

SPAIN

Doñana National Park

Brief description

Doñana National Park in Andalusia occupies the right bank of the Guadalquivir River at its estuary on the Atlantic Ocean. It is notable for the great diversity of its biotopes, especially lagoons, marshlands, fixed and mobile dunes, scrub woodland and marquis. It is home to five threatened bird species. It is one of the largest heronries in the Mediterranean region and is the wintering site for more than 500,000 water fowl each year.

1. Introduction

Year(s) of Inscription 1994, 2005

Agency responsible for site management

Parc National de Doñana

Mailing Address(es)

e-mail:

Website:

2. Statement of Significance

Inscription Criteria N (ii), (iii), (iv)

Justification provided by the State Party

L'inclusion du Parc National de Doñana sur la liste des Biens Naturels du Patrimoine du Monde se justifie par les arguments suivants:

Critère (II).

* Les marais du fleuve Guadalquivir sont un magnifique exemple des procès géologiques au cours du Pleistocène. Après les transformations agricoles des dernières décades, les marais du Parc National représentent la dernière surface inaltérée du grand estuaire du fleuve Guadalquivir.

La formation de ce système commence pendant le Miocène Supérieur et le Pliocène Inferieur, à partir d'un écroulement de la plateforme continentale, qui provoque la formation d'un grand bassin marin: la dépression du Guadalquivir. Des procès sédimentaires postérieurs ont pour conséquence une phase de progressive régression marine. L'étape suivante se caractérise par les influences continentales, fluviales et éoliennes, dans un environnement d'estuaire de profondeur chaque fois plus réduite.

La formation postérieure de failles change partiellement l'aval du Guadalquivir; la rive droite s'enfonce et commence à recevoir des dépôts fluviomarins, qui forment les premiers dépôts typiques des marais.

Comme résultat de ce procès, pendant les dernières étapes du Pléistocène un estuaire lacustre d'eaux peu profondes et d'influence continentale chaque fois plus intense, se forme. Il est progressivement isolé de la mer par la formation et la croissance d'une barre de sable, de direction Nord-ouest-Sud-est (nous devons rappeler que pendant l'époque romaine, la partie méridionale des marais formait le « Ligur Ligustinus », ouvert à la mer, dont les établissements humains sur ses rives peuvent être localisés maintenant plusieurs kilomètres à l'intérieur des terres).

* De la même façon, la barre de sable littorale et le champ de dunes forment de magnifiques exemples des procès géomorphologiques qui modèlent actuellement le territoire.

La disposition actuelle des tours de signalisation, originaires du XVIIème siècle et situées au long de la plage, ainsi que la croissance de la barre de sable à l'embouchure du Guadalquivir, démontrent que la formation de sols est le résultat d'un processus de sédimentation marine; les trains de dunes (parmi les plus grands du continent européen), montrent de leur côté l'existence de sédimentation d'origine éolique. La vitesse moyenne de progression des dunes est de 4-6 m par an, quoique certaines d'entre elles peuvent se déplacer jusqu'à 20m et d'autres rester immobiles pendant des années.

* Les processus antérieurs provoquent une succession remarquable de la végétation du Parc, aussi bien primaire que secondaire, sur les régions couvertes de sables.

Critère (iii).

La perception de la beauté est subjective. Néanmoins, si nous nous attenons aux innombrables gloses écrites par des auteurs de tout temps et conditions, il semble difficile priver de cet attribut aux territoires de Doñana. La merveilleuse horizontalité de ses paysages et l'ensemble de ses différentes ambiances (marais, vera, totos, pinèdes, plage, mer) sont ses valeurs les plus connues.

Comme exemple, voici les paroles du naturaliste anglais Guy Montfort (Portrait of a wilderness, 1962) « les saisons partiront et reviendront, mais notre bien aimée terre sauvage, le Coto de Doñana, continuera de rêver au cours des années,

entourée par sa ; Dieu le veuille ! solitude et beauté inaltérée ».

D'autres éléments singuliers du Parc National de Doñana sont les champs de sables vivants, déjà décrits, la dune des oies sauvages, la Vera (écotone marais-sables), la plage vierge de 38 kms, et les « Pajareras », les vieux chênes-lièges sur lesquels un grand nombre d'ardéidés de différentes espèces (*Ardea cinerea*, *Egretta garzetta*, *Egretta alba*, *Nycticorax nycticorax*), de cigognes (*Ciconia ciconia*) et de spatules (*Platalea leucorodia*) construisent leurs nids.

Critère (iv). La valeur faunistique la plus remarquable du Parc est sans doute l'avifaune. On a recensé plus de 360 espèces d'oiseaux (migrateurs et sédentaires). Les poissons, amphibiens, reptiles et mammifères sont aussi variés et abondants.

Les marais du Parc National de Doñana accueillent en hiver d'énormes quantités d'oiseaux migrants du Paléartique occidental. Les espèces plus communes sont: *Egretta garzetta* (6.000), *Bubulcus ibis* (16.000), *Ardea cinerea* (1.000), *Phoenicopterus ruber* (20.000), *Anser anser* (70.000), *Tadorna tadorna* (5.000), *Anas penelope* (100.000), *A. crecca* (200.000), *A. strepera* (50.000), *A. platyrhynchos* (100.000), *A. acuta* (80.000), *A. clypeata* (150.000), *Aythya ferina* (30.000), *Melanitta nigra* (6.000) dans la mer, *Fulica atra* (25.000), *Grus grus* (1.500), *Recurvirostra avosetta* (10.000), *Limosa limosa* (80.000).

Entre les espèces d'oiseaux menacés, nous devons signaler: *Ardea ralloides* (120), *Botaurus stellaris* (10), *Plegadis falcinellus* (17), *Ciconia nigra* (25), *Platalea leucorodia* (600), *Aythya nyroca* (4), *Marmaronetta angustirostris* (400), *Oxyura leucocephala* (70), *Aegypius monachus* (4), *Aquila adalberti* (30), *Elanus caeruleus* (2), *Falco peregrinus* (20), *Turnix sylvatica* (10), *Porphyrio porphyrio* (2.000) et *Fulica cristata* (5).

Entre les mammifères menacés, on peut citer: *Lynx pardina* (40), *Felis silvestris*, *Herpestes ichneumon* et *Lutra lutra*. D'autres espèces intéressantes sont: *Cervus elaphus* (1.300), *Dama dama* (1.500), *Sus scrofa* y *Genetta genetta*.

Entre les espèces de flore menacées qui trouvent refuge ici, on peut signaler *Linaria thursica*, *Micropyropsis tuberosa*, *Gaudinia hispanica* et *Vulpia fontquerana*.

As provided in IUCN evaluation

(1994): Although it has been affected by a number of human activities that have reduced its integrity,

Doñana National Park is a resilient system and nature is still the dominant force. As the main threats have been averted and as restoration activities are underway, the future of the park seems assured. In the context of a crowded and long-inhabited continent, Doñana is one of the few national parks in Europe that can match the international significance met by parks in other parts of the world. In sum, its outstanding universal values are based on two features:

- its high diversity of habitats: beaches, coastal dunes, marshes, water courses, ponds, Mediterranean scrub, pine, juniper, and cork oak/olive woodlands, and the interactions among them; (*criterion (ii)*)

- its high ornithological values with habitat for five endangered breeding species, as one of the largest heronries in the Mediterranean, for supporting over one half million wintering waterfowl, and as a critical link in the migration route for pale arctic waders; (*criterion (iii)* and (*iv*))

The conditions of integrity for all three of these criteria are met although the prospect of adding appropriate additional areas of natural parks in future years would further improve the property. The main concern would be the maintenance of long-term hydrological integrity which, hopefully, will be assured if the regional sustainable development project is effectively implemented.

6. RECOMMENDATIONS

Doñana National Park meets criteria (*ii*), (*iii*) and (*iv*) and should be inscribed on the World Heritage List. The Spanish authorities should be complemented in their attempts to maintain the integrity of the site, especially over the past decade. They should also be encouraged in their on-going efforts to restore disturbed portions of the park to more natural conditions. A follow-up report on the results of the European Union project, especially with regards to regulation of the water supply, should be requested from the Spanish authorities in 1998.

