



Sister Park Arrangement Between Francisco Coloane Marine and Coastal Protected Area Ministry of Environment of the Republic of Chile and Glacier Bay National Park and Preserve National Park Service Department of the Interior of the United States of America

The two protected areas concerned here - Glacier Bay National Park and Preserve ("Glacier Bay") and Francisco Coloane Marine and Coastal Protected Area ("Francisco Coloane") - seek to further cooperation in protected area management and resource conservation and education through the establishment of an informal Sister Park Arrangement.

While Chile and the United States have been working together on a variety of protected area management issues for more than a decade, including developing other Sister Park partnerships, this new arrangement represents the first Sister Park partnership between marine and coastal protected areas of both countries. Glacier Bay and Francisco Coloane intend to work together to advance their knowledge with the overall goal of improving protected area management.

AN OVERVIEW OF GLACIER BAY NATIONAL PARK AND PRESERVE

Glacier Bay National Park and Preserve was established as a National Monument in 1925, enlarged several times and re-established as a National Park with the addition of the National Preserve in 1980. It was established to protect a glacial landscape of towering coastal mountains (Mount Fairweather rises to 15,325 feet/4671 meters), a number of tidewater glaciers, coastal forests that show the dynamics of plant succession related to glacier advance and retreat, and extensive marine waters. With an area of 3.3 million acres [1.3 million hectares], it includes 607,099 acres [245,684 hectares] of marine waters that are home to a wide variety of marine fish, bird and mammal species including an assortment of fishes, sea birds, harbor seals, sea lions, sea otters, harbor porpoises, orca whales, minke whales and the iconic species of the park, the endangered humpback whale. The temperate spruce-hemlock forests and alpine meadows team with wildlife, including several hundred species of birds and several dozen mammal species,

including brown and black bears, wolves, coyotes, mountain goats, moose, deer, marmots, wolverines, river otters and a variety of smaller species.

Glacier Bay is the ancestral homeland of the Huna Tlingit people, a semi-nomadic maritime culture that lived off the natural abundance of land and sea in this dynamic landscape for sufficient time that their culture has been intimately shaped by the same natural forces that have shaped Glacier Bay. Although their main village now lies outside the park, the Huna Tlingit still actively maintain ties to their homeland and return to harvest native foods, participate in cultural programs, and actively maintain their spiritual connections through ritual and song. Glacier Bay's outer coast was first encountered by European explorers searching for the Northwest Passage, a mythical link between the Atlantic and Pacific Oceans comparable to the Strait of Magellan in South America.

The majority of the park is designated wilderness, including both terrestrial and marine areas. Glacier Bay National Park is relatively remote with no road access. Most visitors arrive on cruise ships, smaller marine vessels or by air to the park's gateway community of Gustavus. Campers and sea kayakers comprise a small but impassioned segment of park visitors. In addition to wildlife viewing, sightseeing and camping, visitors enjoy sport fishing, river rafting, mountaineering and other outdoor oriented activities. Glacier Bay is also part of the Kluane/Wrangell St. Elias/Glacier Bay/Tatshenshini-Alsek World Heritage Site, and the Glacier Bay/Admiralty Island Biosphere Reserve.

AN OVERVIEW OF FRANCISCO COLOANE MARINE AND COASTAL PROTECTED AREA

Named after one of the most of renowned writers of Chile, Francisco Coloane Marine and Coastal Protected Area is located about 80 nautical miles southwest of the city of Punta Arenas in the heart of the Strait of Magellan, one of the world's most important natural waterways, which connects the Pacific and Atlantic oceans. Francisco Coloane has a total area of 67,197 hectares [166,047 acres], which includes a core no-take reserve (the "marine park") of 1,507 hectares [3,724 acres] of marine territory.

Francisco Coloane is the largest marine and coastal protected area in continental Chile. The area is a very productive coastal marine ecosystem that sustains a great endemic biodiversity in both the marine and adjacent coastal areas. This protected area is not only important from the natural science and environmental perspective; it also represents a relevant historical and anthropological site in Chile. Francisco Coloane lies within the traditional homelands of the Kawésqar culture, a nomadic maritime people who plied the inside waters of the Strait of Magellan region in their canoes in an annual subsistence cycle. From the early European occupation of the Chilean territory to the history of nomad cultures in Patagonia, the area represents an important site for conservation, research and interpretation.

