

# United Nations Environment Programme World Conservation Monitoring Centre



# World Heritage Sites

Protected Areas and World Heritage





# PENÍNSULA VALDÉS ARGENTINA

Península Valdés in Patagonia is a site of global significance for the conservation of marine mammals. It is home to an important breeding population of the endangered southern right whale as well as important breeding populations of southern elephant seals and southern sea lion, for which the orcas of the area have developed a unique seashore hunting strategy.

#### **COUNTRY**

Argentina

#### **NAME**

Península Valdés

# NATURAL WORLD HERITAGE SITE

1999: Inscribed on the World Heritage List under Natural Criterion x.

#### STATEMENT OF OUTSTANDING UNIVERSAL VALUE [pending]

The UNESCO World Heritage Committee issued the following statement at the time of inscription:

#### Statement of Significance

The World Heritage Committee inscribed Peninsula Valdés on the World Heritage List under the following:

**Criterion (x).** Peninsula Valdés contains very important and significant natural habitats for the in-situ conservation of several threatened species of outstanding universal value, and specifically its globally important concentration of breeding southern right whales, which is an endangered species. It is also important because of the breeding populations of southern elephant seals and southern sea lions. The area exhibits an exceptional example of adaptation of hunting techniques by the orca to the local coastal conditions.

# **IUCN MANAGEMENT CATEGORIES**

Coastal Zona Intangible la Strict Natural Reserve Golfo San José Marine Park II Provincial Park Carlos Ameghino Isthmus Nature Reserve IV Wildlife Reserve Punta Norte Touristic Nature Reserve IV Wildlife Reserve Isla de los Pájaros Touristic Nature Reserve IV Wildlife Reserve Puerto Pirámide Touristic Nature Reserve IV Wildlife Reserve Punta Cantor (Caleta Valdés) Touristic Nature Reserve IV Wildlife Reserve Punta Delgada Touristic Nature Reserve IV Wildlife Reserve Península Valdés Integral Objective Touristic Nature Reserve VI Nature Reserve

#### **BIOGEOGRAPHICAL PROVINCE**

Patagonian (8.26.8)

# **GEOGRAPHICAL LOCATION**

The site is on the coast of Patagonia 440 km south of Bahia Blanco, protruding 120 km into the Atlantic sited between Golfo San Matías and Golfo Nuevo at 42°00' to 42°48'S and 63°32' to 65°16'W.

# DATES AND HISTORY OF ESTABLISHMENT

1969: Punta Norte and Isla de los Pájaros Touristic Nature Reserves established by Provincial Law 697/69;

- 1974: Golfo San José Marine Park created by Provincial Law 1238/74; Punta Pirámide Touristic Nature Reserve, established by Resolution 9 of 1974;
- 1977: Caleta Valdés and Punta Delgada Touristic Nature Reserves established;
- 1983: Península Valdés designated an Integral Objective Touristic Nature Reservation by Provincial Law 2161/83, integrating all the previously designated reserves;
- 1985: The southern right whale declared a Natural Monument by the National Congress;
- 1995: A strict nature reserve *(zona intangible)* to protect the right whale created by Provincial Law 4098, extending 5 nm out from the coast from Punta Arco on the mainland to Punta Piaggio on Golfo Nuevo, from Punta Cormoranes on Golfo Nuevo to Punto Buenos Aires in the north and from Larralde to Bengoe in Golfo San Jose.

#### LAND TENURE

Most of the land is privately owned in large *estancias*. The reserves are under the administration of the Provincial Tourism Organisation (OPT).

#### **AREA**

360.000ha

#### **ALTITUDE**

From 100m to -35m at Salinas Grandes, the lowest point in mainland South America.

#### PHYSICAL FEATURES

Península Valdés is a 400,000ha barren flat-topped promontory protruding like an island 120 km into the Atlantic Ocean. It has 100m-high rocky cliffs, a series of gulfs and shallow bays, sand dunes, extensive intertidal mudflats and sandy beaches with depressions in the interior. The north coast encloses the large embayment of Golfo San José linked to the San Matías Gulf by only a small passage to its north; to its south the 25 km by 10km wide Ameghino Isthmus connects the peninsula to the mainland, separating the Golfo San José from the Golfo Nuevo in the south. This gulf is itself nearly enclosed by the peninsula and the mainland coast of Chubut province. The peninsula's shoreline is 400km long. On its eastern end is the Caleta Valdés, a narrow 35km-long lagoon-like inlet with four islets in its northern half. The Isla de los Pájaros is an 18ha island 800m off the southeast coast of Golfo San José connected to the mainland at low tide. The relief of the interior is generally flat semi desert scrubland, with shallow lakes and salt pans the largest of which are Salinas Grandes and Salina Chica. There are no permanent streams and little fresh water. The cliffs are of late Miocene fossilbearing sedimentary rock. There is also evidence of volcanic activity on the isthmus and of sea level change in Golfo San José. Soils are generally very shallow. The islands and forbidding cliffs protect the breeding grounds of birds and endangered species from land-based predators.

#### CLIMATE

The peninsula has a semi-arid climate with an annual rainfall of 246mm with significant fluctuations between years. The average annual temperature is 10.6°C, ranging from 15°C-35°C in summer, February being the hottest month, and 0°C-15°C in winter when there are 12 to 20 days of frost. The winds are strong especially in spring. The prevailing current from the north brings warm water into the Golfo San Matías. The southern side of the peninsula is washed by cold waters from the south Atlantic, but the waters of both the enclosed gulfs are shallow, calm and warm.

#### VEGETATION

The dominant vegetation is Patagonian desert steppe scrub. However, 18 different vegetation communities can be found, a high diversity for such a small area, demonstrating its phytogeographic importance in Patagonia, where only 28 communities have been described. Some 130 plant species from 41 families have been recorded, with 38 species endemic to Argentina. The principal communities include tussock grasslands of *Stipa* spp. and xerophytic cushion grasses of *Poa* spp. interspersed with bushes of *Schinus magellanicus* and *Condalia microphilia*.

#### **FAUNA**

The peninsula is an outstanding faunal sanctuary where numerous species of marine birds and mammals congregate in its island-like isolation to breed, often in large numbers, and to find shelter and abundant food in the warm and productive waters of the peninsula and the surrounding coasts. A

population of southern right whale *Eubalaena australis* uses the clear and protected waters of Golfo Nuevo and Golfo San José to mate and calve. Individual whales start to arrive by late autumn, and are present from May to December, but are most visible between August and October. The results from recent surveys show that 1,200 whales visited the Península in 1990 (Payne *et al.*, 1990), and suggest that this population had been growing at an estimated annual rate of 7.1%. If this rate is maintained, the current population may be around 2,700.

The southern elephant seal *Mirounga leonina* forms a mating and calving colony on Punta Norte from late August to early November, reaching peak numbers during the first week in October (Campagna et al., 1993). This is the most northern colony of the species and the only colony on the Argentine mainland, all other colonies being on Antarctic and Sub-Antarctic islands. It is also said to be the world's only colony on the increase (Campagna & Lewis, 1992). The nominated site is also important as a breeding point for the South American sea lion Otaria flavescens (Tagliorette & Losano, 1996). Several other marine mammals are found in the area including a stable group of orca Orcinus orca. They are highly predatory, feeding on a basic diet of fish and squid, but will take both young and adult sea lions, elephant seals and adult right whales on the peninsula and elsewhere in Patagonia. A notable orca hunting technique is to rush into the shallow surf, beach themselves, grabbing the prey in their jaws, and manoeuvre back to sea with the next wave, although they are sometimes stranded (Campagna & Lopez, 1997). Other small whales and dolphins present are long-finned pilot whale Globicephala melas, dusky dolphin Lagenorhynchus obscurus, black-chin dolphin L. australis and piebald dolphin Cephalorhynchus commersonii. Terrestrial mammals are abundant. There are large herds of guanaco Lama guanacoe almost everywhere on the peninsula. Other species present include the big hairy armadillo Chaetophractus villosus, Patagonian cavy Dolichotis patagonum, a large rodent, South American grey fox Pseudalopex griseus, culpeo fox Dusicyon culpaeus, the weasel-like small grison Galictis cuja, Patagonian hog-nosed skunk Conepatus humboldtii and the pampas cat Leopardus colocolo.

Península Valdés has 181 species of birds, of which 66 are migratory. Seven species of marine and coastal birds form nesting colonies on 12 distinct sites scattered throughout the Peninsula. The Magellanic penguin *Spheniscus magellanicus* is the most numerous with almost 40,000 active nests amongst five different colonies (Carribero *et al.*, 1995). The second most numerous bird is the kelp gull *Larus dominicanus* with 6,000 active nests (Bertelotti *et al.*, 1995). The lesser rhea *Rhea pennata* is quite common. Other colonial birds are the neotropic cormorant *Phalacrocorax brasilianus*, Magellan cormorant *P.magellanicus*, great egret *Casmerodius albus*, black-crowned night-heron *Nycticorax nycticorax* and common tern *Sterna hirundo*. The site with the largest diversity of breeding birds is on Isla de los Pájaros where the American oystercatcher *Haematopus palliatus*, the blackish oystercatcher *H. ater* and the flying steamer duck *Tachyeres patachonicus* are also seen. The intertidal mudflats and coastal lagoons are important staging sites for migratory shorebirds, including red knot *Calidris canutus*, white-rumped sandpiper *C. fuscicollis* and Hudsonian godwit *Limosa haemastica* (Blanco & Canevari, 1995).

# **CONSERVATION VALUE**

Península Valdés is a site of global significance for the conservation of marine mammals. Around 50% of the world's population of southern right whales visit its waters each year and it is also important for other species which are decreasing elsewhere such as the southern elephant seal. The mammals attract a large number of visitors and are a major source of income for the region. The Park lies within a WWF Marine Global 200 Eco-region and a WWF/IUCN Centre of Plant Diversity.

