



RAMSAR
SITE NUMBER

714

Lac de Grand-Lieu //



FRANCE

Area :
6 234 ha

Date of designation :
February 1st 1995

Coordinates :
47° 05' N 01° 40' W

Summary

Grand-Lieu lake is one of the biggest natural lakes of plain of France. In winter, when all its meadows, reedbeds and willow groves are flooded, its water surface reaches 6,000 ha. It is reduced to 2 500 ha in summer with an average depth of less than one meter. Extensive water lilies and water chestnuts develop there, without equivalent in Western Europe. These vast belts of vegetation allow a flora and a fauna of a great richness to develop. The breeding and the fishing are the main economic activities which remain on this site.

International importance

Located near other large wetlands such as the Loire estuary and the Breton marsh, the site plays a major role for several species of birds at any time of the year. Thus, 20,000 to 35,000 ducks are counted in mid-January. The lake is then of international importance for the shoveler and gadwall, the green-winged teal and the common pochard. All the species of herons breeding in France breed on the site, with major numbers for the great egret and the white spoonbill in particular.

General location

In the region of Pays-de-la-Loire, the lake of Grand-Lieu is located southwest of Nantes, in the department of Loire-Atlantique. It is connected to the Loire estuary at the hydraulic level via the Acheneau, a river that winds for nearly 25 km in the heart of the Pays de Retz.



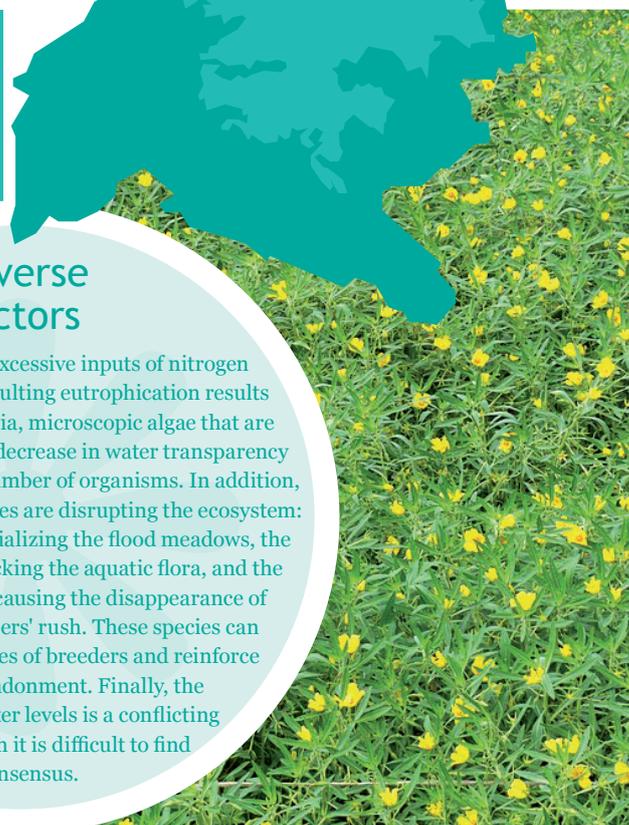
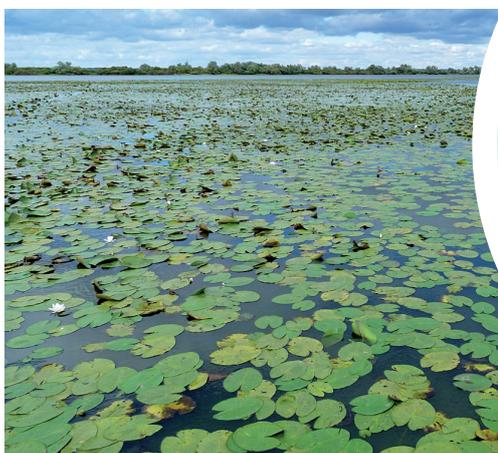
Lac de Grand-Lieu

Services provided by wetlands

In addition to its role as a reservoir of biodiversity, the Grand-Lieu lake constitutes a natural zone attenuating the effect of the floods and ensuring a certain purification of water. The lake is also the support of a secular artisanal fishing activity. The wet meadows are exploited by extensive cattle breeding and constitute an important fodder resource for the breeders, in particular during the driest years. The site is also widely used by waterfowl hunters. It is an attractive place for the general public, close to Nantes, even if its banks are not easily accessible.

