#### INFORMATION SHEET ON RAMSAR WETLANDS

- 1.- Country: Spain
- 2.- Date:
- **3.- Ref.:** 7ES002
- 4.- Name and address of compiler: Parque Nacional de las Tablas de Daimiel Apto. Correos 3.13250 Daimiel.CIUDAD REAL.
- 5.- Name of wetland: Las Tablas de Daimiel
- 6.- Date of Ramsar designation: 18. March. 1982.
- 7.- Geographical coordinates:  $39^{\circ} 09' \text{ N}; 3^{\circ} 40' \text{ W}$

## 8.- General location:

Ciudad Real Province. Municipalities of Daimiel and Villarrubia de los Ojos. Castilla - La Mancha Regional Community. Daimiel village is 10 km far and has 20.000 inhabitants.

9.- Area:

1.928 Has.

**10.- Wetland Type:** M, N, O, Q.

11.- Altitude:

Average 608 m above sea level. Range between 600 and 620 m a.s.l.

# 12.- Overview:

The site is located where two rivers, Guadiana and Giguela, come together. The horizontally shaped landscape of the region and groundwater supplies from the underlying aquifer, namely aquifer 23, cause the overflowing of these rivers into flooding banks. Here, well developed vegetal carpets of cane-shaped plants are dominating.

#### 13.- Physical features:

Las Tablas de Daimiel area is located at the southwestern position of the great La Mancha plain. On a geological basis, La Mancha is a depressed basin whose origin may be considered as a consequence of the Alpine Orogeny, being filled later during the Tertiary Period. This wide miocenic formation is composed basically by limestones, marly limestones and calcareous clays [dated at Pontiense]

Climate is warm mediterranean with continental character. Annual average temperature is  $14^{\circ}$  C, although there are strong

seasonal differences: min. temp.  $-10^{\circ}$  C and max.  $40^{\circ}$  C.Annual average rainfall about 450 mm. Extreme summer droughts are common.

Las Tablas de Daimiel are formed in the concourse of two rivers with different hydrology and chemical composition: river Guadiana is permanent and with bicarbonated fres-waters, whereas river Giguela is seasonal with sulfur brackish waters. Groundwater supplies are named locally "ojos" (eyes). Average water layer depth is 0'5 m, with severe level falls in summer.

# 14.- Ecological features:

There is not a strict linear-special succession of plant communities, since the vegetational lay-out is like a mosaic, according to variations of parameters like salinity, water seasonality, soil humidity, etc. Some of the most representative formations within the hydrophylic vegetation are the submerged prairies of charophytes, mostly belonging to gen. *Chara*, forming a continuous carpet in extensive areas. Within the hygrophilic vegetation, reed beds, cane beds, great fen sedge beds and sea club rush beds may be highlighted, as well as rush prairies, *Limonium* beds and tamariscs scrubs. This species lies in the current flooding limit.

The wetland was surrounded in past times by a dense oak (*Quercus rotundifolia*) wood. At present it remains although cleared, in the right bank, being replaced by crops in the left bank.

#### 15.- Land tenure/ownership of:

a) site: The National Park has 1,928 Has, of which 98'3 % are State property and 1'7 % belong to private individuals.

b) surrounding area: Surrounding the National Park, there is a Protection Area with 5.410 Has, of which 400 belongs to the State ans the remaining to private individuals.

# 16.- Conservation measures taken:

The site was declared National Park by the Decree 1874/1973, dated on June the 28th., with 1.812 Has. Later it was re-clasified by the Law 25/1980 dated on May the 3rd, with an increased area of 1.928 Has. The Hydric Regeneration Plan was passed in the year 1989. Some emergency measures are regarded in it to allow the conservation of this wetland, in the meantime the Plan, that is bein prepared to reduce the irrigation scheme, is carried out.

# 17.- Conservation measures proposed, but not yet implemented:

A large-scale Plan to reduce the irrigated area is being prepared.

Also a Management Plan, regulating the activities to be made inside the National Park is in advanced course of preparation.

# 18.- Current land use: principal human activities in:

a) site: There are neither human activities nor special uses at present in the National Park.

b) surrounding area/catchment: The land is being used basically for agriculture. In the last years, a dramatic change from not

irrigated crops to irrigation schemes, is being registered.

# 19.- Disturbances/threats, including changes in land use and major development projects:

a) at the site: The main negative impact is the disproportionate exploitation of the groundwater underlying La Mancha plain (namely aquifer 23), that reaches 5.500 Km<sup>2</sup> and that supplies water for the irrigation of more than 100.000 Has. As a matter of fact, phreatic levels have fallen, and so, water supplies to the site decreased, both directly and indirectly ( some time ago, river Guadiana received gruoundwater supplies and at present it doesn't flows to the National Park). Additionally to the fall in water supplies, also some quality changes have been registered in the water at the site, since formerly the two main water imputs had different saline concentration.

b) surrounding area/catchment: The main problem is basically the same: groundwater overexploitation causes important agricultural problems, as well as negative ecological impacts like lagoon desappearances and peak combustion in large areas in the Guadiana bed.

