

## WORLD HERITAGE NOMINATION - IUCN SUMMARY

### BANC D'ARGUIN NATIONAL PARK (MAURITANIA)

Summary prepared by IUCN (March 1989) based on the original nomination submitted by the Government of Mauritania. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

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#### 1. LOCATION

Situated on the Atlantic coast of Mauritania, 150km south-south-east of Nouadhibou. The boundary extends along the coastline from Cap Timiris in the south to Pointe Minou in the north, and an area of shallow sea parallel to the coast. 19°21'-21°51'N, 16°00'-16°45'W. The national park totals 1,200,000ha; the Ramsar site 1,173,000ha. A separate 200ha satellite reserve is found to the north of the park at the tip of Cap Blanc.

#### 2. JURIDICAL DATA

The area was the nation's first national park; gazetted in 1976 (by decree No. 76147/PR); established in 1978. Banc d'Arguin was listed as a 1,173,000ha Ramsar wetland site in 1982. In 1986, the satellite reserve at Cap Blanc was added to the park.

#### 3. IDENTIFICATION

The park is in an arid region of the Sahara with averages of 34-40mm of rainfall per year, and strong winds up to 8m/sec. The park comprises three main zones; a vast 600,000ha low-lying, terrestrial sand-dune and desert expanse; coastal areas covered with marshes and mudflats and associated series of islands (the largest of which, Isle of Tidra, is 300 sq.km in extent); and shallow coastal waters little more than 5m in depth.

Habitats are diverse, ranging from extensive marine seagrass meadows to remnants of mangrove forest to nearly barren desert. The land area is dominated by Saharan vegetation with a Mediterranean influence. Tree and shrub flora includes scattered Acacia tortilis, Balanites aegyptiaca, Maerus crassifolia and Euphorbia balsamifera. The dunes are dominated by Stipagrostis pungens, Euphorbia balsamifera and Calligonum comosum. The mangrove forest of Avicennia africana totals some 1,400ha on emergent mud-banks and a further 1,700ha in bays on the mainland. The sandy seashores and islands are represented by vegetation such as Salsola baryosma, Salicornia senegalensis and Suaeda fruticosa. Shallow water vegetation includes extensive seagrass beds consisting of Zostera noltii, Cymodocea nodosa, Halodule wrightii and various seaweeds.

Of the estimated seven million birds which use the Atlantic flyway, approximately 30% spend the winter at Banc d'Arguin. 249 bird species have been recorded, representing both Palaearctic and Afrotropical realms. Wintering shorebirds number over two million and include tens of thousands of flamingo Phoenicopterus ruber, ringed plover Charadrius hiaticula, knot Calidris canutus, redshank Tringa totanus and bar-tailed godwit Limosa lapponica. Notable breeding birds include white pelican Pelecanus onocrotalus

and endemic subspecies of white spoonbill Platalea leucorodia. Mammals of particular interest include Dorcas gazelle Gazella dorcas (V). Atlantic hump-backed dolphin Sousa teuszii, toothed dolphin Steno bredanensis and Risso's dolphin Grampus griseus are regularly recorded. A colony of about 100 monk seal Monachus monachus (E) is found in the reserve at Cap Blanc, near Nouadhibou. Nesting turtles include Chelonia mydas (E), Caretta caretta (V), Eretmochelys imbricata (E) and Dermochelys coriacea (E). Fish are one of the most important components of the park fauna, the shallow tidal flats representing important breeding and nursery areas.

Archaeological sites of the neolithic period and vestiges of the Almoravide civilisation are found on a number of islands. The 600 or so Imraguen tribesmen still maintain their age-old life styles, based almost exclusively on harvesting the migratory fish populations using traditional sailing boats. Fishing techniques, unchanged since first recorded by 15th century Portuguese explorers, include the unique symbiotic collaboration of wild dolphins to catch schools of grey mullet.

#### 4. STATE OF PRESERVATION/CONSERVATION

A preliminary management plan was published in 1984 by WWF and IUCN with collaboration of the Royal Institute of Natural Sciences; a supplemented plan was published in 1987 (under the Comité Executif de la Fondation in Paris) for implementation during the period 1988-1992. The international foundation of Banc d'Arguin National Park was subsequently founded with assistance from international conservation organisations. A separate management plan for the monk seal Integral Reserve at Cap Blanc was completed in 1986. The park administration places its major emphasis on patrolling the area to prevent illegal fishing and disturbance to nesting waterfowl. Further park proposals aim to better integrate the Imraguen populations with park policies, aid them in their socio-economic development and ensure maintenance of traditional customs. Permanent entry points control access into the park and are used in survey work. Temporary bases will also be established at Oued Chibka. Other activities include a mounted camel patrol and the erection of boundary markers. Liaison with the national park authorities in Senegal is envisaged.

