

Country: Czechoslovakia

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RS4 Lednické rybníky (Lednice fishpond system)

Date of Ramsar designation: 03.07.1992

Geographical location: 48° 43' - 48° 48' N 16° 42' - 16° 48' E

District: Břeclav

Area: ~~650~~⁵⁵³ ha

Wetland Type: fishpond system with reed belts, salt marsh

Altitude: 170 - 175 m a.s.l.

Brief description:

A system of shallow fishponds in the floodplain of the Dyje River. The banks of the fishponds are fringed by stands of reeds and Typha, sites with deeper water host a number of aquatic plant species. Specific plant communities occur in the periodically drained littoral. Bank vegetation surrounding the fishponds has been given park appearance and has been supplemented by plantations of exotic trees and shrubs. Numerous romantic castles are situated in the surroundings. The fishponds and their surroundings form a unique landscape segment. The area is an important breeding site, migration meeting point and wintering site for numerous waterfowl species.

Geographical and geological characteristics:

The site is a part of Valtická pahorkatina (Valtice highland), the subbasement is formed by Miocene sediments, partly by Pliocene gravels. The morphological geology affected by tectonic activity, as is documented by sulphuric springs in Sedlec. The Nesyt basin is formed by a large tectonic depression inclined from east to west. The fishpond system is situated on a right-hand tributary of the Dyje River. The climate is dry and warm, with mild winters. The average annual temperature is 9° C, the average rainfall is about 500 mm.

Ecological characteristics:

The site includes a mosaic of habitats associated with fishponds and ecotones between the fishponds and surrounding land. Changes in fishpond management have recently lead to heavy eutrophication of most fishponds. In consequence, the typical macrophytic vegetation has disappeared, littoral stands have been invaded by spontaneously established trees, especially in dried parts. Ruderal weeds have become frequent. Large parts of littoral are covered by a reed belt. A specific plant community is formed on a small salt marsh near Nesyt fishpond.

Property rights:

Presently unclear. The fishponds have been transferred to community property, but the nominal borders cross the real water bodies. Surrounding land is partly in private ownership, part is owned by the Agricultural University in Brno.

Conservation:

Five fishponds of the Lednice system were declared a nature reserve in 1953. This status cannot ensure satisfactory protection under the present conditions; the reserve includes only the water bodies without a surrounding buffer zone.

Conservation activities prepared:

The whole area should be included in the extended proposal for the Pálava Protected Landscape and Biosphere Reserve. A new regime of conservation is being prepared, following the new Nature Conservation Act. Elaboration of a management plan is envisaged.

Main human activities:

Intensive fish production, recreation, tourism. Further tourist services are being established in the area (hotels, golf course).

Main negative impacts:

Increasing eutrophication of the fishponds from agricultural run-off, through fishpond management and discharge of domestic sewage (from Valtice). The water table is kept high in order to maximize fish production. Activities of too high numbers of tourists, especially bathing in fishponds. Extensive areas of reed belt have been destroyed around Nesyt fishpond.

Hydrological value:

Accumulation of water, water purification, partly also irrigation.

Social and cultural value:

Fish production, high cultural and historical value. The area is highly attractive for tourists.

Fauna:

The invertebrates include communities typical for stagnant waters of the Pannonian Region. Many unique butterfly species are associated with the reed belts. The most important species include: *Chilo phragmitellus*, *Calamotropha paludella*, *Cataclysta lemnata*, *Nymphula nymphaeata*, *Paraponyx stratiotata*, *Schoenobius gigantellus*, *S. forticellus*, *Nascia cilialis*, *Sclerocona acutella*, *Mythymna straminea*, *Photedes morrisii*, *Calaena leucostigma*, *Archanara dissoluta*, *A. sparganii*, *A. algae*, *Arenostola phragmitidis*. The salt marsh at Nesyt fishpond is the only site of occurrence of *Bucculatrix maritima* and *Coleophora halophilella* in the Czech lands.

The following bird species breed on the site: *Nycticorax nycticorax* (about 250 pairs), *Ardea cinerea* (about 250 pairs), *Anser anser* (about 50 pairs), *Netta rufina* (20 - 40 pairs), *Panurus biarmicus* (30 - 50 pairs), *Circus aeruginosus* (7 - 9 pairs), *Luscinia svecica* (up to 5 pairs), irregularly: *Ardea purpurea* and *Botaurus stellaris*. The following numbers migrate

through the area regularly: *Anser anser* 5000 individuals, *Aythya ferina* 5000 individuals, *Anas clypeata* 2000 individuals, *Netta rufina* 300 individuals, *Chlidonias niger* 100 individuals, hundreds of waders (*Charadriiformes*). *Haliaeetus albicilla* winters in the area regularly (2 - 4, sometimes up to 10 individuals).

Flora:

The fishponds are surrounded by a continuous fringe of shrubs and willow trees, which extend to shallow parts of the fishponds at some places. Reed stands dominated by *Phragmites australis* and *Typha angustifolia* form a typical transition zone between the willow fringe and the open water. The littoral stands include also the following, less frequent, wetland species: *Schoenoplectus lacustris*, *Iris pseudacorus*, *Acorus calamus*, *Carex riparia*, etc. The vegetation includes also communities of tall sedges, floating aquatic macrophytes and communities of bare fishpond bottom. The salt marsh at Nesyt fishpond hosts unique halophytic vegetation.

Research activities:

Regular waterfowl counts, breeding bionomy, ringing of selected species. Basic botanical and zoological research. An ornithological field station near Prostřední fishpond and a field station of the Pálava Protected Landscape Administration are in use. The research is carried out mainly by the Regional Museum in Mikulov, the Pálava Protected Landscape Administration, Institute of Systematic and Ecological Biology of the Czechoslovak Academy of Sciences and the Agricultural University in Brno.

Education:

A nature trail around the fishponds has been established and restored recently. Guided excursions, lectures, publications. An observation site of migrating birds has been put into operation at Mlýnský fishpond. A detailed guide to the site and surroundings has been published.

Recreation:

The area, especially the surroundings of Lednice Castle and Park, is heavily visited by tourists. The number of foreign visitors has greatly increased recently.

Management:

District Council in Břeclav, Pálava Protected Landscape Administration, Regional Museum in Mikulov.

Jurisdiction: Regional: District Council in Břeclav
State: Ministry of the Environment of the Czech Republic

Bibliography:

Reasons for Ramsar designation:

The site meets criterion 1a (the salt marsh), and criteria 2a, 3b, 3c.