# 20.- Hydrological and physical values:

Las Tablas are located on and fed by the concourse of the rivers Guadiana and Giguela, as well as by groundwater supplied by the aquifer 23. This wetland owed their main features to the equilibrium of waters supplies from run-off and from underground, with different quality and seasonality. Since the seventies, groundwater is being exploited out of control, and the watertable began to fall noticeably. As a consequence of that the former springs (Ojos del Guadiana, ojillos), became water dains. Las Tablas area, today is a recharge area to the aquifer 23, although these supplies aren't big enough to compensate the huge extractions being done in it. The subsequent emptying process is being occurring with a rate of 300 Hm<sup>3</sup>/year. The accumulated deficit at present is higher than 3.000 Hm<sup>3</sup>.

# 21.- Social and cultural values:

The main social values of the site, are related to the use by the nearer inhabitants of their natural resources, basically hunting, fishing and natural fibre collecting. This practices are common since the first Bronze Age settlers (1.500 b. C.) (Las Motillas Culture), of which there is a settlement inside the National Park.

Since the National Park was created, the tourism is the main social use, that also affects the surrounding areas. The declaration of the wetland as a National Park avoided the drainage and further transformation of this area into irrigated crop, according to the scheme beginning in 1966 and that caused severe damages to its natural condition.

# 22.- Noteworthy fauna:

The site owe their main faunistic values basically to aquatic birds, especially Anatidae and Ardeidae. In the site the usual international criteria are valid to: *Ixobrychus minutus*, *Ardea purpurea*, *Marmaronetta angustirostris*, *Circus aeruginosus*, *Grus grus*, *Himantopus himantopus* and *Chlidonias hybridus*. It is important to mention as well to: *Netta rufina*, *Anas crecca*, Aythia nyroca, Aythia ferina, Ardeola ralloides, Nycticorax nycticorax, Podiceps cristatus, P. nigricollis, Panurus biarmicus and Acrocephalus melanopogon.

Mammals: Lutra lutra, Meles meles and Vulpes vulpes.

Reptiles: Mauremys (orig. Clemys) caspica and Emys orbicularis.

Amphibians: Hyla arborea. Fishes: Ciprinus carpio.

# 23.- Noteworthy flora:

The most important communities are: submerged carophyte carpets, great fen sedge (*Cladium mariscus*) beds, highly representative formations in Las Tablas, where they are so extensive that give to the area a relevant value within the iberian and european continental welands. The reed (*Phragmites australis*) beds are dominating in extensive areas. Also other vegetal formations are important: cat-tail (*Typha donminguensis*) beds, sea club rush (*Scirpus maritimus*), rush prairies, *Limonium* beds, highlighting *Limonium longibracteum*, an endemic taxon being peculiar of saline sites at La Mancha. Potential woodlands here represented by tamarisc formations of *Tamarix canariensis*, a halophylic species, surrounding islands and wetland banks, according to the length and the depth of the water. Surrounding the site there is a cleared oak (*Quercus rotundifolia*) wood.

# 24.- Current scientific research and facilities:

Monitoring and control of the biological and chemical quality of the aquatic environment in the National Park, that is being carried out by an agreement with The Scientific Research Council (CSIC). Other hydrological studies are being performed by the Geological Service belonging to the Ministry of Public Works and Transports.

# 25.- Current conservation education:

There is a reception centre for visitors to the National Park, that is located just at the entrance. Four pathways start here, and all have birdwatching and landscape observatories. There are some leaflets about the Park, as well as programmes destinated to school visitors and groups. Visitors, Interpretation and Education Plans are to be passed.

# 26.- Current recreation and tourism:

The National Park hosts 100.000 visitors per year, with different nationalities, of which the 25 % are school visits and organized groups. There are infra-estructural facilities to allow the use, enjoy and knowledge of the Park. It may be visited all the year. Organized group visits, must be booked in advance at the Information Centre. Tel. 926.852 058.

# 27.- Management authority:

ICONA. (M.A.P.A.) Gran Via de San Francisco 4 28005.MADRID.

# 28.- Jurisdiction:

The National Parks State Network is a responsability on the Central Government, being held by ICONA, an Autonomous Organism belonging to the Ministry of Agriculture, Fishing and Food.

# 29.- Bibliographical references:

CORONADO, R., F. LEON and C. MORILLO (1974). Guia del Parque Nacional de las tablas de Daimiel.ICONA. Madrid, 174 pp.

- PASCUAL TERRATS, M. (1976). Contribucion al estudio ecologico de Las tablas de Daimiel. I: Vegetacion. Anales del INIA, Recursos Naturales 2: 129-147.
- SAENZ ROYUELA, R. (1976). Contribucion al estudio ecologico de las Tablas de Daimiel. II: Observaciones ornitologicas (1974-1975). Anales del INIA 2: 129 - 147.
- SANCHEZ SOLER, M.J. and A. DEL MORAL (1991). El Parque Nacional de las Tablas de Daimiel o la importancia del agua en la España seca. R.F.E. (Oct. 91). Madrid.
- **30.- Reasons for inclusion:** 1A, 2B, 3A
- 31.- Map of the site: