

TRANSLATION (3rd March 1995, Dave Fawcett) FROM ORIGINAL SPANISH TEXT SENT 26TH MAY 1994 BY INSTITUTO NACIONAL PARA LA CONSERVACION DE LA NATURALEZA (ICONA)
[Square brackets indicate translator's notes. Direct translations of common names which may not have produced standard English version for that species appear in inverted commas ("), as do words left in Spanish due to translation difficulties.]

Laguna De Chiprana [Site Ref. 7ES028]

1. PHYSICAL ENVIRONMENT.

1.1. GEOGRAPHICAL LOCATION. BOUNDARIES.

The Salada [permanent salt lake] de Chiprana is located in the extreme southeast of the province [admin 2] of Zaragoza [admin 1 being the region of Aragon], in the municipal area of Chiprana.

Altitude: 150 m.a.s.l.

Area: 162 ha [of which 31 ha = open water body] includes - in addition to the Salada [permanent salt lake] de Chiprana - the Prado [wet meadow?] de Farol, the Salada [salt lake] de Rocés (=Salobrosa), and some neighbouring land of this endorheic lake complex, with the following boundaries (annex 1): [details not translated here]

1.2. CLIMATOLOGY

The climate is semi-arid, with an average temperature of 16°C. The average annual rainfall is 330 mm, with maxima in spring and autumn, leading to a marked hydric deficit, intensified by the frequency of strong winds from the northeast.

1.3. HYDROLOGY

The natural hydrological regime of the salt lake [Chiprana] is closed, but it is now altered by an almost continual supply of freshwater coming from the Salada [salt lake] de Rocés (also called Salobrosa), which itself receives irrigation water discharge through a ditch, almost completely losing its saline character. It [Chiprana?] also intermittently receives supplies of the area's surplus irrigation water through other channels excavated in its vicinity. Following the hydrological cycles these "artificial" supplies produce important changes in the level and salinity of water, with the latter fluctuating between 30-70 g/l.

Discharge from ditches, irrigation effluents, and to a lesser extent, run off and subterranean flow would currently comprise the main water supplies in the hydrological balance of the salt lake; evaporation and some superficial drainage being the forms of water loss.

The surface area of the water body is 31 ha, and the maximum depth 5.6 m. The Salada de Rocés salt lake occupies 2.8 ha, and the Prado [meadow] del Farol 1.51 ha (with its water body filled to the maximum and covered with a dense reed bed).

1.4. GEOMORPHOLOGY

From the stratigraphical point of view, the Salada de Chiprana lies upon evaporitic formations from the Tertiary: "margas" [?], silts and sandstone, interspersed with limestone and gypsum. This detritic formation is characterised by unique relief forms: ancient channels from the Tertiary coming from meandering fluvial network, which dug into "margosos" [?margaceous] materials, were later filled in with fossilized sandstones (through silting up of the basin), and then became uncovered through differential erosion effects.

1.5. FLORA. VEGETATION COMMUNITIES.

The vegetation on the shores is scarce and is basically made up of patches of reed *Phragmites australis*, which in the case of the Prado [wet meadow] del Farol covers the entire water surface area. The considerable salinity of the water and the geological substrate has a marked influence on the vegetation cover of the shores, which consists of circles of halophytic vegetation distributed according to gradients of salinity and inundation, with *Salicornia ramosissima*, *Suaeda maritima*, *Limonium* spp., *Inula chritmoides* and *Aleuropus littoralis* being the dominant species.

In the areas with less pools formed and richer in organic material there are reed beds of *Juncus acutus* and *Juncus maritimus*. There are also numerous *Tamarix boveana* and *T. canariensis*.

Owing to the salinity, only two macrophyte species grow here, both forming dense carpets: *Ruppia maritima* on shallow bottoms and *Lamprothamium papulosum* on bottoms of average depth.

Most of the nearby land is cultivated with irrigated cereals, and there are also some small plots with olive groves. Unploughed areas, basically small hills, feature xerophytic scrubland with mainly rosemary *Rosemarinus officinalis*, "aliaga" *Genista scorpius*, thyme *Thymus* sp. and juniper *Juniperus* sp.

1.6. FAUNA. VERTEBRATE COMMUNITIES.

1.6.1. Fish

"Gambusia" *Gambusia affinis* are very abundant in the Salada de Roces salt lake, through the drainage channel of which, they can get into the Salada Grande salt lake. In the Salada de Roces salt lake the presence has also been confirmed of the golden "carpín" *Carassius auratus*.

1.6.2. Amphibians

The "common green frog" *Rana perezi* and the "running toad" *Bufo calamita* are the only species of amphibian present, and are absent in the Salada Grande salt lake due to the hypersaline character of the water.

1.6.3. Reptiles

The Iberian wall lizard *Podarcis hispanica* is the most abundant and widely distribute of the reptiles found in the area. The lands covered by scrub are occupied by the "meadow" wall lizard *Psammodromus algirus*, the "ashy-grey" wall lizard *Psammodromus hispanicus*, the "long-tailed" wall lizard *Acanthodactylus erythrurus* and the "ocelated" lizard *Lacerta lepida* (amongst the saurians), the "southern smooth" snake *Coronella girondica* (amongst the ophidians). The "staircase" snake *Elaphe scalaris* and the "bastard" snake *Malpolon monspessulanus* are species associated with cultivated areas, and the "viperine" snake *Natrix maura* with the network of drainage channels/ irrigation ditches, the Prado del Farol and the Salada de Roces.

