From ICONA document, Madrid, Sept. 1994

TRANSLATION FROM ORIGINAL SPANISH TEXT (1 Dec 1994, Dave Fawcett) [Square brackets indicate translator's notes. The direct translations of Spanish common names may not always equal the common name used in English. I have left the translation in quotation marks (") where I felt that this may be the case. Spanish common names etc. that I could not translate have been left in italics. ~ Indicates text is present in the original but has not vet been translated.]

[Site ref: ES030]

EMBALSES DE CORDOBILLA AND MALPASILLO

"Cordobilla and Malpasillo Reservoirs"

1. GEOGRAPHIC LOCATION

~not yet translated

2. CLIMATOLOGY

~not yet translated

3. GEOLOGICAL AND GEOMORPHOLOGICAL STRUCTURE

~not yet translated

4. HYDROLOGY

The supply of freshwater which these Natural Areas receive is varable: direct precipitation; surface run-off and supply from rivers and streams.

The *direct* precipitation will depend exclusively on the surface area of the reservoir, whilst the surface run-off depends on surface area of the *catchment basins* of each reservoir.

The most important factor is the freshwater supply from the Río Genil, coming from the meltwaters of the Sierra Nevada, and regulated by the Iznajar reservoir.

The Embalse de Cordobilla also receives water from the Arroyos (streams) Carlanco, del Aguila Real, del Molar, and de Navalengua, and from the Ríos Lucena and Anuro.

This reservoir has an average depth of 10 m, and a total volume of nearly 34 million cubic metres.

The Embalse de Malpasillo acts like a "shunt" [presumably of diverted water] reservoir for the Embalse de Iznajar and has a volume of some 6 million cubic metres.

The Environment Agency of the Junta [autonomous government] of Andalucía, through an agreement of collaboration with the Sevillan Electricity Company - owner of the land occupied by these reservoirs - has led to the maintenance of water levels at the most optimal state possible for breeding of waterbirds (important for the white-headed duck *Oxyura leucocephala*).

5. VEGETATION

The Embalses [reservoirs] Cordobilla and Malpasillo do not experience great annual fluctuations in water level, nor even in the most extreme periods of of summer and winter, which allows the existence on their banks of a dense riparian vegetation, composed essentially of the reed mace (cat's tail) *Typha dominguensis*, the reed *Arundo donax*, and the giant reed *Phragmites australis*.

The Embalse de Malpasillo, owing to its current state of being overgrown and shallow, has allowed an enormous development of marshland vegetation, with large expanses of reed mace *T. dominguensis*, together with lesser expanses of ireses *Iris pseudacorus* and rushes *Scirpus* sp. and some examples of poplar *Populus* sp.

Amongst the vegetation of the Embalse de Cordobilla the stands of the shrub *Tamarix gallica* are noteworthy. Other riparian species which grow on its banks such as willow (*Salix* sp.), poplars (*Populus* sp.), elms (*Ulmus minor*), etc. although less abundant, are relative well represented.

6. FAUNA ~not yet translated

7. LAND USE

The Cordobilla and Malpasillo Natural Areas are enclaves within the Genil basin, in the Subbética, a region whose economy is largely based on agriculture.

The predominant land uses in the area are: olive groves, cereal crops, some irrigated crops, and some areas which are not in production from the agricultural point of view, but very interesting from the ecological point of view.

In relation to the Special Plan for the Protection of the Environment, the General Regulations of Title II are applied, whilst the Private [or "Special"] Regulations number 35 and 40 relate to the level of special protection and to the qualification of Transformed Wetland zones.

8. LAND OWNERSHIP

~not yet translated

9. FORM OF PROTECTION

~not yet translated

10. CRITERIA OF INTERNATIONAL IMPORTANCE

10.1. Ornithogical criteria

The Embalses de Cordobilla y Malpasillo have deserved classified as Internationally Important for the wintering of the white-headed duck *Oxyura leucocephala*, and included in the A2 list, that is to say that the site fulfills the numerical citeria but not the temporal (8 years or more for wintering, and/or 4 years or more for nesting).

The Embalses are also of International Importance for the "calamón" (Porphyrio porphyrio), purple heron (Ardea purpurea), grey heron (Ardea cinerea), little egret (Egretta garzetta), mallard (Anas platyrhynchos), shoveler (Anas clypeata) and marsh harrier (circus aeruginosus).

In recent years, species such as the Greater flamingo *Phoenicopterus ruber*, "*cigüeñuela*" (*Himantopus* himantopus), avocet, "*chorlitejo patinegro*" (*Charadrius alexandrinus*) and "*chorletijo chico*" (*Charadrius dubius*), have become regularly observed in the area, and in a few years will species will be amongst those fulfilling national criteria.

10.2. Botanical criteria

A detailed study on this matter, will perhaps collect a species which completes these criteria. For the moment there is no proof of that.

10.3. Other criteria

The great diversity of habitats present within these Natural Areas (flat areas, steep areas, rocky cuts, shallow water areas, deepwater areas, sunny slopes, shady slopes etc.) offers great opportunities for these areas to be occupied by a multitude of species. Certainly a colonisation of these habitats by diverse protected species has been confirmed recently.