## Brenne //



Area : **140 000 ha** Date of designation : **April 8<sup>th</sup> 1991** Coordinates : **46° 43' N 01° 15' E** 

#### Summary

Sparsely populated, the Brenne site is characterized by a mosaic of natural environments (moors, wastelands, woods, dry grasslands, sandstone outcrops, etc.) dominated by a meadow-pond eco-complex. In 2016, there are about 3,000 ponds, or more than 7,000 ha of water, associated with various wetlands: reedbeds, sedges, willows, amphibious lawns, etc. Created in the Middle Ages by Man, the ponds are still exploited for fish. They are home to a remarkable wealth and diversity of birds, dragonflies, amphibians and reptiles, of which the European pond terrapin is one of the symbols.

# International importance

Brenne ecological wealth is linked to the whole of the natural environments of which the pond constitutes the highlight. There, we meet 25 of the 56 classes of vegetation described in metropolitan France in 1969. The Brenne shelters thus a remarkable set of plant communities of the wetlands: hydrophilic habitats, vegetation with helicoids, groupings of the exundated banks, etc. This diversity linked to the thousands of ponds and puddles allows the Brenne to be a site with high naturalistic stakes, in particular for aquatic and amphibious plants with the caldesia parnassifolia, the whiskered tern with the whip-poor-will, the wintering avifauna with the common pochard and the common crane, and reptiles with the European pond terrapin.

## General location

The Brenne is located in the south of the region Centre - Val de Loire, in the department of Indre, between Châteauroux and Poitiers. The Ramsar site is part of the Brenne Regional Nature Park.

La Brenne

#### Services provided by wetlands

The ponds embody the identity of the Brenne, they are the support of various activities. The main one is the breeding of freshwater fish: the Brenne is the second fish breeding region in France after the Dombes. Three hundred owners produce about 800 tons of fish per year: 60% of carp, 40% of roach, tench and pike. However, fish farmers are encountering increasing difficulties, especially due to cormorant predation, and the number of ponds fished is decreasing regularly. Extensively managed, fish farming is favorable to biodiversity. The other activities are extensive cattle breeding on more or less humid meadows,

#### Adverse factors

Cattle breeding is in difficulty, with the abandonment of land, whereas the maintenance of open environments is an important issue for biodiversity and the identity of the territory. Fish farming practices are evolving, with a search for increased yields on certain ponds and an abandonment of fish farming on others. Land prices are increasing due to hunting pressure, often resulting

in grasslands becoming overgrown. Finally, exotic species are invading the ponds: after the coypu and the muskrat, which degrade the vegetation, the primrose willow and, since 2007, the Louisiana red crayfish are colonizing many ponds; the latter is probably the most serious threat to the biodiversity of the

site.

Ramsar

#### Four species representative of the site



WHISKERED TERM (Chlidonias hybrida)

The whiskered tern is a species with a low population in France. Brenne ponds welcome nearly a quarter of the populations during the breeding season (about 1,000 couples). Nesting on aquatic vegetation, this species is a good indicator of the ecological quality of the ponds.



EUROPEAN POND TERRAPIN (Emys orbicularis)

Emblematic animal of the Brenne, the European pond terrapin finds here a place of predilection in the northern limit of its range. Several tens of thousands of turtles make the Brenne one of

the first French regions for this species listed in Annex II of the 'Habitats" directive.



PURPLE HERON (Ardea purpurea)

The purple heron arrives in Brenne in spring and leaves in August or September. The number of this heron on the site is estimated between 250 and 300 couples whose colonies frequent today mainly flooded willows at the edge of ponds.



CALDESIA PARNASSIFOLIA (Caldesia parnassifolia)

The caldesia parnassifolia is an aquatic plant present especially in the ponds whose functioning (annual emptying, assec) is appropriate to it, in particular for the dissemination of seeds and certain vegetative organs. The numbers of the caldesia are decreasing on an international scale and the Brenne remains a very important area for the species. It is today present on about thirty ponds.



## **Biodiversity**

The Brenne is particularly remarkable for :

• its birds, with 310 species including 186 protected species, the Brenne is an important site for breeding, migration and wintering;

• its amphibians, with 15 species, important populations of green frogs, natterjack toad and spotted pelodyte;

• its invertebrates, with 2,000 identified insect species, including 150 remarkable ones, and an exceptional population of dragonflies (62 species out of the 91 present in France);

• its flora, with more than 1 500 species, 275 of which are remarkable, such as the parnassia leaf caldésie, for which the Brenne is the most important French site with more than 80% of the stations, the sparse-leaved isoete, endemic to the Centre-West of France, and the spiny isoete, which is very rare.

#### Management and conservation

Some examples of actions concerning the site:

• implementation of the first aqua-environmental measures (MAE) allowing an adapted exploitation of the ponds in 2010-2015;

• creation of a brigade against invasive alien species by the PNR de la Brenne in 2009 with as main activity the trapping of the Louisiana red crayfish;

• restoration of aquatic vegetation: "operation water lily" with the transplantation of white water lilies from Grande Brenne ponds to ponds that no longer had any;

• animation of several generations of MAE since 1991 with as main stake, the maintenance of natural meadows;

• "Qualinat" labeling of a network of 29 nature leaders aware of the richness and fragility of the natural heritage of the Brenne;

• signing in 2017 of a territorial contract with the Loire-Bretagne Water Agency, the Region, the State (Deputy Director of the Regional Directorate for the Environment, Planning and Housing - DREAL) and a dozen local actors, which allows to strengthen the dynamics of territorial actions in favor of wetlands' good ecological status.



Translation form french : H.Zarrouki Ministery of ecological transition (MTE)

#### 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.