

Additional information

Ecosystem Services:

Fish-farming, fishing, reed harvesting

Appropriate and inappropriate grazing and harvesting of hay; Tourism, and related business, development of guest-house areas; Hunting, mainly for wild boar, red deer, pheasant, waterfowl; Forestry, unfortunately with extended plantation of hybrid poplar.

Scientific research is performed by different institutions. The Limnological Institute of the Academy of Science does fish monitoring work. Studies include research on vegetation, avifauna and fauna in general conducted by Balaton Upplands National Park.

For several years, vegetation and invertebrate monitoring work has been going on in the framework of National Biodiversity Monitoring System. The Water Framework Directive (60/2000/EC) monitoring also joined in 2005. Other studies include surveys and research on birds conducted by Local Group of Birdlife Hungary.

The area has played an important part in history. Many places at the site are of historic and archaeological value. Several hundreds of thousand tourists visit the region annually.

Physical features of the site:

Geology

The Fishponds and Marshlands south of Lake Balaton are located in Outer-Somogy, bordering Sió Valley, Balaton, Kapos Valley and the hills of Inner-Somogy. Balaton is the largest lake in Central Europe and the Fishponds and Marshlands south of Lake Balaton were a lagoon system of the lake in the past. According to earlier estimations, Lake Balaton is 18-22 thousand years old. In the place of Lake Balaton, several shallow, clear and cold water lakes emerged at the end of the Pleistocene era, about 15,000 years ago. They developed one after another, from the west to the east. As a result of the rising temperature and evolving wet climate, the water level rose and a unified water surface formed. After that the water level alternated, in response to changes in the climate. Vegetation gradually increased in the originally clear water. In the surrounding areas, until the Holocene era, first coniferous galleries, then deciduous forests were characteristic, depending on the prevailing climate. The Fishponds and Marshlands south of Lake Balaton were part of a bay system of the lake divided by barrier islands and forming lagoons (local name: “berek”). The water level of these lagoons fluctuated, depending on the water level of the lake itself.

During the second half of the 19th century, human influences started to dominate. The largest intervention was the building of the “Southern Railway” between the lake and the lagoons, which cut across the thousand-years-old natural connections.

Soil types

The most dispersed soil types in the Fishponds and Marshlands south of Lake Balaton are meadow soils, marsh soils and forest soils connected to moorland and swamp soils. Peat formations can also be seen in the area.

Climate

The climate of the Fishponds and Marshlands south of Lake Balaton is influenced by continental (eastern) effects. The climate is moderately warm, and is moderately wet. There is an average of 2000–2050 hours/year of sunlight, (summer 810–820 hours, winter 205 hours). The yearly average temperature is 10,0-10,4 °C. The summer maximum temperature is warm (32,3-33,2 °C), the winter maximum temperature is cold (-14,5 to -15,7). The average yearly rainfall is about 650 - 700 mm (during the vegetation period it is 400 - 430 mm). The average snow coverage is between 32-34 days. The wind usually blows from the north, north-west. The average wind speed is 3,5-3 m/s.

Local microclimatical effects cause high humidity and frequent fog formation over the marshlands

Hydrogeology

The area is part of the catchment area of Lake Balaton. The main streams, rivulets and canals of the area are: Cinege- patak, Endrédi-patak, Köröshegyi-séd, Büdös-gáti-víz, Terves-patak, Jamai-patak, Ordacsehi-árok, Zardavár Keleti- lecsapolóárok, Zardavár Nyugati-lecsapoló árok, Keleti-Bozót-csatorna, Pogányvölgyi-víz, Koroknai-vízfolyás, Ciframalmi-csatorna, Medvagya-patak, Nyugati-övcatorna, and Táská-külvízicsatorna. Permanent freshwater lakes and ponds include Töreki Fishponds, Töközi-berek, Balatonföldvári Fishpond, Öszödi-berek, Irmapuszta Fishponds, Lellei-berek, Ordacsehi-berek, Fonyód(Zardavár) Fishponds, Buzsák Fishponds, and Nagyberek (Fehér-víz).