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3 1 **The contributions of Indigenous Peoples and Local Communities to ecological**  
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5 2 **restoration**

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9 4 **Running head:** Indigenous Peoples for Ecological Restoration  
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13 6 Victoria Reyes-García<sup>a,b</sup>, Álvaro Fernández-Llamazares<sup>c</sup>, Pamela McElwee<sup>d</sup>,  
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15 7 Zsolt Molnár<sup>e</sup>, Kinga Öllerer<sup>e, f</sup>, Sarah Jane Wilson<sup>g</sup>, Eduardo Brondizio<sup>h</sup>  
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17  
18 8 <sup>a</sup> Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain

19 9 <sup>b</sup> Institut de Ciència i Tecnologia Ambientals (ICTA), Universitat Autònoma de  
20 Barcelona, 08193 Bellaterra, Barcelona, Spain

21 10 <sup>c</sup> Global Change and Conservation (GCC), Helsinki Institute of Sustainability Science  
22 (HELSUS), Faculty of Biological and Environmental Sciences, University of Helsinki,  
23 Helsinki, Finland

24 11  
25 12  
26 13 <sup>d</sup> Department of Human Ecology, Rutgers University, New Jersey, USA

27 14  
28 15 <sup>e</sup> MTA Centre for Ecological Research, GINOP Sustainable Ecosystems Group, 8237  
29 Tihany, Hungary

30 16  
31 17 <sup>f</sup> Institute of Biology Bucharest, Romanian Academy, 060031 Bucharest, Romania

32 18 <sup>g</sup> PARTNERS reforestation network, University of Connecticut, CT, USA

33 19 <sup>h</sup> Department of Anthropology, Indiana University, Bloomington, USA

34 20 **Corresponding author:**

35 21 Victoria Reyes-García

36 22 ICREA Research Professor

37 23 Institute of Environmental Science and Technology (ICTA-UAB)

38 24 ICTA-ICP, Edifici Z

39 25 Carrer de les Columnes

40 26 Universitat Autònoma de Barcelona

41 27 E-08193, Bellaterra (Cerdanyola del Vallès-Barcelona)

42 28 Tel: +34 93 586 8976

43 29 E-mail: [Victoria.Reyes@uab.cat](mailto:Victoria.Reyes@uab.cat)  
44 30

45 31 **Author contributions:** VRG and EB conceived and designed the research; AFL, KÖ,  
46 32 PM, SJW, ZM conducted the literature review. VRG, AFL, KÖ, PM, SJW, ZM, and EB  
47 33 wrote and edited the manuscript.  
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3 34 **Abstract**

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5 35 Indigenous Peoples and Local Communities (IPLC) are affected by global  
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7 36 environmental change because they directly rely on their immediate environment for  
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9 37 meeting basic livelihood needs. Therefore, safeguarding and restoring ecosystem  
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11 38 resilience is critical to support their wellbeing. Based on examples from the literature,  
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13 39 we illustrate how IPLC participate in restoration activities maintaining traditional  
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15 40 practices, restoring land degraded by outsiders, and joining outside groups seeking to  
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17 41 restore ecosystems. Our review also provides examples of how Indigenous and local  
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19 42 knowledge can be incorporated in the planning, execution, and monitoring of restoration  
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21 43 activities. However, not all restoration initiatives engaging IPLC are beneficial or  
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23 44 successful, and the factors that lead to success are not fully known. While local  
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25 45 involvement in restoration projects is often mentioned as an element of success, this is  
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27 46 primarily associated to projects that actively involve IPLC in co-designing restoration  
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29 47 activities affecting their territories, ensure both short-term direct benefits to IPLC and  
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31 48 long-term support of the maintenance of restored areas, and recognize IPLC local  
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33 49 traditions and customary institutions. Based on these examples, we argue that IPLC  
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35 50 should be a more important focus in any post-2020 CBD agenda on restoration.  
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41 52 **Key words:** Co-management; Cultural Keystone Species; Ecosystem Services;  
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43 53 Indigenous and Local Knowledge (ILK); Traditional management.  
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3 54 **Implications**  
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- 5 55 • Actively involving IPLC in restoration efforts **i)** can help in site and species  
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7 56 selection for restoration, **ii)** can increase local participation in restoration  
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9 57 activities and in the monitoring and maintenance of restored areas, and **iii)** can  
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11 58 provide historical information on ecosystem state and management and an  
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13 59 understanding of local successional processes.  
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16 60 • The contribution of IPLC and their knowledge systems to ecological restoration  
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18 61 could be more successful if restoration initiatives **i)** recognized IPLC customary  
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20 62 institutions, **ii)** were built on partnerships with IPLC from their design, and **iii)**  
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22 63 ensure both short-term direct benefits to IPLC and long-term support of the  
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24 64 maintenance of restored areas.  
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27 65 • IPLC should also be included in any post-2020 CBD agenda on restoration.  
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Review

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3 67 **The contributions of Indigenous Peoples and Local Communities to ecological**  
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5 68 **restoration**  
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8 69 Indigenous Peoples and Local Communities (IPLC), generally defined as ethnic  
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10 70 groups who are descended from and identify with the original inhabitants of a given  
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12 71 region, are affected by global environmental change because they often rely directly on  
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14 72 their immediate environments (e.g., local resources, water streams) for meeting basic  
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16 73 livelihood needs (Angelsen et al. 2014; Pecl et al. 2017). Degradation of natural  
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18 74 resources can negatively affect their food and health sovereignty and overall wellbeing  
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20 75 (Golden et al. 2016; Pecl et al. 2017), therefore safeguarding and restoring ecosystem  
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22 76 resilience is often critical to support IPLC's wellbeing (Sangha & Russell-Smith 2017).  
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25 77 In line with previous scholarly work recognizing the values of indigenous and  
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27 78 local knowledge for conservation and development (see Reyes-García 2015 for a  
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29 79 review), some researchers have argued that IPLC can be more than recipients of  
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31 80 restoration activities, playing an active role in restoring ecosystems (e.g., Shaffer 2010;  
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33 81 Wangpakapattanawong et al. 2010; Babai & Molnár 2014; Uprety et al. 2012).  
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35 82 However, IPLC's contributions to restoration activities continue to be largely absent in  
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37 83 national, regional, and global environmental policy fora (Wehi & Lord 2017). For  
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39 84 example, Aichi Target 15 of the Convention on Biological Diversity stipulates the goal  
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41 85 to restore 15% of degraded ecosystems, but decisions on which areas to restore are  
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43 86 mainly based on biological importance and restoration feasibility rather than on local  
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45 87 concerns (e.g., Tobón et al. 2017).  
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49 88 In this Opinion Article, we argue for the need to increase the engagement of  
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51 89 IPLC in ecological restoration pursuits. We substantiate this argument by illustrating *i*)  
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53 90 ways in which IPLC are already participating in restoration activities; *ii*) ways in which  
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55 91 Indigenous and Local Knowledge (ILK) has been incorporated in restoration activities;  
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3 92 and *iii*) factors that reportedly lead to successful restoration outcomes and increased  
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5 93 wellbeing for IPLC. Our examples come from a literature search on IPLC and  
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7 94 restoration conducted in the Web of Science. Our search yielded 413 papers. After a  
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9 95 review of abstracts, we retained 120 articles containing both case studies and more  
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11 96 generalized treatment of IPLC issues for further detailed review to draw lessons from  
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13 97 (See Supplementary Material for methodological details).  
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18 99 ***IPLC's participation in restoration activities***

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21 100 IPLC are particularly well positioned to contribute to restore and safeguard  
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23 101 ecosystems because they have an intimate knowledge of their lands and resources and  
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25 102 the dynamics affecting them (Wehi & Lord 2017) and because they have a vested  
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27 103 interest in restoring ecosystems from which they directly benefit (Shaffer 2010;  
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29 104 Wangpakapattanawong et al. 2010; Babai & Molnár 2014). Although the global  
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31 105 percentage of restoration efforts involving IPLC is unknown, there is evidence that  
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33 106 IPLC play an active role in restoring a wide range of ecosystems around the world  
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35 107 (Storm & Shebitz 2006; Nagendra 2007; Lyver et al. 2016). We identified three main  
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37 108 ways in which IPLC participate in restoration activities: (1) maintaining traditional  
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39 109 management and practices; (2) restoring land degraded by outsiders; and (3) joining  
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41 110 outside groups seeking to restore ecosystems.  
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45 111 Researchers have documented instances when, through traditional practices,  
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47 112 IPLC manage, adapt, and restore the land on which their livelihood depends, sometimes  
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49 113 creating new types of highly biodiverse ecosystems (Posey 1985; Babai & Molnár  
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51 114 2014; Comberti et al. 2015). Examples of traditional practices contributing to  
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53 115 maintaining and restoring ecosystems include 1) anthropogenic burning purposively  
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55 116 altering spatial and temporal aspects of habitat heterogeneity to create diversity (Shaffer  
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3 117 2010; Welch et al. 2013; Trauernicht et al. 2015); 2) waste deposition practices resulting  
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5 118 in soil carbon enrichment (Solomon et al. 2016); 3) rotational swidden cultivation  
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7 119 systems able to maintain forest cover and plant diversity (Wangpakapattanawong et al.  
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9 120 2010; Singh et al. 2014); 4) interplanting useful plants in native forests thereby  
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11 121 increasing forest diversity (Garibaldi & Turner 2004; Ford & Nigh 2015), and 5)  
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13 122 scattering species-rich hayseed, and weeding and cleaning meadows to maintain  
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15 123 grassland productivity and resilience (Babai & Molnár 2014).  
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19 124 Second, IPLC have also engaged in activities to restore their own lands and  
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21 125 waters after these areas had been overexploited or degraded by outsiders. For example,  
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23 126 traditional fire regimes have been used to restore overgrown broad-crowned black oak  
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25 127 tree stands in California (Long et al. 2003). Similarly, in Alaska, the Qawalangin Tribe  
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27 128 received funding to restore coastlines affected by pollution (NOAA 2017). In Nepal, the  
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29 129 devolvement of state forests into community control in the 1970s slowed deforestation  
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31 130 and led many local communities to safeguard and restore communal forests and  
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33 131 watersheds, as these activities increased local ecosystem services (Paudyal et al. 2015).  
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35 132 Restoration efforts led by IPLC have also helped to stem the tide of landscape change  
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37 133 caused by urbanization or encroachment (Horiuchi et al. 2011). In some cases,  
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39 134 restoration efforts have resulted in a change in the local political context, creating a  
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41 135 space for assertion of Indigenous spiritual and cultural values to be further reflected in  
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43 136 their participation in restoration efforts (Fox et al. 2017).  
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47 137 Finally, IPLC have also contributed to restoration activities initiated by other  
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49 138 stakeholders. On the one side, IPLC have been key participants in several country-scale  
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51 139 forest restoration efforts in Asia, particularly China and Vietnam (e.g., Clement &  
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53 140 Amezaga 2009; He & Lang 2015). However, these campaigns have not always  
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55 141 successfully involved farmers or impacted afforestation outcomes given the lack of  
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3 142 clarity of the policies designed at the central level (e.g., Clement & Amezaga 2009) or  
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5 143 the neglect of local interests (e.g., He & Lang, 2015). On the other side, IPLC have also  
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7 144 taken leadership roles in restoring forests (Paquette et al. 2009; Douterlungne et al.  
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9 145 2010), lakes and rivers (Coombes 2007; Fox et al. 2017), grasslands and drylands  
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11 146 (Pellant et al. 2004; Stenseke 2009), mangroves and reefs (Selvam et al. 2003;  
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13 147 Trialfhianty & Suadi 2017), and wetlands (Selvam et al. 2003; Henwood et al. 2016).  
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15 148 Many of these activities have successfully coupled the goals of ecological restoration  
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17 149 and increasing participation of IPLC.  
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### 22 151 *Using ILK to inform restoration activities*

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25 152 Some authors specifically working with IPLC and restoration have noticed that  
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27 153 ILK has often been neglected in ecological restoration programs (e.g., Robertson et al.  
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29 154 2000; Mills 2003; Wehi & Lord 2017), arguably because of what Murphy (2011) calls  
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31 155 the "epistemological authority" of Western, objectivist thinking among restoration and  
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33 156 conservation ecologists. For instance, traditional IPLC-prescribed burning regimes are  
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35 157 often dismissed in policy circles (Welch et al. 2013; Mistry et al. 2016), despite  
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37 158 increasing evidence that fire management can contribute to wildfire prevention, climate  
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39 159 change mitigation, and landscape heterogeneity (Defossé et al. 2011; Russell-Smith et  
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41 160 al. 2015). However, as in other areas of natural resource management (Mistry & Berardi  
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43 161 2016; Díaz et al. 2018), examples exist where ILK has been applied to increase the  
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45 162 effectiveness of restoration activities (e.g., Senos et al. 2006; Uprety et al. 2012; Wehi  
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47 163 & Lord 2017). Our review notes that ILK has been incorporated in restoration activities  
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49 164 primarily in three stages: 1) planning of restoration; 2) execution of restoration; and 3)  
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51 165 monitoring of restoration.  
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3 166 First, ILK has been used to identify what species to use and which sites to focus  
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5 167 on in restoration efforts. ILK can provide baseline ecosystem information on cultural  
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7 168 keystone species, i.e., culturally salient species that shape people's identity (Garibaldi &  
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9 169 Turner 2004), or cultural keystone places, i.e., particular places that are critically  
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11 170 important for the flow of ecosystem service and to people's lifeways (Cuerrier et al.  
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13 171 2015). To date, in the absence of ILK, many reforestation efforts have resulted in  
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15 172 monocultures, compositionally simple mixed forests, or the use of non-native species  
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17 173 (e.g., Hua et al. 2016). Reforestation efforts aiming to restoring higher levels of  
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19 174 biodiversity have thus turned to ILK for the selection of appropriate native species  
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21 175 (Garibaldi & Turner 2004; Wangpakapattanawong et al. 2010), or cultural keystone  
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23 176 places (Uprety et al. 2012; Cuerrier et al. 2015; Lepofsky et al. 2017), both in terrestrial  
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25 177 and marine environments (Comberti et al. 2015; Thornton et al. 2015). Moreover, given  
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27 178 the current debate on how to define a reference state for global restoration (e.g., Kotiaho  
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29 179 et al. 2016), ILK is being used to estimate natural baselines for species recovery and to  
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31 180 inform restoration targets (Nabhan 2000; Eckert et al. 2018), as –despite the fact that  
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33 181 IPLCs can be affected by the Shifting Baseline Syndrome (e.g., Fernández-Llamazares  
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35 182 et al. 2015)- IPLC historical continuity in resource use and close cultural connection to  
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37 183 their environments puts them on a privileged position to contribute to setting local  
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39 184 reference states for restoration targets.  
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43 185 Second, ILK has been used to guide actual ecosystem restoration processes.  
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45 186 IPLC often have a long-term experience creating ecosystems that support and enhance  
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47 187 the provision of ecosystem services (Comberti et al. 2015); in some places, IPLC have a  
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49 188 deep understanding of local successional and regeneration processes of the degraded  
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51 189 land. Simulating traditional management systems can help promote or accelerate  
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53 190 succession (Anderson & Barbour 2003; Diemont & Martin 2009; Douterlungne et al.  
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3 191 2010). Other ILK-based land management practices (e.g., rotational farming,  
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5 192 agroforestry, improved crop-fallow systems, hedgerows, grazing enclosures) have also  
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7 193 effectively enhanced carbon sequestration, prevented environmental degradation, and  
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9 194 combatted desertification (e.g., Wangpakapattanawong et al. 2010; Coughlan 2014;  
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11 195 Salick et al. 2014). Emulating Indigenous and traditional land management practices has  
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13 196 been a way to incorporate ILK for effective restoration in national parks (Anderson &  
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15 197 Barbour 2003; Kis et al. 2017; Varga et al. 2017), restoring plant and bird communities  
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17 198 in Swedish oak-hazel woodlands (Hansson 2001), and alluvial meadows in Mongolia  
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19 199 (Jamsran 2010). Using Indigenous fire regimes to recover native biodiversity and  
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21 200 ecosystem functions has been another way of incorporating ILK in restoration pursuits  
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23 201 (Marsden-Smedley & Kirkpatrick 2000; Storm & Shebitz 2006). Oral histories  
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25 202 embedded in ILK have produced baseline information for watershed restoration and  
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27 203 helped to develop collaborative management in restoration (Mustonen 2013).

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31 204 Finally, ILK can be useful in designing and implementing restoration monitoring  
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33 205 programs (Uprety et al. 2012). Many initiatives engaging IPLCs in community-based  
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35 206 carbon monitoring are gaining prominence in the wake of efforts for REDD+ (Reduced  
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37 207 Emissions from Degradation and Deforestation) (Danielsen et al. 2013; Brofeldt et al.  
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39 208 2014; Butt et al. 2015; Hartoyo et al. 2016; McCall et al. 2016), although it is currently  
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41 209 unknown to what degree these local monitoring projects also make use of traditional  
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43 210 ILK. Continuing species shifts due to climate change (Pecl et al. 2017) renders urgent  
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45 211 the need to monitor and potentially relocate species and ecosystems for benefits to  
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47 212 IPLCs, arguing for further incorporation of ILK in monitoring.

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52 214 ***Factors leading to successful and beneficial restoration projects with IPLC***

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3 215 Much work remains to understand the factors that lead to ecologically successful  
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5 216 restoration that also benefits IPLC. Local involvement in restoration projects is often  
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7 217 mentioned as an element of success, although the literature shows that engaging IPLC  
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9 218 in restoration activities does not always lead to ecosystem restoration nor to benefits for  
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11 219 IPLC (e.g., Clement & Amezaga 2009). Thus, despite some restoration projects  
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13 220 showing the creation of diversified livelihoods or an increase in smallholder's income  
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15 221 or access to natural resources (Xu et al. 2007; Brown et al. 2011), there are also other  
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17 222 projects that have had minimal or negative impacts on IPLC wellbeing (Boyd et al.  
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19 223 2007; Reynolds 2012).

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23 224 The cases examined suggest that top-down planned restoration conducted with  
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25 225 low levels of local participation often result in conflicts over landscape visions between  
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27 226 the organizations proposing restoration and local inhabitants, potentially undermining  
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29 227 long-term restoration success because of the lack of public acceptance (Couix &  
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31 228 Gonzalo-Turpin 2015; Heldt et al. 2016). In the same line, projects that involve IPLC  
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33 229 only for labor or providing land are economically unsustainable for them, namely  
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35 230 because of high opportunity costs of land and labor and delayed and low benefits, and  
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37 231 thus are often not locally accepted (Jindal et al. 2012; Aggarwal 2014). Moreover, these  
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39 232 projects may mostly benefit households that are already economically better off  
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41 233 (Glomsrød et al. 2011).

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45 234 Alternatively, projects that actively involve IPLC in co-designing restoration  
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47 235 activities affecting their territories are reported as successful in that they build  
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49 236 partnerships (e.g., for co-management) and address value conflicts over resources  
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51 237 (Davenport et al. 2010; Lyver et al. 2016; Fox et al. 2017). Several cases of community  
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53 238 forestry, i.e., projects involving local communities in forest management, provide a  
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3 239 useful model for restoring degraded forests and informing restoration efforts (Nagendra  
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5 240 2007; Paudyal et al. 2015).  
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8 241 We found examples of other principles that may improve the success of  
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10 242 restoration projects. Some authors have argued that ensuring that restoration projects  
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12 243 receive technical and financial support to maintain restored areas (Nguyen et al. 2017),  
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14 244 and providing sufficient incentives including short-term (e.g., rapidly providing  
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16 245 resources or ecosystem services locally perceived as scarce – Mustonen 2013;  
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18 246 Brancalion et al. 2014) and long-term benefits (e.g., sustained employment or ‘useful’  
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20 247 tree species from restoration – Le et al. 2012; Nielsen-Pincus & Moseley 2013; BenDor  
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22 248 et al. 2015) can also help improve restoration project’s success.  
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26 249 In a different vein, authors have also argued that including cultural elements,  
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28 250 such as revitalizing local traditions or recognizing customary institutions, might  
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30 251 promote the understanding of restoration efforts and therefore increase local  
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32 252 participation (e.g., Long et al. 2003; Wehi & Lord 2017; de Koning et al. 2011; Godden  
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34 253 & Cowell 2016). For example, the creation stories of the White Mountain Apache Tribe  
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36 254 reveal the importance and functions of water bodies within the landscape. These cultural  
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38 255 traditions can help communicate the foundations of river restoration efforts and thus  
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40 256 ensure community support (Long et al. 2003). Similarly, results from a study of 42  
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42 257 reforestation programs in Africa show that the success of such programs largely rest  
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44 258 upon the ability of local institutions to monitor, impose sanctions, and distribute  
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46 259 benefits (Reynolds 2012), thus highlighting the importance of customary institutions for  
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48 260 restoration efforts. Researchers have also argued that in contexts where resource  
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50 261 degradation is linked to the loss of cultural values, cultural revitalization linked to  
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52 262 restoration provides another incentive and base of support for community-based  
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54 263 conservation (Lopez-Maldonado & Berkes 2017).  
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3 264 **Conclusion**  
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6 265 The literature on IPLC and restoration provides examples of IPLC's initiatives  
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8 266 and active participation in ecosystem maintenance and restoration, as well as of  
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10 267 successful ways in which ILK can be incorporated in restoration activities. While there  
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12 268 is not a comprehensive explanation of which factors lead to ecologically successful  
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14 269 restoration that also benefits IPLC, the literature provide valuable insights on how i)  
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16 270 involving IPLC and their knowledge in co-designing restoration activities affecting their  
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18 271 territories, ii) ensuring short-term direct benefits to IPLC and long-term support of the  
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20 272 maintenance of restored areas, and iii) building in local cultural elements to promote the  
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22 273 understanding of restoration efforts have substantially contributed to the local  
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24 274 acceptance of restoration efforts throughout the world.  
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27 275 Thus one major proposal as an outcome of our review is that IPLC should be a  
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29 276 more important focus in the current efforts to meet Aichi Target 15 of the Convention  
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31 277 on Biological Diversity (CBD) on restoring 15% of globally degraded ecosystems.  
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33 278 IPLC should also be included in any post-2020 CBD agenda on restoration.  
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53 287 **References**  
54  
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- 1  
2  
3 288 Aggarwal A (2014) How sustainable are forestry clean development mechanism  
4  
5 289 projects?—A review of the selected projects from India. *Mitigation and*  
6  
7 290 *Adaptation Strategies for Global Change* **19**:73-91  
8  
9 291 Anderson MK, Barbour MG (2003) Simulated indigenous management: A new model  
10  
11 292 for ecological restoration in national parks. *Ecological Restoration*, **21**: 269–277  
12  
13 293 Angelsen A, Jagger P, Babigumira R, Belcher B, Hogarth NJ, Bauch S, Boerner J,  
14  
15 294 Smith-Hall C, Wunder S (2014) Environmental Income and Rural Livelihoods:  
16  
17 295 A Global-Comparative Analysis. *World Development* **64**:S12-S28  
18  
19 296 Babai D, Molnár Z (2014) Small-scale traditional management of highly species-rich  
20  
21 297 grasslands in the Carpathians. *Agriculture, Ecosystems & Environment* **182**:123-  
22  
23 298 130  
24  
25 299 Bendor T, Lester TW, Livengood A, Davis A, Yonavjak L (2015) Estimating the Size  
26  
27 300 and Impact of the Ecological Restoration Economy. *Plos One* **10**:e0128339  
28  
29 301 Boyd E, May P, Chang M, Veiga FC (2007) Exploring socioeconomic impacts of forest  
30  
31 302 based mitigation projects: Lessons from Brazil and Bolivia. *Environmental*  
32  
33 303 *Science & Policy* **10**:419-433  
34  
35 304 Brancalion PHS, Cardozo IV, Camatta A, Aronson J, Rodrigues RR (2014) Cultural  
36  
37 305 Ecosystem Services and Popular Perceptions of the Benefits of an Ecological  
38  
39 306 Restoration Project in the Brazilian Atlantic Forest. *Restoration Ecology* **22**:65-  
40  
41 307 71  
42  
43 308 Brofeldt S, Theilade I, Burgess ND, Danielsen F, Poulsen MK, Adrian T, Bang TN, et  
44  
45 309 al. (2014) Community Monitoring of Carbon Stocks for REDD+: Does  
46  
47 310 Accuracy and Cost Change over Time? *Forests* **5**(8):1834–54.  
48  
49 311 doi:10.3390/f5081834  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 312 Brown DR, Dettmann P, Rinaudo T, Tefera H, Tofu A (2011) Poverty Alleviation and  
4  
5 313 Environmental Restoration Using the Clean Development Mechanism: A Case  
6  
7 314 Study from Humbo, Ethiopia. *Environmental Management* **48**:322-333  
8  
9 315 Butt N, Epps K, Overman H, Iwamura T, Fragoso JMV (2015) Assessing Carbon  
10  
11 316 Stocks Using Indigenous Peoples' Field Measurements in Amazonian Guyana.  
12  
13 317 *Forest Ecology and Management* **338**: 191–99. doi:10.1016/j.foreco.2014.11.014  
14  
15 318 Clement F, Amezaga JM (2009) Afforestation and forestry land allocation in northern  
16  
17 319 Vietnam: Analysing the gap between policy intentions and outcomes. *Land Use*  
18  
19 320 *Policy* **26**:458-470  
20  
21  
22 321 Comberti C, Thornton TF, Wyllie De Echeverria V, Patterson T (2015) Ecosystem  
23  
24 322 services or services to ecosystems? Valuing cultivation and reciprocal  
25  
26 323 relationships between humans and ecosystems. *Global Environmental Change*  
27  
28 324 **34**:247-262  
29  
30  
31 325 Coombes B (2007) Defending community? Indigeneity, self-determination and  
32  
33 326 institutional ambivalence in the restoration of Lake Whakaki. *Geoforum* **38**:60-  
34  
35 327 72  
36  
37 328 Coughlan MR (2014) Farmers, flames, and forests: Historical ecology of pastoral fire  
38  
39 329 use and landscape change in the French Western Pyrenees, 1830–2011. *Forest*  
40  
41 330 *Ecology and Management* **312**:55-66  
42  
43  
44 331 Couix N, Gonzalo-Turpin H (2015) Towards a land management approach to ecological  
45  
46 332 restoration to encourage stakeholder participation. *Land Use Policy* **46**:155-162  
47  
48 333 Cuerrier A, Turner NJ, Gomes TC, Garibaldi A, Downing A (2015) Cultural Keystone  
49  
50 334 Places: Conservation and Restoration in Cultural Landscapes. *Journal of*  
51  
52 335 *Ethnobiology* **35**:427-448  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 336 Danielsen F, Adrian T, Brofeldt S, van Noordwijk M, Poulsen MK, Rahayu S,  
4  
5 337 Rutishauser E, et al. (2013) Community Monitoring for REDD+: International  
6  
7 338 Promises and Field Realities. *Ecology and Society* **18**(3): 41. doi:10.5751/ES-  
8  
9 339 05464-180341  
10  
11 340 Davenport MA, Bridges CA, Mangun JC, Carver AD, Williard KWJ, Jones EO (2010)  
12  
13 341 Building local community commitment to wetlands restoration: A case study of  
14  
15 342 the cache river wetlands in Southern Illinois, USA. *Environmental Management*  
16  
17 343 **45**:711-722  
18  
19  
20 344 De Koning F, Aguiñaga M, Bravo M, Chiu M, Lascano M, Lozada T, Suarez L (2011)  
21  
22 345 Bridging the gap between forest conservation and poverty alleviation: the  
23  
24 346 Ecuadorian Socio Bosque program. *Environmental Science & Policy* **14**:531-542  
25  
26  
27 347 Defossé GE, Loguercio G, Oddi FJ, Molina JC, Kraus PD (2011) Potential CO<sub>2</sub>  
28  
29 348 emissions mitigation through forest prescribed burning: A case study in  
30  
31 349 Patagonia, Argentina. *Forest Ecology and Management* **261**:2243-2254  
32  
33 350 Díaz S, Pascual U, Stenseke M, Martín-López B, Watson RT, Molnár Z, Hill R, Chan  
34  
35 351 KMA, Baste IA, Brauman KA, Polasky S, Church A, Lonsdale M, Larigauderie  
36  
37 352 A, Leadley PW, Van Oudenhoven APE, Van Der Plaat F, Schröter M, Lavorel  
38  
39 353 S, Aumeeruddy-Thomas Y, Bukvareva E, Davies K, Demissew S, Erpul G,  
40  
41 354 Failler P, Guerra CA, Hewitt CL, Keune H, Lindley S, Shirayama Y (2018)  
42  
43 355 Assessing nature's contributions to people. *Science* **359**:270-272  
44  
45  
46 356 Diemont SaW, Martin JF (2009) Lacandon Maya ecosystem management: sustainable  
47  
48 357 design for subsistence and environmental restoration. *Ecological Applications*  
49  
50 358 **19**:254-266  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 359 Douterlungne D, Levy-Tacher SI, Golicher DJ, Danobeytia FR (2010) Applying  
4  
5 360 Indigenous Knowledge to the Restoration of Degraded Tropical Rain Forest  
6  
7 361 Clearings Dominated by Bracken Fern. *Restoration Ecology* **18**:322-329  
8  
9 362 Eckert LE, Ban NC, Frid A, McGreer M (2017) Diving back in time: Extending  
10  
11 363 historical baselines for yelloweye rockfish with Indigenous Knowledge. *Aquatic*  
12  
13 364 *Conservation: Marine and Freshwater Ecosystems* **28**: 158-166.  
14  
15 365 Ford A, Nigh R. (2015) *The Maya Forest Garden: Eight Millennia of Sustainable*  
16  
17 366 *Cultivation of the Tropical Woodlands*. . Left Coast Press., Berkeley  
18  
19 367 Fox CA, Reo NJ, Turner DA, Cook J, Dituri F, Fessell B, Jenkins J, Johnson A, Rakena  
20  
21 368 TM, Riley C, Turner A, Williams J, Wilson M (2017) “The river is us; the river  
22  
23 369 is in our veins”: re-defining river restoration in three Indigenous communities.  
24  
25 370 *Sustainability Science* **12**:521-533  
26  
27 371 Garibaldi A, Turner N (2004) Cultural Keystone Species: Implications for Ecological  
28  
29 372 Conservation and Restoration. *Ecology and Society* **9**  
30  
31 373 Glomsrød S, Wei T, Liu G, Aune JB (2011) How well do tree plantations comply with  
32  
33 374 the twin targets of the Clean Development Mechanism? — The case of tree  
34  
35 375 plantations in Tanzania. *Ecological Economics* **70**:1066-1074  
36  
37 376 Godden L, Cowell S (2016) Conservation planning and Indigenous governance in  
38  
39 377 Australia's Indigenous Protected Areas. *Restoration Ecology* **24** (5):692-697  
40  
41 378 Golden CD, Allison EH, Cheung WW, Dey MM, Halpern BS, Mccauley DJ, Smith M,  
42  
43 379 Vaitla B, Zeller D, Myers SS (2016) Nutrition: Fall in fish catch threatens  
44  
45 380 human health. *Nature* **534**:317-320  
46  
47 381 Hansson L (2001) Traditional management of forests: plant and bird community  
48  
49 382 responses to alternative restoration of oak–hazel woodland in Sweden.  
50  
51 383 *Biodiversity & Conservation* **10**:1865-1873  
52  
53  
54  
55  
56  
57  
58  
59  
60



- 1  
2  
3 384 Hartoyo APP, Siregar IZ, Supriyanto, Prasetyo LB, Thelaide I (2016). Biodiversity,  
4  
5 385 Carbon Stocks and Community Monitoring in Traditional Agroforestry  
6  
7 386 Practices: Preliminary Results from Two Investigated Villages in Berau, East  
8  
9 387 Kalimantan. *Procedia Environmental Sciences* **33**: 376–85.  
10  
11 388 doi:10.1016/j.proenv.2016.03.088  
12  
13 389 He J, Lang R (2015) Limits of State-Led Programs of Payment for Ecosystem Services:  
14  
15 390 Field Evidence from the Sloping Land Conversion Program in Southwest China.  
16  
17 391 *Human Ecology* **43**:749-758  
18  
19 392 Heldt S, Budryte P, Ingensiep HW, Teichgräber B, Schneider U, Denecke M (2016)  
20  
21 393 Social pitfalls for river restoration: How public participation uncovers problems  
22  
23 394 with public acceptance. *Environmental Earth Sciences* **75**:1053  
24  
25 395 Henwood W, Moewaka Barnes H, Brockbank T, Gregory W, Hooper K, Mccreanor T  
26  
27 396 (2016) Ko Tāngonge Te Wai: Indigenous and Technical Data Come Together in  
28  
29 397 Restoration Efforts. *EcoHealth* **13**:623-632  
30  
31 398 Horiuchi M, Fukamachi K, Oku H (2011) Reed community restoration projects with  
32  
33 399 citizen participation: an example of the practical use of Satoyama landscape  
34  
35 400 resources in Shiga Prefecture, Japan. *Landscape and Ecological Engineering*  
36  
37 401 **7**:217-222  
38  
39 402 Hua F, Wang X, Zheng X, Fisher B, Wang L, Zhu J, Tang Y, Yu DW, Wilcove DS  
40  
41 403 (2016) Opportunities for biodiversity gains under the world's largest  
42  
43 404 reforestation programme. *Nature Communications* **7**: 12717.  
44  
45 405 Jamsran U (2010) Involvement of Local Communities in Restoration of Ecosystem  
46  
47 406 Services in Mongolian Rangeland. *Global Environmental Research* **14**:79-86  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 407 Jindal R, Kerr JM, Carter S (2012) Reducing Poverty Through Carbon Forestry?  
4  
5 408 Impacts of the N'hambita Community Carbon Project in Mozambique. *World*  
6  
7 409 *Development* **40**:2123-2135  
8  
9 410 Kis J, Barta S, Elekes L, Engi L, Fegyver T, Kecskeméti J, Lajkó L, Szabó J (2017)  
10  
11 411 Traditional herders' knowledge and worldview and their role in managing  
12  
13 412 biodiversity and ecosystem services of extensive pastures. Pages 57-71 In: Roué  
14  
15 413 M, Molnár Z, (eds) *Knowing our Land and Resources: Indigenous and local*  
16  
17 414 *knowledge of biodiversity and ecosystem services in Europe & Central Asia.*  
18  
19 415 UNESCO, Paris  
20  
21  
22 416 Kotiaho JS, ten Brink B, Harris J (2016) A global baseline for ecosystem recovery.  
23  
24 417 *Nature* **532**: 37.  
25  
26 418 Le HD, Smith C, Herbohn J, Harrison S (2012) More than just trees: Assessing  
27  
28 419 reforestation success in tropical developing countries. *Journal of Rural Studies*  
29  
30 420 **28**:5-19  
31  
32  
33 421 Lepofsky D, Armstrong CG, Greening S, Jackley J, Carpenter J, Guernsey B, Mathews  
34  
35 422 D, Turner NJ (2017) Historical Ecology of Cultural Keystone Places of the  
36  
37 423 Northwest Coast. *American Anthropologist* **119**:448-463  
38  
39 424 Long J, Tecele A, Burnette B (2003) Cultural foundations for ecological restoration on  
40  
41 425 the White Mountain Apache Reservation. *Conservation Ecology* **8**:4  
42  
43  
44 426 Lopez-Maldonado Y, Berkes F (2017) Restoring the environment, revitalizing the  
45  
46 427 culture: cenote conservation in Yucatan, Mexico. *Ecology and Society* **22**:7  
47  
48 428 Lyver POB, Akins A, Phipps H, Kahui V, Towns DR, Moller H (2016) Key biocultural  
49  
50 429 values to guide restoration action and planning in New Zealand. *Restoration*  
51  
52 430 *Ecology* **24**:314-323  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 431 Marsden-Smedley JB, Kirkpatrick JB (2000) Fire management in Tasmania's  
4  
5 432 Wilderness World Heritage Area: Ecosystem restoration using Indigenous-style  
6  
7 433 fire regimes? *Ecological Management & Restoration* **1**:195-203  
8  
9 434 McCall MK, Chutz N, Skutsch M (2016) Moving from Measuring, Reporting,  
10  
11 435 Verification (MRV) of Forest Carbon to Community Mapping, Measuring,  
12  
13 436 Monitoring (MMM): Perspectives from Mexico. *PLoS ONE* **11**(6): e0146038.  
14  
15 437 doi:10.1371/journal.pone.0146038  
16  
17 438 Mills M (2003) Restoring the Mauri of Oruarangi Creek. *Water Sci Technol* **48**:129-137  
18  
19 439 Mistry J, Berardi A (2016) Bridging indigenous and scientific knowledge. *Science*  
20  
21 440 **352**:1274-1275  
22  
23 441 Mistry J, Bilbao BA, Berardi A (2016) Community owned solutions for fire  
24  
25 442 management in tropical ecosystems: case studies from Indigenous communities  
26  
27 443 of South America. *Philosophical Transactions of the Royal Society B: Biological*  
28  
29 444 *Sciences* **371**  
30  
31 445 Murphy BL (2011) From interdisciplinary to inter-epistemological approaches:  
32  
33 446 Confronting the challenges of integrated climate change research. *The Canadian*  
34  
35 447 *Geographer / Le Géographe canadien* **55**:490-509.  
36  
37 448 Mustonen T (2013) Oral histories as a baseline of landscape restoration - Co-  
38  
39 449 management and watershed knowledge in Jukajoki River. *Fennia* **191**:76-91  
40  
41 450 Nabhan GP (2000) Interspecific relationships affecting endangered species recognized  
42  
43 451 by O'odham and Comcáac cultures. *Ecological Applications* **10**: 1288-1295.  
44  
45 452 Nagendra H (2007) Drivers of reforestation in human-dominated forests. *Proceedings of*  
46  
47 453 *the National Academy of Sciences of the United States of America* **104**:15218-  
48  
49 454 15223  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 455 Nguyen TP, Luom TT, Parnell KE (2017) Mangrove allocation for coastal protection  
4  
5 456 and livelihood improvement in Kien Giang province, Vietnam: Constraints and  
6  
7 457 recommendations. *Land Use Policy* **63**:401-407  
8  
9 458 Nielsen-Pincus M, Moseley C (2013) The Economic and Employment Impacts of  
10  
11 459 Forest and Watershed Restoration. *Restoration Ecology* **21**:207-214  
12  
13 460 NOAA (2017) URL <http://response.restoration.noaa.gov/about/media/after-pollution->  
14  
15 461 [strikes-restoring-lost-cultural-bond-between-tribes-and-environment.html](http://response.restoration.noaa.gov/about/media/after-pollution-strikes-restoring-lost-cultural-bond-between-tribes-and-environment.html)  
16  
17 462 Papworth SK, Rist J, Coad L, Milner-Gulland EJ (2009) Evidence for shifting baseline  
18  
19 463 syndrome in conservation. *Conservation Letters* **2**: 93-100.  
20  
21 464 Paquette A, Hawryshyn J, Vyta Senikas A, Potvin C (2009) Enrichment Planting in  
22  
23 465 Secondary Forests: a Promising Clean Development Mechanism to Increase  
24  
25 466 Terrestrial Carbon Sinks. *Ecology and Society* **14**  
26  
27 467 Paudyal K, Baral H, Burkhard B, Bhandari SP, Keenan RJ (2015) Participatory  
28  
29 468 assessment and mapping of ecosystem services in a data-poor region: Case study  
30  
31 469 of community-managed forests in central Nepal. *Ecosystem Services* **13**:81-92  
32  
33 470 Pecl GT, Araújo MB, Bell JD, Blanchard J, Bonebrake TC, Chen I-C, Clark TD,  
34  
35 471 Colwell RK, Danielsen F, Evengård B, Falconi L, Ferrier S, Frusher S, Garcia  
36  
37 472 RA, Griffis RB, Hobday AJ, Janion-Scheepers C, Jarzyna MA, Jennings S,  
38  
39 473 Lenoir J, Linnetved HI, Martin VY, McCormack PC, McDonald J, Mitchell NJ,  
40  
41 474 Mustonen T, Pandolfi JM, Pettorelli N, Popova E, Robinson SA, Scheffers BR,  
42  
43 475 Shaw JD, Sorte CJB, Strugnell JM, Sunday JM, Tuanmu M-N, Vergés A,  
44  
45 476 Villanueva C, Wernberg T, Wapstra E, Williams SE (2017) Biodiversity  
46  
47 477 redistribution under climate change: Impacts on ecosystems and human well-  
48  
49 478 being. *Science* **355**  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 479 Pellant M, Abbey B, Karl S (2004) Restoring the Great Basin Desert, U.S.A.:  
4  
5 480 Integrating Science, Management, and People. *Environmental Monitoring and*  
6  
7 481 *Assessment* **99**:169-179  
8  
9 482 Posey DA (1985) Indigenous management of tropical forest ecosystems: the case of the  
10  
11 483 Kayapó indians of the Brazilian Amazon. *Agroforestry Systems* **3**:139-158  
12  
13 484 Reynolds TW (2012) Institutional Determinants of Success Among Forestry-Based  
14  
15 485 Carbon Sequestration Projects in Sub-Saharan Africa. *World Development*  
16  
17 486 **40**:542-554  
18  
19 487 Reyes-García, V. (2015) The Values of Traditional Ecological Knowledge. In Martinez-  
20  
21 488 Alier and R. Muradian (eds), *Handbook of Ecological Economics*. Edward  
22  
23 489 Elgar. Chapter 12: 286-306  
24  
25 490 Robertson M, Nichols P, Horwitz P, Bradby K, Mackintosh D (2000) Environmental  
26  
27 491 Narratives and the Need for Multiple Perspectives to Restore Degraded  
28  
29 492 Landscapes in Australia. *Ecosystem Health* **6**:119-133  
30  
31 493 Russell-Smith J, Yates CP, Edwards AC, Whitehead PJ, Murphy BP, Lawes MJ (2015)  
32  
33 494 Deriving Multiple Benefits from Carbon Market-Based Savanna Fire  
34  
35 495 Management: An Australian Example. *Plos One* **10**:e0143426  
36  
37 496 Salick J, Ghimire SK, Fang Z, Dema S, Konchar KM (2014) Himalayan Alpine  
38  
39 497 Vegetation, Climate Change and Mitigation. *Journal of Ethnobiology* **34**:276-  
40  
41 498 293  
42  
43 499 Sangha KK, Russell-Smith J (2017) Towards an Indigenous Ecosystem Services  
44  
45 500 Valuation Framework: A North Australian Example. *Conservation & Society*  
46  
47 501 **15**:255-269  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 502 Selvam V, Ravichandran KK, Gnanappazham L, Navamuniyammal M (2003)  
4  
5 503 Assessment of Community-Based Restoration of Pichavaram Mangrove  
6  
7 504 Wetland Using Remote Sensing Data. *Current Science* **85**:794-798  
8  
9 505 Senos R, Lake FK, Turner N, Martinez D (2006) Traditional ecological knowledge and  
10  
11 506 restoration practice. Pages 393-426 In: Apostol D, Sinclair M, (eds) *Restoring*  
12  
13 507 *the Pacific Northwest: the art and science of ecological restoration in Cascadia.*  
14  
15 508 Island Press, Washington, DC  
16  
17  
18 509 Shaffer LJ (2010) Indigenous Fire Use to Manage Savanna Landscapes in Southern  
19  
20 510 Mozambique. *Fire Ecology* **6**:43-59  
21  
22 511 Singh RK, Kumar S, Jat HS, Singh A, Raju R, Sharma DK (2014) Adaptation in rice-  
23  
24 512 wheat based sodic agroecosystems: A case study on climate resilient farmers'  
25  
26 513 practices. *Indian Journal of Traditional Knowledge* **13**:377-389  
27  
28  
29 514 Solomon D, Lehmann J, Fraser JA, Leach M, Amanor K, Frausin V, Kristiansen SM,  
30  
31 515 Millimouno D, Fairhead J (2016) Indigenous African soil enrichment as a  
32  
33 516 climate-smart sustainable agriculture alternative. *Frontiers in Ecology and the*  
34  
35 517 *Environment* **14**:71-76  
36  
37  
38 518 Stenseke M (2009) Local participation in cultural landscape maintenance: Lessons from  
39  
40 519 Sweden. *Land Use Policy* **26**:214-223  
41  
42 520 Storm L, Shebitz D (2006) Evaluating the Purpose, Extent, and Ecological Restoration  
43  
44 521 Applications of Indigenous Burning Practices in Southwestern Washington.  
45  
46 522 *Ecological Restoration* **24**:256-268  
47  
48 523 Thornton T, Deur D, Kitka Sr H (2015) Cultivation of Salmon and other Marine  
49  
50 524 Resources on the Northwest Coast of North America. *Human Ecology* **43**: 189-  
51  
52 525 199.  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 526 Tobón W, Urquiza-Haas T, Koleff P, Schröter M, Ortega-Álvarez R, Campo J, Lindig-  
4  
5 527 Cisneros R, Sarukhán J, Bonn A (2017) Restoration planning to guide Aichi  
6  
7 528 targets in a megadiverse country. *Conservation Biology* **31**:1086-1097  
8  
9 529 Trauernicht C, Brook BW, Murphy BP, Williamson GJ, Bowman DMJS (2015) Local  
10  
11 530 and global pyrogeographic evidence that indigenous fire management creates  
12  
13 531 pyrodiversity. *Ecology and Evolution* **5**:1908-1918  
14  
15 532 Trialfhianty TI, Suadi (2017) The role of the community in supporting coral reef  
16  
17 533 restoration in Pemuteran, Bali, Indonesia. *Journal of Coastal Conservation*  
18  
19 534 **21**:873-882  
20  
21  
22 535 Uprety Y, Asselin H, Bergeron Y, Doyon F, Boucher J-F (2012) Contribution of  
23  
24 536 Traditional Knowledge to Ecological Restoration: Practices and Applications.  
25  
26 537 *Ecoscience* **19**:225-237  
27  
28 538 Varga A, Heim A, Demeter L, Molnár Z (2017) Rangers bridge the gap: integration of  
29  
30 539 wood-pasture related traditional ecological knowledge into nature conservation.  
31  
32 Pages 78-91 In: Roué M, Molnár Z, (eds) *Knowing our Land and Resources:*  
33  
34 541 *Indigenous and local knowledge of biodiversity and ecosystem services in*  
35  
36 542 *Europe & Central Asia*. UNESCO, Paris  
37  
38 543 Wangpakapattanawong P, Kavinchan N, Vaidhayakarn C, Schmidt-Vogt D, Elliott S  
39  
40 544 (2010) Fallow to forest: Applying indigenous and scientific knowledge of  
41  
42 545 swidden cultivation to tropical forest restoration. *Forest Ecology and*  
43  
44 546 *Management* **260**:1399-1406  
45  
46  
47 547 Wehi PM, Lord JM (2017) Importance of including cultural practices in ecological  
48  
49 548 restoration. *Conservation Biology* **31**:1109-1118  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 549 Welch JR, Brondízio ES, Hetrick SS, Coimbra CEA, Jr. (2013) Indigenous Burning as  
4  
5 550 Conservation Practice: Neotropical Savanna Recovery amid Agribusiness  
6  
7 551 Deforestation in Central Brazil. Plos One **8**:e81226  
8  
9 552 Xu W, Yin Y, Zhou S (2007) Social and economic impacts of carbon sequestration and  
10  
11 553 land use change on peasant households in rural China: A case study of Liping,  
12  
13 554 Guizhou Province. Journal of Environmental Management **85**:736-745  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
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For Peer Review



## 1 ***Supplementary material***

2           The analysis presented is based on a literature review conducted in the Full  
3 collection of the Web of Science. We used the following search terms as ‘topic’:  
4 (*"Indigenous Community" OR "Indigenous Peoples" OR "Local Community" or*  
5 *"Aboriginal") OR ("traditional ecological knowledge" OR "indigenous knowledge" OR*  
6 *"traditional management" OR "indigenous management") AND ("carbon" OR "carbon*  
7 *stocks" OR "ecological restoration" OR "desertification" OR "carbon sequestration")*  
8 *OR ("Aichi Target 15")*. We did not limit the time-span for documents published in the  
9 past, but our search only included documents published through December 2017. The  
10 search yielded 413 papers. We reviewed the title and the abstract of all the retrieved  
11 documents and found that many not relevant to our topic. Most of the papers that were  
12 not relevant had to do with the term “indigenous” in our search string or referred to  
13 restoration of “indigenous vegetation”, “local bacterial communities,” and the like  
14 without any link to IPLCs. Some papers were also dismissed because they were about  
15 archaeology (e.g., formation of Terra Preta) and did not specifically look at  
16 contemporary IPLCs contributions to restoration efforts or about climate justice and had  
17 the word restoration in the Abstract, but referred vaguely to the importance of carbon  
18 restoration. The 120 works listed below provide information on restoration activities  
19 and IPLC. In constructing our arguments, we also used additional papers selected from  
20 our own literature database, which are cited and listed in the main body of the text.