Francisco Coloane's geographic, climatic, and oceanographic condition, with the influence of subantarctic water from both oceans, creates a unique condition for special coastal and marine flora and fauna. Fjords, channels, glaciers, and native coastal forest are the home of a variety of seabirds such as the Magellan penguin, albatross, and imperial cormorant. The area is also an important feeding and nursing area for many marine mammals such as the sea lion, South American fur seal, Austral dolphin, and some seasonal species such as sea elephants and orcas, sei, and minke whales. Also, the area is one of the most important feeding grounds for the humpback whale in the southern hemisphere.

SIMILARITIES BETWEEN THE PROTECTED AREAS

Glacier Bay and Francisco Coloane share a number of cultural, ecological, and geological characteristics that make them prime candidates to work as sister parks. Both parks have impressive glaciers, snow-capped mountain ranges, ocean coastlines, deep fjords, and freshwater rivers and lakes. The diverse land and seascape hosts a myriad of endemic species and a variety of marine and terrestrial wildlife; their geographically isolated conditions in the hemispheric antipodes share many similar coastal and terrestrial characteristics, and they present opportunities for adventuring and learning about their environments and the challenges they face as protected areas.

Both Glacier Bay and Francisco Coloane support important outdoor activities that bring benefits to their local communities. The coastal and marine ecosystems in both protected areas are home to similar endangered species and provide exceptional opportunities for scientific research and exchange of conservation management experience. Both parks protect unique stretches of ecosystems and share a history of discovery, adventure, and ancient settlement that are rooted in the local culture and legacy of the two countries.

Glacier Bay and Francisco Coloane also face many of the same management challenges. Making conservation and resource use compatible, facilitating the access of certain types of visitation and tourism activities, and bringing new opportunities for sustainable economic activities compatible with the conservation objectives are among the common challenges that the protected areas currently face. It is important for the two areas to ensure that any activity within the boundaries of the park is focused on the best interests of their resources and conservation objectives, and protecting their natural and cultural heritage.

The environmental pressures associated with global climate change are affecting both parks, creating problems for already endangered species and retreating glaciers, and requiring new management techniques and scientific studies. Glacier Bay and Francisco Coloane have the opportunity to learn from each other in a collaboration to improve the overall management of both parks through the Sister Park Relationship.

Both parks lie within the temperate latitudes (Glacier Bay lies between 58 degrees 18 minutes and 59 degrees 42 minutes north latitude; Francisco Coloane lies between 53 degrees 15 minutes and 53 degrees 53 minutes south latitude) and are characterized as having moist maritime climates. Both parks are coastal fjord-lands that have been shaped by past glacial activity, and today both have tidewater glaciers that attract visitors. They both support growths of temperate rainforests high in plant biodiversity. Both support abundant marine life, and are important summer feeding grounds for endangered populations of humpback whales.

They are also the homelands Native American cultures – the Huna Tlingit at Glacier Bay, the Kawésqar at Francisco Coloane – that share remarkable similarities as semi-nomadic or nomadic maritime cultures who traditionally traveled the marine waterways in canoes in an annual cycle of food harvest, and who still retain strong ties to their homelands. Commercial harvest of fish is authorized in both parks, and both parks deal with the impacts to park resources that can come from extractive industries. Both Glacier Bay and Francisco Coloane attract visitors who come to see and experience their remoteness aboard a variety of marine vessels.

Glacier Bay and Francisco Coloane also face many of the same management challenges. The two parks lie on or near major shipping channels, and both directly receive visitors into the summer feeding grounds of humpback whales, so both must deal with concerns over impacts to the resources that come from marine vessels. Glacier Bay and Francisco Coloane are remote destinations, so share common concerns for visitor access and activities in fragile coastal ecosystems. Glacier Bay and Francisco Coloane are homelands to Native American cultures that have undergone dramatic changes since the arrival of western society, and while both cultures struggle to retain their identity, both parks recognize that they play a critical role in nurturing and The environmental pressures associated with global climate change are sustaining them. affecting both parks, and both parks realize the need for baseline studies to document the abundance and distribution of plants, animals and physical parameters to better track that change. And the marine corollary of atmospheric climate change - ocean acidification - has the potential to affect the ecosystems in similar ways at both parks. Glacier Bay and Francisco Coloane have the opportunity to learn from each other in a collaborative way to improve the overall management of both parks through the Sister Park Relationship.

