

Information Sheet on Ramsar Wetlands

1. Date this sheet was completed/updated: 28 January 2001

2. Country: Algeria

3. Name of wetland: Chott ech Chergui

4. Geographical coordinates:

34° 25' - 34° 30' North latitude
0° 45' - 0° 55' East longitude

5. Altitude: 985–1000 metres

6. Area: 855,500 hectares

7. Overview:

Chott ech Chergui is an area very rich in saltwater and brackish resources and thermal springs and is in one of the largest water basins in Algeria with an area of around 40,000 square kilometres. Chott ech Chergui is representative of the Mediterranean region, especially because of its diversity of habitats of permanently green steppes around the *chotts* and *sebkhas* that are completely bare of vegetation. In addition to these plant formations, there are wetland associations with purely aquatic or paludal vegetation.

8. Wetland type:

Marine/coastal: A, B, C, D, E, F, G, H, I, J, K, Zk (a)

Continental: L, M, N, O, P, Q, R, (Sp), (Ss), (Tp), Ts, U, Va, Vt, W, (Xf), Xp, Y, (Zg), Zk (b)

Man-made: 1, 2, 3, 4, 5, 6, 7, 8, 9, Zk (c)

Types of wetlands by decreasing order of importance:

Permanent ponds/salt marshes/brackish water/alkaline (Sp)

Seasonal ponds/salt marshes/brackish water/alkaline (Ss)

Ponds and permanent freshwater marshes (Tp)

Freshwater wetlands dominated by trees (Xf)

Wetlands with geothermal resources

9. Ramsar criteria: 1, 2, 3, 4, 5, 6, 7, 8

Criteria that best characterize the site: 1

10. Map of site included? Please tick yes -or- no

11. Name and address of the compiler of this form:

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12. Justification of the criteria selected under point 9, on previous page:

Criterion 1: Chott ech Chergui is, after Chott Djerid in Tunisia, the largest natural wetland of this type in North Africa. Because of its size, it contains many environments: freshwater, saltwater, brackish water and thermal of international importance in light of its biodiversity. It is also a rare type of permanent wetland, located in a region of arid steppe, where water is often temporary.

Criterion 2: Chott ech Chergui is a habitat for endangered and vulnerable plant species, such as a relic forest of Aleppo pine and a substratum of directly threatened shrubs. According to Maire (1940), this vegetation was represented by an association of Aleppo pine (*Pinetum alepensis*) associated with *chêne vert* (*Quercus ilex*), *genévrier oxycède* (*Juniperus oxycedrus*), *pistachier lentisque* (*Pistacia lentiscus*), rosemary (*Rosmarinus tourniforti*) and *Jasmenum fruticans*. Only a few degraded vestiges of these plants now remain. There is also a species of pear tree (*Pyrus gharbiana*) recorded here for the first time in 1907. This species, rare in this region, should be monitored because of its distribution throughout the area. Furthermore, there are three characteristic species: *Tamarix boveana*, *T. gallica* and *Ziziphus lotus*. There are populations of tamarisk in the form of scattered shrubs in the south-southwestern part of the area of distribution from Aïn Skhouna up to the salt *chott*. But remarkably, a humid forest of tamarisk is found there, flooded by warm water from the Aïn Skhouna hot springs, in which there are populations of ferruginous duck (*Aythya nyroca*) and *sarcelle marbrée* (*Marmaronetta angustirostris*), two vulnerable duck species on the IUCN Red List. It is also the habitat of vulnerable wildlife, such as the Houbara bustard and the mountain gazelle (*Gazella gazella*).

Criterion 4: Chott ech Chergui is a very important refuge for migratory waterfowl and nesting birds because of its location in a semi-desert and steppe area. It is now the only known wintering and nesting site in southern Algeria for the ferruginous duck, which was thought to be limited to the el-Kala area. More than a hundred specimens are regularly identified in winter and several couples during the mating season (120 specimens were recorded in January 2000 and several couples in June–July 2000). It is also an important site for nesting and wintering of the *sarcelle marbrée* and several waders (*échalasse blanche*, *glaréole à collier* and *oedicnème criard*). It is probably an important stopover or wintering site for other species. Unfortunately, the data now available, of different quality from year to year and obtained by inexperienced observers using inadequate samples, makes it impossible to provide conclusive evidence.

13. General location:

Chott ech Chergui is located on the high Oran plains, 80 kilometres south-east of the wilaya of Saïda and 530 kilometres southwest of Alger. For purposes of

administration, it is in the wilaya of Saïda, daïra de Hassasna, in the commune of Aïn-Skhouna.

14. Physical features:

Geology: Three geological formations are represented in the *chott*: continental Tertiary, the upper Cretaceous and *Senonien* and the lower *Bathonien* (see annex).

Geomorphology: Chott ech Chergui is a large depression oriented north-east/south-west, extending south of the Saïda hills, approximately 170 kilometres long and 20 kilometres wide. The edges of this depression are at elevations of 1000 metres and the bottom at about 990 metres. This wetland, with salt water on the surface, drained by thermal springs and water taken from Albian wells, is permanent.

Soil: The soil in this region is desert, relic and steppe with a slightly saline texture, covered with degraded vegetation represented by large areas of *Salsolaceae*.

Hydrology: Chott ech Chergui is a closed basin with slight relief. The average water depth is about 25 centimetres, of which part is absorbed into the ground and, through another part, enters underground circulation flowing to the lowest parts of the basin. The loam soils, lying over the calcareous rocks, create an obstacle for the exit of water. There are springs that flow year round and form ponds with specific biotopes.

Water quality: The water is primarily thermal with a mineral content greater than 1 g/l, but less than 3 g/l. The chemical composition is sulphate chloride and magnesium calcite with a temperature between 20° to 40° C. The well water is distinctly brackish.

Water basin: The water basin of Chott ech Chergui covers 40,000 square kilometres and is the largest closed basin in Algeria.

Climate: The bioclimate is semi-arid with cold winters and hot summers. The average annual temperature is around 14.8° C; the hottest month is July, with an average temperature of 26.3° C and a maximum temperature of 35.3° C. January is the coldest month with an average of 6.1° C and an average minimum of 0.2° C. In winter, there are an average of six days of snow and the area is characterized by heavy evaporation, which reaches 2150 millimetres/year. There are frosts in the winter and spring over a total of 48 days per year. Average annual rainfall is 276 millimetres over 47 days. The average relative humidity of the air varies from 74.5 per cent in December to 37 per cent in July. The average minimum is 14.6 per cent in July, while the maximum reaches 94.7 per cent. This region is subject to very strong winds, which blow from the northwest in winter and from the south in summer. Siroccos are frequent and last for 22 days.

15. Hydrological values:

Chott ech Chergui has three large underground water layers: the Tertiary continental, the *Senonien* layer and the lower *Bathonien* layer. It is also the site of a high degree of thermal activity; one of the thermal areas is called Skhouna (hot in Arabic). Nonetheless, these characteristics are not yet well known and as a result are poorly exploited. The listing of this site as a Ramsar site of international importance should

make it possible to promote interest in this area. Like most of the *chotts*, Chott ech Chergui is considered to be an excellent grazing area. The productive pastures are well exploited and highly appreciated by the livestock owners and the population living around the wetland. It is also here that camels are raised and their natural reproduction is subsidized by the Algerian government.

16. Ecological features:

Three plant associations are found in the region of Chott ech Chergui, in addition to the characteristic vegetation of the wetlands (*typha*, *roselière*, *scirpes* and other potamots, Ceratophyllaceae and myriophyllum): an association of the high plains of *daïas* and *herba alba*. The second association includes two populations on the edge of the *chott*. The first population includes two associations: an association of *Stipa tenacissima* and an association of *Atriplex mauritanica* and *Artemesia* with sub-associations of *Artemesia herba alba*, *Atriplex mauritanica* and *Suaeda fruticosa*. The second population of *daïas* has two types of vegetation: that of saline soils and that of non-saline soils. The third population is formed by three sub-populations: *Juncus maritimus* in the permanently wet areas, *Halocnemum strobilacum* and a population of pure *Halocnemum strobilacum*. The vegetation of the Chott ech Chergui wetland is still poorly known.