1.6.4. Birds.

Waterbirds are the best represented group. Regular nesters are: little grebe *Tachybaptus ruficollis*, mallard *Anas platyrhynchos*, red-crested pochard *Netta rufina*, moorhen *Gallinula chloropus*, water rail *Rallus aquaticus*, coot *Fulica atra*, black headed gull *Larus ribundus*, kentish plover *Charadrius alexandrius* and the black-winged stilt *Himantopus himantopus*. Since 1985 1 to 3 pairs of the shelduck *Tadorna tadorna* have been nesting here: one of the few Iberian breeding localities for the species, and the only non-coastal one.

Irregular nesters: black-necked grebe *Podiceps nigricollis*, gadwall *Anas strepera*, shoveler *Anas clypeata*, redshank *Tringa totanus*, little "anadarríos" *Actitis hypoleucos*, little-ringed plover *Charadrius dubius*. In recent years the great crested grebe *Podiceps cristatus* and avocet *Recurvirostra avosetta* have ceased breeding here.

The waters of the lagoons and their beaches, serve as a resting place for numerous wader species passing through on migration.

Hunting, the high salinity and climatic conditions are the main factors which influence arrival/stay of birds over winter. In general the numbers involved are very moderate, with mallard *Anas platyrhynchos*, teal *Anas crecca*, wigeon *Anas penelope*, pintail *Anas acuta* and the black-necked grebe *Podiceps nigricollis* being the most frequent and numerous species.

The reedbeds and rushbeds are a nesting site for several pairs of marsh harrier *Circus aeruginosus* and numerous "tordal" warblers *Acrocephalus arundinaceus* and reed warblers *Acrocephalus scirpaceus*. In winter the reedbeds and rushbeds are used as roosts for thousands of marsh "escribanos" *Emberiza schoeniclus*, pipits *Anthus* spp., "trigueros" *Miliaria calandra* and spotted and black starlings *Sturnus vulgaris* and *Sturnus unicolor*.

1.6.5. Mammals

Species known to be present are: water rat *Arvicola sapidus*, common "topillo" *Pytimis duodecimcostatus*, wood mouse *Apodemus sylvaticus*, house mouse *Mus musculus*, Moorish mouse *Mrs spretus*, hare *Lepus granatensis*, rabbit *Oryctolagus cuniculus*, fox *Vulpes vulpes*, badger *Meles meles*, common hedgehog *Erinaceus europaeus*, common shrew *Crocidura russula* and wild boar *Sus scrofa*.

2. LAND REGIME

2.1. LAND USE

The land surrounding the Salada de Chiprana saltlake complex is basically under cereal cultivation, both irrigated and non-irrigated. In the immediate vicinity of the eastern shore there are some small plots used for growing olives for oil, with a change of crop being started up in the spring of 1991.

The halophytic vegetation on the shores of the saltlake is used for sheep grazing; likewise the few scrubland areas which are generally found to the north of the Salada de Chiprana, with distinct evidence of overgrazing shown in their vegetation community development and structure.

As of 1972 La Salada was included in a 40 ha private waterbird hunting reserve, with the common coot being the main object of this hunting exploitation.

2.2. LAND OWNERSHIP

Cadastral [land registry] data show that all the land included in the site are private property. In accordance with the Water Law in force, the lake beds are considered public property, (this effects the Salada de Chiprana, the Prado del Farol and the Salada de Rocés).

2.3. FORM OF PROTECTION

The Salada de Chiprana saltlake complex has not yet been declared a Protected Area in accordance with the 4/1989 Law. Most of the land is subject to a special hunting regime: private hunting reserve.

As of 1977 the Urban Land Delimitation Project was approved in the Chiprana municipal area. The draft Town Planning Subsidiary Regulations which are being processed, are in part aimed at giving a appropriate status to the singularity of the saltlakes.

3. CRITERIA OF INTERNATIONAL IMPORTANCE

3.1. Waterbirds

The only species meeting the numerical criteria established by the Ramsar Convention for classifying this area as Internationally Important is the shelduck *Tadorna tadorna* (as a nesting species).

3.2. As an example of a specific type of wetland which is rare or unusual in the biogeographic area under consideration.

The endorheic saline lakes of the Mediterranean zone of the Western Palaearctic constitute a specific type of wetland which is now very rare due to the attacks of a distinct nature which they have suffered in the last decades. The Salada de Chiprana, for its state of conservation and special ecological and geological characteristics (the only deep permanent water endorheic saline lake in western Europe) must be considered a good example of this type of wetland.

4. MANAGEMENT PLAN

The lack of a legal form of protection means that there is not, currently, a plan for usage and management of the resources in the Salada de Chiprana complex.

5. BIBLIOGRAPHY [see original for 15 references (in tiny print)]