

RAMSAR WETLANDS CONSERVATION SCHEDULE

Ratified by Conference of Parties by Rec. C.4.7 in
Montreux - July 1990

1. COUNTRY: Republic of Turkey 2. Date: 3. Ref:

7 TR 003

4. Name of Wetland: Seyfe Lake

5. Ramsar Criteria: (State and justify which Ramsar Criteria as adopted by Rec. C.4.15 of the Montreux Conference- are applicable)

-Wetland of Lake Seyfe serves as a natural and good example for wetlands located in the Central Anatolia region.

-Lake Seyfe is a regular shelter for endangered bird species and for those which may be endangered in the future.

-Lake Seyfe is regularly sustaining more than 20,000 water birds.

6. Wetland type: /as presented in guidelines, based on Montreux Rec.C.4.7):

Q- Saline: Permanent

7. Date of Ramsar designation

17.05.1994

13.07.1994 → letter Ramsar Bureau 16 aug 1994

8. Geographical Coordinates:

39 degree 12 minutes North, 34 degrees 25 minutes East

9. Altitude (average and/or maximum or minimum):

Its height from sea level is 1110 metres.

10. Area (in hectares):

10,700 hectares.

11. General location (e.g. administrative region and nearest large town):

It is located in Central Anatolia within boundaries of Mucur county of Kırşehir province.

12. Overview (general summary, in two or three sentences, of the wetlands principal characteristics)

It is generally included in a step ecosystem. The lake looks like a saline marsh in the summer.

13. Physical features (e.g. geology, geomorphology; origins- natural or artificial; hydrology; soil type;

water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate):

Seyfe Plain is a depression area which has been formed as a result of faults which have developed in different directions. There are sedimentary, magmatic and metamorphic rocks in the plain which has taken the shape of a closed basin.

There are three types of soil groups in the region including alluvial, hydromorphic and halomorphie.

Depth of the lake changes depending on rains. Depth of the permanent lake varies between 100 - 130 cm. Water quality class is C4S4 in the spring, C4S4, C5S5 in the summer and C5S5 in the fall. The lake's area varies between 1500 ha - 7000 ha.

The average annual rainfall is 428 mm. Maximum infiltration to deep as a result of rain is 0.85 mm/day and the surface runoff is 7.40 mm/day. The total discharge is 11,000,000 m³/year.

Summers are moderately warm and winters are cold around the lake. Annual average temperature is 11 C with a maximum temperature of 26 C and a minimum temperature of minus 7 C. Winds generally blow in northeast direction.

14. Ecological features (main habitats and vegetation types):

There are some plants including Limonium sp., Salicornia sp., Juncus sp which are resistant to salinity growing around parts of the lake where salinity is relatively low. Tamerix sp. in short bush form is seen in the region. Some fish such as Aphanis chantra, Spiralinus sp. which have no commercial value are seen where tributaries flow to the lake. The lake has rich vegetal and animal planktons. Other species living in the salty lake water include some small crustacea which look like shrimps (Artemia sp.) some worm and earthworm species and some mollusca.

15. Land tenure/ownership of:

a) **Site:**The lake is a government property.

b) **Surrounding areas:** consists of land owned by the government, natural persons, village legal entities and Malya State Breeding Farm.

16. Conservation measures taken (national category and legal status of protected areas- including any boundary changes which have been made: management practices; whether an officially approved management plan exist and whether it has been implemented)

The lake and 10,700 hectares of land surrounding it was declared as a Nature Conservation Zone in 1990. At present the Ministry of Forestry and the General Directorate for Natural Parks and Hunting - Wild Animals are developing conservation measures and supervise implementation.

The lake has also been declared as a First Degree Natural SIT Area. It is being supervised by the Ministry of Culture in addition to the Ministry of Forestry. Because of its conservation status no activity other than those with education and scientific objectives is allowed.

17. Conservation measures proposed but not yet implemented (e.g. management plan in preparation; officially proposed as a protected area etc.):

The Ministry has drawn up an Environment Order Plan at a scale of 1/25000 including geographical arrangements as part of its policy designed to ensure socio-economic

development while maintaining an equilibrium between conservation and utilization needs at Lake Seyfe basin. However the said plan could not be implemented because arrangements relating to application have not been concluded yet.

18. Current land use:

(a) Site:No activity other than bird watching and hunting is presently carried out at the Lake.

(b) surroundings/catchment:Adjacent lands are being used by farmers living in villages near the lake and Malya State Breeding Farm for agricultural and pasturing purposes. Other activities include recreation, bird watching and hunting.