17. Noteworthy flora:

The noteworthy flora of the region is represented by the following endemic species: *Ephorbia guyoniana* (endemic to the Sahara), *Holenackeria polyodon* (endemic to North Africa), *Carum foetidum* (endemic), *Frankenia thymifolia* (endemic to North Africa), *Tymus ciliatus* (endemic to North Africa), *Anacyclus cyrtolepidioides* (endemic) and *Helianthemum apertum* (endemic). In addition, there are four indigenous species found here: *Pyrus garbiana*, *Tamarix boveana*, *T. gallica* and *Ziziphus lotus*.

18. Noteworthy fauna:

Chott ech Chergui is a site favourable to populations of a large and varied population of fauna because of its diversity of environments and habitats. Furthermore, the abundance of water in an arid region makes this an area where a large number of fauna concentrate. However, given the absence of detailed surveys of wildlife, only the better-studied bird life reveal the wealth and the specific characteristics of these environments. Among the important species of birds found here are nesting ferruginous duck and *sarcelle marbrée* (species considered vulnerable on the IUCN Red List), *glaréole à collier*, *échasse blanche* and *oedicnème*. The *chott* is also rich in characteristic and endemic fish, unfortunately not yet well known, such as the *Barbus* spp.

19. Social and cultural values:

There are two settlements in the region of Chott ech Chergui: the commune of Aïn Skhouna and the village of Dayet Zeragett. There is grazing, agriculture and tourism, with livestock raising as the most important activity. The hot springs are not yet well developed.

20. Land tenure/ownership of:

The land in Chott ech Chergui is government-owned land, with water rights regulated by the water code, while the surrounding area is pasture and also belongs to the government.

21. Current land use:

The land in this region is used for grazing camels, livestock and, especially, sheep. Around the *chott* are steppes with *alfa*, *armoise*, *sparta* and *harmel*. There are several unusual farming practices found around wells drawing on the groundwater.

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:

Among the adverse factors affecting the ecological characteristics are over-grazing, poaching, desertification, the burning of tamarisk and the cutting of firewood widely consumed in this region.

23. Conservation measures taken:

No conservation measures have been taken for the protection of Chott ech Chergui.

24. Conservation measures proposed but not yet implemented:

In order to protect, conserve and promote the site, the forestry administration of Chott ech Chergui, intends to list the area as a nature reserve in light of its biological diversity.

25. Current scientific research and facilities:

In the commune of Aïn Skhouna, there is a scientific research station for forestry studies of the Institut National de Recherche Forestière. This station carries out trials in the area of Faïd R'mel, 5 kilometres from the commune of Aïn Skhouna. Currently, research trials are being carried out on the growing of poplar, which have produced good results. Several trials have been carried out in this area for improving pastures. The water services are concentrating on a project for supplying drinking water to the city of Saïda from Aïn Skhouna.

26. Current conservation education:

The commune of Aïn Skhouna has two primary schools and a C.E.M in addition to a youth centre, which are the only institutions playing a role in promoting awareness among children in this area about the problems related to the environment and the protection and conservation of wetlands.

27. Current recreation and tourism:

Recreation for the inhabitants of this region is primarily the poaching of waterfowl. In the flood plains, a small number of families come for recreation and to relax around the sites. The thermal springs of Ain Skhouna attract a large number of local inhabitants from the surrounding area because the hot springs in this area have important therapeutic properties. A hammam has been constructed that will soon to be operational.

28. Jurisdiction:

Jurisdiction for the wetlands is the responsibility of the government through the ministry for water resources at the local level through the water services of the wilaya of Saïda. The surrounding area is the responsibility of the administration of agency for the conservation of forests of the wilaya of Saïda.

29. Management authority:

The water service of the wilaya of Saïda and the forestry services (water code and forestry code) are the management authorities.

30. References: