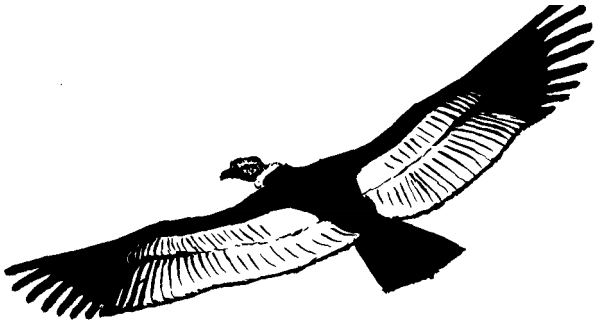
Park in the Andes



Jeffery Boswall

Covering more than a million and a half acres, Los Glaciares National Park in Patagonia has great possibilities as a wildlife sanctuary. But farming, sport and hunting take precedence over wildlife except in the highest parts that are difficult of access. The author spent a month in the park in 1971, making a film for BBC television.

In 1834 during his voyage round the world in HMS *Beagle,* the young Charles Darwin took a trip 140 miles up the Rio Santa Cruz, in Patagonia, until he was within sight of 'the white summits of the Cordillera as they were seen peeping through their dusky envelope in the clouds'[5]. Had he and his party struggled on only fifteen miles further they would have discovered the mighty Lago (Lake) Argentino, and, at its further end, a long valley choked with impressive glaciers. They would have arrived at what is now the centrepiece of the Glaciers National Park, the most impressive but least known of Argentina's fifteen national parks.

The first man to write about the area was Francisco P. Moreno, who followed in Darwin's wake in 1877 and again in 1898. In his travels across Lago Argentino's sixty miles of water from east to west Moreno found 'the western end closed by the main chain of the Cordillera with its glaciers'[14]. Moreno also explored Lago Nahuel Huapi and other sub-Andean lakes further north, and in 1903 he gave the original nucleus of the Nahuel Huapi National Park, 7500 hectares (18,500 acres), to the Argentine nation. Today that park is even larger than Los Glaciares, and there is a statue of Moreno in the little town of San Carlos de Bariloche.

The Glaciers National Park, declared in 1937, covers 600,000 hectares (nearly 1½m acres)—rather more than the English county of Norfolk; it extends about 175 kilometres (110 miles) from north to south, and averages 40 kilometres (25 miles) in width. The western limit is on the Chilean frontier, which follows the line of the highest peaks, from Mount Fitzroy, 3375 metres (11,070 feet) in the north, to Mount Stokes, 2060 metres (6757 feet) in the south. The boundary crosses part of the South Patagonian Ice Cap, first traversed by human beings in about 1959[20], which feeds the dozen or so glaciers that give the park its name. The largest glacier within the park is the Upsala; the best known is the Moreno. The western arms of the two enormous lakes, Viedma and Argentino, reach into the foothills and into the national park. Apart from some deciduous