19. Disturbances/threats, including changes in land use and major development projects (factors which may have a negative impact on the ecological character of the wetland):

a) at the site:An irrigation project aiming to open steppe area to agriculture has been developed. However it has been revised as "Seyfe Basin Ecology Conservation Project" after the area was declared as a "Nature Conservation

Zone" in 1990. The project was designed to discharge waste water coming from adjacent agricultural land outside the basin. However there are concerns that there may be a decline in Lake Seyfe's water level and, in the long run, removal of various salts depending on their solubility levels if the project is completed.

b) in the surroundings/catchment: The basin is generally covered by lake-shaped neocene formations. Salts melted by storm water and underground waters from these formations concentrate at upper layers during high evaporation periods after rising by cappillarity. As a result of this process barren lands in the basin extend every year.

20. Hydrological and biophysical values (ground water recharge, flood control, sediment trapping shoreline stabilisation, etc.):

Underground waters constitute the most important resource feeding the lake. Therefore, the lake is playing an important role in balancing the underground water level.

21. Social and cultural values (e.g. fisheries production, forestry, religious importance, archeological site, etc.):

There are settlements thousands of years old in the Seyfe Lake basin. It is frequently visited by archaeologists because of its historical value. Among these ruins 20 tumulus have been registered and the area within the boundaries of the conservation zone has been declared as an "archaeological site".

22. Noteworthy fauna (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.):

187 bird species including songbirds on and around Lake Seyfe. One of the largest flamingo populations was discovered in 1986 in this lake. Total bird population is over half a million.

Of the species living on Lake Seyfe 27 are included in the list of birds enjoying conservation by the International Council for Birds Protection (ICBP).

They are:

1. *Pelecanus onocrotulus* #
2. *Pelecanus crispus*
3. *Egretta alba*
4. *Ciconia ciconia*
5. *Phalacrocorax pygmaeus*
6. *Ciconia nigra*

7. *Platalea leucorodia*
8. *Plegadis fulcinellus*
9. *Phoenicopterus ruber*
10. *Tadorna ferruginea* #
11. *Buteo rufinus*
12. *Hieraetus pennatus*
13. *Aquila heliaca*
14. *Neophron percnopterus*
15. *Circus pygargus*
16. *Falco cherrug*
17. *Falco biarmicus*
18. *Falco peregrinus*
19. *Otis tarda* #
20. *Glareola pratincola* #
21. *Vanellus spinosus* #
22. *Tringa stagnatilis*
23. *Larus genei* #
24. *Pterocles orientalis* #
25. *Bubo bubo*
26. *Gelochelidon nilotica*
27. *Aquila clanga*

Brooding species

23. Noteworthy flora (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc.):

Juncus heldreichianus ssp. *orientalis* is a group of plants spreading over barren soil with excessive salt. *Aeluropus litoralis* group of plants grow up as an ingenuous community. *Halocnemum strobilaceum* is a group of plants growing in the salty marshy land at south east of the lake. *Juncus gerardi* sub sp. together with *Juncus heldreichianus* ssp. *orientalis* is a group of plant widely seen around the lake. There are poplar tree plantations and fruit tree gardens in west of the lake.

24. Current scientific research and facilities (e.g. details of current projects; existence of field station, etc.):

The Ankara University is carrying on a research project on water quality.

25. Current conservation education (e.g. visitors centre, information booklet, facilities for school visits, hides, etc.):

There is no visitor centre in the region.

26. Current recreation and tourism; (state if wetland used for recreation/tourism; indicate type and frequency/intensity):

The area is being used for recreational purposes. However no specific arrangement has yet been made in this regard and there is no data relating to utilisation.

27. Management authority (name and address of body responsible for managing the wetland):

- Ministry of Forestry

The General Directorate for Natural Parks and Hunting Animals - Wild Life, Çiftlik/ANKARA

- Ministry of Culture

- Ministry of Environment

28. Jurisdiction (territorial e.g. state/region and functional e.g. Dept. of Agriculture /Dept. of Environment etc.):

- Ministry of Agriculture

Kırşehir Provincial Directorate

- Ministry of Forestry

Kırşehir Provincial Directorate

- Ministry of Public Works and Reconstruction

State Hydraulic Works Administration Regional Directorate

29. Bibliographical references (scientific/ technical only):

- Turkey's Important Bird Sanctuaries 1989, The Association for Conservation of Wildlife, Ertan A. Kılıç A. Kapsarek m.
- Wetlands of Turkey, The Association Foundation of Turkey
- Flora and Fauna of Lakes and Marshy Land in Aegean Region, Central Anatolian Region and west of Mediterranean Region, TUBITAK-TBAG, Seçmen Ö. Leblebici E. 1982
- Bird Species in Turkey, 11, 1984, Chris Husbands
- Bird Heavens of Turkey, 1995, Ministry of Environment, Erdem O.
- Seasonal Changes in Species and Quantities of Zooplanktonic Organisms in Lake Seyfe, 1990, Ankara University, Institute of Sciences, Altındağ A.

30. Name and address of complier:

Ministry of Environment

The General Directorate for Conservation of Environment

Eskişehir Yolu 8.km ANKARA

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

A map at a scale of 1/25,000 showing land utilization around Lake Seyfe and including ecological and geographical data is attached hereto.