations of the majority of local residents; ultimately failing also to consider (or even recognize) the effects of its actions on these same people. That the epicenter of the centralized planning is now western Montana and not Washington DC is an insignificant point for a resident of central Idaho. Social and political difference – or, geographically, the spaces and places of the ecologically

¹⁴⁴ Though, as rewilding advocates have warned (see Chapter 4 section 5 above), "conservation plan[s] cannot give equal weight to biocentric and socioeconomic goals, or the former will never be realized" (Soulé & Noss, 1998, p. 25).

¹⁴⁵ This reference is to the edited book *Bioregionalism* (McGinnis, 1999), *all* of the contribution of which emphasize the central place of "place" within bioregionalism.

unenlightened – become mere obstacles between our present, defiled state and an idealized end.

As I hope to have made clear, I believe that driving more wedges between environmentalists and everyone-else will not save wild nature, much less lead us toward more sustainable modes of living. On that litmus test, the CMC proposal clearly falls out as preferable to the CB proposal. That noted, my preference for the CMC, as it stands so far, is based (primarily) in critiques of and (secondarily) in comparative assessments against the CB proposal. My most elaborated discussion of the CMC proposal, Chapter 5, is less a judgment and more an explanation of the rhetorical and strategic components of the proposal. In other words, I have yet to articulate a critique or defense of the CMC proposal itself. That will be the task of the following sections, the first of which makes a general case for the collaborative conservation model, after which I asses hypothetical future scenarios of a CMC-managed Bitterroot population of grizzly bears.

7.3. A Case for Collaborative Conservation

In this section, I argue a general case for the positive potential of collaborative, community-based conservation initiatives on public lands. I will draw primarily on an essay by collaborative conservation champion Donald Snow (1997) that succinctly and forcefully defends collaborative conservation in an historical and contemporary analysis of Western public lands management and politics. My intent in this section is not to review the various aspects of the Citizen Management Committee (as I hope to have already accomplished that task) but rather to provide the initial grounds for the case that the CMC represents a worthwhile "experiment" in public lands management authority devolution.

Snow recounts the West's "legacy of dependence" on the Federal Government: "Virtually every state and every *rural* county … remains profoundly dependent on the flow of revenues from public lands" (Snow, 1997, p. 189, emphasis in original). As I showed in chapter five, in the Bitterroot region of Idaho this has been the case for nearly all of the post-Euro-American-settlement history of the region.¹⁴⁶ The pattern that has

¹⁴⁶ To restate (following chapter five) the historical depth of this problem, this history of disempowered citizens predates the growth of corporate timber in the State. By 1870, only a decade after Elias Pierce's discovery of goal at Orofino Creek in 1960, gold prospectors in Idaho found themselves mostly poor and

developed out of the "historical accident" of the Federal Government owning half or more of the land has been one of often-massive, and always massively-subsidized, development of the natural resources of the Federal lands. Every oil- or gas-development project, hardrock mine, timber sale, water project and even grazing allotment in the West is heavily subsidized by the Federal Government. That these projects were usually Washington/state/corporate backroom deals (though their transparency has certainly improved in the past quarter-century), and just as often proceeded in highly unsustainable fashion, has given rise to the well-known boom/bust economic cycles that typified the rural West for most of the twentieth century.

This cycle of dependence and despair has given rise to an opportunistic political leadership where "plans for resource development – indeed, for any development – are never denied" (p. 189). The result is a region containing both an angry, disempowered citizenry and an elected leadership content to "avoid tough decisions [and continue] reaching deep into the pork barrel to keep the benefits flowing and the true costs of resource development hidden from public view" (p. 190). The political "impotence" (p. 190) of Western residents Snow describes has been articulated by a number of writers sympathetic to conservation. Former Missoula Mayor and CMC advocate Daniel Kemmis, for example, describes the West as a region where "democratic human sovereignty ha[s] been atrophied by decades of bureaucracy" under a system of governance that by any accounts seems bent on "threaten[ing] self-determination" (Kemmis, 1998, p. 4,5). (Although I would add that singling out "bureaucracy" as the villain lays the blame too singularly on the Federal Government and plays into the Wise Use creed of State-(corporate) control over Federal lands, even as that is far from Kemmis' intent. Snow's Federal-Government/corporate/State-political-leadership collusion better captures the complexity of the history and the difficulty of overcoming it). As shown in the regional historical overview in Chapter 5, the Northern Rockies and central Idaho are dominated by Federal lands and play the rule to Snow's model sociopolitical West.

powerless. "By, then, the individual miner had become just another tiny gear in a gigantic industrial machine" (Peterson, 1976, p. 61).

Over the past three decades or so, environmentalists and academics have done an exhaustive job of exposing the grand sham of subsidizing the unsustainable exploitation of the region's Federal lands. Now fully exposed, "what the region faces ... is essentially the end of the great federal experiment" (Snow, 1997, p. 186). Three alternative 'models' of management are rising out of the ashes.¹⁴⁷

One is a rush to privatization, where "instead of relying on distant (or not-sodistant) bureaucrats to act as environmental stewards, we could trust the marketplace, for private resource owners will always tend to act to protect their property, whereas bureaucrats will tend to act to protect their own rear ends" (p. 193). Environmentalists have been selective and opportunistic endorsers of the privatization movement. For example, they love to lay bare the "lie" of subsidized timber harvests on national forests¹⁴⁸ but have been vocal opponents of fees on backcountry camping and hiking on Federal lands which would go toward covering the costs of trail maintenance and recreation management. And there is nothing inherently disingenuous about selectively appropriating privatization schemes on Federal lands. As multiple authors have argued, in some cases free-market approaches are appropriate and benefit environmentalist objectives while in others cases they run counter to the goals of the movement (diZerega, 1996; Power, 1997). But enthusiastically toeing the privatization line marks dangerous ground for environmentalists, as blanket admonishments against "subsidies" can easily appear disingenuous. National parks and wilderness areas, after all, are just as heavily subsidized as Federal lands logging. One of the true challenges for western

¹⁴⁷ I suppose a fourth model could be mentioned, but its hypocrisy is so transparent and its goals so unapologetically and singularly geared toward profit for a few, that at best it deserves to be a footnote (even if some of its mouthpieces, such as New Mexico Senator Pete Domenici, hold Federally-elected office). This would be the most extreme and radical side of what remains of the Wise Use movement – the program of which is basically to do away with all environmental regulations all the while legislatively mandating the development of all timber, oil and gas, hardrock, and range resources on all Federal lands, including wilderness areas and even national parks.

¹⁴⁸ I will take one last poke at Alliance for the Wild Rockies' promotion of the CB alternative. In their economic analysis of timber *versus* restoration jobs in the Bitterroot (itself a strategic move in casting them as mutually exclusive), an interesting rhetorical maneuver is worth noting. They cast "short-term timber jobs" (which are "unsustainable" and being lost due to "technological improvements" anyway) against their proposed "good jobs"/"high-paying jobs"/"quality jobs" in ecological restoration. In doing so, they produce an *inevitability* to the transition away from (any and all) Federal lands logging, making obsolete all conversations of the possibility of sustainable forestry on the Federal lands in the region (and, as Rocky Barker (1997) urges Rocky Mountain Northwest environmentalists to consider, there is plenty reason to believe that this is possible). The "good jobs [in ecological restoration] which could spread out well into the 21st century" (Garrity, 1996, p. 20), it should be noted, were projected to last ten years.

environmentalists, to be sure, is to articulate their goals and programs in ways which can silence the many critics who see the movement as harboring an elitism that borders on hypocrisy (Pendley, 1994; White, 1995).¹⁴⁹ Hostile admonitions against decentralized management (see footnote 153, below) do little to temper this image.

The second model of Federal lands management basically stays the course of federally centralized techno-scientific planning and rational management, but does so now under the mantra "this time we are going to get it right." Of course, the Federal Government and the land management agencies are leading this trend, and its place as well as its promise should not be discounted. Now that the sham has been exposed, we should be thankful (or at least hopeful) that where centralized management structures persist (including where they are necessary, for better or for worse, such as managing the network of dams along the Columbia River or the Idaho National Engineering Laboratory¹⁵⁰), the agencies will act in a more accountable and sustainable fashion.

The third model may have been foreordained eighty years ago by John Dewey¹⁵¹ and a couple of decades later by Aldo Leopold,¹⁵² but only in the past decade or so has it really begun to make waves in Federal lands management. This model does not eschew Federal management *per se*,¹⁵³ but rather "attempts … to make [it] more responsive, more attuned to public needs (especially) local needs, more *democratic*" (Snow, 1997, p.

¹⁴⁹ And this selection of two references (from the many that could have been chosen) was made to highlight that this common and valid criticism can and does come from both the political right (Pendley) and left (White).

¹⁵⁰ And this is not to make a case for or against either of these environmentally destructive behemoths, or to deny that some degree of increased community involvement in their management might be envisioned. My more specific point is that the new model won't work everywhere, and where it will, it won't be accomplished overnight – megadam networks and nuclear research facilities are probably not the most logical places to begin the experiment of decentralized management.

¹⁵¹ "Eighty years ago John Dewey asked how citizens could participate in political decision making dependent on knowledge experts. Since then the question has only grown in importance" (Fischer, 2000, p. 28).

^{28).} ¹⁵² "Aldo Leopold … frequently reminded people that conservation's central goal should be to enhance not only how people relate to the land, but also how people relate to one another" (Fischer, 1998, p. 121).

¹⁵³ Snow argues that collaborative management models "are attempts not to erase or abdicate existing structures of government – as some have erroneously argued..." (p. 186). This "some" would have to include Friends of the Bitterroot, who, in their letter to the FWS protested that "[T]he CMC has essentially been given *control* of national public lands. This is an unprecedented disaster. Will our national parks be next? What about foreign policy?" (USFWS, 2000a, p. 5-125, emphasis in original). This statement can be contested on a number of levels. First, it overstates its case: the CMC (with Federal, State, Tribal, and citizen members) has been given management authority over the reintroduced bears, not "control of lands." Second, it smacks of hypocrisy, as the Scientific Committee was designed to give outside members a guaranteed minimum 50% representation. Third, the foreign policy comment makes laughable the "slippery slope" line of argumentation.

186, emphasis in original). This is the growing movement toward decentralized, collaborative management *authority* (*when and where appropriate*) over public lands. Snow admits to the experimental nature of "collaborative management" (the most common catchphrase for this new trend in management), but none the less endorses "the risk of the local, [meaning] entrusting local people with a major share of decision making about the lands proximate to their communities – both private and public lands" (p. 195). It is a risk indeed – history underscores the pervasiveness of short-term thinking in the region and the volatility and despair that mark the Western "boomtown mentality" (p. 195). Gus diZerega underscores how the pros and cons of community conservation are nowhere more amplified than in the rural West. On the positive side,

community-based approaches [can facilitate] preserving and enhancing environmental values [and] can bring unparalleled sensitivity to local circumstances and opportunities, allowing a fine-tuned approach unavailable to centralized management... A community-oriented strategy maximizes points for innovation ... Successes can be copied, failure avoided (diZerega, 1996, p. 109).

But on the negative side,

Local communities, particularly in ecologically critical areas, are often not wealthy, and therefore are subject to strong economic pressure for hasty development. This situation afflicts the rural West ... [where communities] are often dominated by local elites tied emotionally as well as economically to extractive industries... They can be extraordinarily myopic to the wider impact of local decisions (p. 109-110).

Echoing diZerega, Snow prefers the term "community conservation" to the more popular "collaborative conservation" because an emphasis on community more clearly accentuates the new model's potential strengths as well as why it is a true alternative to the dominant model. For Snow, community conservation imparts three distinct reasons to believe its idealism is not unfounded. First, local communities care deeply about and will work to protect their "nearby natural resources" (Snow, 1997, p. 197). For environmentalists who point to case after case of local opposition to conservation agendas, it can be argued that this is more a result of rural Westerners' sense of perpetual disempowerment (a disempowerment that many feel has been exacerbated by environmentalists) and less a sign of inalterable anti-conservation sentiments. It could be further countered that empirical evidence points just as strongly in a positive direction. After all, it was residents of the Bitterroot Valley in 1962, who – through a coalition of

timber workers, farmers, developers, and mountain recreationists – formed the first organized opposition to the radically increased levels of timber harvests in their surrounding national forests (Bolle, 1997). More recent evidence abounds as well. Take, for example, the Applegate Partnership in southwest Oregon, where environmentalists, loggers, and various other local citizens have worked for over a decade to establish common ground from which to develop sustainable watershed-scale development and conservation plans. After a few years of stiff resistance to the local coalition, even the Forest Service and Bureau of Land Management are now active partners in the group (Little, 1999). So despite the scarred, clearcut hillsides, dammed rivers and overgrazed rangelands so ubiquitous throughout the West, empirical evidence exists to back up the intuitive notion that people care about and will protect their surrounding landscapes when given the chance.

Snow's second advantage of community conservation echoes many of the sentiments of the bioregional movement, that is, when communities are *active* in conservation, the communities are conserved as well. Collaborative community conservation forces people into finding and fostering common ground. A significant, if secondary, result is stronger communities, which in turn can be more effective in achieving collaborative objectives. As such, a positive feedback loop of sorts is set in motion once well-organized, committed efforts at community conservation are underway. Finally, especially in the West, where nearly every community is so directly invested (on multiple levels) in the surrounding public lands, the sense of community extends beyond the local to encompass the public lands. A defensive, provincial sense of community, then, would be counterproductive and would belie the multi-scalar mandate of Federal lands management. Evidence suggests that this is not an abstract utopian projection. Herb Reid and Betsy Taylor have empirically found in Appalachia "that a place-based politics does not have to be and must not be a place-bound politics" (Reid & Taylor, 2003, p. 89).