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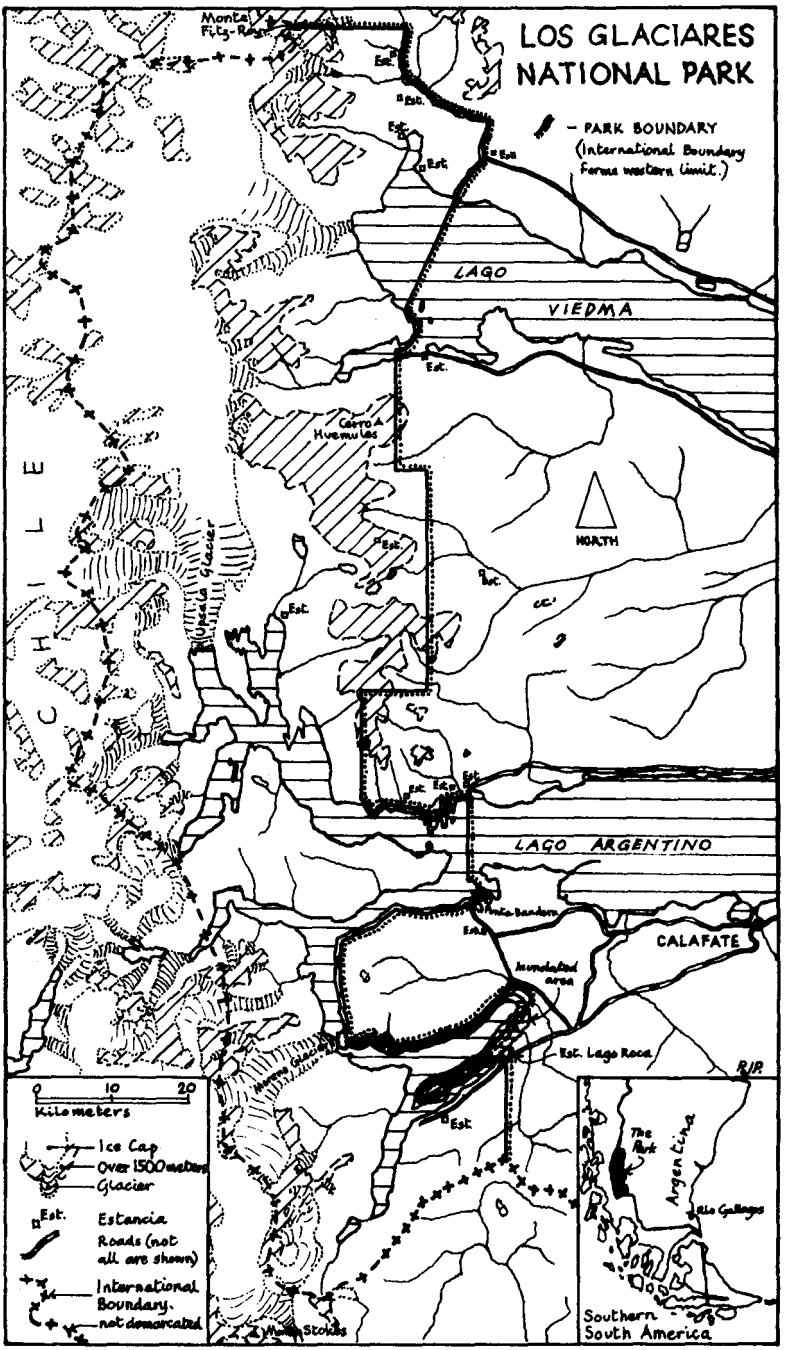

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forest on the lower slopes and some marshy areas, the park is more or less typical Patagonian habitat with low scrub vegetation. In the mountain forests southern beech *Nothofagus* species are dominant.

In August 1971 I visited the park for a couple of days' reconnaissance, and spent a month there in December making a television film, accompanied by Douglas Fisher, professional photographer; Robin Prytherch, research assistant; Francisco Erize, wildlife adviser; and Donaldo MacIver, interpreter.

I talked with Saviano Gonzalez, the park's chief ranger and a man of immense practical experience, about the larger mammals in the park. He told me that the huemul, *Hippocamelus bisulcus,* although nearly extinct there, was still hanging on, appropriately enough on Cerro Huemules, 1930 metres (6311 feet), where a hundred at most of these deer are spread over about 45,000 hectares (111,000 acres). This hill lies immediately south of the western end of Lago Viedma, just inside the park boundary. In 1901 Hesketh Prichard, an early British explorer, during his fruitless search for the prehistoric giant sloth *Mylodon* in Patagonia's mountain regions, had seen huemul frequently in the Lago Argentino area. Of the tiny Chilean pudu *Pudu pudu,* said by Dennler de la Tour (1957) to be present in the park, Gonzalez said that there was no evidence that this deer had ever occurred in this area. The grey or Patagonian fox *Dusicyon gracilis* he thought was decreasing, hundreds being killed in 1955 and 1958 by farm workers, whereas the Patagonian red fox *D. culpaeus* is apparently increasing. The puma or cougar *Felis concolor* has probably declined but may be maintaining its numbers, for the park is large and the mountain parts little visited. Hesketh Prichard, in 1901, was told of 73 being killed in one winter. In the Magellanes Peninsula woods Francisco Erize spotted a small cat, and provisionally identified it as Geoffroy's cat *Felis geoffroyi,* which Gonzalez later confirmed occurs in the park. We also saw wild guinea pigs (the southern cavy) *Microcavia australis.* The guanaco *Lama guanicoe,* which Hesketh Prichard (1902, 1911) saw all over the Patagonian plains, with a herd four or five hundred strong inhabiting the higher plateau of Mt Frias, is today decreasing everywhere in Patagonia, newly-born calves being brought down by

ADULT GUANACO The young are hunted with the bolas, an Amerindian weapon, consisting of three stone balls connected by leather thongs. The bolas is swung round the head, released and then entangles the quarry's legs bringing it down. *Francisco Erize*

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Above LAGO ARGENTINO IN WINTER
Below THE MORENO GLACIER *J. Boswall*

MAGELLANIC WOODPECKER at nest hole in *Nothogagus* forest

UPLAND GEESE, which are shot in the park because the sheepowners believe they compete with the sheep
Francisco Erize

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gauchos with a bolas; even within the park we saw skins pegged out to dry in the sun! The possibility that Chinchilla *Chinchilla laniger* survive in the park, mentioned in Harroy (1967), is exceedingly remote.

The commonest and most conspicuous mammal (apart from man) is the European hare *Lepus europaeus,* released in Argentina in 1888[7] and now to be found along the entire length of the country, from Jujuy province in the tropical north-west, to Tierra del Fuego in the subantarctic south. Driving after dusk I found more than ten hares to the kilometre, about one every hundred yards. Their ecological effect must be considerable.

The Birds

Of the birds perhaps the most characteristic and distinctive was the black-necked swan *Cygnus melanocoryphus:* we saw fifty or more on a small lake near Punta Bandera, mostly in pairs with quite young cygnets on their parents' backs. There were large flocks of upland geese *Chloephaga picta,* the magnificent ashy-headed goose *C. poliocephala,* flying steamer ducks *Tachyeres patachonicus,* Chiloe (or southern) wigeon *Anas sibilatrix,* crested ducks *Lophonetta specularioides,* and other waterfowl. In the park or nearby Robin Prytherch identified about seventy-five species of bird in all, the largest by far—indeed the largest bird in the world in terms of sail area—the Andean condor *Vultur gryphus* being a daily sight, as was the black-chested buzzard eagle *Geranoaetus melanoleucus,* which is shot because of its supposed depredations on lambs. Other birds of prey included two of the distinctively South American caracaras, the chimango *Milrago chimango* and the crested caracara *Polyborus plancus,* dashing little American kestrels (or sparrowhawks) *Falco sparverius,* and the red-backed hawk *Buteo polyosoma.* There were no herons or egrets, except black-crowned night herons *Nycticorax nycticorax,* but there were Chilean flamingos *Phoenicopterus ruber chilensis* and austral parakeets *Enicognathus ferrugineus.* My most vivid memory by far, however, is of a pair of magnificent Magellanic woodpeckers *Campephilus magellanicus* feeding young in a hole in a rotting false beech *Nothofagus* sp., the female all black with a prominent upcurved crest, the male with a brilliant all-red head, and both as big as ivory-bills. The prize for bizarrerie goes however to the buff-necked ibis *Theristicus caudatus,* an extraordinary bird with a black extensible wattle, thick pink legs, straw-coloured neck and grey wings, that nests in a small marsh colony on Estancia Lago Roca, and for sheer ungainly charm, a male Darwin's rhea *Pterocnemia pennata* running off at high speed across the Patagonian plain, followed by a dozen tiny chicks. Vocally pleasing were the austral thrush *Turdus falklandii* and the rufous-collared sparrow *Zonotrichia capensis.* Field ornithology is not very advanced in Argentina and passerines can be particularly difficult to identify. The best books are those of Olrog (1959) and Meyer de Schauensee (1970).

Most glaciers in the world are retreating, but the Moreno glacier in Los Glaciares National Park is advancing and has been doing so

for most of this century. In 1917 for the first time it thrust its snout so far forward that the wall of ice ran aground on the land on the opposite side of the lake-arm, creating a natural dam, behind which the water rose, inundating large areas of grazing land until the warmth of late summer melted a breach and the water escaped. In succeeding seasons the toe of the glacier established a deeper bridgehead and the 60-metre wall of ice was knocking down and killing mature trees, until in the summer of 1954 the ice failed to give, and a head of water 23 metres above the usual level built up. Even larger areas were flooded, buildings were destroyed and thousands of trees killed. Only after 26 months did the ice-dam rupture. In 1972, after another two-year build-up, a wall of water, suddenly released, swept away several tourists.

The reason why the Moreno should be advancing while other glaciers are in retreat is far from clear. Nichols and Miller (1952) discuss a number of possibilities including climatic factors, volcanic processes and topographical conditions.

Park Organisation

The park is run by 28 full-time staff (1971 figures), operating from the headquarters in the small town of Calafate, about 38 kilometres (24 miles) to the east. They maintain daily radio contact with national headquarters in Buenos Aires over a thousand miles to the north. The annual budget is 160,000 new pesos ($16,000 at Christmas, 1971).

In 1971 the number of visitors to the park was 11,768, almost all between December and March. The only accommodation for them inside the park is in four camping sites, a house that sleeps ten by Lago Viedma, and some chalets opposite the Moreno glacier owned by the Automobile Club of Argentina, but there are hotels in Calafate which can be reached by a frequent air service or by bus from Rio Gallegos on the coast. The best map by far is that of the 'Automovil Club Argentino' (1967).

Park policy seems to be orientated towards physical recreation—sailing, skiing, walking and climbing; sport-fishing is also encouraged, the main species being the native 'la perca', a species of *Percichthys,* and two introduced species—'salmon d'agua-dulce' *Salmo salar sabago* and 'trucha arco iris' *Salmo iridis.* And there are no fewer than seven estancias within the park; the number of sheep is supposed to be restricted, but it is neverthless a rude shock to find great flocks immediately inside an impressive park entrance. The land is all state-owned and then rented to the farmers. Apparently these farms were all established before the park was declared, though the chance to let leases lapse and provide total protection as opportunities offered seems not to have been taken. On the other hand, attempts to further exploit park woodland as timber have been successfully repulsed.

When is a national park *not* a national park? According to the IUCN definition (in Harroy 1970), governments are requested not to designate as a national park 'an inhabited and exploited area where landscape planning and measures taken for the development of

tourism have led to the setting up of recreation areas ... and where public outdoor recreation takes priority over the conservation of ecosystems'. I formed the impression at Los Glaciares that opportunities for outdoor recreation as such were rather a high priority.

When *is* a national park a national park? Again, according to the definition, 'where one or several ecosystems are not materially altered by human exploitation and occupation'. At Los Glaciares this is true of the high-elevation ecosystems which are extremely difficult of access, but is not true of most or all of the areas capable of being used for farming. The claim by the authorities (in Harroy 1970) that 'some sections have been given the status of strict nature reserves' and that 'there are inviolable virgin land' areas with conditional access by 'special permit' seem to be unfounded. The definition also requires that the highest competent authority of the country has taken steps to prevent or eliminate as soon as possible exploitation or occupation in the whole area and to enforce effectively the respect of ecological, geomorphological or aesthetic features which have led to its establishment'. On these definitions, steps would need to be taken to eliminate farming, and with it the shooting of birds of prey and geese, and the killing of baby guanacos. These steps are especially necessary because the very areas that are farmed would be the best ones for wildlife.

G. F. Bayley, a visiting member of the United States National Parks Service, recommended[4] that a full-time biologist be appointed to the park staff. The many problems that are generated by the vast number of domestic livestock in the area, their effect on the flora and fauna and on the future of the park, seem to demand a thorough investigation. The extensive domestic livestock grazing is, of course, in real conflict with any policy for a genuine national park, as is the emphasis on *development* for sporting tourists.

If only real efforts could be made to put these things right, Los Glaciares would be able to take a rightful place among the great national parks in the world.

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The Andean condor drawing on page 259 and the map on page 260 are by Robin Prytherch.

Wolf Music

The Language and Music of the Wolves, 12-in. record, produced by Bob Maxwell. American Museum of Natural History, FPS, £3, including postage.

'The wolf has had a bad press since the day the Little Red Riding Hood story broke', as a Canadian friend (himself a sound recordist of wolves) once said to me. Today, there is some glimmer of hope that furred predators like the wolf, feathered ones like birds of prey, and scaly ones like crocodiles are being accepted by the public as important pieces in the jigsaw of nature's economy. The wonderful wild music on side 2 of this disc, and Robert Redford's description of it on side 1 'mournful and menacing yet strangely alluring' along with his outline history of man's relationship with the wolf, should help towards a more balanced view of this wild dog. The Eskimos have had the wolf in perspective for a long time. 'The wolf and the caribou are one', they say. 'For the caribou feeds the wolf. But it is the wolf that keeps the caribou strong.' As Redford explains, the wolf 'usually kills the old and the infirm—the diseased. And of course some young. By killing he strengthens the herd. Ironically, by every kill he ensures that the next victim will be even harder to take'.

This magnificent animal has already been banished from most of Europe, and soon it will have no lands to retreat to in North America. Bounties are still paid in Alaska, and the North-west Territories. Wolves are still poisoned, trapped, shot from aeroplanes, and pursued by riflemen on snowmobiles. Strange that man should thus treat the closest living relative of the Alsatian!

JEFFERY BOSWALL

Dune and Moorland Life, by Leif Lyneborg (Blandford Press, £1.45) is an excellent little introduction to the invertebrates of moors, heaths and dunes, translated from the Danish and edited by Arnold Darlington, with 48 admirable colour plates by Henning Anthon.