Adverse factors

The site suffers from excessive inputs of nitrogen and phosphorus. The resulting eutrophication results in blooms of cyanobacteria, microscopic algae that are sometimes toxic, and in a decrease in water transparency that is harmful to a large number of organisms. In addition, several invasive exotic species are disrupting the ecosystem: the primrose willow is trivializing the flood meadows, the Louisiana crayfish is attacking the aquatic flora, and the coypu and muskrat are causing the disappearance of the cattail and the coopers' rush. These species can accentuate the difficulties of breeders and reinforce the threat of abandonment. Finally, the management of water levels is a conflicting subject for which it is difficult to find a consensus.



Four species representative of the site



EUROPEAN EEL
(*Anguilla anguilla*)

Eel is an emblematic fish of the site and has been exploited by fishermen for a very long time. The lake represents a privileged place for the growth of this highly endangered migratory species: close to the Loire estuary, rich in food and favorable habitats. Improvements in downstream structures favor the migration of young eels, but progress still needs to be made for the departure of adult eels, known as "silver eels".



EURASIAN SPOONBILL
(*Platalea leucorodia*)

With more than 300 breeding couples, the Grand-Lieu Lake is the main nesting place for this species in France. Taking advantage of the tranquility of the site, the Eurasian spoonbill installs its nest in the willows difficult to access, most often in the national nature reserve. It looks for its food in the periphery in the weakly flooded spaces, in particular the meadows in spring.



WHISKERED TERN
(*Chlidonias hybrida*)

A migratory species, the whiskered tern has the particularity to install its nest made of plants in precarious condition on floating leaves of water lilies or on the vegetation of long flooded marshes. Grand-Lieu is home to nearly 10% of the breeding pairs in Western Europe, making it a major site along with the Brière marshes.



WATER-STAR
(*Damasonium alisma*)

This annual plant is a protected species in France. It is not very rare within the flooded meadows of Grand-Lieu. In the south-western part of the site, its pioneer character makes it take advantage of the marsh paths maintenance which are regularly reloaded with sand by the stockbreeders to allow access to the peaty plots.



Biodiversity

The Grand-Lieu site is marked by a great diversity of plant communities all characterized by species adapted to more or less prolonged flooding.

Nearly 25 protected plant species have been identified ! The floating peaty formations with large sedges (or sedges) sometimes colonized by alders and reeds, called here the "levis", are original.

Several insects that are rare in France have been identified, but their inventory remains to be completed. The pike finds a particularly favorable breeding ground in the large, long flooded areas. A good number of water birds reach remarkable breeding numbers: greylag goose, scaup, great cormorant, great crested grebe, etc.



Management and conservation

The Ramsar site practically overlaps the Natura 2000 site of the lake of Grand-Lieu, which is managed by the Grand-Lieu watershed syndicate. Natura 2000 contracts and related agro-environmental measures contribute to the preservation and management of the site. Two nature reserves, national (managed by the Société nationale de protection de la nature, property of the State assigned to the Conservatoire du littoral) and regional (managed by the departmental federation of hunters) ensure a strong protection of the central zone of the lake and contribute to the development of knowledge. Numerous complementary initiatives of protection, management and valorization are carried by the communities: tourist office, house of the lake of Grand-Lieu, etc.



The Ramsar Convention

The Convention on Wetlands of International Importance, commonly known as the Ramsar Convention, is a global inter-governmental treaty that provides the frame-work for national action and international cooperation for the conservation and wise use of wetlands and their resources. It is the only global treaty to focus on one single ecosystem.