#### **CULTURAL HERITAGE**

Neolithic man left evidence of obsidian tools, and historically the land was part of the range of the nomadic Tehuelches. Península Valdés was first discovered in 1779, by a Spanish expedition under Juan de la Piedra which founded the port of San José and the fort of La Candelaria though these lasted only 30 years. The name derives from the Spanish minister of marine at the time. The Tehuelches met and cooperated with the Welsh settlers of Puerto Madryn and Trelew in 1865 and 1875.

# LOCAL HUMAN POPULATION

There are few permanent residents on Península Valdés, 300 of whom live in the small coastal village of Puerto Pirámide, who are now often living on tourism. 56 ranches holding almost 80,000 head of sheep are spread across the peninsula and wool is the main product. Until 1953 when the government withdrew its concessions for killing and commerce in sea lions, large-scale exploitation of them

occurred and clandestinely still occurred into the 1970s. Recent legislation for conservation of marine mammals has prevented further commercial killings.

#### VISITORS AND VISITOR FACILITIES

Tourism is a very important in the peninsula and is not limited to any particular season, although the visitors numbers peak during late winter and early spring. In 1992, more than 85,000 tourists visited the site, and in 1997 the number rose to nearly 140,000, of which almost 80% were nationals (Tagliorette & Losano, 1996). Whale-watching in spring attracts most of the visitors to the peninsula: between 1993 and 1995, they were 40% of the visitors who were said in 1996 to generate an income of about US\$10 million per year. Visitor centres exist both on the isthmus and in the nearby town of Puerto Madryn. The village of Puerto Pirámide, on the mainland side of Golfo Nuevo is the main centre for off-shore whale-watching by speedboat, sailboat or even kayak. The road network is well-developed and most visitors travel by car staying for three days or more, though day visits from the towns are also common. There are hotels at Puerto Pirámide, a 54 bed luxury hotel and restaurant at Punta Delgada, and some private ranches offering ecotourism, campsites, and several hotels in Puerto Madryn where there is also an Ecological Centre and an airstrip. There is also an airport at Trelew (Tagliorette & Losano, 1996).

#### SCIENTIFIC RESEARCH AND FACILITIES

Península Valdés has long attracted scientific attention, with extensive research mainly concentrated on the colonial marine mammals and birds. Prolonged field studies of elephant seals, Magellan penguins and the southern right whale have been conducted by the National Centre for Patagonia from the Marine Mammal laboratory of the local University of Patagonia in Puerto Madryn with Argentinian and foreign university missions and the Smithsonian Institution. The management plan for the site anticipates research into. The Integrative Management Plan for the Coast of Patagonia drawn up during 1994-6 produced 32 technical reports on the wildlife, climate, geomorphology, soils, vegetation, tourism, contamination and fishing. A partial list of references is given in the official nomination (SENATUR, 1998).

#### **MANAGEMENT**

In 1998 a management plan - the Integrated Collaborative Management Plan - endorsed by the provincial authorities, defined the peninsula as a Managed Resource Protected Area. This plan established the zoning and management regulations for all the reserves. Under it, the Provincial Tourism Authority is responsible for the protection of the area, but decisions are agreed with representatives of all stakeholders. The plan also expanded the boundaries of the area, extending the limits on the mainland and incorporating coastal areas as the Golfo Nuevo reserve which was expanded to provide additional protection to the southern right whale. In addition a marine buffer zone of five nautical miles was established around the whole peninsula. The buffer zone to the west protects the isthmus from development pressures from the mainland. These areas are within the nominated site.

#### MANAGEMENT CONSTRAINTS

Conservation problems in the peninsula are not serious at present except for the cumulative effects of tourists who approach too close to or harass whales. An incident reporting program was been initiated by the NGO *Fundacion Patagonia Natural*. Pollution of the waters of Golfo Nuevo and by passing oiltanker traffic are seen as potential threats to breeding whales (Campagna & Harris, 1997). The development of coastal areas may diminish the quality of penguin breeding habitat, reduce their reproductive success and increase the adult mortality rate. In some areas, the availability of offal is increasing kelp gull populations with a corresponding increase of predation on penguin eggs and chicks (Gandini *et al.*, 1996). Throughout the peninsula, water supply is a problem, and a 200,000 litres per day desalinisation plant had to be installed in Puerto Pirámide, sufficient for 2,000 people.

#### STAFF

Since the 1970's, there has been a provincial corps of wildlife guards patrolling the peninsula and the local police and National Coast Guard support enforcement. The Provincial Tourism Organisation (OPT) trains guides for private companies. Equipment for communications and patrols, including five vehicles and two marine patrol boats were provided on World Heritage nomination.

#### BUDGET

The Provincial government, the National Tourism Organisation and OPT finance the reserves, partly from the revenue generated from tourist fees: it has been estimated that whale-watching generates an income of about US\$10 million per year (Rivarola *et al.*, 1996). No further detailed information is available.

#### **LOCAL ADDRESS**

Organismo Provincial de Turismo de la Provincia de Chubut, Avda. 9 de Julio 280, Rawson, Chubut, Argentina.

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### **DATE**

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