## 21 22 **List of references found in the search**

23 Abate, Randall S, and Elizabeth Ann Kronk. 2013. “Commonality Among Unique  
24 Indigenous Communities: An Introduction to Climate Change and Its Impacts on  
25 Indigenous Peoples.” *Tulane Environmental Law Journal* 26(2): 179–196.

- 1  
2  
3 26 Adeney, J. Marion, Norman L. Christensen, and Stuart L. Pimm. 2009. "Reserves  
4 27 Protect against Deforestation Fires in the Amazon." *PLoS ONE* 4 (4): e5014.  
5 28 doi:10.1371/journal.pone.0005014.
- 7 29 Adger, W Neil, Terry P Hughes, Carl Folke, Stephen R Carpenter, and Johan  
8 30 Rockström. 2012. "Social-Ecological Resilience to Coastal Disasters Social-  
9 31 Ecological Resilience to Coastal Disasters Social-Ecological Resilience to Coastal  
11 32 Disasters." *Science* 309 (5737): 1–6. doi:10.1126/science.1112122.
- 13 33 Aggarwal, Ashish. 2014. "How Sustainable Are Forestry Clean Development  
14 34 Mechanism Projects? A Review of the Selected Projects from India." *Mitigation  
15 35 and Adaptation Strategies for Global Change* 19 (1): 73–91. doi:10.1007/s11027-  
16 36 012-9427-x.
- 18 37 Albrecht, Alain, and Serigne T. Kandji. 2003. "Carbon Sequestration in Tropical  
19 38 Agroforestry Systems." *Agriculture, Ecosystems and Environment* 99 (1–3): 15–  
20 39 27. doi:10.1016/S0167-8809(03)00138-5.
- 23 40 Alexander, Sasha, Cara R. Nelson, James Aronson, David Lamb, An Cliquet, Kevin L.  
24 41 Erwin, C. Max Finlayson, et al. 2011. "Opportunities and Challenges for  
25 42 Ecological Restoration within REDD+." *Restoration Ecology* 19 (6): 683–89.  
26 43 doi:10.1111/j.1526-100X.2011.00822.x.
- 29 44 Al-Subaiee, Faisal Sultan. 2015. "Local Participation in Woodland Management in the  
30 45 Southern Riyadh Area: Implications for Agricultural Extension." *Geographical  
31 46 Review* 105 (4): 408–28. doi:10.1111/j.1931-0846.2015.12104.x.
- 33 47 Anderson, M Kat. 1996. "Tending the Wilderness." *Restoration Management Notes* 14  
34 48 (2): 154–66. doi:10.3368/er.14.2.154.
- 36 49 Anderson, M. Kat, and Michael G. Barbour. 2003. "Simulated Indigenous Management:  
37 50 A New Model for Ecological Restoration in National Parks." *Ecological  
38 51 Restoration*. doi:10.3368/er.21.4.269.
- 41 52 Araujo, Claudio, Catherine Araujo Bonjean, Jean Louis Combes, Pascale Combes  
42 53 Motel, and Eustaquio J. Reis. 2009. "Property Rights and Deforestation in the  
43 54 Brazilian Amazon." *Ecological Economics* 68 (8–9): 2461–68.  
44 55 doi:10.1016/j.ecolecon.2008.12.015.
- 47 56 Aronson, James C, Charles M Blatt, and Thibaud B Aronson. 2016. "Restoring  
48 57 Ecosystem Health to Improve Human Health and Well-Being: Physicians and  
49 58 Restoration Ecologists Unite in a Common Cause." *Ecology and Society* 21 (4):  
50 59 39. doi:10.5751/ES-08974-210439.
- 52 60 Asiyambi, Adeniyi P., Albert A. Arhin, and Usman Isyaku. 2017. "REDD+ in West  
53 61 Africa: Politics of Design and Implementation in Ghana and Nigeria." *Forests* 8  
54 62 (3). doi:10.3390/f8030078.

- 1  
2  
3 63 Atela, Joanes O., Peter A. Minang, Claire H. Quinn, and Lalisa A. Duguma. 2015.  
4 64 “Implementing REDD+ at the Local Level: Assessing the Key Enablers for  
5 65 Credible Mitigation and Sustainable Livelihood Outcomes.” *Journal of*  
6 66 *Environmental Management* 157: 238–49. doi:10.1016/j.jenvman.2015.04.015.
- 7  
8  
9 67 Awono, Abdon, Olufunso A Somorin, Richard Eba’a Atyi, and Patrice Levang. 2014.  
10 68 “Tenure and Participation in Local REDD+ Projects: Insights from Southern  
11 69 Cameroon.” *Environmental Science and Policy* 35: 76–86.  
12 70 doi:10.1016/j.envsci.2013.01.017.
- 13  
14 71 Baker, Susan. 2017. “Social Engagement in Ecological Restoration.” In *Routledge*  
15 72 *Handbook of Ecological and Environmental Restoration*.  
16 73 doi:10.4324/9781315685977.
- 17  
18  
19 74 Bardsley, Douglas K., and Nathanael D. Wiseman. 2012. “Climate Change  
20 75 Vulnerability and Social Development for Remote Indigenous Communities of  
21 76 South Australia.” *Global Environmental Change* 22 (3): 713–23.  
22 77 doi:10.1016/j.gloenvcha.2012.04.003.
- 23  
24 78 Bautista, Susana, Joan Llovet, Anahi Ocampo-Melgar, Alberto Vilagrosa, Angeles G  
25 79 Mayor, Cristina Murias, V Ramon Vallejo, and Barron J Orr. 2017. “Integrating  
26 80 Knowledge Exchange and the Assessment of Dryland Management Alternatives.  
27 81 A Learning-Centered Participatory Approach.” *Journal of Environmental*  
28 82 *Management* 195 (1): 35–45. doi:10.1016/j.jenvman.2016.11.050.
- 29  
30  
31 83 Benayas, José M. R., Adrian C. Newton, Anita Diaz, and James M. Bullock. 2009.  
32 84 “Enhancement of Biodiversity and Ecosystem Services by Ecological Restoration:  
33 85 A Meta-Analysis.” *Science* 325 (5944): 1121–24. doi:10.1126/science.1172460.
- 34  
35  
36 86 BenDor, Todd, T. William Lester, Avery Livengood, Adam Davis, and Logan  
37 87 Yonavjak. 2015. “Estimating the Size and Impact of the Ecological Restoration  
38 88 Economy.” *PLoS ONE* 10 (6): e0128339. doi:10.1371/journal.pone.0128339.
- 39  
40  
41 89 Bennett, Michael T. 2008. “China’s Sloping Land Conversion Program: Institutional  
42 90 Innovation or Business as Usual?” *Ecological Economics* 65 (4): 699–711.  
43 91 doi:10.1016/j.ecolecon.2007.09.017.
- 44  
45 92 Bennett, Michael T, Chen Xie, Nicholas J Hogarth, Daoli Peng, and Louis Putzel. 2014.  
46 93 “China’s Conversion of Cropland to Forest Program for Household Delivery of  
47 94 Ecosystem Services: How Important Is a Local Implementation Regime to  
48 95 Survival Rate Outcomes?” *Forests* 5 (9): 2345–76. doi:10.3390/f5092345.
- 49  
50  
51 96 Bhagawati, Kaushik, Goutom Bhagawati, Ranjan Das, R. Bhagawati, and S.V.  
52 97 Ngachanngachan. 2015. “The Structure of Jhum (Traditional Shifting Cultivation  
53 98 System): Prospect or Threat to Climate.” *International Letters of Natural Sciences*  
54 99 46: 16–30. doi:10.18052/www.scipress.com/ILNS.46.16.

- 1  
2  
3 100 Bikila, Negasa Gilo, Zewdu Kelkay Tessema, and Ebro Gedda Abule. 2016. "Carbon  
4 101 Sequestration Potentials of Semi-Arid Rangelands under Traditional Management  
5 102 Practices in Borana, Southern Ethiopia." *Agriculture, Ecosystems and*  
6 103 *Environment* 223: 108–14. doi:10.1016/j.agee.2016.02.028.
- 8 104 Blackman, Allen, Leonardo Corral, Eirivelthon Santos Lima, and Gregory P. Asner.  
9 105 2017. "Titling Indigenous Communities Protects Forests in the Peruvian  
10 106 Amazon." *Proceedings of the National Academy of Sciences* 114 (16): 4123–28.  
11 107 doi:10.1073/pnas.1603290114.
- 14 108 Boissiere, M, D Sheil, I Basuki, M Wan, and Hien Le. 2009. "Can Engaging Local  
15 109 People's Interests Reduce Forest Degradation in Central Vietnam?" *Biodiversity*  
16 110 *and Conservation* 18 (10): 2743–57. doi:10.1007/s10531-009-9627-1.
- 18 111 Borda-Nino, Monica, Diego Hernandez-Mucino, and Eliane Ceccon. 2017. "Planning  
19 112 Restoration in Human-Modified Landscapes: New Insights Linking Different  
20 113 Scales." *Applied Geography* 83: 118–29. doi:10.1016/j.apgeog.2017.03.012.
- 23 114 Boyd, Emily, Peter May, Manyu Chang, and Fernando C. Veiga. 2007. "Exploring  
24 115 Socioeconomic Impacts of Forest Based Mitigation Projects: Lessons from Brazil  
25 116 and Bolivia." *Environmental Science and Policy* 10 (5): 419–33.  
26 117 doi:10.1016/j.envsci.2007.03.004.
- 29 118 Brofeldt, Søren, Ida Theilade, Neil D. Burgess, Finn Danielsen, Michael K. Poulsen,  
30 119 Teis Adrian, Tran Nguyen Bang, et al. 2014. "Community Monitoring of Carbon  
31 120 Stocks for REDD+: Does Accuracy and Cost Change over Time?" *Forests* 5 (8):  
32 121 1834–54. doi:10.3390/f5081834.
- 34 122 Brown, D.R., P Dettmann, T Rinaudo, H Tefera, and A Tofu. 2011. "Poverty  
35 123 Alleviation and Environmental Restoration Using the Clean Development  
36 124 Mechanism: A Case Study from Humbo, Ethiopia." *Environmental Management*  
37 125 48 (2): 322–33. doi:10.1007/s00267-010-9590-3.
- 40 126 Brown, Michael I. 2013. *Redeeming REDD: Policies, Incentives, and Social Feasibility*  
41 127 *for Avoided Deforestation*. Routledge. doi:10.4324/9780203123652.
- 43 128 Buijs, Arjen E. 2009. "Public Support for River Restoration. A Mixed-Method Study  
44 129 into Local Residents' Support for and Framing of River Management and  
45 130 Ecological Restoration in the Dutch Floodplains." *Journal of Environmental*  
46 131 *Management* 90 (8): 2680–89. doi:10.1016/j.jenvman.2009.02.006.
- 49 132 Buntaine, Mark T., Stuart E. Hamilton, and Marco Millones. 2015. "Titling Community  
50 133 Land to Prevent Deforestation: An Evaluation of a Best-Case Program in Morona-  
51 134 Santiago, Ecuador." *Global Environmental Change* 33: 32–43.  
52 135 doi:10.1016/j.gloenvcha.2015.04.001.

- 1  
2  
3 136 Butt, Nathalie, Kimberly Epps, Han Overman, Takuya Iwamura, and Jose M.V.  
4 137 Fragoso. 2015. "Assessing Carbon Stocks Using Indigenous Peoples' Field  
5 138 Measurements in Amazonian Guyana." *Forest Ecology and Management* 338:  
6 139 191–99. doi:10.1016/j.foreco.2014.11.014.
- 8  
9 140 Caillon, Sophie, Georgina Cullman, Bas Verschuuren, and Eleanor J. Sterling. 2017.  
10 141 "Moving beyond the Human–nature Dichotomy through Biocultural Approaches:  
11 142 Including Ecological Well-Being in Resilience Indicators." *Ecology and Society*  
12 143 22 (4): 27. <https://www.ecologyandsociety.org/issues/article.php/9746>.
- 14  
15 144 Campbell, Alison, Lera Miles, Igor Lysenko, Holly Gibbs, Adam Hughes, and A  
16 145 Campbell. 2008. "Carbon Storage in Protected Areas – Technical Report."  
17 146 [http://old.unep-](http://old.unep-wcmc.org/medialibrary/2010/09/24/d8a43698/Carbon_storage_PAs.pdf)  
18 147 [wcmc.org/medialibrary/2010/09/24/d8a43698/Carbon\\_storage\\_PAs.pdf](http://old.unep-wcmc.org/medialibrary/2010/09/24/d8a43698/Carbon_storage_PAs.pdf).
- 20  
21 148 Caplow, Susan, Pamela Jagger, Kathleen Lawlor, and Erin Sills. 2011. "Evaluating  
22 149 Land Use and Livelihood Impacts of Early Forest Carbon Projects: Lessons for  
23 150 Learning about REDD+." *Environmental Science and Policy* 14 (2): 152–67.  
24 151 doi:10.1016/j.envsci.2010.10.003.
- 26  
27 152 Ceddia, M.G, Ulrich Gunter, and Alexandre Corriveau-Bourque. 2015. "Land Tenure  
28 153 and Agricultural Expansion in Latin America: The Role of Indigenous Peoples'  
29 154 and Local Communities' Forest Rights." *Global Environmental Change* 35: 316–  
30 155 22. doi:10.1016/j.gloenvcha.2015.09.010.
- 32  
33 156 Cerbu, Gillian A., Denis J. Sonwa, and Benno Pokorny. 2013. "Opportunities for and  
34 157 Capacity Barriers to the Implementation of REDD+ Projects with Smallholder  
35 158 Farmers: Case Study of Awae and Akok, Centre and South Regions, Cameroon."  
36 159 *Forest Policy and Economics* 36: 60–70. doi:10.1016/j.forpol.2013.06.018.
- 38  
39 160 Chen, Cheng, Hannes J Koenig, Bettina Matzdorf, and Lin Zhen. 2015. "The  
40 161 Institutional Challenges of Payment for Ecosystem Service Program in China: A  
41 162 Review of the Effectiveness and Implementation of Sloping Land Conversion  
42 163 Program." *Sustainability* 7 (5): 5564–91. doi:10.3390/su7055564.
- 44  
45 164 Cheng, Kaity, Stewart A W Diemont, and Allan P. Drew. 2011. "Role of Tao (Belotia  
46 165 Mexicana) in the Traditional Lacandon Maya Shifting Cultivation Ecosystem."  
47 166 *Agroforestry Systems* 82 (3): 331–36. doi:10.1007/s10457-011-9379-2.
- 48  
49 167 Chhatre, Ashwini, and Arun Agrawal. 2009. "Trade-Offs and Synergies between  
50 168 Carbon Storage and Livelihood Benefits from Forest Commons." *Proceedings of*  
51 169 *the National Academy of Sciences* 106 (42): 17667–70.  
52 170 doi:10.1073/pnas.0905308106.
- 54  
55 171 Chirwa, Paxie W., Larwanou Mahamane, and Godwin Kowero. 2017. "Forests, People  
56 172 and Environment: Some African Perspectives." *Southern Forests* 79 (2): 79–85.  
57 173 doi:10.2989/20702620.2017.1295347.



- 1  
2  
3 174 Clement, Floriane, and Jaime M Amezaga. 2009. "Afforestation and Forestry Land  
4 175 Allocation in Northern Vietnam: Analysing the Gap between Policy Intentions  
5 176 and Outcomes." *Land Use Policy* 26 (2): 458–70.  
6 177 [http://www.sciencedirect.com/science/article/B6VB0-4T4HJK7-](http://www.sciencedirect.com/science/article/B6VB0-4T4HJK7-1/2/bef831b948f3b6a1a8f399648fa966ed)  
7 178 [1/2/bef831b948f3b6a1a8f399648fa966ed](http://www.sciencedirect.com/science/article/B6VB0-4T4HJK7-1/2/bef831b948f3b6a1a8f399648fa966ed).
- 9  
10 179 Clement, Floriane, Didier Orange, Meredith Williams, Corinne Mulley, and Michael  
11 180 Epprecht. 2009. "Drivers of Afforestation in Northern Vietnam: Assessing Local  
12 181 Variations Using Geographically Weighted Regression." *Applied Geography* 29  
13 182 (4): 561–76. doi:10.1016/j.apgeog.2009.01.003.
- 15 183 Conservation of Arctic Flora and Fauna (CAFF). 2013. "Arctic Biodiversity  
16 184 Assessment: Report for Policy Makers." Akureyri, Iceland.  
17 185 [http://www.caff.is/assessment-series/10-arctic-biodiversity-assessment/229-arctic-](http://www.caff.is/assessment-series/10-arctic-biodiversity-assessment/229-arctic-biodiversity-assessment-2013-report-for-policy-makers-english)  
18 186 [biodiversity-assessment-2013-report-for-policy-makers-english](http://www.caff.is/assessment-series/10-arctic-biodiversity-assessment/229-arctic-biodiversity-assessment-2013-report-for-policy-makers-english).
- 21 187 Cook, Garry D., Richard J. Williams, Christopher J. Stokes, Lindsay B. Hutley, Andrew  
22 188 J. Ash, and Anna E. Richards. 2010. "Managing Sources and Sinks of Greenhouse  
23 189 Gases in Australia's Rangelands and Tropical Savannas." *Rangeland Ecology and*  
24 190 *Management* 63 (1): 137–46. doi:10.2111/08-101.1.
- 27 191 Coombes, Brad. 2007. "Defending Community? Indigeneity, Self-Determination and  
28 192 Institutional Ambivalence in the Restoration of Lake Whakaki." *Geoforum* 38 (1):  
29 193 60–72. doi:10.1016/j.geoforum.2006.05.006.
- 31 194 Couix, Nathalie, and Héloïse Gonzalo-Turpin. 2015. "Towards a Land Management  
32 195 Approach to Ecological Restoration to Encourage Stakeholder Participation."  
33 196 *Land Use Policy* 46: 155–62. doi:10.1016/j.landusepol.2015.01.025.
- 36 197 Cuerrier, A, N J Turner, T C Gomes, A Garibaldi, and A Downing. 2015. "Cultural  
37 198 Keystone Places: Conservation and Restoration in Cultural Landscapes." *Journal*  
38 199 *of Ethnobiology* 35 (3): 427–48.
- 40 200 Cuong, Chu Van, Sharon Brown, Huynh Huu To, and Marc Hockings. 2015. "Using  
41 201 Melaleuca Fences as Soft Coastal Engineering for Mangrove Restoration in Kien  
42 202 Giang, Vietnam." *Ecological Engineering* 81: 256–65.  
43 203 doi:10.1016/j.ecoleng.2015.04.031.
- 46 204 Damnyag, Lawrence, Olli Saastamoinen, Mark Appiah, and Ari Pappinen. 2012. "Role  
47 205 of Tenure Insecurity in Deforestation in Ghana's High Forest Zone." *Forest*  
48 206 *Policy and Economics* 14 (1): 90–98. doi:10.1016/j.forpol.2011.08.006.
- 51 207 Danielsen, Finn, Teis Adrian, Søren Brofeldt, Meine van Noordwijk, Michael K.  
52 208 Poulsen, Subekti Rahayu, Ervan Rutishauser, et al. 2013. "Community  
53 209 Monitoring for REDD+: International Promises and Field Realities." *Ecology and*  
54 210 *Society* 18 (3): 41. doi:10.5751/ES-05464-180341.

- 1  
2  
3 211 Datta, S K, and K J Virgo. 1998. "Towards Sustainable Watershed Development  
4 212 through People's Participation: Lessons from the Lesser Himalaya, Uttar Pradesh,  
5 213 India." *Mountain Research and Development* 18 (3): 213–33.  
6 214 doi:10.2307/3674034.
- 8 215 Davenport, Mae A., Christopher A. Bridges, Jean C. Mangun, Andrew D. Carver, Karl  
9 216 W J Williard, and Elizabeth O. Jones. 2010. "Building Local Community  
10 217 Commitment to Wetlands Restoration: A Case Study of the Cache River Wetlands  
11 218 in Southern Illinois, USA." *Environmental Management* 45 (4): 711–22.  
12 219 doi:10.1007/s00267-010-9446-x.
- 15 220 de Koning, Free, Marcela Aguiñaga, Manuel Bravo, Marco Chiu, Max Lascano, Tannya  
16 221 Lozada, and Luis Suarez. 2011. "Bridging the Gap between Forest Conservation  
17 222 and Poverty Alleviation: The Ecuadorian Socio Bosque Program." *Environmental  
18 223 Science and Policy* 14 (5): 531–42. doi:10.1016/j.envsci.2011.04.007.
- 21 224 De La Fuente, T., and R. Hajjar. 2013. "Do Current Forest Carbon Standards Include  
22 225 Adequate Requirements to Ensure Indigenous Peoples' Rights in REDD  
23 226 Projects?" *International Forestry Review* 15 (4): 427–41.  
24 227 doi:10.1505/146554813809025676.
- 27 228 Defossé, Guillermo E., Gabriel Loguercio, Facundo J. Oddi, Julio C. Molina, and P.  
28 229 Daniel Kraus. 2011. "Potential CO2 Emissions Mitigation through Forest  
29 230 Prescribed Burning: A Case Study in Patagonia, Argentina." *Forest Ecology and  
30 231 Management* 261 (12): 2243–54. doi:10.1016/j.foreco.2010.11.021.
- 33 232 der Knaap, M. 2013. "Comparative Analysis of Fisheries Restoration and Public  
34 233 Participation in Lake Victoria and Lake Tanganyika." *Aquatic Ecosystem Health  
35 234 and Management* 16 (3): 279–87. doi:10.1080/14634988.2013.816618.
- 37 235 Deur, Douglas, and Nancy Turner. 2006. *Keeping It Living: Traditions of Plant Use and  
38 236 Cultivation on the Northwest Coast of North America*. Seattle: University of  
39 237 Washington Press.  
40 238 <http://ubc.summon.serialssolutions.com/search?s.q=keeping+it+living>.
- 43 239 Dinh, Hoang Huu, Trung Thanh Nguyen, Viet-Ngu Hoang, and Clevo Wilson. 2017.  
44 240 "Economic Incentive and Factors Affecting Tree Planting of Rural Households:  
45 241 Evidence from the Central Highlands of Vietnam." *Journal of Forest Economics*  
46 242 29: 14–24. doi:10.1016/j.jfe.2017.08.001.
- 49 243 Douterlungne, David, Samuel I. Levy-Tacher, Duncan J. Golicher, and Francisco  
50 244 Román Dañobeytia. 2010. "Applying Indigenous Knowledge to the Restoration of  
51 245 Degraded Tropical Rain Forest Clearings Dominated by Bracken Fern."  
52 246 *Restoration Ecology* 18 (3): 322–29. doi:10.1111/j.1526-100X.2008.00459.x.
- 54 247 Duchelle, Amy E., Marina Cromberg, Maria Fernanda Gebara, Raissa Guerra, Tadeu  
55 248 Melo, Anne Larson, Peter Cronkleton, et al. 2014. "Linking Forest Tenure

- 1  
2  
3 249 Reform, Environmental Compliance, and Incentives: Lessons from REDD+  
4 250 Initiatives in the Brazilian Amazon.” *World Development* 55: 53–67.  
5 251 doi:10.1016/j.worlddev.2013.01.014.  
6  
7 252 Eden, Sally E., and Sylvia Tunstall. 2006. “Ecological versus Social Restoration? How  
8 253 Urban River Restoration Challenges but Also Fails to Challenge the Science-  
9 254 Policy Nexus in the United Kingdom.” *Environment and Planning C:  
10 255 Government and Policy* 24 (5): 661–80. doi:10.1068/c0608j.  
11  
12  
13 256 Egan, Dave, Evan E. Hjerpe, Jesse Abrams, and Ecological. 2011. *Human Dimensions  
14 257 of Ecological Restoration: Integrating Science, Nature, and Culture The Science  
15 258 and Practice of Ecological Restoration*. Island Press. doi:10.5822/978-1-61091-  
16 259 039-2.  
17  
18  
19 260 Eil, Andrew, Benoit Bosquet, Megan Brayne, Peter Cooke, Andre Grant, Peter Kuria,  
20 261 Sam Johnston, et al. 2009. “A Carbon Guide for Northern Indigenous  
21 262 Australians.” Yokohama, Japan.  
22  
23 263 Evans, Kristen, Laura Murphy, and Wil De Jong. 2014. “Global versus Local Narratives  
24 264 of REDD: A Case Study from Peru’s Amazon.” *Environmental Science and  
25 265 Policy* 35: 98–108. doi:10.1016/j.envsci.2012.12.013.  
26  
27  
28 266 Fa, John E., Dominic Currie, and Jessica Meeuwig. 2003. “Bushmeat and Food Security  
29 267 in the Congo Basin: Linkages between Wildlife and People’s Future.”  
30 268 *Environmental Conservation* 30 (1): 71–78. doi:10.1017/S0376892903000067.  
31  
32 269 FAO. 2010. “Global Forest Resources Assessment 2010.” *FAO Forestry Paper* 163:  
33 270 350. doi:ISBN 978-92-5-106654-6.  
34  
35  
36 271 Fernández-Llamazares, Álvaro, Isabel Díaz-Reviriego, Maximilien Guèze, Mar Cabeza,  
37 272 Aili Pyhälä, and Victoria Reyes-García. 2016. “Local Perceptions as a Guide for  
38 273 the Sustainable Management of Natural Resources: Empirical Evidence from a  
39 274 Small-Scale Society in Bolivian Amazonia.” *Ecology and Society* 21 (1): 2.  
40 275 doi:10.5751/ES-08092-210102.  
41  
42  
43 276 Finley-Brook, M. 2007. “Indigenous Land Tenure Insecurity Fosters Illegal Logging in  
44 277 Nicaragua.” *International Forestry Review* 9 (4): 850–64.  
45 278 doi:10.1505/ifor.9.4.850.  
46  
47 279 Ford, Anabel, and Ronald Nigh. 2015. *The Maya Forest Garden: Eight Millennia of  
48 280 Sustainable Cultivation of the Tropical Woodlands*. Berkeley: Left Coast Press.  
49  
50 281 Forest Peoples Programme, International Indigenous Forum on Biodiversity, and  
51 282 Secretariat of the Convention on Biological Diversity. 2016. “Local Biodiversity  
52 283 Outlooks. Indigenous Peoples’ and Local Communities’ Contributions to the  
53 284 Implementation of the Strategic Plan for Biodiversity 2011-2020. A Complement  
54  
55  
56  
57  
58  
59  
60



- 1  
2  
3 285 to the Fourth Edition of the Global Biodiversity Outlook.” Moreton-in-Marsh,  
4 286 England.
- 5  
6 287 Fox, Coleen A., Nicholas James Reo, Dale A. Turner, Jo Anne Cook, Frank Dituri,  
7 288 Brett Fessell, James Jenkins, et al. 2017. “‘The River Is Us; the River Is in Our  
8 289 Veins’: Re-Defining River Restoration in Three Indigenous Communities.”  
9 290 *Sustainability Science* 12 (4): 521–33. doi:10.1007/s11625-016-0421-1.
- 11  
12 291 Frey, M., and I. Spellerberg. 2011. “Restoring the Amenity and Nature Conservation  
13 292 Values of Gravel Pits: An Ecological Restoration and Community Engagement  
14 293 Approach.” *Australasian Journal of Environmental Management* 18 (1): 33–46.  
15 294 doi:10.1080/14486563.2011.566159.
- 17  
18 295 Garibaldi, Ann, and Nancy J. Turner. 2004. “Cultural Keystone Species: Implications  
19 296 for Ecological Conservation and Restoration.” *Ecology and Society* 9 (3): 1.  
20 297 doi:10.1146/annurev-pharmtox-061008-103038.
- 22  
23 298 Glaser, B. 2007. “Prehistorically Modified Soils of Central Amazonia: A Model for  
24 299 Sustainable Agriculture in the Twenty-First Century.” *Philosophical Transactions  
25 300 of the Royal Society B: Biological Sciences* 362 (1478): 187–96.  
26 301 doi:10.1098/rstb.2006.1978.
- 27  
28 302 Glomsrød, Solveig, Taoyuan Wei, Gang Liu, and Jens B. Aune. 2011. “How Well Do  
29 303 Tree Plantations Comply with the Twin Targets of the Clean Development  
30 304 Mechanism? - The Case of Tree Plantations in Tanzania.” *Ecological Economics*  
31 305 70 (6): 1066–74. doi:10.1016/j.ecolecon.2010.09.034.
- 33  
34 306 Golden, Christopher D, Edward Hugh Allison, Madan M. Dey, Benjamin S. Halpern,  
35 307 Douglas J McCauley, Matthew Smith, Bapu Vaitla, et al. 2016. “Fall in Fish  
36 308 Catch Threatens Human Health.” *Nature* 534 (7607): 317–20.  
37 309 doi:10.1038/534317a.
- 39  
40 310 Green, D., and G. Raygorodetsky. 2010. “Indigenous Knowledge of a Changing  
41 311 Climate.” *Climatic Change* 100 (2): 239–42. doi:10.1007/s10584-010-9804-y.
- 42  
43 312 Griffiths, Thomas. 2004. “Indigenous Peoples, Land Tenure and Land Policy in Latin  
44 313 America.” *Land Reform* 1: 46–62.
- 45  
46 314 Hall, A. 2012. *Forests and Climate Change: The Social Dimensions of REDD in Latin  
47 315 America*. Cheltenham, UK ; Northampton, MA: Edward Elgar Publishing.
- 48  
49 316 Hartoyo, Adisti Permatasari Putri, Iskandar Z. Siregar, Supriyanto, Lilik B. Prasetyo,  
50 317 and Ida Thelaide. 2016. “Biodiversity, Carbon Stocks and Community Monitoring  
51 318 in Traditional Agroforestry Practices: Preliminary Results from Two Investigated  
52 319 Villages in Berau, East Kalimantan.” *Procedia Environmental Sciences* 33: 376–  
53 320 85. doi:10.1016/j.proenv.2016.03.088.
- 55  
56  
57  
58  
59  
60