(2005: IUCN considers that the areas proposed for extension are of similar natural character to the rest of the World Heritage property and the extension will contribute to maintaining the integrity of the property. This is also in line with IUCN recommendations at the time of the evaluation of the property. IUCN considers that the World Heritage property should be extended to include the three proposed areas.

IUCN recommends that the Committee adopt the following decision:

The World Heritage Committee,

1. Having examined Document WHC-05/29.COM/8B
2. Decides to extend Doñana National Park to bring the boundaries of the World Heritage property in line with the extended National Park; thus the total area of the World Heritage property will be 54,251.7ha.
3. Commends the State Party for its efforts to enhance the protection and management of the property.

Committee Decision

Bureau (July 1994): The Bureau recommended that the Committee inscribe the site which contains an exceptional example of a large Mediterranean wet land site with diverse habitats of marshes, forests, pristine beaches, dunes and lagoons which contain a high faunal diversity, particularly for its ornithological values.

The Bureau furthermore complemented the Spanish authorities on the improved protection of the site during the past two years and their efforts to maintain the integrity of the site. It noted, however, continuing threats to the integrity of the hydrological system and therefore encouraged the Spanish authorities in their on-going efforts to restore disturbed parts of the park and to report back on progress with the European Union project in 1998.

Session (1994):

The Committee inscribed this site as an exceptional example of a large Mediterranean wetland with diverse habitats such as marshes, forests, pristine beaches, dunes and lagoons, which supports high faunal diversity, particularly large numbers of migratory birds of the pale arctic region.

The Committee complemented the Spanish authorities on measures taken to improve protection of the site during the past two years and their efforts to maintain the integrity of the site. The Committee, however, alerted the Spanish authorities to continuing threats to the integrity of the site arising from hydrological projects and encouraged them in their on-going efforts to restore disturbed parts of the Park. The Committee requested that the Spanish authorities submit a report on the site, particularly highlighting the results of the project to regulate water supply by 1998.

Session (2005): Decision 29 COM 8B.16

The World Heritage Committee,

1. Having examined Documents **WHC-05/29.COM/8B, WHC-05/29.COM/8B.Add 2 and WHC-05/29.COM/INF.8B.2**
2. Decides to extend **Doñana National Park, Spain**, to bring the boundaries of the World Heritage property in line with the extended National Park; thus the total area of the World Heritage property will be 54,251.7 ha;
3. Commends the State Party for its efforts to enhance the protection and management of the property.

- Statement of Significance adequately defines the outstanding universal value of the site

Boundaries and Buffer Zone

- Status of boundaries of the site: inadequate. State Party has provided suggestion for enlargement.
- Buffer zone: adequate

Status of Authenticity/Integrity

- World Heritage site values have been maintained

3. Protection

Legislative and Administrative Arrangements

- The National Park of Doñana was created by decree 2412/1969 (16 October) and modified through decree 3101/1973 (9 November). Law 91/1978 (28 December), known as the Doñana Law, set its legal status. The first PRUG was adopted by royal decree 2421/1984 (12 December), and the second, by royal decree 1772/1991 (16 December), while that which is currently enforced was adopted by decree 48/2004 (10 February). On 9 December 2003, the government of the autonomous region of Andalusia adopted the plan of regional planning, through decree 341/2003, for the region of Doñana
- The protection arrangements are considered highly effective
- Actions proposed: A stricter control of the aquifer would be necessary as regards underground waters

4. Management

Use of site/property

- National park

Management /Administrative Body

- A management committee for Andalusia's national parks was started in 29 mars 1999. It includes two representatives from the State's central administration, two representatives from Andalusia's autonomous regional authorities and the directors of the two national parks of Doñana and Sierra Nevada
- Levels of public authority who are primarily involved with the management of the site: national: regional, local
- The current management system is highly effective
- Actions proposed: The government's central authorities and the authorities of the autonomous region are responsible for the management of the national park. In November 2004, a new decree was issued by the Spanish Constitutional Court of Justice, stipulating that responsibility for management lies exclusively with the regional authorities. This decree should be implemented as of 2006