Snow admits and acknowledges that representing national interests (which in the rural West often means getting environmentalists a seat at the table) in the "most rural reaches of the West" presents a great challenge, and some will no doubt exploit the "new" model as a means to "help governmental agencies and/or corporate interests proceed even more efficiently with predetermined agendas to develop public lands"

(Snow, 1997, p. 199). Noting that possibility, it could be countered that the existing structure is no less vulnerable – the dominant paradigm has certainly been exploited countless times to the same effect. Snow admits that the new model is largely untested, that it is a call for an experiment (though preliminary results, such as the Applegate Partnership, are encouraging). But he is also resolutely optimistic. In the following section, I argue that grizzly reintroduction in the Bitterroot did provide an appropriate opportunity to test the collaborative model, and that a little more optimism regarding the potential of the CMC proposal was probably due.

7.4. What If? Thinking about the CMC Alternative as if it were in place

And in the caverns of tomorrow With just our flashlights and our love We must plunge, we must plunge, we must plunge¹⁵⁴

Supporters of the CB alternative, as shown in the previous chapter, adamantly opposed the idea of non-experts being granted management authority over the reintroduced grizzly bear population. Even more disconcerting, they argued, was the likelihood that the 'citizens' serving on the committee would not have a sincere commitment to grizzly recovery. This perceived potential defect in the committee could adversely affect the reintroduced grizzlies in two ways. First, the committee might too readily lean toward killing 'problem bears'. Additionally (and not unrelated to the first concern¹⁵⁵) was the idea that CMC management decisions, most specifically those related to timber plans on national forests surrounding the wilderness areas, would consistently fall against the bear and in favor of 'industry'. The cumulative effects of "anti-bear"¹⁵⁶

Several lines of reasoning can be followed in response to these concerns. The first response, that checks against sabotage were built into the CMC proposal, is worth restating (it was mentioned in Chapter 4) as its significance should not be understated. It is also straightforward and was articulated directly by the FWS in the Final EIS. The clearest way to do this, then, is to quote a concern as stated by one of the CMC proposal's

¹⁵⁴ Lyrics to "At The Bottom Of Everything." Lyrics by Conor Oberst. Music by Bright Eyes (Oberst, 2005).

¹⁵⁵ The concern over management kills raises both (*a*) the ethical (i.e., animal rights) objection to unnecessary killings of individual bears and (*b*) the broader ecological concern that every dead bear compromises the chances for the recovery of the population (i.e., it not going extinct).

¹⁵⁶ That the CMC would be "anti-bear" was nearly a mantra at the Draft EIS hearings.

fiercest opponents and follow this with the FWS's response, documented in the Final EIS.¹⁵⁷

Here is the general misgiving as voiced by Friends of the Bitterroot:

By placing management in the hands of local citizens who *may or may not* have any interest in recovering the bear, the agency fails to act in a way that is in concert with recovery ... This is nothing but a legal shell-game (USFWS, 2000a, p. 5-125, emphasis in original).

To this omnipresent objection, FWS replied:

The CMC decisions, management plans and their implementation must lead to grizzly bear recovery. If there is concern over CMC actions leading to recovery, a Scientific Review Panel could be invoked to review CMC actions and decisions and make recommendations as to whether CMC actions ... are leading to recovery (USFWS, 2000a, p. 5-124).

CMC decisions must lead to recovery. "Fine," a cynic might reply, "and the EPA is making sure my air and water remain clean as well. Why should I believe that 'the system' will work, all of a sudden, in this case?" I think there are a few reasons to believe that the CMC would not have resulted in a worst-case-scenario (i.e., anti-bear committee makes decisions that harm bear; bears die; recovery fails). For one, despite the posturing and rhetorical protestations by Idaho's elected officials, Idahoans had plenty to gain from making this recovery successful, and would likely have acted accordingly. Perhaps even more significantly, the State's interests would suffer from deliberately (or carelessly) letting the program fail due to lack of commitment or effort.

Proposals like the CMC alternative require either a certain degree of faith or favorable evidence to be convincing. The CMC proposal solicited faith from regional residents and environmentalists – faith in the promise that citizens could and would work together to promote and ensure grizzly recovery in the Bitterroot. If successful, there

¹⁵⁷ Although, for obvious reasons, the FWS did not respond directly to every letter and comment sent as part of the Draft EIS public comment component, it did directly respond to 18 letters from "the most prominent or most vocal large private organizations representing the diverse points of view and concerns about the proposal" (USFWS, 2000a, p. 5-120) as well as *all* 37 Federal, state, and local elected officials or governmental bodies who wrote letters on the proposal. These 55 letters were reproduced in full photocopied form in the Final EIS, along with a point-by-point response from the FWS. Considering the strident opposition from both sides represented in these letters (from, for example on the pro-recovery side, Friends of the Bitterroot and Alliance for the Wild Rockies, and from the anti-grizzly-recovery side, Concerned About Grizzlies and the Idaho Farm Bureau), this point-by-point response really does seem to be a fine example of agency accountability. The FWS response was also not just Federally-mandated lip service. Despite sticking with their 'preferred alternative' from start to finish, the FWS did make many changes to the Final EIS based on comments made in response to the Draft EIS. One significant change was the addition of two "scientific advisors" to the Citizen Management Committee.

would be evidence in support of future participatory efforts. If the effort failed, however, and much worse if the failure could be tied to a lack of commitment or sincerity of effort, then no one – whether it be groups like NWF searching for new collaborative models, or state and local governments (historically disempowered scales in endangered species management) – would have a leg to stand on if advocating anything other than traditional top-down federal management of lands and species in the future. This is not a trend that many residents of Idaho, and certainly not their elected officials, would want to propagate.

So I have established two 'checks' against the feared political sabotage of the recovery efforts. The first is the built-in mandate that '[a]ll decisions of the CMC must lead to recovery of the grizzly bear in the BE" (USFWS, 2000a, p. 2-11). Secondly, it is not difficult to argue that working sincerely toward recovery (and hence success of the CMC program) represented the best interests of Idaho residents – even those who vocally opposed the program. Beyond these, there are additional 'checks' built into the system that would work in favor of its success. For one, the remaining two constituencies on the committee (not counting the Idaho representatives) were from the Nez Perce Tribe and the State of Montana. The Nez Perce Tribe was on the record as supporting the CMC alternative, and there is little reason to believe that they would sit quietly if they felt the recovery goals were being sabotaged.¹⁵⁸ The Governor of the State of Montana during the EIS process, Mark Racicot, also endorsed the CMC coalition. Granted, Governors change,¹⁵⁹ and this does represent a good degree of potential political malleability regarding CMC appointees. But in the case of Montana, due to the State's increasingly prominent environmentalist constituency, I believe it would be difficult for a Montana Governor to appoint anti-bear committee members. The addition of scientific advisors to the committee would also, one would hope, serve as a check against sabotage.

Even considering the possibility that the committee would not sincerely work toward bear recovery (a possibility I consider remote based on the previous evidence),

¹⁵⁸ I base this claim in my four years of professional experience as an employee of the Nez Perce Tribe Natural Resources Department. The Nez Perce Tribe has a longstanding and impressively successful record of wildlife management and recovery, including their subcontracted work as the day-to-day managers of the reintroduced gray wolf population in central Idaho.

¹⁵⁹ The governor that followed Racicot was no shining example guaranteeing grizzly-friendly CMC Montana appointees. In a now famous declaration, soon to be Governor Judy Martz once promised to be "a lapdog of industry" at a campaign rally (Ring, 2002).

actually working against grizzly recovery would be extremely difficult for the committee to get away with. The reintroduction process would have been a highly visible and easily trackable project (especially in its early years as all the reintroduced bears would be collared and the growth and movement of the population would be monitored). CMC committee meetings would also have been open to the public. As such, it would have been very difficult for the committee to hide intentionally counter-productive decisions, and there would have been a lot of groups (e.g., NWF, Defenders of Wildlife, the Nez Perce Tribe, one would hope the State of Montana and eventually the State of Idaho) with vested interests in seeing the program succeed, not to mention any groups that would be watching closely, waiting for it to fail (as we could assume would be the case for some, even if we might wish otherwise).

"Fine," responds my hypothetical CMC-cynic, "but what you haven't mentioned is that your best case scenario is the establishment of one other small, isolated subpopulation of grizzly bears within (already protected) Federally designated wilderness areas. This recovery plan still does nothing to reestablish links with existing grizzly populations by protecting and restoring habitat." One response would be that these goals go well beyond the scope of the ESA, since it is a stretch to claim that a fully connected metapopulation is necessary to ensure the grizzly bear's viability in the lower 48 States. This is not to argue that a grizzly bear metapopulation isn't a laudable goal, much less that we should cease working toward. It can and has successfully been argued, however, that the metapopulation recovery program is not the only way to achieve recovery. To guard against genetic depression in the various populations, for example, translocations could serve as proxies for corridors,¹⁶⁰ and switching one or two bears every twenty to thirty years (hardly offensively intensive management) would suffice (Hedrick, 1995; Allendorf, 1997). But beyond making a case for the CB alternative as beyond the scope of the ESA (a response that would fail to satisfy my CMC-cynic), adding a temporal dimension to the potential of the CMC recovery program reopens the (currently closed) possibility of protected habitat, corridors, all of the goals of the CB alternative.

¹⁶⁰ And remember, this is all said in lieu of the fact that we don't even know how effectively or even *if* grizzly bears would utilize corridors between the subpopulations (Simberloff et al., 1992). They are not a rapidly dispersing species (Gaillard interview; Fischer interview).

In reexamining the predicted growth rate of the reintroduced population, we see that after 20 years the population (if successfully growing) is projected to consist of approximately somewhere between 40 and 60 grizzly bears. After 40 years, between 60 and 125 bears. It is 50 years down the road, and this using the most optimistic growth projections (it "could likely take more than 100 years"), before the tentative target population for recovery of 280 bears would be reached (USFWS, 2000a, pp. 2-19 and 2-20). So if CMC sabotage is feared, it seems like this fear is being projected very far into the future. If in twenty years the population was growing healthily and consisted of around 50 bears, the population could still be easily 'contained' by the large existing wilderness areas. 40 years out, with up to 125 bears, this is still the case. Problem bears, for example, those that wandered into the Bitterroot valley east of the recovery area (as Louisa Wilcox (interview) predicted they would begin doing early in the effort), would still have plenty of space available for relocation within the wilderness recovery area. In cases such as these, the ESA Section 9 prohibition against killing grizzlies would still hold (i.e., people could not kill these "experimental nonessential" bears any more than if they were granted fully protected ESA "threatened" status; the exception is acting in selfdefense, which is allowable for "threatened" bears as well¹⁶¹). As Servheen pointed out in the interviews in "Bear Wars," the protocol for problem bears is little different than it is in the other grizzly bear populations enjoying the full protection of Section 9. It seems fair, then, to judge the objections to the Section 9 compromises as hyperbole.

Before I move ahead with an assessment of the CMC in light of the other primary ESA concession (the lack of Section 7 consultation), bringing in the issue of time provides an opportunity for a productive pragmatist intervention. Pragmatism (as noted in

¹⁶¹ There are some slight differences in the application of Section 9 to the experimental Bitterroot population. One is that a "livestock owner may be issued a permit to kill a grizzly bear killing or pursuing livestock on private lands if it has not been possible to capture such a bear or deter depredations through agency efforts" (USFWS, 1997a, p. 2-77). I suppose in a political climate particularly hostile to grizzly recovery, this is one place where the experimental status could be exploited by anti-bear forces. None the less, the situation itself would be rare, rarer even when considering the climate necessary for it to be exploited. The second exception is "[f]ollowing issuance of a permit by the USFWS, the public would be allowed to harass, through non-injurious means, a grizzly bear attacking livestock (cattle, sheep, horses, and mules) or bees" (p. 2-77). I would hardly rate this as highly objectionable. I also cannot help myself from commenting a little further on this passage: It is a rare treat to be amused by an EIS, but the thought of a beekeeper having his bees attacked by a grizzly, calling the FWS, being issued a permit, then finally being allowed to non-injuriously harass the bear should bring a grin to even the most bleary-eyed social scientist.

the previous chapter) emphasizes the "open ended nature of moral experience" and just as fundamentally "suggests a more processual view of ethics, one in which values, principles, and moral standards emerge through the method of experimentation and situational analysis rather than just being taken off the shelf and imposed on specific ... conflicts" (Minteer, 2004, p. 107, second emphasis added). We cannot assume, in other words, that our own standards or anyone else's will remain static as the processes of "experimentation and situational analysis" develop and change with time (we can, as a matter of fact, assume the converse). The CB alternative assumed that its "off the shelf" solution ("permanent" protection of maximum habitat) was the only way to produce the (one) socio-spatial structure that could guarantee the viability of the grizzly bear. By projecting a fixed state of affairs indefinitely out in time (implicit in its social assumption and explicit in its population viability analysis extinction projections), the CB alternative failed to recognize (at least) two things: first, there is no imaginable means, outside of coercion (and this itself is, thankfully, not an available option), to arrive *instantly* at this fixed end, much less remain there indefinitely; second, implementation of the CMC proposal would not have precluded, and may have even fostered, *desirable change*.