- 1  
2  
3 321 Hayes, Tanya Marie. 2007. "Does Tenure Matter? A Comparative Analysis of  
4 322 Agricultural Expansion in the Mosquitia Forest Corridor." *Human Ecology* 35 (6):  
5 323 733–47. doi:10.1007/s10745-007-9117-6.  
6
- 7 324 He, Jun, and Rong Lang. 2015. "Limits of State-Led Programs of Payment for  
8 325 Ecosystem Services: Field Evidence from the Sloping Land Conversion Program  
9 326 in Southwest China." *Human Ecology* 43 (5): 749–58. doi:10.1007/s10745-015-  
10 327 9782-9.  
11
- 12  
13 328 He, Jun, Rong Lang, and Jianchu Xu. 2014. "Local Dynamics Driving Forest  
14 329 Transition: Insights from Upland Villages in Southwest China." *Forests* 5 (2):  
15 330 214–33. doi:10.3390/f5020214.  
16
- 17 331 Heckbert, Scott, Jeremy Russell-Smith, Andrew Reeson, Jocelyn Davies, Glenn James,  
18 332 and Carl Meyer. 2012. "Spatially Explicit Benefit-Cost Analysis of Fire  
19 333 Management for Greenhouse Gas Abatement." *Austral Ecology* 37 (6): 724–32.  
20 334 doi:10.1111/j.1442-9993.2012.02408.x.  
21
- 22  
23 335 Heldt, Sonja, Paulina Budryte, Hans Werner Ingensiep, Burkhard Teichgraeber, Ute  
24 336 Schneider, and Martin Denecke. 2016. "Social Pitfalls for River Restoration: How  
25 337 Public Participation Uncovers Problems with Public Acceptance." *Environmental*  
26 338 *Earth Sciences* 75 (13). doi:10.1007/s12665-016-5787-y.  
27
- 28  
29 339 Higgs, Eric S. 1997. "What Is Good Ecological Restoration?" *Conservation Biology*.  
30 340 doi:10.1046/j.1523-1739.1997.95311.x.  
31
- 32 341 Hill, Stephanie, and Brad Coombes. 2004. "The Limits of Participation in Dis-  
33 342 Equilibrium Ecology: Maori Involvement in Habitat Restoration within Te  
34 343 Urewera National Park." *Science as Culture* 13 (1): 37–74.  
35 344 doi:10.1080/0950543042000193771.  
36
- 37  
38 345 Hobbs, Joseph J., Knut Krzywinski, Gidske L. Andersen, Mohamed Talib, Richard H.  
39 346 Pierce, and Ahmed E.M. Saadallah. 2014. "Acacia Trees on the Cultural  
40 347 Landscapes of the Red Sea Hills." *Biodiversity and Conservation* 23 (12): 2923–  
41 348 43. doi:10.1007/s10531-014-0755-x.  
42
- 43  
44 349 Holland, Margaret B., Kelly W. Jones, Lisa Naughton-Treves, José Luis Freire, Manuel  
45 350 Morales, and Luis Suárez. 2017. "Titling Land to Conserve Forests: The Case of  
46 351 Cuyabeno Reserve in Ecuador." *Global Environmental Change* 44: 27–38.  
47 352 doi:10.1016/j.gloenvcha.2017.02.004.  
48
- 49 353 Holmes, Ignacia, Catherine Potvin, and Oliver T. Coomes. 2017. "Early REDD+  
50 354 Implementation: The Journey of an Indigenous Community in Eastern Panama."  
51 355 *Forests* 8 (3): 1–18. doi:10.3390/f8030067.  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 356 Holtgren, J. Marty, and Nancy A. Auer. 2016. "Re-Envisioning State and Tribal  
4 357 Collaboration in Fishery Assessment and Restoration." *Fisheries* 41 (5): 244–57.  
5 358 doi:10.1080/03632415.2016.1162159.  
6  
7 359 Horiuchi, Mio, Katsue Fukamachi, and Hirokazu Oku. 2011. "Reed Community  
8 360 Restoration Projects with Citizen Participation: An Example of the Practical Use  
9 361 of Satoyama Landscape Resources in Shiga Prefecture, Japan." *Landscape and  
10 362 Ecological Engineering* 7 (2): 217–22. doi:10.1007/s11355-010-0129-9.  
11  
12  
13 363 Hormel, Leontina M., and Kari Marie Norgaard. 2009. "Bring the Salmon Home! Karuk  
14 364 Challenges to Capitalist Incorporation." *Critical Sociology* 35 (3): 343–66.  
15 365 doi:10.1177/0896920508101502.  
16  
17 366 Howson, Peter, and Sara Kindon. 2015. "Analysing Access to the Local REDD+  
18 367 Benefits of Sungai Lamandau, Central Kalimantan, Indonesia." *Asia Pacific  
19 368 Viewpoint* 56 (1): 96–110. doi:10.1111/apv.12089.  
20  
21  
22 369 Jackson, Sue, Michael Storrs, and Joe Morrison. 2005. "Recognition of Aboriginal  
23 370 Rights, Interests and Values in River Research and Management: Perspectives  
24 371 from Northern Australia." *Ecological Management and Restoration* 6 (2): 105–  
25 372 10. doi:10.1111/j.1442-8903.2005.00226.x.  
26  
27  
28 373 Jindal, Rohit, John M. Kerr, and Sarah Carter. 2012. "Reducing Poverty Through  
29 374 Carbon Forestry? Impacts of the N'hambita Community Carbon Project in  
30 375 Mozambique." *World Development* 40 (10): 2123–35.  
31 376 doi:10.1016/j.worlddev.2012.05.003.  
32  
33  
34 377 Jindal, Rohit, Brent Swallow, and John Kerr. 2008. "Forestry-Based Carbon  
35 378 Sequestration Projects in Africa: Potential Benefits and Challenges." *Natural  
36 379 Resources Forum* 32 (2): 116–30. doi:10.1111/j.1477-8947.2008.00176.x.  
37  
38  
39 380 Johnson, Craig R., Rebecca H. Chabot, Martin P. Marzloff, and Simon Wotherspoon.  
40 381 2017. "Knowing When (Not) to Attempt Ecological Restoration." *Restoration  
41 382 Ecology* 25 (1): 140–47. doi:10.1111/rec.12413.  
42  
43 383 Junker, Berit, Mattias Buchecker, and Ulrike Mueller-Boeker. 2007. "Objectives of  
44 384 Public Participation: Which Actors Should Be Involved in the Decision Making  
45 385 for River Restorations?" *Water Resources Research* 43 (10): 96–110.  
46 386 doi:10.1029/2006WR005584.  
47  
48  
49 387 Junqueira, André B., Conny J.M. Almekinders, Tjeerd Jan Stomph, Charles R. Clement,  
50 388 and Paul C. Struik. 2016. "The Role of Amazonian Anthropogenic Soils in  
51 389 Shifting Cultivation: Learning from Farmers' Rationales." *Ecology and Society* 21  
52 390 (1). doi:10.5751/ES-08140-210112.  
53  
54 391 Junqueira, André Braga, Glenn Harvey Shepard, and Charles R. Clement. 2010.  
55 392 "Secondary Forests on Anthropogenic Soils in Brazilian Amazonia Conserve

- 1  
2  
3 393 Agrobiodiversity.” *Biodiversity and Conservation* 19 (7): 1933–61.  
4 394 doi:10.1007/s10531-010-9813-1.
- 5  
6 395 Kessler, J. J., and P. Laban. 1994. “Planning Strategies and Funding Modalities for  
7 396 Land Rehabilitation.” *Land Degradation & Development* 5 (1): 25–32.  
8 397 doi:10.1002/ldr.3400050104.
- 9  
10 398 Kimmerer, R N. 2000. “Native Knowledge for Native Ecosystems.” *Journal of Forestry*  
11 399 98 (8): 1288–1303.
- 12  
13 400 Kimmerer, Robin. 2011. “Restoration and Reciprocity: The Contributions of Traditional  
14 401 Ecological Knowledge.” In *Human Dimensions of Ecological Restoration:  
15 402 Integrating Science, Nature, and Culture*, 257–76. doi:10.5822/978-1-61091-039-  
16 403 2.
- 17  
18  
19 404 Kingsley, J., and S. Thomas. 2017. “Ecosystem Approaches to Community Health and  
20 405 Wellbeing: Towards an Integrated Australian Governance Framework in  
21 406 Response to Global Environmental Change.” *EcoHealth* 14 (2): 210–13.  
22 407 doi:10.1007/s10393-016-1193-x.
- 23  
24  
25 408 Laris, Paul, Moussa Koné, Sepideh Dadashi, and Fadiala Dembele. 2017. “The  
26 409 Early/late Fire Dichotomy: Time for a Reassessment of Aubréville’s Savanna Fire  
27 410 Experiments.” *Progress in Physical Geography* 41 (1): 68–94.  
28 411 doi:10.1177/0309133316665570.
- 29  
30  
31 412 Laris, P., S. Dadashi, A. Jo, and S. Wechsler. 2016. “Buffering the Savanna: Fire  
32 413 Regimes and Disequilibrium Ecology in West Africa.” *Plant Ecology* 217 (5):  
33 414 583–96. doi:10.1007/s11258-016-0602-0.
- 34  
35  
36 415 Larson, A M, M Brockhaus, W D Sunderlin, A Duchelle, A Babon, T Dokken, T T  
37 416 Pham, et al. 2013. “Land Tenure and REDD+: The Good, the Bad and the Ugly.”  
38 417 *Global Environmental Change* 3: 678–79. doi:10.1016/j.gloenvcha.2013.02.014.
- 39  
40 418 Larson, A. M. 2010. “Making the ‘Rules of the Game’: Constituting Territory and  
41 419 Authority in Nicaragua’s Indigenous Communities.” *Land Use Policy* 27 (4):  
42 420 1143–52. doi:10.1016/j.landusepol.2010.03.004.
- 43  
44  
45 421 Larson, Anne M. 2011. “Forest Tenure Reform in the Age of Climate Change: Lessons  
46 422 for REDD+.” *Global Environmental Change* 2 (21): 540–49.  
47 423 doi:10.1016/j.gloenvcha.2010.11.008.
- 48  
49 424 Larson, Anne M., and Ganga Ram Dahal. 2012. “Forest Tenure Reform: New Resource  
50 425 Rights for Forest-Based Communities?” *Conservation and Society* 10 (2): 77.  
51 426 doi:10.4103/0972-4923.97478.
- 52  
53  
54 427 Larson, Anne M, Maria Brockhaus, William D Sunderlin, Amy Duchelle, Andrea  
55 428 Babon, Therese Dokken, Thu Thuy Pham, et al. 2013. “Land Tenure and REDD+:

- 1  
2  
3 429 The Good, the Bad and the Ugly.” *Global Environmental Change* 23 (3): 678–89.  
4 430 doi:10.1016/j.gloenvcha.2013.02.014.  
5  
6 431 Lawlor, Kathleen, Erika Weinthal, and Lydia Olander. 2010. “Institutions and Policies  
7 432 to Protect Rural Livelihoods in REDD+ Regimes.” *Global Environmental Politics*  
8 433 10 (4): 1–11. doi:10.1162/GLEP\_a\_00028.  
9  
10 434 Le, Hai Dinh, Carl Smith, John Herbohn, and Stephen Harrison. 2012. “More than Just  
11 435 Trees: Assessing Reforestation Success in Tropical Developing Countries.”  
12 436 *Journal of Rural Studies* 28 (1): 5–19. doi:10.1016/j.jrurstud.2011.07.006.  
13  
14  
15 437 Lee, L S, and K Courtenay. 2016. “Enrichment Plantings as a Means of Enhanced Bush  
16 438 Food and Bush Medicine Plant Production in Remote Arid Regions - a Review  
17 439 and Status Report.” *Learning Communities-International Journal of Learning in*  
18 440 *Social Contexts* 19: 64–75.  
19  
20  
21 441 Lefale, Penehuro Fatu. 2010. “Ua’afa Le Aso Stormy Weather Today: Traditional  
22 442 Ecological Knowledge of Weather and Climate. The Samoa Experience.”  
23 443 *Climatic Change* 100 (2): 317–35. doi:10.1007/s10584-009-9722-z.  
24  
25  
26 444 Lehmann, Johannes, Dirse Kern, Laura German, Joe Mccann, Gilvan Coimbra Martins,  
27 445 Adonis Moreira, Wim Sombroek, et al. 2003. “Amazonian Dark Earths: Origin  
28 446 Properties Management.” Springer, Dordrecht, The Netherlands.  
29  
30  
31 447 Lejon, Anna G C, Birgitta Malm Renöfält, and Christer Nilsson. 2009. “Conflicts  
32 448 Associated with Dam Removal in Sweden.” *Ecology and Society* 14 (2): 4.  
33  
34  
35 449 Liu, Jinlong, Ming Liang, Lingchao Li, Hexing Long, and Wil De Jong. 2017.  
36 450 “Comparative Study of the Forest Transition Pathways of Nine Asia-Pacific  
37 451 Countries.” *Forest Policy and Economics* 76: 25–34.  
38 452 doi:10.1016/j.forpol.2016.03.007.  
39  
40  
41 453 Long, Jonathan, Aregai Tecele, and Benrita Burnette. 2003. “Cultural Foundations for  
42 454 Ecological Restoration on the White Mountain Apache Reservation.” *Ecology and*  
43 455 *Society* 8 (1): 4. doi:10.5751/ES-00591-080104.  
44  
45  
46 456 Lyver, Phil O.B., Ashli Akins, Hilary Phipps, Viktoria Kahui, David R. Towns, and  
47 457 Henrik Moller. 2016. “Key Biocultural Values to Guide Restoration Action and  
48 458 Planning in New Zealand.” *Restoration Ecology* 24 (3): 314–23.  
49 459 doi:10.1111/rec.12318.  
50  
51  
52 460 Macchi, M, Gonzalo Oviedo, Sarah Gotheil, Katharine Cross, Agni Boedhihartono,  
53 461 Caterina Wolfangel, and Matthew Howell. 2008. “Indigenous and Traditional  
54 462 Peoples and Climate Change.” Gland, Switzerland.  
55 463 [http://cmsdata.iucn.org/downloads/indigenous\\_peoples\\_climate\\_change.pdf](http://cmsdata.iucn.org/downloads/indigenous_peoples_climate_change.pdf).  
56  
57  
58 464 Maikhuri, R K, R L Senwal, K S Rao, and K G Saxena. 1997. “Rehabilitation of  
59 465 Degraded Community Lands for Sustainable Development in Himalaya: A Case  
60



- 1  
2  
3 466 Study in Garhwal Himalaya, India.” *International Journal Of Sustainable*  
4 467 *Development And World Ecology* 4 (3): 192–203.  
5 468 doi:10.1080/13504509709469954.  
6  
7 469 McCall, Michael K., Noah Chutz, and Margaret Skutsch. 2016. “Moving from  
8 470 Measuring, Reporting, Verification (MRV) of Forest Carbon to Community  
9 471 Mapping, Measuring, Monitoring (MMM): Perspectives from Mexico.” *PLoS*  
10 472 *ONE* 11 (6): e0146038. doi:10.1371/journal.pone.0146038.  
11  
12 473 McDermott, Constance L., Lauren Coad, Ariella Helfgott, and Heike Schroeder. 2012.  
13 474 “Operationalizing Social Safeguards in REDD+: Actors, Interests and Ideas.”  
14 475 *Environmental Science and Policy* 21: 63–72. doi:10.1016/j.envsci.2012.02.007.  
15  
16 476 McDonald, James. 2005. “Cultivating the Northwest: Early Accounts of Tsimshian  
17 477 Horticulture.” In *Keeping It Living: Traditions of Plant Use and Cultivation on*  
18 478 *the Northwest Coast of North America*, 240–73.  
19  
20 479 Meyfroidt, Patrick, and Eric F. Lambin. 2011. Global Forest Transition: Prospects for  
21 480 an End to Deforestation. *Annual Review of Environment and Resources*. Vol. 36.  
22 481 doi:10.1146/annurev-environ-090710-143732.  
23  
24 482 Mijatović, Dunja, Frederik Van Oudenhoven, Pablo Eyzaguirre, and Toby Hodgkin.  
25 483 2013. “The Role of Agricultural Biodiversity in Strengthening Resilience to  
26 484 Climate Change: Towards an Analytical Framework.” *International Journal of*  
27 485 *Agricultural Sustainability* 11 (2): 95–107. doi:10.1080/14735903.2012.691221.  
28  
29 486 Mills, M. 2003. “Restoring the Mauri of Oruarangi Creek.” *Water Science and*  
30 487 *Technology* 48 (7): 129–37.  
31  
32 488 Mistry, Jayalaxshmi, Bibiana A. Bilbao, and Andrea Berardi. 2016. “Community  
33 489 Owned Solutions for Fire Management in Tropical Ecosystems: Case Studies  
34 490 from Indigenous Communities of South America.” *Philosophical Transactions of*  
35 491 *the Royal Society B: Biological Sciences* 371 (1696): 20150174.  
36 492 doi:10.1098/rstb.2015.0174.  
37  
38 493 Montagnini, F., and P. K.R. Nair. 2004. “Carbon Sequestration: An Underexploited  
39 494 Environmental Benefit of Agroforestry Systems.” *Agroforestry Systems* 61–62 (1–  
40 495 3): 281–95. doi:10.1023/B:AGFO.0000029005.92691.79.  
41  
42 496 Murphy, Brett P., and David M.J.S. Bowman. 2007. “The Interdependence of Fire,  
43 497 Grass, Kangaroos and Australian Aborigines: A Case Study from Central Arnhem  
44 498 Land, Northern Australia.” *Journal of Biogeography* 34 (2): 237–50.  
45 499 doi:10.1111/j.1365-2699.2006.01591.x.  
46  
47 500 Mustonen, Tero. 2015. “Communal Visual Histories to Detect Environmental Change in  
48 501 Northern Areas: Examples of Emerging North American and Eurasian Practices.”  
49 502 *Ambio* 44 (8): 766–77. doi:10.1007/s13280-015-0671-7.  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 503 Nagendra, H. 2007. "Drivers of Reforestation in Human-Dominated Forests."  
4 504 Proceedings of the National Academy of Sciences 104 (39): 15218–23.  
5 505 doi:10.1073/pnas.0702319104.  
6  
7 506 Naughton-Treves, Lisa, and Kelly Wendland. 2014. "Land Tenure and Tropical Forest  
8 507 Carbon Management." *World Development* 55: 1–6.  
9 508 doi:10.1016/j.worlddev.2013.01.010.  
10  
11 509 Nelson, Andrew, and Kenneth M Chomitz. 2011. "Effectiveness of Strict vs. Multiple  
12 510 Use Protected Areas in Reducing Tropical Forest Fires: A Global Analysis Using  
13 511 Matching Methods." *PLoS ONE* 6 (8): e22722.  
14 512 doi:10.1371/journal.pone.0022722.  
15  
16 513 Nepstad, D., S. Schwartzman, B. Bamberger, M. Santilli, D. Ray, P. Schlesinger, P.  
17 514 Lefebvre, et al. 2006. "Inhibition of Amazon Deforestation and Fire by Parks and  
18 515 Indigenous Lands." *Conservation Biology* 20 (1): 65–73. doi:10.1111/j.1523-  
19 516 1739.2006.00351.x.  
20  
21 517 Nguyen, Tan Phong, Thai Thanh Luom, and Kevin E. Parnell. 2017. "Mangrove  
22 518 Allocation for Coastal Protection and Livelihood Improvement in Kien Giang  
23 519 Province, Vietnam: Constraints and Recommendations." *Land Use Policy* 63:  
24 520 401–7. doi:10.1016/j.landusepol.2017.01.048.  
25  
26 521 Nguyen, Trung Thanh, Siegfried Bauer, and Holm Ubrig. 2010. "Land Privatization  
27 522 and Afforestation Incentive of Rural Farms in the Northern Uplands of Vietnam."  
28 523 *Forest Policy and Economics* 12 (7): 518–26. doi:10.1016/j.forpol.2010.05.007.  
29  
30 524 Nielsen-Pincus, Max, and Cassandra Moseley. 2013. "The Economic and Employment  
31 525 Impacts of Forest and Watershed Restoration." *Restoration Ecology* 21 (2): 207–  
32 526 14. doi:10.1111/j.1526-100X.2012.00885.x.  
33  
34 527 Nolte, Christoph, Arun Agrawal, Kirsten M. Silvius, and Britaldo S. Soares-Filho. 2013.  
35 528 "Governance Regime and Location Influence Avoided Deforestation Success of  
36 529 Protected Areas in the Brazilian Amazon." *Proceedings of the National Academy*  
37 530 *of Sciences* 110 (13): 4956–61. doi:10.1073/pnas.1214786110.  
38  
39 531 Novotny, Etelvino H., Michael H.B. Hayes, Beáta E. Madari, Tito J. Bonagamba,  
40 532 Eduardo R. deAzevedo, André A. de Souza, Guixue Song, Christiane M.  
41 533 Nogueira, and Antonio S. Mangrich. 2009. "Lessons from the Terra Preta de  
42 534 Índios of the Amazon Region for the Utilisation of Charcoal for Soil  
43 535 Amendment." *Journal of the Brazilian Chemical Society* 20 (6): 1003–10.  
44 536 doi:10.1590/S0103-50532009000600002.  
45  
46 537 Paneque-Gálvez, Jaime, Jean François Mas, Maximilien Guèze, Ana Catarina Luz,  
47 538 Manuel J. Macía, Martí Orta-Martínez, Joan Pino, and Victoria Reyes-García.  
48 539 2013. "Land Tenure and Forest Cover Change. The Case of Southwestern Beni,  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 540 Bolivian Amazon, 1986-2009.” *Applied Geography* 43: 113–26.  
4 541 doi:10.1016/j.apgeog.2013.06.005.  
5  
6 542 Paquette, Alain, Jessica Hawryshyn, Alexandra Vyta Senikas, and Catherine Potvin.  
7 543 2009. “Enrichment Planting in Secondary Forests: A Promising Clean  
8 544 Development Mechanism to Increase Terrestrial Carbon Sinks.” *Ecology and*  
9 545 *Society* 14 (1): 31. doi:31.  
10  
11 546 Pascua, Pua‘ala, Heather McMillen, Tamara Ticktin, Mehana Vaughan, and Kawika B.  
12 547 Winter. 2017. “Beyond Services: A Process and Framework to Incorporate  
13 548 Cultural, Genealogical, Place-Based, and Indigenous Relationships in Ecosystem  
14 549 Service Assessments.” *Ecosystem Services* 26: 465–75.  
15 550 doi:10.1016/j.ecoser.2017.03.012.  
16  
17  
18 551 Paudyal, Kiran, Himlal Baral, Benjamin Burkhard, Santosh P Bhandari, and Rodney J  
19 552 Keenan. 2015. “Participatory Assessment and Mapping of Ecosystem Services in  
20 553 a Data-Poor Region: Case Study of Community-Managed Forests in Central  
21 554 Nepal.” *Ecosystem Services* 13: 81–92. doi:10.1016/j.ecoser.2015.01.007.  
22  
23  
24 555 Pecl, Gretta T., and Et Al. 2017. “Biodiversity Redistribution under Climate Change:  
25 556 Impacts on Ecosystems and Human Well-Being.” *Science* 355 (6332): eaai9214.  
26 557 doi:10.1126/science.aai9214.  
27  
28  
29 558 Pellant, M, B Abbey, and S Karl. 2004. “Restoring the Great Basin Desert, USA:  
30 559 Integrating Science, Management, and People.” *Environmental Monitoring and*  
31 560 *Assessment* 99 (1–3): 169–79. doi:10.1007/s10661-004-4017-3.  
32  
33  
34 561 Pfeiffer, Jeanine M., and Robert A. Voeks. 2008. “Biological Invasions and Biocultural  
35 562 Diversity: Linking Ecological and Cultural Systems.” *Environmental*  
36 563 *Conservation* 35 (4): 281–93. doi:10.1017/S0376892908005146.  
37  
38 564 Phong, Nguyen Tan, Thai Thanh Luom, and Kevin E Parnell. 2017. “Mangrove  
39 565 Allocation for Coastal Protection and Livelihood Improvement in Kien Giang  
40 566 Province, Vietnam: Constraints and Recommendations.” *Land Use Policy* 63:  
41 567 401–7. doi:10.1016/j.landusepol.2017.01.048.  
42  
43  
44 568 Phong, Nguyen Tan, Kevin E Parnell, and Alison Cottrell. 2017. “Human Activities and  
45 569 Coastal Erosion on the Kien Giang Coast, Vietnam.” *Journal of Coastal*  
46 570 *Conservation* 21 (6): 967–79. doi:10.1007/s11852-017-0566-9.  
47  
48 571 Pohnan, Erica, Hotlin Ompusunggu, and Campbell Webb. 2015. “Does Tree Planting  
49 572 Change Minds? Assessing the Use of Community Participation in Reforestation to  
50 573 Address Illegal Logging in West Kalimantan.” *Tropical Conservation Science* 8  
51 574 (1): 45–57. doi:10.1177/194008291500800107.  
52  
53  
54 575 Porter-Bolland, Luciana, Edward A. Ellis, Manuel R. Guariguata, Isabel Ruiz-Mallén,  
55 576 Simoneta Negrete-Yankelevich, and Victoria Reyes-García. 2012. “Community  
56  
57  
58  
59  
60



- 1  
2  
3 577 Managed Forests and Forest Protected Areas: An Assessment of Their  
4 578 Conservation Effectiveness across the Tropics.” *Forest Ecology and Management*  
5 579 268: 6–17. doi:10.1016/j.foreco.2011.05.034.  
6  
7 580 RAISG. 2016. “Amazonia 2016. Protected Areas and Indigenous Territories.”  
8  
9 581 Reyes-García, Victoria, Juan Carlos Ledezma, Jaime Paneque-Gálvez, Martí Orta,  
10 582 Maximilien Gueze, Agustín Lobo, Daniel Guinart, and Ana Catarina Luz. 2012.  
11 583 “Presence and Purpose of Nonindigenous Peoples on Indigenous Lands: A  
12 584 Descriptive Account from the Bolivian Lowlands.” *Society & Natural Resources*  
13 585 25: 270–84. doi:10.1080/08941920.2010.531078.  
14  
15  
16 586 Reynolds, Travis W. 2012. “Institutional Determinants of Success Among Forestry-  
17 587 Based Carbon Sequestration Projects in Sub-Saharan Africa.” *World Development*  
18 588 40 (3): 542–54. doi:10.1016/j.worlddev.2011.09.001.  
19  
20  
21 589 Richards, Anna E., Alan N. Andersen, Jon Schatz, Robert Eager, Tracy Z. Dawes, Kate  
22 590 Hadden, Kelly Scheepers, and Maria Van Der Geest. 2012. “Savanna Burning,  
23 591 Greenhouse Gas Emissions and Indigenous Livelihoods: Introducing the Tiwi  
24 592 Carbon Study.” *Austral Ecology* 37 (6): 712–23. doi:10.1111/j.1442-  
25 593 9993.2012.02395.x.  
26  
27  
28 594 Richardson, Benjamin J, and Ted Lefroy. 2016. “Restoration Dialogues: Improving the  
29 595 Governance of Ecological Restoration.” *Restoration Ecology* 24 (5): 668–73.  
30  
31 596 Ricketts, Taylor H, Britaldo Soares-Filho, Gustavo A B da Fonseca, Daniel Nepstad,  
32 597 Alexander Pfaf, Annie Petsonk, Anthony Anderson, et al. 2010. “Indigenous  
33 598 Lands, Protected Areas, and Slowing Climate Change.” *PLoS Biology* 8 (3): 6–9.  
34 599 doi:10.1371/journal.pbio.1000331.  
35  
36  
37 600 Rights and Resources Initiative. 2014. *Lots of Words , Little Action Will the Private*  
38 601 *Sector Tip the Scales for Community Land Rights ?*  
39  
40 602 Robertson, Margaret, Pam Nichols, Pierre Horwitz, Keith Bradby, and David  
41 603 MacKintosh. 2000. “Environmental Narratives and the Need for Multiple  
42 604 Perspectives to Restore Degraded Landscapes in Australia.” *Ecosystem Health* 6  
43 605 (2): 119–33. doi:10.1046/j.1526-0992.2000.00013.x.  
44  
45  
46 606 Robinson, Brian E., Margaret B. Holland, and Lisa Naughton-Treves. 2014. “Does  
47 607 Secure Land Tenure Save Forests? A Meta-Analysis of the Relationship between  
48 608 Land Tenure and Tropical Deforestation.” *Global Environmental Change* 29:  
49 609 281–93. doi:10.1016/j.gloenvcha.2013.05.012.  
50  
51  
52 610 Roe, Stephanie, Charlotte Streck, Luke Pritchard, and John Costenbader. 2013.  
53 611 “Safeguards in REDD+ and Forest Carbon Standards: A Review of Social,  
54 612 Environmental and Procedural Concepts and Application.” *Climate Focus*: 1–89.  
55  
56  
57  
58  
59  
60

- 1  
2  
3 613 Rose, Denis, Damein Bell, and David A. Crook. 2016. "Restoring Habitat and Cultural  
4 614 Practice in Australia's Oldest and Largest Traditional Aquaculture System."  
5 615 *Reviews in Fish Biology and Fisheries* 26. Springer International Publishing: 589–  
6 616 600. doi:10.1007/s11160-016-9448-8.
- 8  
9 617 Russell-Smith, Jeremy, Cameron P. Yates, Andrew C. Edwards, Peter J. Whitehead,  
10 618 Brett P. Murphy, and Michael J. Lawes. 2015. "Deriving Multiple Benefits from  
11 619 Carbon Market-Based Savanna Fire Management: An Australian Example." *PLoS*  
12 620 *ONE* 10 (12): e0143426. doi:10.1371/journal.pone.0143426.
- 14  
15 621 Salick, J, S K Ghimire, Z D Fang, S Dema, and K M Konchar. 2014. "Himalayan  
16 622 Alpine Vegetation, Climate Change and Mitigation." *Journal of Ethnobiology* 34  
17 623 (3): 276–93. doi:10.2993/0278-0771-34.3.276.
- 18  
19 624 Sangha, Kamaljit K., Andrew Le Brocq, Robert Costanza, and Yvonne Cadet-James.  
20 625 2015. "Ecosystems and Indigenous Well-Being: An Integrated Framework."  
21 626 *Global Ecology and Conservation* 4: 197–206. doi:10.1016/j.gecco.2015.06.008.
- 23  
24 627 Sayer, Jeffrey, Gary Bull, and Chris Elliott. 2008. "Mediating Forest Transitions:  
25 628 'Grand Design' or 'Muddling Through.'" *Conservation and Society* 6 (4): 320–27.  
26 629 doi:10.4103/0972-4923.49195.
- 28  
29 630 Schleicher, Judith, Carlos A. Peres, Tatsuya Amano, William Llactayo, and Nigel  
30 631 Leader-Williams. 2017. "Conservation Performance of Different Conservation  
31 632 Governance Regimes in the Peruvian Amazon." *Scientific Reports* 7 (1): 11318.  
32 633 doi:10.1038/s41598-017-10736-w.
- 34  
35 634 Seid, M.A., N.J. Kuhn, and T.Z. Fikre. 2016. "The Role of Pastoralism in Regulating  
36 635 Ecosystem Services." *Rev. Sci. Tech. Int. Epiz.* 35 (2): 435–44.  
37 636 doi:10.20506/rst.35.2.2534.
- 38  
39 637 Selvam, V., K. K. Ravichandran, L. Gnanappazham, and M. Navamuniyammal. 2003.  
40 638 "Assessment of Community-Based Restoration of Pichavaram Mangrove Wetland  
41 639 Using Remote Sensing Data." *Current Science* 85 (6): 794–98.  
42 640 [http://www.jstor.org/stable/24109889?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org/stable/24109889?seq=1#page_scan_tab_contents).
- 44  
45 641 Shackelford, Nancy, Richard J. Hobbs, Joanna M. Burgar, Todd E. Erickson, Joseph B.  
46 642 Fontaine, Etienne Laliberté, Cristina E. Ramalho, Michael P. Perring, and Rachel  
47 643 J. Standish. 2013. "Primed for Change: Developing Ecological Restoration for the  
48 644 21st Century." *Restoration Ecology* 21 (3): 297–304. doi:10.1111/rec.12012.
- 49  
50 645 Shaffer, L Jen. 2010. "Indigenous Fire Use to Manage Savanna Landscapes in Southern  
51 646 Mozambique." *Fire Ecology* 6 (2): 43–59. doi:10.4996/fireecology.0602043.
- 53  
54 647 Sheil, Douglas, Imam Basuki, Laura German, Thomas W. Kuyper, Godwin Limberg,  
55 648 Rajindra K. Puri, Bernard Sellato, Meine van Noordwijk, and Eva Wollenberg.  
56 649 2012. "Do Anthropogenic Dark Earths Occur in the Interior of Borneo? Some

- 1  
2  
3 650 Initial Observations from East Kalimantan.” *Forests* 3 (2): 207–27.  
4 651 doi:10.3390/f3020207.
- 5  
6 652 Sheil, Douglas, Imam Basuki, Laura German, Thomas W. Kuyper, Godwin Limberg,  
7 653 Rajindra K. Puri, Bernard Sellato, Meine van Noordwijk, and Eva Wollenberg.  
8 654 2012. “Do Anthropogenic Dark Earths Occur in the Interior of Borneo? Some  
9 655 Initial Observations from East Kalimantan.” *Forests* 3 (2): 207–29.
- 10  
11  
12 656 Singh, Awani K, Ranjay K Singh, A K Singh, V K Singh, S S Rawat, K S Mehta, A  
13 657 Kumar, Manoj K Gupta, and Shailja Thakur. 2014. “Bio-Mulching for Ginger  
14 658 Crop Management: Traditional Ecological Knowledge Led Adaptation under  
15 659 Rainfed Agroecosystems.” *Indian Journal of Traditional Knowledge* 13 (1): 111–  
16 660 22.
- 17  
18  
19 661 Smith, Amelia, Susan H. Yee, Marc Russell, Jill Awkerman, and William S. Fisher.  
20 662 2017. “Linking Ecosystem Service Supply to Stakeholder Concerns on Both Land  
21 663 and Sea: An Example from Guánica Bay Watershed, Puerto Rico.” *Ecological*  
22 664 *Indicators* 74: 371–83. doi:10.1016/j.ecolind.2016.11.036.
- 23  
24  
25 665 Smith, Amelia, Susan H Yee, Marc Russell, Jill Awkerman, and William S Fisher.  
26 666 2017. “Linking Ecosystem Service Supply to Stakeholder Concerns on Both Land  
27 667 and Sea: An Example from Guanica Bay Watershed, Puerto Rico.” *Ecological*  
28 668 *Indicators* 74: 371–83. doi:10.1016/j.ecolind.2016.11.036.
- 29  
30  
31 669 Soares-Filho, B, P Moutinho, D Nepstad, A Anderson, H Rodrigues, R Garcia, L  
32 670 Dietzsch, et al. 2010. “Role of Brazilian Amazon Protected Areas in Climate  
33 671 Change Mitigation.” *Proceedings of the National Academy of Sciences of the*  
34 672 *United States of America* 107 (24): 10821–26. doi:10.1073/pnas.0913048107.
- 35  
36  
37 673 Soares-Filho, Britaldo, Leticia Lima, Maria Bowman, and Leticia Viana. 2012.  
38 674 “Challenges for Low-Carbon Agriculture and Forest Conservation in Brazil.”
- 39  
40  
41 675 Soentgen, Jens, Klaus Hilbert, Carolin von Groote-Bidlingmaier, Gabriele Herzog-  
42 676 schröder, Eije Erich Pabst, and Sabine Timpf. 2017. “Terra Preta de Índio:  
43 677 Commodification and Mythification of the Amazonian Dark Earths.” *Gaia* 26 (2):  
44 678 136–43. doi:10.14512/gaia.26.2.18.
- 45  
46  
47 679 Solomon, Dawit, Johannes Lehmann, James A. Fraser, Melissa Leach, Kojo Amanor,  
48 680 Victoria Frausin, Søren M. Kristiansen, Dominique Millimouno, and James  
49 681 Fairhead. 2016. “Indigenous African Soil Enrichment as a Climate-Smart  
50 682 Sustainable Agriculture Alternative.” *Frontiers in Ecology and the Environment*  
51 683 14 (2): 71–76. doi:10.1002/fee.1226.
- 52  
53  
54 684 Stenseke, Marie. 2009. “Local Participation in Cultural Landscape Maintenance:  
55 685 Lessons from Sweden.” *Land Use Policy* 26 (2): 214–23.  
56 686 doi:10.1016/j.landusepol.2008.01.005.

- 1  
2  
3 687 Sterling, Eleanor J., Christopher Filardi, Anne Toomey, Amanda Sigouin, Erin Betley,  
4 688 Nadav Gazit, Jennifer Newell, et al. 2017. "Biocultural Approaches to Well-Being  
5 689 and Sustainability Indicators across Scales." *Nature Ecology and Evolution* 1  
6 690 (12): 1798–1806. doi:10.1038/s41559-017-0349-6.
- 8  
9 691 Stevens, C, R Winterbottom, J Springer, and K Reytar. 2014. "Securing Rights,  
10 692 Combating Climate Change: How Strengthening Community Forest Rights  
11 693 Mitigates Climate Change." Washington, DC.
- 13 694 Stewart, J., M. Anda, and R. J. Harper. 2016. "Carbon Profiles of Remote Australian  
14 695 Indigenous Communities: A Base for Opportunities." *Energy Policy* 94: 77–88.  
15 696 doi:10.1016/j.enpol.2016.03.036.
- 17 697 Stone, Kathy, Mahadev Bhat, Ramachandra Bhatta, and Andrew Mathews. 2008.  
18 698 "Factors Influencing Community Participation in Mangroves Restoration: A  
19 699 Contingent Valuation Analysis." *Ocean & Coastal Management* 51 (6): 476–84.  
20 700 doi:10.1016/j.ocecoaman.2008.02.001.
- 23 701 Storm, Linda, and Daniela Shebitz. 2006. "Evaluating the Purpose, Extent, and  
24 702 Ecological Restoration Applications of Indigenous Burning Practices in  
25 703 Southwestern Washington." *Ecological Restoration* 24 (4): 256–68.  
26 704 doi:10.3368/er.24.4.256.
- 29 705 Sunderlin, William D, Anne M Larson, Amy E Duchelle, Ida Aju Pradnja  
30 706 Resosudarmo, Thu Ba Huynh, Abdon Awono, and Therese Dokken. 2014. "How  
31 707 Are REDD+ Proponents Addressing Tenure Problems? Evidence from Brazil,  
32 708 Cameroon, Tanzania, Indonesia, and Vietnam." *World Development* 55: 37–52.  
33 709 doi:10.1016/j.worlddev.2013.01.013.
- 36 710 Suryanto, P, and E T S Putra. 2012. "Traditional Enrichment Planting in Agroforestry  
37 711 Marginal Land Gunung Kidul, Java, Indonesia." *Journal of Sustainable*  
38 712 *Development* 5 (2): 77–87. doi:10.5539/jsd.v5n2p77.
- 40 713 Tekle, K. 1999. "Land Degradation Problems and Their Implications for Food Shortage  
41 714 in South Wello, Ethiopia." *Environmental Management* 23 (4): 419–27.  
42 715 doi:10.1007/s002679900197.
- 45 716 Thacher, T, D R Lee, and J W Schelhas. 1997. "Farmer Participation in Reforestation  
46 717 Incentive Programs in Costa Rica." *Agroforestry Systems* 35 (3): 269–89.  
47 718 doi:10.1007/BF00044458.
- 49 719 Thacher, T, D Lee, and J Schelhas. 1997. "Farmer Participation in Reforestation  
50 720 Incentive Programs in Costa Rica." *American Journal of Agricultural Economics*  
51 721 79 (5): 1704.

- 1  
2  
3 722 Thornton, Thomas, Douglas Deur, and Herman Kitka. 2015. "Cultivation of Salmon  
4 723 and Other Marine Resources on the Northwest Coast of North America." *Human*  
5 724 *Ecology* 43 (2): 189–99. doi:10.1007/s10745-015-9747-z.
- 6  
7 725 Throop, William, and Rebecca Purdom. 2006. "Wilderness Restoration: The Paradox of  
8 726 Public Participation." *Restoration Ecology* 14 (4): 493–99. doi:10.1111/j.1526-  
9 727 100X.2006.00160.x.
- 10  
11  
12 728 Trauernicht, Clay, Barry W. Brook, Brett P. Murphy, Grant J. Williamson, and David  
13 729 M.J.S. Bowman. 2015. "Local and Global Pyrogeographic Evidence That  
14 730 Indigenous Fire Management Creates Pyrodiversity." *Ecology and Evolution* 5  
15 731 (9): 1908–18. doi:10.1002/ece3.1494.
- 16  
17  
18 732 Trialfhianty, Tyas Ismi, and Suadi. 2017. "The Role of the Community in Supporting  
19 733 Coral Reef Restoration in Pemuteran, Bali, Indonesia." *Journal of Coastal*  
20 734 *Conservation* 21 (6): 873–82. doi:10.1007/s11852-017-0553-1.
- 21  
22 735 Tschakert, Petra, Oliver T. Coomes, and Catherine Potvin. 2007. "Indigenous  
23 736 Livelihoods, Slash-and-Burn Agriculture, and Carbon Stocks in Eastern Panama."  
24 737 *Ecological Economics* 60 (4): 807–20. doi:10.1016/j.ecolecon.2006.02.001.
- 25  
26  
27 738 Tucker, Catherine M. 2004. "Community Institutions and Forest Management in  
28 739 Mexico's Monarch Butterfly Reserve." *Society and Natural Resources* 17 (7):  
29 740 569–87. doi:10.1080/08941920490466143.
- 30  
31 741 Turner, Nancy J., Lukasz Jakub Luczaj, Paola Migliorini, Andrea Pieroni, Angelo  
32 742 Leandro Dreon, Linda Enrica Sacchetti, and Maurizio G. Paoletti. 2011. "Edible  
33 743 and Tended Wild Plants, Traditional Ecological Knowledge and Agroecology."  
34 744 *Critical Reviews in Plant Sciences* 30 (1–2): 198–225.  
35 745 doi:10.1080/07352689.2011.554492.
- 36  
37  
38 746 Turner, NJ, MB Ignace, and R Ignace. 2000. "Traditional Ecological Knowledge and  
39 747 Wisdom of Aboriginal Peoples in British Columbia." *Ecological Applications* 10  
40 748 (5): 1275–87. doi:10.1890/1051-0761(2000)010[1275:TEKAWO]2.0.CO;2.
- 41  
42  
43 749 Turnhout, Esther, Aarti Gupta, Janice Weatherley-Singh, Marjanneke J. Vijge, Jessica  
44 750 de Koning, Ingrid J. Visseren-Hamakers, Martin Herold, and Markus Lederer.  
45 751 2017. "Envisioning REDD+ in a Post-Paris Era: Between Evolving Expectations  
46 752 and Current Practice." *Wiley Interdisciplinary Reviews: Climate Change* 8 (1): 1–  
47 753 13. doi:10.1002/wcc.425.
- 48  
49  
50 754 Uprety, Yadav, Hugo Asselin, Yves Bergeron, Frédéric Doyon, and Jean-François  
51 755 Boucher. 2012. "Contribution of Traditional Knowledge to Ecological  
52 756 Restoration: Practices and Applications." *Écoscience* 19 (3): 225–37.  
53 757 doi:10.2980/19-3-3530.
- 54  
55  
56  
57  
58  
59  
60



- 1  
2  
3 758 Uychiaoco, A J, P M Alino, and A L Dantis. 2000. "Initiatives in Philippine Coastal  
4 759 Management: An Overview." *Coastal Management* 28 (1): 55–63.  
5  
6 760 Van Dam, Chris. 2011. "Indigenous Territories and REDD in Latin America:  
7 761 Opportunity or Threat?" *Forests* 2 (1): 394–414. doi:10.3390/f2010394.  
8  
9 762 Vergara-Asenjo, Gerardo, and Catherine Potvin. 2014. "Forest Protection and Tenure  
10 763 Status: THE Key Role of Indigenous Peoples and Protected Areas in Panama."  
11 764 *Global Environmental Change* 28 (1): 205–15.  
12 765 doi:10.1016/j.gloenvcha.2014.07.002.  
13  
14  
15 766 Vining, J, E Tyler, and B.S. Kweon. 2000. "Public Values, Opinions, and Emotions in  
16 767 Restoration Controversies." In *Restoring Nature: Perspectives from the Social*  
17 768 *Sciences and Humanities*, 143–61. doi:citeulike-article-id:2687785.  
19  
20 769 Walker, Wayne, Alessandro Baccini, Stephan Schwartzman, Sandra Ríos, María A.  
21 770 Oliveira-Miranda, Cicero Augusto, Milton Romero Ruiz, et al. 2014. "Forest  
22 771 Carbon in Amazonia: The Unrecognized Contribution of Indigenous Territories  
23 772 and Protected Natural Areas." *Carbon Management* 5 (5–6): 479–85.  
24 773 doi:10.1080/17583004.2014.990680.  
25  
26 774 Walters, Bradley B. 2000. "Local Mangrove Planting in the Philippines: Are Fisherfolk  
27 775 and Fishpond Owners Effective Restorationists?" *Restoration Ecology* 8 (3): 237–  
28 776 46. doi:10.1046/j.1526-100X.2000.80035.x.  
29  
30  
31 777 Wangpakapattanawong, Prasit, Nuttira Kavinchan, Chawapich Vaidhayakarn, Dietrich  
32 778 Schmidt-Vogt, and Stephen Elliott. 2010. "Fallow to Forest: Applying Indigenous  
33 779 and Scientific Knowledge of Swidden Cultivation to Tropical Forest Restoration."  
34 780 *Forest Ecology and Management* 260 (8): 1399–1406.  
35 781 doi:10.1016/j.foreco.2010.07.042.  
36  
37  
38 782 Watanabe, Moriaki, Patma Vityakon, and A. Terry Rambo. 2014. "Can't See the Forest  
39 783 for the Rice: Factors Influencing Spatial Variations in the Density of Trees in  
40 784 Paddy Fields in Northeast Thailand." *Environmental Management* 53 (2): 343–56.  
41 785 doi:10.1007/s00267-013-0206-6.  
42  
43  
44 786 Wehi, Priscilla M., and Janice M. Lord. 2017. "Importance of Including Cultural  
45 787 Practices in Ecological Restoration." *Conservation Biology* 31 (5): 1109–18.  
46 788 doi:10.1111/cobi.12915.  
47  
48 789 Welch, James R., Eduardo S. Brondízio, Scott S. Hetrick, and Carlos E A Coimbra.  
49 790 2013. "Indigenous Burning as Conservation Practice: Neotropical Savanna  
50 791 Recovery amid Agribusiness Deforestation in Central Brazil." *PLoS ONE* 8 (12).  
51 792 doi:10.1371/journal.pone.0081226.  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 793 White, Douglas. 2014. "A Perfect Storm? Indigenous Rights within a National REDD+  
4 794 Readiness Process in Peru." *Mitigation and Adaptation Strategies for Global*  
5 795 *Change* 19 (6): 657–76. doi:10.1007/s11027-013-9523-6.  
6  
7 796 Wilman, Elizabeth A. 2015. "An Economic Model of Aboriginal Fire-Stick Farming."  
8 797 *Australian Journal of Agricultural and Resource Economics* 59 (1): 39–60.  
9 798 doi:10.1111/1467-8489.12038.  
10  
11 799 Wilson, Jeffrey S, and Greg H Lindsey. 2009. "Identifying Urban Neighborhoods for  
12 800 Tree Canopy Restoration Through Community Participation." In *Planning and*  
13 801 *Socioeconomic Applications*, edited by RR Gatrell, JD and Jensen, 1:29–42.  
14 802 Geotechnologies and the Environment. doi:10.1007/978-1-4020-9642-6\_3.  
15  
16  
17 803 Wortley, Liana, Jean Marc Hero, and Michael Howes. 2013. "Evaluating Ecological  
18 804 Restoration Success: A Review of the Literature." *Restoration Ecology* 21 (5):  
19 805 537–43. doi:10.1111/rec.12028.  
20  
21  
22 806 Xu, W., Y. Yin, and S. Zhou. 2007. "Social and Economic Impacts of Carbon  
23 807 Sequestration and Land Use Change on Peasant Households in Rural China: A  
24 808 Case Study of Liping, Guizhou Province." *Journal of Environmental Management*  
25 809 85 (3): 736–45. doi:10.1016/j.jenvman.2006.09.013.  
26  
27  
28 810 Yamanoshita, Makino Yamada, and Masahiro Amano. 2012. "Capability Development  
29 811 of Local Communities for Project Sustainability in Afforestation/reforestation  
30 812 Clean Development Mechanism." *Mitigation and Adaptation Strategies for*  
31 813 *Global Change* 17 (4): 425–40. doi:10.1007/s11027-011-9334-6.  
32  
33  
34 814 Yang, Xiaohui, Zhiqing Jia, and Longjun Ci. 2010. "Assessing Effects of Afforestation  
35 815 Projects in China." *Nature* 466(7304): 315. doi:10.1038/466315c.  
36  
37 816 Yan-qiong, Ye, Chen Guo-jie, and Fan Hong. 2003. "Impacts of the 'Grain for Green'  
38 817 Project on Rural Communities in the Upper Min River Basin, Sichuan, China."  
39 818 *Mountain Research and Development* 23 (4): 345–52. doi:10.1659/0276-  
40 819 4741(2003)023[0345:IOTGFG]2.0.CO;2.  
41  
42 820 Zorner, R J, A Trabucc, D A Bossio, and L V Verchota. 2008. "Climate Change  
43 821 Mitigation: A Spatial Analysis of Global Land Suitability for Clean Development  
44 822 Mechanism Afforestation and Reforestation." *Agriculture Ecosystems &*  
45 823 *Environment* 126 (1–2): 67–80.  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60