GOALS OF THE RELATIONSHIP

- 1. Exchange of experiences on development, monitoring, and evaluation of coastal-marine protected area management plans
- 2. Exchange of protocols or contingency plans for shipwreck, oil spills, and natural catastrophes than can impact protected areas biodiversity
- 3. Exchange of experiences on environmental assessment of for-profit projects within protected areas

- 4. Exchange of experiences and scientific-technical information on marine mammals and seabirds (monitoring, surveys, tagging, and recovery plans)
- 5. Exchange of experiences and scientific-technical information on glacier research
- 6. Exchange of experiences and scientific-technical information on vegetation succession
- 7. Exchange of information on indigenous people ethnographic, anthropological, and archeological studies
- 8. Exchange of information on prevention and control of exotic species (plant and animals), and ballast water control
- 9. Exchange of experiences on issuing permits and allocation of benefits generated by science and technical biodiversity research within protected areas
- 10. Exchange of experience on promoting collaboration between researchers and protected areas
- 11. Cooperation to promote the quality of bathymetric information in Francisco Coloane Coastal-Marine Protected Area
- 12. Exchange of experience and scientific-technical information on climate change impacts
- 13. Exchange of experience on environmental education programs in schools and training programs for teachers addressing in situ learning and curricula
- 14. Exchange of experience on natural and cultural history interpretation of protected areas
- 15. Exchange of experience on information generated to be distributed among ship crew and passengers visiting protected areas
- 16. Cooperation to produce bilingual outreach material on the protected area(s)
- 17. Promote exchange of experiences on capacity building programs for interpreters in protected areas
- 18. Exchange of information (e.g., contacts and background) of researchers in protected areas, and on marine protected area-related relevant events
- 19. Exchange of experience on how to acknowledge and integrate indigenous population culture as protected area heritage
- 20. Explore possibilities for exchanging knowledge between the representative indigenous communities existing on both geographic areas
- 21. Exchange of experience on concession management in protected areas
- 22. Exchange of experience on the development of a sustainable budget for the protected area
- 23. Exchange of experiences on volunteer programs in protected areas
- 24. Exchange of experiences relating to studies and adaptive management strategies related to marine vessel interactions and impacts on humpback whales and other marine species.
- 25. Exchange of experiences and techniques in fostering positive relations with Native American groups, and in the development of programs that help to reconnect these groups to their homelands and preserve living elements of their cultures to ensure their transmission to future generations
- 26. Exchange of experiences in creating and maintaining a marine operations program
- 27. Exchange of experiences in management and maintenance of park facilities, and

28. Other appropriate exchanges as agreed upon by the Superintendent of Glacier Bay and the Manager of Francisco Coloane

UNDERSTANDINGS

Cooperation under this relationship should initially be 5 years. The term may be extended or modified in writing, or cooperation may be discontinued at any time by either park; the participants should endeavor to provide written notification of discontinuation with at least 30 days' notice.

Both parks are to fund their own participation in this relationship. The financing of the activities planned typically should be under a cost share basis; when personnel of one park visit or are detailed to the other, the park sending the employee is to be responsible for the cost of travel to and from the receiving country and the receiving park is to generally be responsible for travel and living expenses in their country: each exchange is to be negotiated individually and is dependent upon available resources.

The parks may develop and share reports that describe the results of this sister park arrangement. Also, the experience deriving from the collaboration and cooperation, as well as the technical data exchanged, can be shared among the staff of the sister parks.

The execution of this sister park arrangement is to be consistent with the applicable laws and regulations of the United States and Chilean governments. This cooperation arrangement is a non-binding document for the participating countries, and it does not modify or interfere with any international commitments, rights, or obligations under international law.

When appropriate, the two signing agencies may [or should] work with other marine and terrestrial protected area agencies to advance the goals of the Sister Park Arrangement.

In virtue of the above, the Sister Parks Arrangement is signed in Santiago, Chile, in English and Spanish and is valid as of the date of signature.

On behalf of Glacier Bay National Park and Preserve National Park Service Department of the Interior of the United States of America March 18, 2011 On behalf of Francisco Coloane Marine and Coastal Protected Area Ministry of Environment of the Republic of Chile March 18, 2011