5. Management Plan

- Management plan is being implemented
- Implementation commenced: 2004
- Adequate
- Responsibility for over-seeing the implementation of the management plan and monitoring its effectiveness: Patronato de Doñana. The Patronato de Doñana is the institution in charge of supervising the implementation of the management plan and of assessing its efficiency, and that of the three levels of authorities involved: national, regional and local

6. Financial Resources

Financial situation

- State Budget
- Very sufficient

7. Staffing Levels

Rate of access to adequate professional staff across the following disciplines:

- Very good: conservation, management, promotion, interpretation, education, visitor management

8. Sources of Expertise and Training in Conservation and Management Techniques

- The Ministry of Environment and the institution for the management of national parks are responsible for staff training. Furthermore, in 2004, two training initiatives were created: one on the natural and cultural heritage of the national park of Doñana, and the other on the interpretation of heritage

9. Visitor Management

- Visitor statistics: 391/day
- Visitor facilities: There are two ways of visiting Doñana. 1) A visit through the visitor centers and their trails and paths (access is free) 2) Visits by appointment through private companies which offer three different guided tours: two tours by land within the national park (north and south respectively), and one boat tour. There are six visitor centres and an information center in Aznalcázar (Sevilla)

10. Scientific Studies

- Risk assessment, monitoring exercises, condition surveys, studies related to the value of the site, archaeological surveys, visitor management
- Archaeological digs at "Cerro del Trigo" have revealed a roman settlement. Several monitoring studies were undertaken including that of the piezometric network of aquifer 27 or that on the natural processes and aquatic bird settlements. Several studies regarding the mapping and photography of the site have been undertaken as well as numerous studies on endangered species

11. Education, Information and Awareness Building

- An adequate number of signs referring to World Heritage site
- World Heritage Convention Emblem used on some publications
- Adequate awareness of World Heritage among: visitors, local communities, businesses, local authorities
- Environmental strategy for general public and schools including guided visits and tours.
- Web site available
- Local participation: above educational programme

12. Factors affecting the Property (State of Conservation)

Reactive monitoring reports

- World Heritage Bureau sessions: 22nd (1998); 23rd(1999); 24th (2000); 25th (2001); 26th (2002)
- World Heritage Committee sessions: 22nd (1998); 23rd (1999); 24th (2000); 25th (2001); 26th (2002); 28th (2004); 29th (2005)

Conservation interventions

- Conservation; restoration works; management plans of endangered species (lynx, royal eagle), programme “Doñana 2005”, natural reserves, regulation concerning uses and traditional exploitations (cattle, pine cones, fishing and related activities)
- Present state of conservation: good

Threats and Risks to site

- Environmental; natural disasters
- Specific issues: In 1998, the breaking of the dam of the mine of Aznalcóllar entailed serious conservation problems that were handled immediately following the incident, stopping the pollution from further jeopardizing the national park. PRUG observed an increase in the number of visitors entering the park from El Rocío and of the presence of cattle in the park, hence the need to regulate access. Roads also present an increasing danger to the lynx population of the park at El Rocío and Matalascañas. An other problem concerns illegal water usage around the national park (intensive agriculture)
- Emergency measures taken: The “Doñana 2005” program focuses on the regeneration of the water resources of Doñana. Regulations concerning the number of visitors entering the park from El Rocío have been included in the management plan. The problem of the presence of cattle has also been included in the sectoral plan adopted in 2000. Underground landscapes for the local fauna are being built along the busiest roads. The Patronato is studying measures aiming at reducing the risk of illegal water usage.

13. Monitoring

- Formal monitoring programme
- There is a specific agreement with the Superior Council for Scientific Research and the institution in charge of the management of

national parks regarding the assessment of the flora, fauna, and water resources

14. Conclusions and Recommended Actions

- Main benefits of WH status: conservation, social