Since 1985, WWF, IUCN and the Mauritanian government have worked to implement management plans for the area, notably for the monk seal reserve. As part of this work a number of recommendations, including implementation of the management plan, have been proposed for the next stage of development.

#### 5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST

The Banc d'Arguin National Park Nomination, as presented by the Government of Mauritania provides the following justification for designation as a World Heritage property:

##### b) Natural heritage properties

(ii) Outstanding example of man's interaction with his natural environment. The Imraguen maintain ancient traditional fishing techniques, one of which involves symbiotic collaboration with dolphins.

(iii) Outstanding examples of ongoing geological processes. Banc d'Arguin lies in tropical currents which supply organic material which maintains a rich and diverse marine and littoral environment able to support important communities of fish, birds and marine mammals.

(iv) The most important and significant natural habitats where threatened species still survive. The park contains perhaps the only viable and largest colony of monk seals (25% of the world population). The littoral zone represents one of the major natural humid coastal zones in the world and is reported to be the most important area on the western side of the Atlantic for West African breeding birds. Other factors include the extensive seagrass meadows which are of major importance for fish nurseries and the four threatened species of marine turtle.

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## WORLD HERITAGE NOMINATION - IUCN TECHNICAL EVALUATION

### 506 BANC D'ARGUIN NATIONAL PARK (MAURITANIA)

#### 1. DOCUMENTATION

- i) IUCN data sheet
- ii) Additional literature consulted: IUCN/WWF project files
- iii) Consultations: Park staff, L. Hoffmann, P. Dugan, J. Vershuren, G. Sournia, M. Smart, W. Wolff
- iv) Site Visit: J. Thorsell, C. Pomerleau. April 1989.

#### 2. COMPARISON WITH OTHER AREAS

The biogeographical province of the Western Sahel in which Banc d'Arguin is located has six other protected areas but all of them together amount to less than half the size of Banc d'Arguin and none of them are found along the coast. The features of the park that provide comparison are not, however, biogeographical in nature but relate to other major protected areas with a combination of hot desert and coastal features. These are found elsewhere in the world in Paracas (Peru), Namib (Namibia) and Asir (Saudi Arabia). Of these, Asir has coral reefs and mangrove but no extensive mud flats typical of the Banc d'Arguin. Paracas and Namib are similar in being near upwelling sites and are also important for birds, seals, and sea turtles. Compared to all other areas on the west coast of Africa, Banc d'Arguin is by far the most important for migratory birds with only the Bijagos Archipelago in Guinea-Bissau, a close rival (with about one-half the total numbers), and these islands are mainly mangrove habitat. Other important sites for the estimated 7 million waders that move between Europe and West Africa are the Merja Zerga and Khnifiss lagoons in Morocco but numbers here are only 5% of what they are in Banc d'Arguin. The other World Heritage wetland site found in the same biogeographic province is the Djoudj National Park where riverine flats also support significant Palearctic migrants, mostly waterfowl. It is, however, much smaller and does not have a marine aspect.

In summary, the Banc d'Arguin is unique in a number of ways:

- it is the largest National Park in all of western Africa (north of Zaire);
- as a coastal park, it consists of about half marine and half terrestrial environments;
- it provides the major single habitat for migratory and nesting water birds on the West Atlantic flyway, providing one of the world's great ornithological spectacles;
- the high biological productivity of its shallow waters due to nearby ocean upwelling gives high priority to protection of the park as a nursery and breeding area for numerous species of fish;
- it contains a portion of the major viable remnant population of the Mediterranean monk seal and several endangered Sahelian species such as the Dorcas gazelle;
- the wildness of the area, combining the austerity of the desert and the biodiversity of the marine zone, result in a land and seascape of exceptional contrasting natural value; and
- the traditional activities of the resident Imraguen fishermen provide an additional cultural dimension to the natural setting.

### 3. INTEGRITY

In addition to the unique intrinsic qualities of the park, the Banc d'Arguin has two other special arrangements which relate to its integrity. The first is that its management reports directly to the President of the Republic. This special privilege is a telling demonstration of the importance accorded to the park by successive Mauritanian governments which have maintained that status. Second, the Banc d'Arguin is one of very few parks (others are the Galapagos and Aldabra) that has established its own supporting Foundation. The Fondation Internationale du Banc d'Arguin was set up in 1986 in order to reinforce government efforts in conserving the park and has been very effective to date in strengthening field management activities. Adding to its integrity and providing more assurances that the park is fully integrated in national development, is the Administrative Council that has been established to oversee the general policy aspects of the park. This Council meets regularly and comprises senior representatives of the Ministries of Finance, Tourism, Fisheries, Culture, and Rural Development.

In terms of field equipment, the park is well supplied relative to other parks in Africa. The Mauritanian government provided an operating budget in 1988 equivalent to US\$ 225,000 and additional support has been received from the EEC for equipment, training and a visitor centre at Cap Blanc (200,000 Ecu). Also in the past year, the French Ministry of Cooperation has provided FF210,000 to complete the research station at Iwik and WWF has made a contribution of Sfr 50,000 to equip a new eight-man camel patrol unit. The Government of the Netherlands has also supported a number of research projects in the park. Further funds are being sought to acquire a patrol boat and to provide various facilities to assist the local Imarguen community (boat repairs, water supply and medical supplies). While there is a shortage of qualified staff, more attention is being given to this constraint.

A recent review of the legislation by an FAO consultant has noted that the park was established by decree and it would be strengthened if this could be upgraded to an ordinance. There are three separate planning documents which provide for orderly development. Information brochures and a booklet on the park are available and the terrestrial boundaries are marked. Fewer than 100 tourists visited the park in 1988 and plans to allow controlled growth in this type of use are currently being considered.

The only threat to the area in the future would be proposals that would alter the traditional artisanal fishing methods on the Banc. Introduction of motorised technologies and increased offtake could significantly affect and disturb the bird life of the area. Signs of this change in traditional life style are now in evidence in the village at Cap Timiris in the southern part of the park which is more and more moving towards commercialisation. A military base has also recently been installed there, introducing further vehicle traffic and external influence.

The rectangular nature of the boundaries of the park suggest that they were not ecologically determined but rather are convenient administrative lines. The eastern boundary extends into the desert in places up to 50 km and this offers an ample strip to deflect inconsistent activities such as the Paris-Dakar rally. Some adjustments to the southern boundary to excise the village of Cap Timiris and the military base there would not detract from the nomination and this may eventually be considered. The marine boundary line is again a straight line and cuts through the middle of the shallow water of the Banc. There would be strong rationale for encompassing the whole area of shallow water but this is not currently envisioned.

#### 4. ADDITIONAL COMMENTS

The current 200ha satellite reserve at Cap Blanc which protects a portion of the monk seal colony and is separated from the main part of the park by a distance of 33km, presents an issue that requires further elaboration. First, the reserve boundaries encompass the home of only ten or so of the 100 monk seals found in the area, the remainder using the area to the north known as Côte des Phoques. This means that the condition of integrity (iii) which requires that sufficient area to ensure continuity for the species is not satisfied. Second, the extension of the Cap Blanc reserve to encompass the key breeding and nursery area at Côte des Phoques is not possible at this time as the international boundary in this area is being reviewed by a UN Commission looking into the question of the Spanish Sahara.

#### 5. EVALUATION

The World Heritage values of the Banc d'Arguin are most evident when reviewing the park as a habitat for its exceptional numbers of birds. The Park's vast expanses of mudflats provide home for over two million migrant shorebirds from northern Europe, Siberia and Greenland. The mild climate of the area and the absence of human disturbance make the Park one of the most important sites in the world for these species. The nesting bird population of the park is also remarkable for its great numbers and diversity. Between 25,000 and 40,000 pairs belonging to 15 species make up the largest colonies of water birds in west Africa. The Park's role in protecting these birds is critical, particularly for those species that use the area as their major breeding grounds (eg. spoonbills and gull-billed terns). From the underwater eel grass beds through its invertebrates, fish and myriad other species in the food web, the Banc d'Arguin clearly meets criterion (iv) as a significant habitat for species.

The park also meets criterion (ii) as it provides a classic locality for study of biological processes in a tropical coastal zone located between the desert and an ocean upwelling area.

It is less clear if the park merits inscription under criterion (iii) as an exceptional combination of natural and cultural elements. Certainly the changes to the traditional life of the Imraguen in the Cap Timiris area (as noted in section 3 above) suggest that the maintenance of the original techniques, at least in this one community, are not assured. It is also recognised that this area is on the edge of the park and is an anomaly when compared to the smaller and more traditional villages inside. IUCN would suggest that a decision on the use of this criterion in this case be deferred until more consideration can be given to the future development of the Imraguen communities.

#### 6. RECOMMENDATION

The Banc d'Arguin National Park should be inscribed on the World Heritage list under criteria (ii) and (iv). The Bureau, accordingly, has recommended that the Committee inscribe this site on the World Heritage list excluding the Cap Blanc Satellite Reserve which could only be considered once the boundary question is resolved and until the Côte des Phoques parts can be included. The Bureau also recommended that the Mauritanian authorities should adopt the recommendation of a FAO review of the protective legislation of the Park, as well as expand its research efforts into cultural and socio-economic aspects of local people (Imraguen), living in the Park.

