

Le Pinail //



RAMSAR SITE
NUMBER
2461



FRANCE

Area :
923 ha

Date of designation :
October 22nd 2021

Coordinates :
46 ° 42' N, 0 ° 31' E

Summary

Pinail is one of the largest former millstone quarries in the world. Today, it is a unique ecosystem made up of more than 7,500 ponds distributed in a mosaic of moors, meadows, peat bogs and hardwood and softwood forests. Paradoxically, it is the poverty of the soils that contributes to the richness of this large wetland, where more than 2,600 species of plants, animals and fungi find refuge, including many rare and threatened species.

International importance

Shaped by the hand of Man, the Pinail is one of the last landscapes of "Brandes du Poitou". The complexity of the "natural" habitats, marked by a network of several thousands of ponds, allows the expression of a teeming biodiversity, dependent on wetlands. The site is home to unique or relict populations of endangered species such as: the white-clawed crayfish, the fishing spider, the whitefaces, the southwestern water vole or the alcon blue.

General location

Pinail is located between Poitiers and Châtelleraut, in the Vienne department from Nouvelle-Aquitaine region. The site is associated with the Moulière forest, the largest forest in the department, on a vast plateau overlooking Vienne and Clain rivers.



Le Pinail



Services provided by wetlands

Whether permanent or temporary, the Pinail wetlands play key roles in the territory.

Located at the head of the watershed, the site acts as a water tower and a water treatment plant. Indeed, in addition to constituting reservoirs of biodiversity, these "natural" environments regulate the water cycle but also the carbon cycle: a means of mitigating and adapting to climate change.

Foresters, tourists, hunters, scientists, schoolchildren, etc. benefit directly from the many goods and services provided by the Pinail's ecosystems.

Adverse factors

If past forestation is the main cause of alteration of the site, it is climate change that constitutes the main threat, questioning the very future of the site. The increase in temperature, the intensification of droughts, the modification of rainfall patterns, the acidification of water, etc. are already disrupting wetlands biodiversity and functionality.



Four species representative of the site

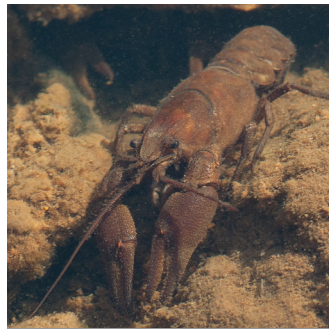


ALCON BLUE
(*Phengaris alcon alcon*)

This butterfly is emblematic of moors and wet meadows.

It has the particularity of living in symbiosis with two other species: the marsh gentian, its only host plant, and an ant of the genus *Myrmica* which raises caterpillar for one to two years.

It is almost threatened in France and critically endangered in the region, where the Pinail is the last bastion of the species.



WHITE-CLAWED CRAYFISH
(*Austropotamobius pallipes*)

This species, typical of fresh and well oxygenated waterways, is in danger of extinction at the global level.

Pinail is home to the only populations in the world living in small ponds.

Only 7 of the 6,000 ponds listed on the Pinail Reserve are deep enough and rich enough in calcium to host the species.



ELATINE ALSINASTRUM
(*Elatine alsinastrum*)

This very rare aquatic plant is currently recorded on about fifty stations in France.

On Pinail, it develops in only a few ponds, appearing in hundreds of feet and disappearing for many years.

It is almost threatened with extinction in the world, in Europe and in France; and critically endangered in the region.



HYGROCYPBE COCCINEOCRENATA
(*Hygrocybe coccineocrenata*)

This fungus develops throughout the summer in peat bogs, on a carpet of sphagnum mosses and carnivorous plants of the genus *Drosera*.

This rare species is currently known only on one of the 9 peat bogs listed on the Pinail Nature Reserve.

It is almost threatened with extinction at the global level.



Management and conservation

The preservation and development of the Pinail is based on several measures to protect the natural heritage: National Nature Reserve, Natura 2000 site and Managed Biological Reserve (in progress).

The complementary action of the local managers and actors, allows to associate the forestry management with the conservation management of the moors and ponds. These semi-natural environments are subject to regular mowing with export, extensive grazing or prescribed burning, while another part of the site is left to evolve freely.

There is a potential for restoration with the reopening of ponds under afforestation and a scientific observatory is deployed to measure the state of biodiversity and the impacts of climate change.



Biodiversity

Pinail ecological stakes are based on the poverty (oligotrophy) and the humidity of its soils. The succession of transitions between different environments (ecotones) characterizes the site. In the space of a few meters, the dry environments of hills top succeed aquatic environments of ponds heart.

Variability of these living conditions allows the expression of an exceptional biodiversity with more than 400 plant species and 750 species of fungi recorded.

Odonata and amphibians are the two emblematic fauna groups of the site (51 species of dragonflies and 12 species or amphibians hybrids recorded) beyond the interest of some birds (Dartford warbler), reptiles (European pond terrapin) or invertebrates (Raft spiders).



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.