

Acknowledged

Information Sheet on Ramsar Wetland: Karas Lake

1. Country: Poland
2. Date: 8 August 1984
3. No ref.: PL004
4. Name and address of compiler:
5. Name of wetland: Karas Lake
6. Date of Ramsar designation: 3 January 1984
7. Geographical coordinates:
53° 33' N, 19° 29' E
8. General location: 5 km ^{west} east of Ikawa Town, Olsztyn Province,
Northern Poland
9. Area:
815.48 ha
10. Wetland type:
Freshwater lake OS
Surrounding meadows, wetlands, drainage ditches U9
11. Altitude:
89.6 m / 98.6 - 100.1 m a.s.l.
12. Overview:

The reserve comprises the lake (377.49 ha), surrounded by forest (246.83 ha), bogs and marshes (182.4 ha) and drainage ditches (3.21 ha). The lake is at an advanced stage of hydrosereal succession, colonized by submerged vegetation of stoneworts (*Chara* spp.) and pondweeds (*Potamogeton* spp.) in shallow waters and by rushes and reeds in the shore zones. Lake margins are overgrown by willow and birch shrubs.

13. Physical features:

The lake basin is shallow with an average depth of 0.6 m and maximum - about 2.8 m, gradually overgrown by aquatic vegetation. The large surface of the lake, its shape and poorly developed shore line permit to classify it among the typical inundation type lakes, the origin whereof is linked with glacial erosion. The catchment is poor - only one main stream drains the neighbouring meadows of the village Wikielec, carrying the water

at the level some 1.4 m higher than the lake water level, to to northwestern end of the lake.

14. Ecological features:

The dominant vegetation types of the lake comprise submerged communities of stoneworts and pondweeds and lake margins are taken by rush and reedbeds (Phragmitetea and Plantaginetea majoris classes). Altogether 14 plant associations were distinguished. The area bordering the water, which is exposed when water level drops, and the islands on the interlake shallows are covered by rushes (*Juncus* spp.), great reedmace (*Typha latifolia*), reeds (*Phragmites communis*), bulrush (*Scirpus lacustris*) and lesser reedmace (*Typha angustifolia*). To the west of the lake, there are extensive peatbogs overgrown by sedges with dominating bottle sedge (*Carex rostrata*) and *Carex gracilis*). On the higher ground near the edge of the original lake basin there are shrub and woodland communities of willows (*Salix cinerea*, *S. pentandra* and *S. rosmarinifolia*), birches (*Betula pubescens* and *B. verrucosa*), alder (*Alnus glutinosa*) and buckthorn (*Frangula alnus*).

15. Land tenure/ownership of

a) site: State owned

b) surrounding area: the ownership is divided: 88% of grounds are owned by the State while 12% are private.

16. Conservation measures taken:

The lake is protected as a Nature Reserve established on 12 April 1958 under the order of the Minister of Forestry and Timber Industries (Monitor Polski 1958, No.42. poz. 243) with further amendments (Monitor Polski 1989, No.17.poz.119).

The water is dammed at the outflow from the lake on the Gać river at the level of 98.6 m a.s.l.

The area is managed according to principles of forest management in its forested portion. The reserve is guarded by a warden.

17. Conservation measures proposed but not yet implemented:

At present, botanical and ornitological studies have been conducted aiming at, among others, establishing needs and methods for conservation activities.

18. Current land use: principal human activities in:

a) site

The lake is exploited as a commercial fishery. In the forest, thinnings and sanitary fellings are made.

b) surroundings / catchment:

The adjacent lands are used for farming purposes (plough land, meadows, pastures) and forests are commercially exploited.

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

a) at the site:

The lake overgrowing, shallowing and fish poaching.

b) surroundings/catchment:

Possible intensification of agricultural activities including construction of a small fruit-processing plant.

20. Hydrological and physical values:

Water retention - the lake volume was established to be 2 639,1 thousand cubic meters, the lake plays a considerable role in groundwater recharge.

21. Social and cultural values:

Commercial fishery. Timber harvesting from thinnings and sanitary fellings in forests. Game refuge. The reserve supports rare species of fauna and flora and is used for numerous investigations.

22. Noteworthy fauna:

The reserve was established to protect the important Polish breeding site of greylag goose - 20 breeding pairs were observed in 1990 and 155 birds in non-breeding flocks, while mute swan counts in 1990 indicated several breeding pairs and about 440 non-breeding birds.

Other waterfowl species include the following breeding birds: gadwall (*Anas strepera*); wigeon (*Anas penelope*); northern shoveler (*Anas clypeata*); red-crested pochard (*Netta rufina*); common goldeneye (*Bucephala clangula*); common merganser (*Mergus merganser*); red-necked grebe (*Podiceps grisgenae*); and black-headed gull (*Larus ridibundus*) - 1000 pairs.

The reserve is a moulting refuge for the males of various species such as greylag goose (*Anser anser*) and is a resting station for spring and autumn migrants including crane (*Grus grus*) up to 300 birds, little gull (*Larus minutus*); white-fronted goose (*Anser albifrons*); and bean goose (*Anser fabalis*). Otter *Lutra lutra* was observed on 13 December 1989. One pair of white-tailed eagle (*Haliaeetus albicilla*) is observed to prey regularly, while osprey (*Pandion haliaetus*) was encountered on 11 July 1990 and little bittern (*Ixobrychus minutus*) - one pair - 17 July 1990. Regularly recorded species include little egret (*Egretta garzetta*); at least 4 pairs of Eurasian bittern (*Botaurus stellaris*); bluethroat (*Luscinia svecica*), penduline tit (*Remiz pendulinus*); red-necked grebe (*Podiceps grisgena*) - 3 pairs and black-necked grebe (*Podiceps nigricollis*).

23. Noteworthy flora:

The submerged vegetation abundantly growing in the lake comprises various species of charales *Chara fragilis*, *C. aspera*, *C. intermedia*, pondweeds *Potamogeton lucens*, *P. perfoliatus* and *P. gramineus*, bladderwort (*Utricularia vulgaris*) and *Najas maritima*. Marsh species include sundews *Drosera rotundifolia* and *D. anglica* /vulnerable within Poland/, orchids - marsh helleborine (*Epipactis palustris*) and lesser butterfly orchid (*Platanthera bifolia*) - protected in Poland as well as mezerion (*Daphne mezereum*) and small waterlily (*Nymphaea candida*).

24. Current scientific research and facilities:

Since 1990, flora and fauna of avians have been studied in the reserve by researchers from the Agricultural and Technical School in Olsztyn. MSc degree thesis have been written on the basis of works conducted there.

There are three primitive observation towers in the reserve.

25. Current conservation education:

At the borders of the reserve two boards inform about natural values of the reserve.

26. Current recreation and tourism:

The lake is sporadically used for bathing by local population what is difficult to eliminate with one reserve warden.

Visitor pressure is limited in view of difficult access to the lake.

27. Management authority:

Provincial Nature Conservator in Olsztyn and
Iżawa Forestry District Administration.

28. Jurisdiction:

Community Office in Iżawa
Provincial Office in Olsztyn

29. Bibliographical references:

See enclosure
and

Czaplicka, Dziedzic, Koc, 1990. Botanical evaluation of
the Karaś Lake Reserve. In Polish.

Młynek T. et al., 1954. Vascular plants of the Karaś Lake.
In Polish.