As Charlene Haddock Seigfried argues, "pragmatism's experimental method undermines the conservatism that seeks to preserve ... standards despite changing conditions" (Seigfried, 1998, p. 191). To paraphrase Kelly Parker, the pragmatic method aims for an attunement to the right and the good and an ability to *foster change* so that what is good is what grows (Parker, 1996). If this pragmatic mandate is rather abstract, placing it in the context of the 'problematic situation' of grizzly recovery in the BE brings to light a fundamental difference in the two recovery alternatives. The CB alternative aimed for a fixed, unchanging socio-spatial end (ironically, in the name of fostering evolutionary change). Following Seigfried, the CB alternative is (philosophically and politically) conservative in assuming it is Right and would forever remain Right. The CMC alternative, by contrast, read generously¹⁶² could be seen as pragmatist – experimental and unapologetically open-ended, and even progressive –

¹⁶² That is, not interpreted as merely fostering a "new" three-headed monster to (literally) rule the West – a collusion of national-NGO/corporate-timber/Federal-government to the exclusion of the more ambitious "new conservation movement." If this was indeed the motive, or would have been the result (both of which I highly doubt), it shallowness (and my interpretive naiveté) would have been exposed soon enough.

fostering changes necessary to move in the direction of broader, abstract goals of community, sustainability, and grizzly bear conservation¹⁶³ (all three of which can only be viewed as emergent and ever-changing "values, principles, and moral standards"). Stated in a different way, just because one proposal (the CMC alternative) is less determinant that the other (the CB alternative) does not mean that the more determinant of the two better establishes the (socioeconomic, regulatory, protective, etc.) grounds from which *long-term* grizzly conservation goals can proceed. As diZerega argues, "[w]e need to become pragmatic when considering strategies and policies. No single strategy is suitable for every problem. Society is as complex as an ecosystem, and ideological or political rigidity on public policy is hardly a wise approach" (diZerega, 1996, p. 110). Judged in this manner, the CMC alternative is certainly still preferable to the current state of affairs but also, I would argue, begins to demonstrate its own merits as well as its potential preferability over the CB alternative. I will now return to the specific analyses of the controversial components of the CMC proposal, focusing on the concessions to ESA Section 7 that accompany the experimental nonessential population status.

For CB supporters, the lack of required Section 7 consultation for national forest management activities represented an even more worrisome compromise than did the Section 9 concessions. As bears wandered north out of the recovery area into the (non-wilderness) national forests, they would be entering the "Bitterroot experimental population area." As grizzly bears (re)colonize these "multiple-use" forests, the CMC would make non-binding recommendations to the Forest Service regarding the effects of planned forests uses (e.g., timber, off-road vehicle usage) on the grizzly population. Under the CB alternative, with the bears enjoying full Section 7 habitat protection (as these areas would have been within the primary recovery area), the burden of proof would have been on the national forests – every timber harvest would have to be shown to not adversely affect grizzly bear habitat. Moreover, all logging and roadbuilding in roadless areas would have been prohibited. Here, clearly, is a component of the CMC

¹⁶³ And, for a rewilder, *within* the goal of grizzly conservation lay the goals of core reserves (*with grizzlies*, after CMC implementation), corridors (which, as Servheen has repeatedly stressed, are neither off the FWS and IGBC agendas nor excluded from future restoration and conservation by the CMC alternative), and buffers (like corridors, the development of which is not excluded by the CMC proposal; the "experimental population area" surrounding the wilderness core "recovery area" could even ideally be a place to test the buffer concept out on the ground).

alternative that really could fall in favor of timber production at the expense of grizzly bears. Roads could be built, quality forested habitat could be cleared; thus opening up the forests (potentially including roadless areas) to human access, resulting in increased human-bear conflict and some combination of illegally killed grizzlies and human-conditioned grizzlies (the latter condition which more often than not ultimately results in dead bears). If this possibility provides grounds enough to oppose the CMC alternative, fair enough. Even so, I would argue against that line of reasoning based on current and projected socioeconomic trends.

Countless studies have announced the arrival of a "new west" - citing economic trends in the region moving away from resource extraction and toward an amenity-based economy that favors land conservation over mining, logging, and livestock grazing (Garrity, 1996; Power, 1995, 1996a, 1996b; Power & Barrett, 2001; Rasker, 1994, 1995; Rasker & Hackman, 1996; Riebsame et al., 1997; Rudzitis, 1996). If this is indeed the case,¹⁶⁴ then the region would have to undergo a major retransformation for large-scale timber harvests (especially in roadless areas) to regain prominence in national forest management. If the amenity-based, pro-conservation transition continues, then at best (from a grizzly bear conservation perspective) large-scale clearcutting of the national forests would never be proposed. At worst, the general pro-conservation climate would be powerful enough to moderate (through the CMC or otherwise) timber plans so as not to jeopardize grizzly recovery. In either case, aren't "we" (grizzly recovery advocates) better off with a grizzly population in the Bitterroots and a Citizen Management Committee in place that *could*, at least, influence national forest management in the favor of grizzlies? After all, without the experimental population of grizzlies, environmentalists have no leverage courtesy of the grizzly bear¹⁶⁵ on which to challenge timber harvest

¹⁶⁴ And it is fair in this instance to take the "new west" narrative as an assumption of (more or less) truth because the CB supporters employed the narrative to validate their case. Stated another way, I am only applying their own assumptions to their own conclusions. I do not mean to simply and uncritically accept and run with the various problematic assumptions of a wholesale regional transformation, but a more elaborated examination that directly challenges the "new west" narrative – a worthwhile project in its own right – is beyond the scope of this dissertation (though see footnote 148, this chapter, for one "new west" assumption 'unpacked' in the context of these debates).

¹⁶⁵ Other, non-bear related, potential future avenues for challenging forest plans still exist, but these avenues exist with or without an experimental population of grizzlies inhabiting the Bitterroot. For example, endangered species litigation on behalf of any number of species of anadromous (salmon and steelhead) and non-anadromous (e.g., bull trout and cutthroat trout) fish. The latter are especially

plans. That is, barring either reintroduction of fully protected grizzlies or natural recolonization of the Bitterroot by grizzlies (both of which are remote possibilities), the grizzly bear provides no additional habitat protection for the national forests surrounding the wilderness areas. If the trends do reverse and go against conservation and toward extractive production, then this would mark a future political climate in which even a CMC-type proposal would have little chance of passing.

Thus a third case, a truly worst case scenario from a conservation standpoint, and we are still better off, I would argue, with an experimental population of grizzly bears in the Bitterroot. I could go on from here to make specific cases projecting positive collaborative successes for the CMC, but that would be highly speculative and downright boosterist – hardly a sincere perspective for a critical social science analysis (though I cannot *not* mention the positive potential I see in a timber/environmentalist alliance, tense as it would necessarily be). The positive potential is better off left in the abstract (as covered by Snow (1997) and reviewed in the previous section). Hopefully the future will provide opportunities to test similar proposals, or perhaps even give the Bitterroot CMC new life. Only after extended experiments in these endeavors will my optimism toward the potential of the CMC and collaborative efforts in general prove justified or be relegated to the dustbin of environmental history.

In closing, I argue that (an environmentalist) opposition to the CMC alternative would have to be based in one or both of the following beliefs: first, that the CB alternative provided a viable and preferable alternative to the CMC proposal; second, that the CMC proposal would have worked to the ultimate detriment of grizzly bear conservation and against broader environmentalist objectives. Based upon my analysis, I conclude on the first question that the CB alternative was neither viable nor preferable to the CMC proposal, and on the second that the CMC proposal – judged with even the slightest degree of optimism – would have benefited the cause of grizzly bear conservation in the Rocky Mountain Northwest.

significant in watersheds like the North Fork of the Clearwater, which has been cut off from anadromous fish runs by the Dworshak Dam. Habitat restoration and species conservation for these fish presents one of the greatest challenges to the region (Barker, 1997), but its possibility represents inestimable (cultural/ecological/economic) rewards (Cone, 1995; Landeen & Pinkham, 1999; Reading, 1996; Scarce, 1999). Arguing that since much of the blame for the degradation of fisheries is due to historic and current forestry practices, timber harvesting on public lands should be eliminated is an overly-simplistic and erroneous leap of logic (Barker, 1997).

References

- Alexander, T. M. (1987). John Dewey's theory of art, experience, and nature: the horizons of feeling. Albany, NY: State University of New York.
- Allendorf, F. W. (1997). Genetically Effective Sizes of Grizzly Bear Populations. In G. K. Meffe and C. K. Carroll, *Principles of Conservation Biology* (pp. 174-5). Sunderland, MA: Sinauer Associates.
- Anderson, W. A. (2000). Bear Wars (film: W. A. Anderson, Director). National Wildlife Federation and Turner Original Productions (Producer). Washington: National Wildlife Federation.
- Athanasiou, T. (1998). *Divided Planet: The Ecology of Rich and Poor*. Athens, GA: University of Georgia.
- Awanyo, L. (2001). Labor, ecology, and a failed agenda of market incentives: The political ecology of agrarian reforms in Ghana. *Annals of the Association of American Geographers*, 91(1), 92-121 Additional Info: United States.
- AWR. (1997). A Citizen's Guide to Grizzly Bear Recovery in the Greater Salmon-Selway Ecosystem. Missoula, MT: Alliance for the Wild Rockies & The Salmon-Selway Grizzly Coalition.
- Bader, M. & Bechtold, T. (1996). The Conservation Biology Alternative for Grizzly Bear Population Restoration in the Greater Salmon-Selway Region Central Idaho and Western Montana: Alliance for the Wild Rockies Special Report No. 8. Missoula: Alliance for the Wild Rockies.
- Baldwin, P., & Corn, M. L. (2002). *The Endangered Species Act and 'Sound Science'*. Washington: Congressional Research Service.
- Bardach, E., & Pugliaresi, L. (1977). The Environmental Impact Statement vs. the Real World. *The Public Interest*, 49, 22-38.
- Barker, R. (1997). New Forestry in the Next West. In J. Baden & D. Snow (Eds.), The Next West: Public Lands, Community, and Economy in the American West (pp. 25-44). Covelo, CA: Island Press.
- Barker, R. (2000, November 19). Roadless plan clashes with Idaho grizzly plan. *Idaho Statesman*, pp. 1.
- Barlow, C. (1999). Rewilding for Evolution. Wild Earth, 9(1), 53-56.
- Barnes, T. J., & Duncan, J. S. (1992). Introduction: Writing Worlds. In T. J. Barnes & J.
 S. Duncan (Eds.), Writing Worlds: Discourse, text and metaphor in the representation of landscape (pp. 1-17). London: Routledge.
- Bartram, R., & Shobrook, S. (2000). Endless/End-less Natures: Environmental Futures at the Fin de Millennium. *Annals of the Association of American Geographers*, 90(2), 370-380.
- Behan, R. W. (2001). *Plundered Promise: Capitalism, Politics, and the Fate of the Federal Lands.* Washington: Island.

Belyea, B. (1992). Images of Power: Derrida/Foucault/Harley. Cartographica, 29(2), 1-9.

- Benton, T. (1989). Marxism and Natural Limits: An Ecological Critique and Reconstruction. *New Left Review*, 178, 51-86.
- Bergman, C. (1990). Wild Echoes: Encounters with the Most Endangered Animals in North America. Bothell, WA: Alaska Northwest.
- Berthoff, A. E. (1999a). *The Mysterious Barricades: Language and its Limits*. Toronto: University of Toronto.
- Berthoff, A. E. (1999b). Reclaiming the Active Mind. College English Journal, 61(6), 660-680.
- Best, S., & Kellner, D. (1997). The postmodern turn. New York: Guilford.
- Birch, T. H. (1999). The Incarceration of Wildness: Wilderness Areas as Prisons. In J. B. Callicott & M. P. Nelson (Eds.), *The Great New Wilderness Debate* (pp. 443-470). Athens, GA: University of Georgia.
- Bird, E. A. R. (1987). The social construction of nature: theoretical approaches to the history of environmental problems. *Environmental Review*, 11, 255-264.
- Black, R. W. (2005, April 7). Wyoming fine-tunes grizzly bear plan. *Billings Gazette,* online edition: <u>billingsgazette.com</u> (accessed 6 May 2005).
- Blaikie, P. M. (1985). The political economy of soil erosion in developing countries. London: Longman.
- Bolle, A. W. (1997). The Bitterroot Revisited: 'A University [Re]View of the Forest Service'. In C. Miller (Ed.), *American forests: nature, culture, and politics* (pp. 163-178). Lawrence, KA: University Press of Kansas.
- Bookchin, M. (1994). Which Way for the Ecology Movement? Edinburgh: AK Press.
- Boyce, M. (1992). Population Viability Analysis. Annual Review of Ecology and Systematics, 23, 481-506.
- Boyce, M., & Waller, J. (2003). Grizzly Bears for the Bitterroot: predicting potential abundance and distribution. *Conservation Biology*, 31(3), 670-683.
- Bragg, J. (2000, November 19). Aspens wither without wolves. *Klamath Falls Herald and News*. Available: <u>http://www.cof.orst.edu/aspen/declart/klamath.htm</u> (accessed 24 January 2004).
- Braun, B., & Wainwright, J. (2001). Nature, Poststructuralism, and Politics. In N. Castree & B. Braun (Eds.), *Social Nature: Theory, Practice, and Politics* (pp. 41-63). Malden, MA: Blackwell.
- Brick, P. D. (1995). Determined Opposition: The Wise Use Movement Challenges Environmentalism. *Environment*, 37(8).
- Brick, P. D., & Weber, E. P. (2001). Will Rain Follow the Plow? Unearthing a New Environmental Movement. In P. D. Brick & D. Snow & S. Van de Wetering (Eds.), Across the Great Divide: explorations in collaborative conservation and the American West (pp. 15-32). Washington: Island Press.

- Bromley, S. (1999). The Spaces of Flows and Timeless Time: Manual Castell's *The Information Age. Radical Philosophy*, 97, 6-17.
- Brown, B. A. (1995). In Timber Country: Working people's stories of environmental conflict and urban flight. Philadelphia: Temple University.
- Brulle, R. J. (1996). Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective. Cambridge, MA: MIT.
- Bullard, R. D. (1990). Dumping in Dixie: race, class, and environmental quality. Boulder: Westview.
- Bullard, R. D. (1994). Unequal protection: environmental justice and communities of color. San Francisco: Sierra Club.
- Burgess, B. (2001). Fate of the Wild: The Endangered Species Act and the Future of Biodiversity. Athens, GA: University of Georgia.
- Burke, K. (1966). Language as symbolic action; essays on life, literature, and method. Berkeley: University of California.
- Butler, J. (1990). Gender trouble: feminism and the subversion of identity. New York: Routledge.
- Callicott, J. B. (2001a). Animal Liberation and Environmental Ethics: Back Together Again. In M. E. Zimmerman & J. B. Callicott & G. Sessions & K. J. Warren & J. Clark (Eds.), *Environmental Philosophy: from Animal Rights to Radical Ecology* (pp. 147-156). Upper Saddle River, NJ: Prentice Hall.
- Callicott, J. B. (2001b). Holistic Environmental Ethics and the Problem of Ecofascism. In M. E. Zimmerman & J. B. Callicott & G. Sessions & K. J. Warren & J. Clark (Eds.), *Environmental Philosophy: from Animal Rights to Radical Ecology* (pp. 111-125). Upper Saddle River, NJ: Prentice Hall.
- Castree, N. (1995). The Nature of Produced Nature. Antipode, 27(1), 12-48.
- Castree, N. (2000a). Production of Nature. In R. J. e. a. Johnston (Ed.), *The Dictionary of Human Geography* (4th ed., pp. 643-644). Malden, MA: Blackwell.
- Castree, N. (2000b). The Production of Nature. In E. Sheppard & T. J. Barnes (Eds.), *A companion to economic geography*. Malden, MA: Blackwell.
- Castree, N. (2001). Socializing Nature: Theory, Practice, and Politics. In N. Castree & B. Braun (Eds.), *Social Nature: Theory, Practice, and Politics*. Malden, MA: Blackwell.
- Castree, N. (2002). Environmental issues: From policy to political economy. *Progress in Human Geography*, 26(3), 357-366.
- Castree, N., & Braun, B. (1998). The Construction of Nature and the Nature of Construction: Analytical and political tools for building survivable futures. In N. Castree & B. Braun (Eds.), *Remaking Reality: Nature at the Millenium* (pp. 3-42). London: Routledge.
- Castree, N., & Braun, B. (Eds.). (1998b). *Remaking Reality: Nature at the Millenium*. London: Routledge.

- Chaloupka, W., & Cawley, R. M. (1993). The Great Wild Hope: Nature, Environmentalism, and the Open Secret. In J. Bennett & W. Chaloupka (Eds.), *In* the Nature of Things: Language, Politics, and the Environment (pp. 3-23). Minneapolis: University of Minnesota.
- Chouliaraki, L., & Fairclough, N. (2001). *Discourse in Late Modernity: Rethinking Critical Discourse Analysis*. Edinburgh: Edinburgh University.
- Clark, J. A. (1994). The Endangered Species Act: Its History, Provisions, and Effectiveness. In T. W. Clark & R. P. Reading & A. L. Clarke (Eds.), *Endangered Species Recovery: Finding the Lessons, Improving the Process*. Washington: Island.
- Clark, T. W., Paquet, P. C., & Curlee, A. P. (1996). 'Introduction' to the Special Section: Large Carnivore Conservation in the Rocky Mountains of the United States and Canada. *Conservation Biology*, *10*(4), 936-939.
- Clark, T. W., Minta, S. C., Curlee, A. P., & Kareiva, P. M. (1999). A Model Ecosystem for Carnivores in Greater Yellowstone. In T. W. Clark & S. C. Minta & A. P. Curlee & P. M. Kareiva (Eds.), *Carnivores in Ecosystems: The Yellowstone Experience* (pp. 1-9). New Haven, CT: Yale University.
- Clary, D. (1986). *Timber and the Forest Service*. Lawrence, KS: University Press of Kansas.
- Clawson, M. (1983). *The Federal Lands Revisited*. Washington: Resources for the Future.
- Coile, Z. (2003, June 10). Bush plans to relax 'roadless rule': Governors could get wilderness areas opened to development. *San Francisco Chronicle*.
- Cone, J. (1995). A common fate: endangered salmon and the people of the Pacific Northwest. New York: Henry Holt.
- Cooper, M. M. (1996). Environmental Rhetoric in the Age of Hegemonic Politics: Earth First! and the Nature Conservancy. In C. G. Herndl & S. C. Brown (Eds.), Green culture: environmental rhetoric in contemporary America (pp. 236-260). Madison, WI: University of Wisconsin.
- Craighead Environmental Research Institute (2002a). Craighead Environmental Research Institute. Available: www.grizzlybear.org (accessed 3 November 2003).
- Craighead Environmental Research Institute (2002b). *World Population Growth*. Available: <u>www.grizzlybear.org/worldpop.htm</u> (accessed 3 November 2003).
- Craighead, F. C., Jr. (1979). Track of the Grizzly. San Francisco: Sierra Club.
- Craighead, J. J., Sumner, J. S., & Mitchell, J. A. (1995). *The Grizzly Bears of Yellowstone: Their Ecology in the Yellowstone Ecosystem*, 1959-1992. Washington: Island.
- Cresswell, T. (1997). Weeds, Plagues, and Bodily Secretions: A Geographical Interpretation of Metaphors of Displacement. *Annals of the Association of American Geographers*, 87(2), 330-345.

- Cronon, W. (1990). Modes of prophecy and production: placing nature in history. *The Journal of American History*, 76(4), 1122-1131.
- Cronon, W. (1992). A Place for Stories: Nature, History, and Narrative. *Journal of American History*, 78, 1347-1376.
- Cronon, W. (1995). The Trouble with Wilderness; or, Getting Back to the Wrong Nature. In W. Cronon (Ed.), *Uncommon Ground: Toward Reinventing Nature* (pp. 69-90). New York: W.W. Norton.
- Cronon, W. (Ed.). (1996). Uncommon Ground: Toward Reinventing Nature. New York: W.W. Norton.
- Czech, B., & Krausman, P. R. (2001). *The Endangered Species Act: History, Conservation Biology, and Public Policy*. Baltimore: Johns Hopkins University.
- Dalehousie Whale Research. (1999). Journal Rankings Within Subject Categories. Available: www.dal.ca/~whitelab/sh/jrnljcr.htm (accessed 4 May 2005).
- Darier, É. (1999a). Foucault Against Environmental Ethics. In É. Darier (Ed.), Discourses of the Environment (pp. 217-240). Oxford: Blackwell.
- Darier, É. (1999b). Foucault and the Environment: An Introduction. In É. Darier (Ed.), *Discourses of the Environment* (pp. 1-33). Oxford: Blackwell.
- Davies, G. (2000). Virtual animals in electronic zoos: the changing geographies of animal capture and display. In C. Philo & C. Wilbert (Eds.), *Animal Geographies* (pp. 243-267). New York: Routledge.
- Davis, S. G. (1995). 'Touch the Magic'. In W. Cronon (Ed.), *Uncommon Ground: Toward Reinventing Nature* (pp. 204-217). New York: W.W. Norton.
- Dee, D. (1997, November/December). Brother, Can You Spare a Bear? *Outdoor Canada*, 9-10.
- Demeritt, D. (2001a). Being Constructive about Nature. In N. Castree & B. Braun (Eds.), Social Nature: Theory, Practice, and Politics. Malden, MA: Blackwell.
- Demeritt, D. (2001b). The Construction of Global Warming and the Politics of Science. Annals of the Association of American Geographers, 91(2), 307-337.
- Demeritt, D. (2002). What is the 'social construction of nature'? A typology and sympathetic critique. *Progress in Human Geography*, 26(6), 767-790.
- Devall, B., & Sessions, G. (1985). *Deep ecology: Living as if Nature Mattered*. Salt Lake City, Utah: G.M. Smith.
- Dewey, J. (1922). Human Nature and Conduct. New York: Modern Library.
- Dewey, J. (1934). Art as experience. New York: Minton Balch & Company.
- Dewey, J. (1960). The quest for certainty: a study of the relation of knowledge and action. New York: Putnam.
- Dewey, J. (1989). Later Works (Vol. 7). Carbondale, IL: Southern Illinois University.

- Dewey, J. (1998a). Existence, Value, and Criticism. In L. A. Hickman & T. M. Alexander (Eds.), *The Essential Dewey* (Vol. 1). Bloomington, IN: Indiana University.
- Dewey, J. (1998b). What I Believe. In L. A. Hickman & T. M. Alexander (Eds.), *The Essential Dewey* (Vol. 1, pp. 22-32). Bloomington, IN: Indiana University.
- Dewey, J., & Tufts, J. H. (1932). Ethics. The Later Works (Vol. 7).
- Di Chiro, G. (1995). Nature as Community: The Convergence of Environment and Social Justice. In W. Cronon (Ed.), *Uncommon Ground: Toward Reinventing Nature* (pp. 298-320). New York: W.W. Norton.
- Dixon, D. P., & Jones III, J. P. (1996). Editorial: For a Supercalifragilisticexpialidocious Scientific Geography. *Annals - Association of American Geographers*, 86(4), 767-779.
- diZerega, G. (1996). Environmentalists and the New Political Climate: Strategies for the Future. In P. D. Brick & R. M. Cawley (Eds.), *A Wolf in the Garden: The Land Rights Movement and the New Environmental Debate* (pp. 107-116). Lanham, MD: Rowman & Littlefield.
- Douglas, A. (1992). From fascism to libertarian communism: Georges Valois against the *Third Republic*. Berkeley: University of California Press.
- Dowie, M. (1995). Losing ground: American environmentalism at the close of the twentieth century. Cambridge, MA: MIT.
- Duda, M. D., & Young, K. C. (1995). The Public and Grizzly Bear Reintroduction in the Bitterroot Mountains of Central Idaho. Harrisonburg, VA: Responsive Management.
- Eccleston, C. H. (1999). The NEPA Planning Process: a Comprehensive Guide with Emphasis on Efficiency. New York: John Wiley & Sons.
- Ehrlich, P. R., & Ehrlich, A. H. (1996). Betrayal of science and reason: how antienvironmental rhetoric threatens our future. Washington: Island Press.
- Emel, J. (1991). Editorial: Ecological Crisis and Provocative Pragmatism. *Environment* and Planning D: Society and Space, 9, 384-390.
- Escobar, A. (1996). Constructing Nature: elements for a poststructural political ecology. In M. Watts & R. Peet (Eds.), *Liberation Ecologies* (pp. 46-68). New York: Routledge.
- Evernden, N. (1999). The Natural Alien. Toronto: University of Toronto.
- Fairclough, N. (1992). Discourse and Social Change. Cambridge: Polity.
- Fairhead, J., & Scoones, I. (2005). Local knowledge and the social shaping of soil investments: Critical perspectives on the assessment of soil degradation in Africa. *Land Use Policy*, 22(1), 33-41.
- Feldman, D. L. (1993). Natural Resource Policy in the West: The Absence of an Environmental Ethic. In Z. A. Smith (Ed.), *Environmental Politics and Policy in* the West (pp. 117-134). Dubuque, IA: Kendall/Hunt.

- Ferry, L. (1995). *The New Ecological Order* (C. Volk, Trans.). Chicago: University of Chicago.
- Fiedler, P. L., & Kareiva, P. M. (1998). Conservation biology: for the coming decade (2nd / edited by Peggy L Fiedler and Peter M Kareiva ed.). New York: Chapman & Hall.
- Fischer, F. (2000). *Citizens, Experts, and the Environment: the Politics of Local Knowledge*. Durham, NC: Duke University.
- Fischer, F., & Hajer, M. A. (1999). Beyond Global Discourse: The Rediscovery of Culture in Environmental Politics. In F. Fischer & M. A. Hajer (Eds.), *Living with nature: environmental politics as cultural discourse* (pp. 3-20). Oxford: Oxford University.
- Fischer, H. (1995). Wolf wars: the remarkable inside story of the restoration of wolves to Yellowstone. Helena, MT: Falcon Press.
- Fischer, H. (1998). Moving Past Polarization: Wolves, Grizzly Bears, and Endangered Species Recovery. In R. B. Keiter (Ed.), *Reclaiming the native home of hope: community, ecology, and the American West* (pp. 121-126). Salt Lake City: University of Utah.
- FitzSimmons, M. (1989). The Matter of Nature. Antipode, 21(2), 106-120.
- FitzSimmons, M., Glaser, J., Monte Mor, R., Pincetl, S., & Rajan, S. C. (1994). Environmentalism and the Liberal State. In M. O'Connor (Ed.), *Is Capitalism Sustainable? Political Economy and the Politics of Ecology*. New York: Guilford.
- Foreman, D. (1991a). Confessions of an eco-warrior (1st ed.). New York: Harmony.
- Foreman, D. (1991b). Dreaming Big Wilderness. Wild Earth, 1(1), 10-13.
- Foreman, D. (1995a). From Scenery to Nature. Wild Earth, 5(4), 9-16.
- Foreman, D. (1995b). The New Conservation Movement. In G. Sessions (Ed.), *Deep Ecology for the 21st Century* (pp. 50-56). Boston: Shambhala.
- Foreman, D. (1997). All Kinds of Wilderness Foes. Wild Earth, Winter.
- Foreman, D., Davis, J., Johns, D., Noss, R., & Soulé, M. (1992). The Wildlands Project Mission Statement. *Wild Earth, Special Issue on the Wildlands Project*, 3-4.
- Foreman, D., Dugelby, B., Humphrey, J., Howard, B., & Holdsworth, A. (2000). The Elements of a Wildlands Network Conservation Plan. *Wild Earth*, *10*(1), 17-30.
- Foreman, D., & Wolke, H. (1989). The Big Outside. Tucson: Ned Ludd.
- Forest History Society (2004). *1964 Wilderness Act*. US Congress 88:557. Available: <u>http://www.lib.duke.edu/forest/Research/usfscoll/policy/Wilderness/1964_Wilderness.html</u> (accessed 6 May 2005).
- Forsyth, T. (2003). *Critical political ecology: the politics of environmental science*. London: Routledge.
- Foster, J. B. (2002). Ecology Against Capitalism. New York: Monthly Review.

Foucault, M. (1980). Power/Knowledge. New York: Pantheon.

- Fox, W. (1990). Toward a Transpersonal Ecology. Boston: Shambhala.
- Fox, W. (2003). Deep Ecology: A New Philosophy for Our Time. In A. Light & H. Rolston III (Eds.), *Environmental Ethics: An Anthology* (pp. 252-261). Malden, MA: Blackwell.
- Gaillard, D. (2001). Predator Conservation Alliance. In C. L. Convis (Ed.), Conservation Geography: Case Studies in GIS, Computer Mapping and Activism (pp. 104-106). Redlands, CA: ESRI.
- Garrity, M. (1996). Economic Analysis of the Conservation Biology Proposal for Grizzly Bear Restoration in the Salmon-Selway Region. Missoula, MT: Alliance for the Wild Rockies. In Bader & Bechtold. (1996). The Conservation Biology Alternative for Grizzly Bear Population Restoration in the Greater Salmon-Selway Region Central Idaho and Western Montana: Alliance for the Wild Rockies Special Report No. 8.
- Gearino, J. (2004, October 27). Where to allow grizzlies?. *Casper Star Tribune*, online edition: <u>www.casperstartribune.net</u> (accessed 10 November 2004).
- Mann, J. (2004, December 2). Griz death toll reaches 31. *The Kalispell Daily Inter Lake*, online edition: <u>www.dailyinterlake.com</u> (accessed 13 December 2004)
- Gee, J. P. (1999). An Introduction to Discourse Analysis: Theory and Method. New York: Routledge.
- Goldman, M. (2003). Partitioned nature, privileged knowledge: Community-based conservation in Tanzania. *Development and Change*, 34(5), 833-862.
- Gottlieb, R. (1993). Forcing the spring: the transformation of the American environmental movement. Washington: Island Press.
- Gregory, D. (1994). Geographical Imaginations. Cambridge, MA: Blackwell.
- Gregory, D. (2001). (Post)Colonialism and the Production of Nature. In N. Castree & B. Braun (Eds.), *Social Nature: Theory, Practice, and Politics* (pp. 84-111). Malden, MA: Blackwell.
- Grossman, L. S. (1993). The political ecology of banana exports and local food production in St. Vincent, eastern Caribbean. *Annals, Association of American Geographers*, 83(2), 347-367.
- Grumbine, R. E. (1992). *Ghost Bears: Exploring the Biodiversity Crisis*. Washington: Island.
- Guha, R. (1998). Radical American Environmentalism and Wilderness Preservation: A Third World Critique. In J. B. Callicott & M. P. Nelson (Eds.), *The Great New Wilderness Debate* (pp. 231-245). Athens, GA: University of Georgia.
- Gunderson, A. G. (1998). Bookchin's Ecocommunity as Ecotopia: A Constructive Critique. In A. Light (Ed.), *Social Ecology after Bookchin* (pp. 192-210). New York: Guilford.

- Guthman, J. (1997). Reinventing Crisis: The Theory of Himalayan Environmental Degradation and the Project of Development in Post-Rana Nepal. *Development and Change*, 28(1), 45-69.
- Guthman, J., & McCarthy, J. (1998). Introduction: Special Issue: Nature and Capital in the American West. *Antipode*, 30(2), 67-72.
- Hacking, I. (1999). *The social construction of what?* Cambridge, MA: Harvard University.
- Hall, S. (1997). *Representation: cultural representations and signifying practices*. Thousand Oaks, CA: Sage.
- Halton, E. (1995). Bereft of Reason. Chicago: University of Chicago.
- Haraway, D. J. (1992). The promise of monsters: a regenerative politics for inappropriate/d others. In L. Grossman & C. Nelson & P. Treichler (Eds.), *Cultural Studies*. New York: Routledge.
- Haraway, D. J. (1997). *Modest_Witness@Second_Millennium. FemaleMan©_Meets_OncoMouse*TM: *feminism and technoscience.* New York: Routledge.
- Harré, R., Brockmeier, J., & Mühlhäuser, P. (1999). Greenspeak: a study of environmental discourse. Thousand Oaks, CA: Sage.
- Harrison, C. M., Burgess, J., & Clark, J. (1998). Discounted knowledges: Farmers' and residents' understandings of nature conservation goals and policies. *Journal of Environmental Management*, 54(4), 305-320.
- Harvey, D. (1973). Social Justice and the City. Baltimore: Johns Hopkins University.
- Harvey, D. (1989). The condition of postmodernity: an enquiry into the origins of cultural change. Oxford: Blackwell.
- Harvey, D. (1993). The Nature of Environment: the Dialectics of Social and Environmental Change. *Socialist Register*, 29, 1-51.
- Hays, S. P. (1987). Beauty, Health, and Permanence. New York: Cambridge University.
- Hecht, S. B., & Cockburn, A. (1989). *The fate of the forest: developers, destroyers, and defenders of the Amazon*. London: Verso.
- Hedrick, P. W. (1995). Gene Flow and Genetic Restoration: the Florida Panther as a Case Study. *Conservation Biology*, *9*(5), 996-1007.
- Hendee, J., Stankey, G. H., & Lucas, R. C. (1990). *Wilderness Management*. Golden, CO: North American.
- Hickman, L. (1996). John Dewey's Pragmatic Naturalism. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 50-72). New York: Routledge.
- High Country News (2005). *HighCountryNews.org*. Available: <u>www.hcn.org</u> (accessed 6 May, 2005).
- Hintz, J. (2003). Grizzly Conservation and the Nature of Essentialist Politics. *Capitalism, Nature, Socialism, 14*(4), 121-145.

- Hirt, P. (1994). A Conspiracy of Optimism: the Management of the National Forests Since World War II. Lincoln, NE: University of Nebraska.
- Hoy, T. (1998). *The political philosophy of John Dewey: towards a constructive renewal.* Westport, CO: Praeger.
- Humphrey, M. (2000). 'Nature' in deep ecology and social ecology: Contesting the core. *Journal of Political Ideologies*, 5(2), 247-268.
- Humphrey, M. (2002). *Preservation versus the People? Nature, Humanity, and Political Philosophy*. Oxford: Oxford University.
- ICBEMP. Interior Columbia Basin Ecosystem Management Project home page. Available: <u>www.icbemp.gov</u> (accessed 9 May 2005).
- ICBEMP. (2001a). SMMS Metadata Report: Isolated Timber Dependent Areas. Available: <u>www.icbemp.gov/spatial/metadata/demog/713.htm</u> (accessed 10 April 2005).
- ICBEMP. (2001b). SMMS Metadata Report: Mill towns -- from 1:100K Towns. Available: <u>www.icbemp.gov/spatial/metadata/demog/823.htm</u> (accessed 10 April 2005).
- Jackson, H. H. (1965). *A century of dishonor: the early crusade for Indian reform* (1st Harper Torchbook ed.). New York: Harper & Row.
- Jensen, D., Draffan, G., & Osborn, J. (1995). *Railroads and clearcuts: legacy of Congress's 1864 Northern Pacific Railroad land grant.* Spokane, WA: Inland Empire Public Lands Council.
- Johnson, A. G. (2000). The Blackwell Dictionary of Sociology: A User's Guide to Sociological Language. Malden, MA: Blackwell.
- Josephy, A. M. (1979). The Nez Perce Indians and the opening of the Northwest (Abridged ed.). Lincoln, NE: University of Nebraska Press.
- Kaniut, L. (1997). Some Bears Kill: True Life Tales of Terror. Long Beach, CA: Safari Press.
- Katz, E. (1997). *Nature as subject: human obligation and natural community*. Lanham, MD: Rowman & Littlefield.
- Katz, E. (2000). Against the inevitability of anthropocentrism. In E. Katz & A. Light & D. Rothenberg (Eds.), *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology* (pp. 17-42). Cambridge, MA: MIT.
- Katz, E., Light, A., & Rothenberg, D. (2000a). Introduction: Deep Ecology and its Philosophy. In E. Katz & A. Light & D. Rothenberg (Eds.), *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology* (pp. ix-xxiv). Cambridge, MA: MIT.
- Katz, E., Light, A., & Rothenberg, D. (Eds.). (2000b). *Beneath the surface: critical essays in the philosophy of deep ecology*. Cambridge, MA: MIT.
- Keefe-Feldman, M. (2005, March 25). How to Train a Bear. *Missoula Independent*, online edition: <u>www.missoulanews.com</u> (accessed 8 April 2005).

- Kemmis, D. (1998). A Democracy to Match its Landscape. In R. B. Keiter (Ed.), *Reclaiming the native home of hope: community, ecology, and the American West* (pp. 2-14). Salt Lake City: University of Utah.
- Keulartz, J. (1999). The Politics of Nature Development. In F. Fischer & M. A. Hajer (Eds.), *Living with nature: environmental politics as cultural discourse* (pp. 83-102). Oxford: Oxford University.
- Killingsworth, M. J., & Palmer, J. S. (1992). *Ecospeak: rhetoric and environmental politics in America*. Carbondale, IL: Southern Illinois University Press.
- Knight, R. R., Blanchard, B. M., & Schuller, P. (1999). Yellowstone Bears. In T. W. Clark & S. C. Minta & A. P. Curlee & P. M. Kareiva (Eds.), *Carnivores in Ecosystems: The Yellowstone Experience* (pp. 51-75). New Haven, CT: Yale University.
- Kovel, J. (2002). *The enemy of nature: the end of capitalism or the end of the world?* New York: Zed Books.
- Landeen, D., & Pinkham, A. (1999). Salmon and his people: fish & fishing in Nez Perce culture (1st ed.). Lewiston, ID: Confluence Press.
- Latour, B. (1987). Science in action: how to follow scientists and engineers through society. Cambridge, MA: Harvard University.
- Latour, B. (1999). *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University.
- Leopold, A. (1949). A Sand County Almanac and Sketches Here and There. Oxford: Oxford University.
- Levy, N. (1999). Foucault's Unnatural Ecology. In É. Darier (Ed.), *Discourses of the Environment* (pp. 202-216). Oxford: Blackwell.
- Lewontin, R. C. (1992). *Biology as ideology: the doctrine of DNA* (1st U S ed.). New York: Harper Perennial.
- Light, A. (1996). Compatibilism in Political Ecology. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 161-184). New York: Routledge.
- Light, A. (2002). Restoring Ecological Citizenship. In B. A. Minteer & B. P. Taylor (Eds.), *Democracy and the claims of nature: critical perspectives for a new century* (pp. 153-172). Lanham, MD: Rowman & Littlefield.
- Light, A. (2004). Methodological Pragmatism, Animal Welfare, and Hunting. In E. McKenna & A. Light (Eds.), *Animal Pragmatism: Rethinking Human-Nonhuman Relationships* (pp. 119-139). Bloomington, IN: Indiana University.
- Light, A., & Katz, E. (1996a). Environmental Pragmatism as Philosophy or Metaphilosophy: On the Weston-Katz Debate. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 325-338). New York: Routledge.
- Light, A., & Katz, E. (1996b). Introduction: Environmental Pragmatism and Environmental Ethics as Contested Terrain. In A. Light & E. Katz (Eds.), *Environmental Pragmatism*. New York: Routledge.

Light, A., & Katz, E. (Eds.). (1996c). Environmental pragmatism. New York: Routledge.

- Lindstrom, M. J., Smith, Z. A., & Caldwell, L. K. (2002). The National Environmental Policy Act: Judicial Misconstruction, Legislative Indifference, & Executive Neglect (Environmental History Series, 17). College Station, TX: Texas A&M University.
- Little, J. B. (1999). Arguing for Accord. American Forests, 104(4), 37-39.
- Livingston, J. A. (1981). *The Fallacy of Wildlife Conservation*. Toronto: McClelland and Stewart.
- Livingston, J. A. (1994). *Rogue Primate: An Exploration of Human Domestication*. Boulder, CO: Roberts Rinehart.
- London, J. K. (1998). Common Roots and Entangled Limbs: Earth First! and the Growth of Post-Wilderness Environmentalism on California's North Coast. *Antipode*, 30(2), 155-176.
- Luke, T. W. (1997). *Ecocritique: Contesting the Politics of Nature, Economy, and Culture*. Minneapolis: University of Minnesota.
- Luke, T. W. (1999a). Eco-Managerialism: Environmental Studies as a Power/Knowledge Formation. In F. Fischer & M. A. Hajer (Eds.), *Living with Nature: Environmental Politics as Cultural Discourse* (pp. 103-120). New York: Oxford University.
- Luke, T. W. (1999b). *Capitalism, Democracy, and Ecology: Departing from Marx.* Urbana, IL: University of Illinois.
- Luke, T. W. (2001). The Pleasures of Use: Federalizing Wilds, Nationalizing Life at the National Wildlife Federation. *Capitalism, Nature, Socialism, 12*(1), 3-38.
- Luke, T. W. (2002). The People, Politics, and the Planet: Who Knows, Who Protects, and Serves Nature Best? In B. A. Minteer & B. P. Taylor (Eds.), *Democracy and the claims of nature: critical perspectives for a new century* (pp. 301-320). Lanham, MD: Rowman & Littlefield.
- Lynn, W. S. (1998). Animals, Ethics, and Geography. In J. Wolch & J. Emel (Eds.), *Animal Geographies* (pp. 280-). New York: Verso.
- Maguire, L. A., & Servheen, C. (1992). Integrating biological and sociological concerns in endangered species management: augmentation of grizzly bear populations. *Conservation Biology*, 6(3), 426-434.
- Mann, J. (2004, December 2). Griz death toll reaches 31. *The Kalispell Daily Inter Lake*, online edition: <u>www.dailyinterlake.com</u> (accessed 13 December 2004).
- Mann, J. (2005, April 1). Grizzly Man. *The Kalispell Daily Inter Lake*, online edition: <u>www.dailyinterlake.com</u> (accessed 3 April 2005).
- Marx, K. (1994). Selected writings. Indianapolis: Hackett.
- Massey, D. (1994). Space, Place, and Gender. Minneapolis: University of Minnesota.

- Mathews, F. (2001). Deep Ecology. In D. Jamieson (Ed.), A Companion to Environmental Philosophy (pp. 218-232). Malden, MA: Blackwell.
- Mattson, D. J., Herrero, S., Wright, R. G., & Pease, C. M. (1996). Science and Management of Rocky Mountain Grizzly Bears. *Conservation Biology*, 10(4), 1013-1025.
- Mattson, D. J., & Reid, M. M. (1991). Conservation of the Yellowstone Grizzly Bear. *Conservation Biology*, 5(3), 364-372.
- McCarthy, J. (1998). Environmentalism, Wise Use and the Nature of Accumulation in the Rural West. In N. Castree & B. Braun (Eds.), *Remaking Reality: Nature at the Millenium* (pp. 126-149). London: Routledge.
- McCarthy, J. (2002). First world political ecology: Lessons from the Wise Use movement. *Environment and Planning A*, 34(7), 1281-1302.
- McGinnis, M. V. (Ed.). (1999). Bioregionalism. New York: Routledge.
- McIntyre, R. (1995). *War against the wolf: America's campaign to exterminate the wolf.* Stillwater, MN: Voyageur.
- McKenna, E. (2001). *The task of Utopia: a pragmatist and feminist perspective*. Lanham, MD: Rowman & Littlefield.
- McKenna, E., & Light, A. (2004). Introduction: Pragmatism and the Future of Human-Nonhuman Relationships. In E. McKenna & A. Light (Eds.), *Animal Pragmatism: Rethinking Human-Nonhuman Relationships* (pp. 1-16). Bloomington, IN: Indiana University.
- McLaughlin, A. (1993). *Regarding nature: industrialism and deep ecology*. Albany: State University of New York Press.
- McLaughlin, A. (1995). For a Radical Ecocentrism. In A. Drengson & Y. Inoue (Eds.), *The Deep Ecology Movement: An Introductory Anthology* (pp. 257-280). Berkeley: North Atlantic.
- McLellan, B. L., & Shackleton, D. M. (1988). Grizzly Bears and Resource-Extraction Industries: Effects of Roads on Behaviour, Habitat Use and Demography. *Journal* of Applied Ecology, 25(2), 451-460.
- McPhee, J. A. (1971). *Encounters with the archdruid*. New York: Farrar, Straus and Giroux.
- Merrill, T., Mattson, D. J., Wright, R. G., & Quigley, H. B. (1999). Defining landscapes suitable for restoration of grizzly bears Ursus Arctos in Idaho. *Biological Conservation*, 87, 231-248.
- Michel, S. M. (1998). Golden Eagles and the Environmental Politics of Care. In J. Wolch & J. Emel (Eds.), *Animal Geographies* (pp. 162-187). London: Verso.
- Miewald, C., & McCann, E. (2004). Gender Struggle, Scale, and the Production of Place in the Appalachian Coalfields. *Environment and Planning A*, *36*(6), 1045-1064.
- Mighetto, L. (1991). *Wild Animals and American Environmental Ethics*. Tucson: University of Arizona.

- Milbraith, L. (1984). *Environmentalists: Vanguards for a New Society*. Albany, NY: State University of New York.
- Mincher, B. J. (2002). Harvest as a component of Greater Yellowstone Ecosystem grizzly bear management. *Wildlife Society Bulletin, 30*(4), 1287-1292.
- Minta, S. C., & Kareiva, P. M. (1994). A Conservation Science Perspective: Conceptual and Experimental Improvements. In T. W. Clark & R. P. Reading & A. L. Clarke (Eds.), *Endangered Species Recovery: Finding the Lessons, Improving the Process* (pp. 275-304). Washington: Island.
- Minteer, B. (2001). Intrinsic Value for Pragmatists? Environmental Ethics, 22, 57-75.
- Minteer, B. A. (2002). Deweyan Democracy and Environmental Ethics. In B. A. Minteer & B. P. Taylor (Eds.), *Democracy and the claims of nature: critical perspectives for a new century* (pp. 33-48). Lanham, MD: Rowman & Littlefield.
- Minteer, B. A. (2004). Beyond Considerability: A Deweyan View of the Animal Rights-Environmental Ethics Debate. In E. McKenna & A. Light (Eds.), Animal Pragmatism: Rethinking Human-Nonhuman Relationships (pp. 97-118). Bloomington, IN: Indiana University.
- Moeckli, J., & Braun, B. (2001). Gendered Natures: Feminism, Politics, and Social Nature. In N. Castree & B. Braun (Eds.), *Social Nature: Theory, Practice, and Politics*. Malden, MA: Blackwell.
- Moore, B. (1996). *The Lochsa Story: Land Ethics in the Bitterroot Mountains*. Missoula: Mountain.
- Myers, G. A. (2002). Local communities and the new environmental planning: A case study from Zanzibar. *Area*, 34(2), 149-159.
- Naess, A. (1973). The Shallow and the Deep, Long-Range Ecology Movement: A Summary. *Inquiry*, 16, 95-100.
- Naess, A. (1986). Instrinsic Value: Will the Defenders of Nature Please Rise? In M. E. Soulé (Ed.), *Conservation biology: the science of scarcity and diversity* (pp. 504-516). Sunderland, MA: Sinauer Associates.
- Naess, A. (1989). Ecology, Community, Lifestyle. Cambridge: Cambridge University.
- Natural Resources Law Center (2000). Laws Influencing Community-Based Conservation in Colorado and the American West: A Primer. Boulder, CO: University of Colorado.
- Neumann, R. P. (1995). Ways of Seeing Africa: Colonial Recasting of African Society and Landscape in Serengeti National Park. *Ecumene*, 2(2), 149-169.
- Neumann, R. P. (1996). Dukes, earls, and ersatz Edens: aristocratic nature preservationists in colonial Africa. *Environment and Planning D: Society and Space, 14*(1), 79-98.
- Neumann, R. P. (1998). *Imposing wilderness: struggles over livelihood and nature preservation in Africa*. Berkeley: University of California Press.

- Newmark, W. (1985). Extinction of mammal populations in western North American national parks. *Biological Conservation*, 33, 197-208.
- NOAA. (2005). *Endangered Species Act of 1973*. US Congress 16:1452-64. Available: <u>http://www.nmfs.noaa.gov/prot_res/laws/ESA/ESA_Home.html</u> (accessed 23 January 2005).
- Norton, B. G. (1991). *Toward unity among environmentalists*. New York: Oxford University.
- Norton, B. G. (1996a). The Constancy of Leopold's Land Ethic. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 84-104). New York: Routledge.
- Norton, B. G. (1996b). Integration or Reduction: Two Approaches to Environmental Values. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 105-138). New York: Routledge.
- Norton, B. G. (2003). Searching for sustainability: interdisciplinary essays in the philosophy of conservation biology. Cambridge: New York.
- Noss, R. F. (1991). Ecosystem Restoration: An Example from Florida. *Wild Earth, 1*(1), 18-23.
- Noss, R. F. (1991/2). Biologists, Biophiles, and Warriors. Wild Earth, 1(4), 56-60.
- Noss, R. F. (1992). The Wildlands Project: Land Conservation Strategy. *Wild Earth, Special Issue on the Wildlands Project*, 10-25.
- Noss, R. F. (1994/5). Wilderness--Now More than Ever: a response to Callicott. *Wild Earth*, 4(4), 60-63.
- Noss, R. F. (1999). Sustainability and Wilderness. In J. B. Callicott & M. P. Nelson (Eds.), *The Great New Wilderness Debate* (pp. 408-413). Athens, GA: University of Georgia.
- Noss, R. F., & Cooperrider, A. Y. (1994). Saving nature's legacy: protecting and restoring biodiversity. Washington: Island Press.
- Noss, R. F., Dinerstein, E., Gilbert, B., Gilpin, M., Miller, B. J., Terborgh, J., & Trombulak, S. (1999). Core Areas: Where Nature Reigns. In M. Soulé & J. Terborgh (Eds.), *Continental Conservation* (pp. 99-128). Washington: Island.
- Noss, R. F., Quigley, H. B., Hornocker, M. G., Merrill, T., & Paquet, P. C. (1996). Conservation Biology and Carnivore Conservation in the Rocky Mountains. *Conservation Biology*, 10(4), 949-963.
- Nowicki, B. Is there really no money for the Endangered Species Act? *Center for Biological Diversity*. Available: <u>www.sw-center.org/swcbd/Library/esa-budget-</u> <u>crisis-nowicki.pdf12</u> (accessed 1 March 2005).
- NWF. (1997a). The Return of the Bear (pamphlet, pp. 8). Merrifield, VA: National Wildlife Federation.
- NWF. (1997b). Will You Help the Bears Come Back Home? (pamphlet, pp. 8). Merrifield, VA: National Wildlife Federation.

- NWF. (2001). Reintroducing Grizzly Bears to the Bitterroot Ecosystem. *National Wildlife Federation*. Available: <u>http://www.nwf.org/grizzly/bitteroo.html</u> (accessed 23 Feb 2002).
- Oberst, C. (2005). At The Bottom Of Everything. performed by Bright Eyes. Omaha: Saddle Creek.
- O'Connor, M. (Ed.). (1994). Is Capitalism Sustainable? Political Economy and the Politics of Ecology. New York: Guilford.
- Osborn, J. (2001). Railroads & Clearcuts: Legacy of Congress's 1864 Northern Pacific Railroad Land Grant, A Photographic Essay. Spokane, WA: The Lands Council. Available: <u>http://www.waterplanet.ws/railroads/photoessay/</u> (accessed 6 May 2005).
- Palomares, F., Gaona, P., Ferraras, P., & Delibes, M. (1995). Positive effects on game species of top predators by controlling smaller predator populations: An example with lynx, mongooses, and rabbits. *Conservation Biology*, 9(2), 295-305.
- Paquet, P. C., & Hackman, A. (1995). Large carnivore conservation in the Rocky Mountains: a long-term strategy for maintaining free-ranging and self-sustaining populations of carnivores. Toronto: World Wildlife Fund.
- Parker, K. (1996). Pragmatism and Environmental Thought. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 21-37). New York: Routledge.
- Parsell, N. (1986). Major Fenn's Country: a history of the lower Lochsa, the upper Middle-fork of the Clearwater, and surrounding lands. Kooskia, ID: Upper Clearwater – Lochsa – Selway Chamber of Commerce.
- Pease, C. M., & Mattson, D. J. (1999). Demography of the Yellowstone grizzly bears. *Ecology*, 80(3), 957.
- Peet, R. (1969). A New Left Geography. *Antipode*, 1(1), 3-5.Peet, R. (2000). *Modern Geographical Thought*. Malden, MA: Blackwell.
- Peet, R. (1997). The Development of Radical Geography in the United States. In R. Peet (Ed.), *Radical Geography* (pp. 6-30). Chicago: Maaroufa.
- Peet, R. (2000). Modern Geographical Thought. Malden, MA: Blackwell.
- Peluso, N. L. (1992). *Rich forests, poor people: resource control and resistance in Java*. Berkeley: University of California.
- Pendley, W. (1994). It Takes a Hero: The Grassroots Battle Against Environmental Oppression. Bellevue, WA: Free Enterprise.
- Penley, C., & Ross, A. (1991). Technoculture. Minneapolis: University of Minnesota.
- Pepper, D. (1993). *Eco-socialism: from deep ecology to social justice*. London: New York.
- Petersen, J. (1994, Winter). The 1910 Fire. Evergreen Magazine.
- Petersen, S. (2002). *Acting for endangered species: the statutory ark.* Lawrence, KA: University Press of Kansas.

Peterson, F. R. (1976). Idaho: A Bicentennial History. New York: W.W. Norton.

- Philo, C. (2000). Foucault's Geography. In M. Crang & N. Thrift (Eds.), *Thinking Space* (pp. 205-238). New York: Routledge.
- Plumwood, V. (2002). Environmental Culture: The Ecological Crisis of Reason. New York: Routledge.
- Poster, M. (1989). *Critical theory and poststructuralism: in search of a context*. Ithaca: Cornell University.
- Power, T. M. (1995). Economic Well-Being and Environmental Protection in the Pacific Northwest (Press Release, January).
- Power, T. M. (1996a). The wealth of nature: environmental quality, not mining, logging, or ranching, is driving local economic development in the West. *Issues in Science and Technology*, *12*(3), 48-54.
- Power, T. M. (1996b). Lost landscapes and failed economies: the search for a value of place. Washington: Island.
- Power, T. M. (1997). Ideology, wishful thinking, and pragmatic reform: a constructive critique of free-market environmentalism. In J. Baden & D. Snow (Eds.), *The Next West: Public Lands, Community, and Economy in the American West* (pp. 233-254). Covelo, CA: Island Press.
- Power, T. M., & Barrett, R. N. (2001). *Post-Cowboy Economics: Pay and Prosperity in the New American West*. Washington: Island.
- Price, J. (1995). Looking for Nature at the Mall: A Field Guide to the Nature Company. In W. Cronon (Ed.), Uncommon Ground: Toward Reinventing Nature (pp. 186-203). New York: W.W. Norton.
- Primm, S. A. (1996). A Pragmatic Approach to Grizzly Bear Conservation. *Conservation Biology*, 10(4), 1026-1035.
- Proctor, J. (1995). Whose Nature? The Contested Moral Terrain of Ancient Forests. In W. Cronon (Ed.), *Uncommon Ground: Toward Reinventing Nature* (pp. 269-297). New York: W.W. Norton.
- Proctor, J. (1998a). The social construction of nature: relativist accusations, pragmatic and realist responses. *Annals of the Association of American Geographers*, 88(3), 353-376.
- Proctor, J. (1998b). The Spotted Owl and the Contested Moral Landscape of the Pacific Northwest. In J. Wolch & J. Emel (Eds.), *Animal Geographies* (pp. 191-217). London: Verso.
- Proctor, J. (2001). Solid Rock and Shifting Sands: The Moral Paradox of Saving a Socially Constructed Nature. In N. Castree & B. Braun (Eds.), Social Nature: Theory, Practice, Politics (pp. 225-240). Malden, MA: Blackwell.
- Putnam, H. (1995). Pragmatism: an open question. Oxford, UK: Cambridge Mass. USA.
- Putnam, H. (2004). Ethics without ontology. Cambridge, MA: Harvard University Press.

- Putnam, H., & Conant, J. (1994). Words and life. Cambridge, MA: Harvard University Press.
- Quigley, P. (1999). Nature as Dangerous Space. In É. Darier (Ed.), *Discourses of the Environment* (pp. 181-202). Oxford: Blackwell.
- Rangan, H. (2000). *Of Myths and Movements: Rewriting Chipko into Himalayan History*. London: Verso.
- Rasker, R. (1994). A New Look at Old Vistas: The Economic Role of Environmental Quality in Western Public Lands. University of Colorado Law Review, 65, 369-399.
- Rasker, R. (1995). A New Home on the Range: Economic Realities in the Columbia Basin. Washington: The Wilderness Society.
- Rasker, R., & Hackman, A. (1996). Economic Development and the Conservation of Large Carnivores. *Conservation Biology*, *10*(4), 991-1002.
- Reading, D. (1996). *The economic impact of steelhead fishing and the return of salmon fishing in Idaho*. Boise, ID: Idaho Fish & Wildlife Foundation.
- Redford, K., & Sanjayan, M. A. (2003). Editorial: Retiring Cassandra. Conservation Biology, 17(6), 1473-1474.
- Reid, H., & Taylor, B. (2003). John Dewey's Aesthetic Ecology of Public Intelligence and the Grounding of Civic Environmentalism. *Ethics and the Environment*, 8(1), 74-92.
- Rescher, N. (2002). Knowledge of the truth. In J. Conant & U. M. Zeglen (Eds.), *Hilary Putnam: Pragmatism and Realism* (pp. 66-79). New York: Routledge.
- Riebsame, W., Gosnell, H., & Theobald, D. (Eds.). (1997). Atlas of the New West: Portrait of a Changing Region. New York: W. W. Norton & Company.
- Riffell, S. K. (1998). Metapopulations and Wildlife Conservation: book review. *Ecology*, 79(6), 2212-2213.
- Ring, R. (2002, August 2). Montana's governor is a poor choice to lead the West. *High Country News*, pp. online edition: <u>http://www.hcn.org</u> (accessed 20 April 2005).
- Ripple, W. J., & Larsen, E. J. (2000). Historic aspen recruitment, elk, and wolves in northern Yellowstone National Park, USA. *Biological Conservation*, 95(3), 361-370.
- Ripple, W. J., Larsen, E. J., Renkin, R. A., & Smith, D. W. (2001). Trophic cascades among wolves, elk and aspen on Yellowstone National Park's northern range. *Biological Conservation*, 102(3), 227-234.
- Robbins, P. (2002). Obstacles to a First World political ecology? Looking near without looking up. *Environment and Planning A*, *34*(8), 1509.
- Robbins, W. (1997). Colony and Empire: the Capitalist Transformation of the American West. Lawrence, KS: University of Kansas.

- Robert, J. S. (2000). Wild Ontology: Elaborating Environmental Pragmatism. *Ethics and the Environment*, 5(2), 191-209.
- Roberts, R. S., & Emel, J. (1992). Uneven development and the tragedy of the commons: competing images for nature-society analysis. *Economic Geography*, 68(3), 249-271.
- Rocky Mountain College. (2005). Environmental Speaker Series. *Rocky Mountain College.* Available: <u>www.rocky.edu/newewb/index.php?topgroupid=28&subgroupid+86&contentid=</u> <u>133</u> (accessed 9 May 2005).
- Rogers, R. A. (1994). Nature and the Crisis of Modernity: a critique of contemporary discourse on managing the earth. Montreal: Black Rose.
- Rogers, R. A. (1995). The Oceans are Emptying. Cheektowaga, NY: Black Rose.
- Rogers, R. A. (1998a). Solving History: The Challenge of Environmental Activism. Buffalo: Black Rose.
- Rogers, R. A. (1998b). Unaccommodated Nature (in Symposium on David Harvey's *Justice, Nature, and the Geography of Difference*). *Capitalism, Nature, Socialism,* 9(3), 43-49.
- Rorty, R. (1979). Philosophy and the mirror of nature. Princeton: Princeton University.
- Rosenthal, S. B. (1986). *Speculative pragmatism*. Amherst, MA: University of Massachusetts.
- Rosenthal, S. B., & Buchholz, R. A. (1996). How Pragmatism is an Environmental Ethic. In A. Light & E. Katz (Eds.), *Environmental Pragmatism* (pp. 38-49). New York: Routledge.
- Rothenberg, D. (1995). Introduction. In D. Rothenberg (Ed.), *Wild Ideas* (pp. xii-xxvii). Minneapolis: University of Minnesota.
- Roy, J., Servheen, C., Kasworm, W., & Waller, J. (2001). Restoration of Grizzly Bears to the Bitterroot Wilderness: The EIS Approach. In D. Maehr & R. F. Noss & J. Larkin (Eds.), Large Mammal Restoration: Ecological and Social Challenges for the 21st Century (pp. 205-224). Washington: Island.
- Rudzitis, G. (1996). *Wilderness and the Changing American West*. New York: John Wiley & Sons.
- Runte, A., & Steen, H. (1991). *Public lands, public heritage: the national forest idea*. Niwot, CO: R. Rinehart Publishers in cooperation with the Buffalo Bill Historical Center.
- Safari Press (2004). Safari Press: Publisher and Seller of Fine Quality Hunting and Firearms Books. Available: www.safaripress.com (accessed 5 May 2005).
- Sagoff, M. (2001). Animal Liberation and Environmental Ethics: Bad Marriage, Quick Divorce. In M. E. Zimmerman & J. B. Callicott & G. Sessions & K. J. Warren & J. Clark (Eds.), *Environmental Philosophy: from Animal Rights to Radical Ecology* (pp. 87-96). Upper Saddle River, NJ: Prentice Hall.

- Salleh, A. (1994). Nature, Woman, Labor, Capital: living the deepest contradiction. In M. O'Connor (Ed.), Is Capitalism Sustainable? Political Economy and the Politics of Ecology (pp. 106-124). New York: Guilford.
- Sayer, A. (1989). On the dialogue between humanism and historical materialism in geography. In A. Kobayashi & S. Mackenzie (Eds.), *Remaking Human Geography* (pp. 206-226). Boston: Unwin Hyman.
- Sayer, A. (2000). Realism and Social Science. Thousand Oaks, CA: Sage.
- Scarce, R. (1999). *Fishy business: salmon, biology, and the social construction of nature*. Philadelphia, PA: Temple University Press.
- Schlosberg, D. (1997). Challenging Pluralism: Environmental Justice and the Evolution of Pluralistic Practice. In R. S. Gottlieb (Ed.), *The Ecological Community* (pp. 270-291). New York: Routledge.
- Scholz, A., Benjamin, N., Woodling, N., Black, P., Steinback, C., Bonzon, K., & Fujita, R. (2004). Participatory socioeconomic analysis: Drawing on fishermen's knowledge for marine protected area planning in California. *Marine Policy*, 28(4), 335-349.
- Schwantes, C. A. (1993). *Railroad signatures across the Pacific Northwest*. Seattle: University of Washington.
- Seidman, S. (1992). Postmodern Social Theory as Narrative with Moral Intent. In S. Seidman & D. G. Wagner (Eds.), *Postmodern Social Theory*. Oxford: Blackwell.
- Seigfried, C. H. (1998). John Dewey's Pragmatic Feminism. In L. A. Hickman (Ed.), *Reading Dewey* (pp. 187-216). Bloomington, IN: Indiana University.
- Sellars, R. W. (1997). *Preserving Nature in the National Parks*. New Haven, CT: Yale University.
- Servheen, C., & Fischer, H. (2001). Grizzly Bear Reintroduction in Montana and Idaho (29 January interview by B. Marston). Paonia, CO: Radio High Country News.
- Sessions, G. (1992). Radical Environmentalism in the 90s. Wild Earth, 2(3), 64-67.
- Sessions, G. (1995). Postmodernism, Environmental Justice and the Demise of the Ecology Movement?. *Wild Duck Review*, 5 (June/July), 14-16.
- Sessions, G. (1996). Reinventing Nature? The End of Wilderness? A Response to William Cronon's Uncommon Ground. Wild Earth, 6(4), 46-52.
- Shabecoff, P. (2000). *Earth rising: American environmentalism in the 21st century*. Washington: Island Press.
- Shaffer, M. L. (1992). *Keeping the grizzly bear in the American West: a strategy for real recovery*. Washington: Wilderness Society.
- Shepard, F. (1999). Coming Home to the Wild. Wild Earth, 9(1), 22-27.
- Shepard, P. (1996). The others: how animals made us human. Washington: Island Press.
- Shepard, P. (1998a). Nature and Madness. Athens, GA: University of Georgia.

- Shepard, P. (1998b). *Thinking Animals: Animals and the Development of Human Intelligence* (2nd. ed.). Athens, GA: University of Georgia.
- Simberloff, D., Farr, J. A., Cox, J., & Mehlman, D. W. (1992). Movement Corridors: Conservation Bargains or Poor Investments?, *Conservation Biology* 6(4), 493-504.
- Sixel, F. W. (1995). Understanding Marx. Lanham, MD: University Press of America.
- Smith, M. (2001). *An ethics of place: radical ecology, postmodernity, and social theory.* Albany: State University of New York.
- Smith, N. (1991). Uneven development: nature, capital, and the production of space. Cambridge, MA: Blackwell.
- Smith, N. (1998). Nature at the Millenium: Production and re-enchantment. In N. Castree & B. Braun (Eds.), *Remaking Reality: Nature at the Millenium* (pp. 271-285). London: Routledge.
- Snow, D. (1997). Empire or Homelands? A Revival of Jeffersonian Democracy in the American West. In J. Baden & D. Snow (Eds.), *The next West: public lands, community, and economy in the American West* (pp. 181-203). Washington: Island Press.
- Snyder, G. (1996). Nature as Seen from Kitkitdizze is No 'Social Construction'. *Wild Earth*, 6(4), 8-9.
- Society for Conservation Biology. Society for Conservation Biology: Information. Available: <u>www.conbio.org/SCB/Information</u> (accessed 6 May 2005).
- Soja, E. W. (1980). The socio-spatial dialectic. Annals, Association of American Geographers, 70(2), 207-225.
- Solnit, R. (2004, November 12). The Siege of the Sierra Club. *TomDispatch.com*. Available: <u>TomDispatch.com</u> (accessed 25 February 2005).
- Soper, K. (1995). What is Nature? Oxford: Blackwell.
- Soper, K. (1996). Nature/'nature'. In G. Robertson & M. Mash & L. Tickner & J. Bird & B. Curtis & T. Putnam (Eds.), *FutureNatural: Nature, Science, Culture* (pp. 22-34). New York: Routledge.
- Soulé, M. (1987). History of the Society for Conservation Biology: How and Why We Got Here. *Conservation Biology*, *1*(1), 4-5.
- Soulé, M. (1992). Foreword. In R. E. Grumbine (Ed.), *Ghost Bears: Exploring the Biodiversity Crisis*. Washington: Island.
- Soulé, M. (2001). Should Wilderness Areas be Managed? In T. Kerasote (Ed.), *Return of the Wild: The Future of Our National Lands* (pp. 136-152). Washington: Island.
- Soulé, M., & Noss, R. F. (1998). Rewilding and Biodiversity: Complementary Goals for Continental Conservation. *Wild Earth*, 7(3), 19-28.

- Soulé, M., & Terborgh, J. (1999a). The Policy and Science of Regional Conservation. In M. Soulé & J. Terborgh (Eds.), *Continental Conservation: Scientific Foundations* of Regional Reserve Networks (pp. 1-17). Washington: Island.
- Soulé, M., & Terborgh, J. (Eds.). (1999b). Continental Conservation: Scientific Foundations of Regional Reserve Networks. Washington: Island.
- Soulé, M. E. (1986). Conservation biology: the science of scarcity and diversity. Sunderland, MA: Sinauer Associates.
- Sparke, M. (1995). Between Demythologizing and Deconstructing the Map: Shawnadithit's New-found-land and the Alienation of Canada. *Cartographica*, 32(1), 1-21.
- Stanford Environmental Law Society. (2001). *The Endangered Species Act*. Stanford, CA: Stanford University Press.
- St. Clair, J. (1995). Cashing Out: Corporate Environmentalism in the Age of Newt. Eugene, OR: Public Interest Law Conference.
- St. Clair, J. (2004). *Been brown so long it looked like green to me: the politics of nature.* Monroe, ME: Common Courage.
- St. Martin, K. (2001). Making Space for Community Resource Management in Fisheries. Annals of the Association of American Geographers, 91(1), 122-142.
- Sullins, T. (2001). ESA: Endangered Species Act. Chicago: American Bar Association.
- Sutton, A., & Sutton, M. (1965). Guarding the Treasured Lands: The Story of the National Park Service. Philadelphia: J.B. Lippincott.
- Takacs, D. (1996). *The Idea of Biodiversity: Philosophies of Paradise*. Baltimore: Johns Hopkins University.
- Talbot, C. (1998). The Wilderness Narrative and the Cultural Logic of Capitalism. In J.
 B. Callicott & M. P. Nelson (Eds.), *The Great New Wilderness Debate* (pp. 325-333). Athens, GA: University of Georgia.
- Taylor, B. (2000). Deep Ecology and its Social Philosophy: A Critique. In E. Katz & A. Light & D. Rothenberg (Eds.), *Beneath the Surface: Critical Essays in the Philosophy of Deep Ecology* (pp. 269-300). Cambridge, MA: MIT.
- Taylor, B. P. (1992). Our Limits Transgressed: Environmental Political Thought in America. Lawrence, KS: University of Kansas.
- Taylor, J. M. (2003). Appeals Court Upholds Clinton 'Roadless Rule'. *Environment News*, 1 February.
- Terborgh, J. (1999). Requiem for Nature. Washington: Island.
- Terborgh, J., & Soulé, M. (1999). Why We Need Mega-Reserves: Large-Scale Networks and How to Design Them. *Wild Earth*, 9(1), 66-72.
- Turner, J. (1996). The Abstract Wild. Tucson: University of Arizona.

- Turner, J. (1999). In Wildness is the Preservation of the World. In J. B. Callicott & M. P. Nelson (Eds.), *The Great New Wilderness Debate* (pp. 617-627). Athens, GA: University of Georgia.
- Underwood, L. (2000). *Man eaters: true tales of animals stalking, mauling, killing, and eating human prey.* New York: Lyons.
- US EPA. (2001). "Reevaluation of the Record of Decision for the Final Environmental Impact Statement and Selection of Alternative for Grizzly Bear Recovery in the Bitterroot Ecosystem." *Federal Register* 66:121. Available: <u>www.epa.gov/fedgrstr/EPA-SPECIES/2001/June/Day-22/e15908.htm</u> (accessed 9 May 2005).
- USFWS. (1982). Grizzly Bear Recovery Plan. Missoula, MT: US Fish and Wildlife Service.
- USFWS. (1993). Grizzly Bear Recovery Plan (Revised). Missoula, MT: US Fish and Wildlife Service.
- USFWS. (1997a). Grizzly Bear Recovery in the Bitterroot Ecosystem: Draft Environmental Impact Statement. Missoula, MT: US Fish and Wildlife Service.
- USFWS. (1997b). Transcript of Proceedings from Boise, Idaho, 3 October: In the Matter of Reintroduction of Grizzly Bears in the Bitterroot Ecosystem (pp. 153). Boise, ID: US Fish and Wildlife Service. Associated Reporting (preparer).
- USFWS. (1997c). Transcript of Proceedings from Helena, Montana, 3 October: In the Matter of Reintroduction of Grizzly Bears in the Bitterroot Ecosystem (pp. 63). Missoula, MT: US Fish and Wildlife Service. Hendrickson Court Reporting (preparer).
- USFWS. (1997d). Transcript of Proceedings from Lewiston, Idaho, 2 October: In the Matter of Reintroduction of Grizzly Bears in the Bitterroot Ecosystem (pp. 122). Missoula, MT: US Fish and Wildlife Service.
- USFWS. (1997e). Transcript of Proceedings from Missoula, Montana, 2 October: In the Matter of Reintroduction of Grizzly Bears in the Bitterroot Ecosystem (pp. 138). Missoula, MT: US Fish and Wildlife Service. Rebish Court Reporting (preparer).
- USFWS. (1997f). Transcript of Proceedings from Salmon, Idaho, 8 October: In the Matter of Reintroduction of Grizzly Bears in the Bitterroot Ecosystem (pp. 154). Missoula, MT: US Fish and Wildlife Service. Buchanan Reporting Service (preparer).
- USFWS. (1998). Executive Summary of Public Comments Draft EIS for Grizzly Bear Recovery. Missoula, MT: US Fish and Wildlife Service.
- USFWS. (2000a). Grizzly Bear Recovery in the Bitterroot Ecosystem: Final Environmental Impact Statement. Missoula, MT: US Fish and Wildlife Service.
- USFWS. (2000b). Grizzly Bear Recovery: Overview and Update. Missoula, MT: US Fish and Wildlife Service.

- USFWS. (2001). Summary of Public Comments: Re-evaluation of Record of Decision/Removal of Regulations for Reintroduction of Grizzly Bears in Bitterroot Area of Idaho and Montana. Missoula, MT: US Fish and Wildlife Service.
- Utley, R. M., & Mackintosh, B. (1989). *The Department of Everything Else: Highlights of Interior History*. online book: <u>http://www.cr.nps.gov/history/online_books/utley-mackintosh/</u> National Park Service.
- Van Wyck, P. C. (1997). Primitives in the wilderness: deep ecology and the missing human subject. Albany: State University of New York.
- Varner, G. (2003). Can Animal Rights Activists Be Environmentalists? In A. Light & H. Rolston III (Eds.), *Environmental Ethics: An Anthology* (pp. 95-113). Malden, MA: Blackwell.
- Walker, P. A. (2003). Reconsidering 'regional' political ecologies: toward a political ecology of the rural American West. *Progress in Human Geography*, 27(1), 7-24.
- Waller, D. M. (1996). Wilderness Redux: Can Biodiversity Play a Role? *Wild Earth*, 6(4), 36-45.
- Warner, R. (2002). Pragmatism and Legal Reasoning. In J. Conant & U. M. Zeglen (Eds.), *Hilary Putnam: Pragmatism and Realism* (pp. 25-37). New York: Routledge.
- Warren, L. (1994). The Hunter's Game: Poachers, Conservationists, and Twentieth-Century America. Unpublished Ph.D., Yale University, New Haven, CT.
- Weaver, J. L., Paquet, P. C., & Ruggiero, L. F. (1996). Resilience and Conservation of Large Carnivores in the Rocky Mountains. *Conservation Biology*, 10(4), 964-976.
- Wenner, L. M. (1993). The Courts in Environmental Politics: The Case of the Spotted Owl. In Z. A. Smith (Ed.), *Environmental Politics and Policy in the West* (pp. 45-61). Dubuque, IA: Kendall/Hunt.
- Wenz, P. S. (2001). Environmental ethics today. New York: Oxford University.
- West, C. (1989). *The American evasion of philosophy: a genealogy of pragmatism.* Madison, WI: University of Wisconsin.
- West, C. (2004). *Democracy matters: winning the fight against imperialism*. New York: Penguin.
- Whatmore, S. (2002). *Hybrid geographies: natures, cultures, spaces*. Thousand Oaks, CA: Sage.
- White, R. (1995). 'Are You an Environmentalist or Do You Work for a Living?': Work and Nature. In W. Cronon (Ed.), Uncommon Ground: Toward Reinventing Nature (pp. 171-185). New York: W.W. Norton.
- Whitford, J. (2002). Pragmatism and the untenable dualism between means and ends: Why rational choice theory does not deserve paradigmatic authority. *Theory and Society*, *31*, 325-363.

- Wilcox, L. (1997). The Last Grizzlies in the American West: the Long Hard Road to Recovery. *Endangered Species Update*, 14(9/10), 11-16.
- Wilcox, L. (1998). Bear Necessities: Grizzlies, Wilderness, and the Sciences of Extinction. *Wild Earth*, 8(4), 14-18.
- Wild Earth (1991). Statement of Purpose. Wild Earth, 1(1), inside front cover.
- Wild Earth (2001). Special Issue: Citizen Science: looking to protect nature 11(3/4).
- Wildlands Project (2003). 2002 Year in Review. Wild Earth, 13(1), insert.
- Wilkinson, C. F. (2003). Foreward. In M. P. Dombeck & C. A. Wood & J. E. Williams (Eds.), From conquest to conservation: our public lands legacy (pp. xvi-xviii). Washington, DC: Island Press.
- Willems-Braun, B. (1997). Buried Epistemologies: The Politics of Nature in (Post)colonial British Columbia. Annals of the Association of American Geographers, 87(1), 3-31.
- Williams, R. (1972). Ideas of Nature. In J. Benthall (Ed.), *Ecology, The Shaping Enquiry* (pp. 146-164). Edinburgh: T. & A. Constable Ltd.
- Williams, R. W. (1999). Environmental injustice in America and its politics of scale. *Political Geography*, 18(1), 49-73.
- Wilmers, C. C., & Getz, W. M. (2004). Simulating the effects of wolf-elk population dynamics on resource flow to scavengers. *Ecological Modeling*, 177(1-2), 193-208.
- Wilson, A. (1991). *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez*. Toronto: Between the Lines.
- Wolch, J., & Emel, J. (Eds.). (1998). Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands. London: Verso.
- Wuerthner, G. (1999). Selfish Genes, Local Control, and Conservation. *Wild Earth*, 9(4), 87-91.
- Yaffee, S. L. (1982). Prohibitive policy: implementing the Federal Endangered Species Act. Cambridge, MA: MIT.
- Yaffee, S. L. (1994). *The wisdom of the spotted owl: policy lessons for a new century*. Washington, DC: Island Press.
- Zaslowsky, D. C. (1986). *These American lands: parks, wilderness, and the public lands* (1st ed.). New York: Henry Holt.
- Zeglen, U. M. (2002). Introduction to Part II. In J. Conant & U. M. Zeglen (Eds.), *Hilary Putnam: Pragmatism and Realism* (pp. 89-95). New York: Routledge.
- Zweers, W. (2000). Participating with Nature. Utrecht: International.

Vita

John G. Hintz Date of birth: 19 September 1966 Place of birth: Ft. Walton Beach, Florida Educational institutions attended and degrees awarded

1998	M.S. Geography, University of Idaho
1988	B.S. Geography, Florida State University

Professional positions held

2001-2004	Teaching Assistant, University of Kentucky
2001, 2002, 2003	Instructor, University of Kentucky (Summer Semesters)
2000-2001	Research Fellow, Kentucky Transportation Center
1997-2000	GIS Analyst/System Administrator, Nez Perce Tribe, Lapwai, ID
1996-1997	GIS Analyst, Waggoner Engineering, Inc., Jackson, MS
1995-1996	Research Assistant, University of Idaho

Scholastic and professional honors

2004-5	Dissertation Year Fellowship, University of Kentucky
2003	Dissertation Enhancement Award, University of Kentucky
2001-2004	Graduate Student Support Award, University of Kentucky
2000-2001	Kentucky Opportunity Fellowship, University of Kentucky
2000-2001	Graduate Fellowship, Kentucky Transportation Center

Professional publications

Publication in Refereed Journal:

2003 "Grizzly Conservation and the Nature of Essentialist Politics," *Capitalism, Nature, Socialism* 15(4), p. 140-162.

Refereed Book Chapter: 2005 "The Role of Wilderness and Public Land Amenities in Explaining Migration and Rural Development in the American Northwest," in Gary Green (editor), Amenities and Rural Development (Northampton, MA: Edward Elgar). 3rd author with Christy Dearien and Gundars Rudzitis (forthcoming). Book Reviews in Refereed Journals: 2005 Review of Shepard Krech, John Robert McNeill, and Carolyn Merchant (editors), 2002. Encyclopedia of World Environmental History. New York: Routledge, 2002. in Cultural Geographies 12(1). 2003 Review of Val Plumwood, 2002. Environmental Culture: The Ecological Crisis of Reason. New York: Routledge. in Human Ecology Review 10(1), p. 77-79. **Cartographic Publications** "Birthplaces of AAG Members: 1961." in Newsletter: Association 2005 of American Geographers (forthcoming), with Holly R. Barcus,

Stanley D. Brunn, and Richard A. Gilbreath.