

The lacustrine zone

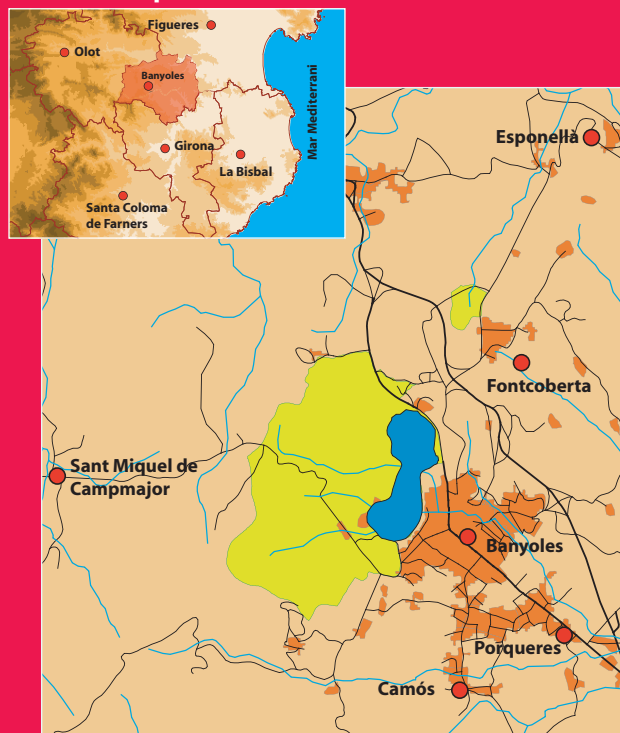


The lacustrine zone of Banyoles is a natural area of great ecological, scenic and cultural value. It is formed by the lake – the largest in Catalonia – and a set of ponds and outflows which together constitute the largest karstic system in the country.

The natural values of the lake and its surroundings have been recognized in several legal protection measures. In 1992 the area was included in the Plan for Areas of Natural Interest (PEIN) by the Catalan Government. This protection was reaffirmed at a European level, with the declaration, in 2003, of an Area of Community Interest within the Natura 2000 network. Meanwhile, it was recognized by the Ramsar Treaty, which categorised the area as of International Interest. This natural environment is home to 11 habitats of community interest, 15 species protected by the Habitats Directive and 28 named in said European law, in addition to others protected by national legislation.

Since days gone by humans have exploited this area, and have left several marks: The Serinyà caves, the Neolithic village of Draga, the Mas Castell archaeological site and the church of Santa Maria de Porqueres are good examples. Moreover, the area closest to the lake, which includes the fisheries and walks, was defined as an Asset of National Cultural Interest in 1997.

Situation map



Consorci de l'Estany

Plaça dels Estudis, 2
17820 **Banyoles (Girona)**
Tel/Fax. 972 57 64 95
ae consorci@consorcidelestany.org
www.estanyespainatural.net



l'estany natural values



The origin of the lake and ponds



The waters that shape the lacustrine zone of Banyoles come from Alta Garrotxa, from where they filter through limestone bedrock to an aquifer. The lake, ponds and several outflows make up the lowest point in this vast hydrogeological system. Waters flow underground from south to north until in Banyoles, due to a fault, they emerge and dissolve gypsum and limestone. This causes the land to sink, leading to the formation of marshes and different types of outflow.

Six basins and thirteen water outflows make up Banyoles lake. In the immediate surroundings there are several permanent lacustrine zones such as “Cendra”, “Montalt”, “Ca n’Ordís”, “Can Cisó” or “Nou” (this last one emerged in 1978). Also of importance are some temporary lakes, such as Platja d’Espolla, or the outflows on the Usall flatlands.

Travertine, Banyoles’ stone



Travertine is a special stone that grows naturally in the lake, and is therefore known as the “living rock”. It is built up due to carbonate minerals precipitating when microbiological activity causes chemical changes.

This stone, so typical of Banyoles, has been used since ancient times for construction (the old quarter, the Santa Maria de Porqueres church and irrigation ditches). You will see travertines in formation underwater, in the zone between the swimming club and Cap de Bou, as well as the Marimon fishery

Underwater



Permanent flooding permits the establishment of submerged plants, such as junks, *Myriophyllum* lawns and pondweeds, in addition to meadows of algae of the characeae family. The area is also home to freshwater mussels and some fish. The majority of the fish species are exotic, and have harmed native species such as the Mediterranean barbel, the chub and the freshwater blenny.

In temporary ponds like the Platja d’Espolla, where there are no fish, amphibians are abundant. Particularly noteworthy is the typical crustacean Triops, also known locally as the “tortugueta” (little tortoise).

The shore



Near the water, we find partially submerged bands of vegetation, formed by saw-sedge, reed and reedmace, which make up very interesting habitats. They protect the shore from erosion and represent very important areas for feeding and breeding. It is in these habitats that the rare bracken *Thelypteris thelypteroides* is found.

The most typical animals of these communities are birds such as the kingfisher, the little bittern, the moorhen, the common coot and several species of duck. There are also mammals, such as the small southern water vole, amphibians such as the stripeless treefrog and some reptiles such as freshwater tortoises. Among the latter, the European pond tortoise and the Spanish terrapin have suffered a decrease in their populations, due to destruction of the shore and the competition of the exotic red-eared slider.

The riverside forest



The real forest of the area around the lake of Banyoles and its ponds and ditches are the riverside woods. In well conserved areas you can find native trees such as the European alder, white willow, white poplar or narrowleaf ash. Humidity in the soil is maintained throughout the year, thanks to the abundance of ditches, streams and the oscillation of water tables. In areas where the flooding is more intense, grasslands of *Carex* form. Certain tree-dwelling birds can be observed in these woods, such as the lesser spotted woodpecker or, when summertime arrives, the golden oriole.

The Mediterranean woodland



Evergreen trees and oaks are the last main formations which can easily be found within the natural area of Banyoles lake. These woods are dominated by evergreen trees, and often pines, but in zones where the soil is deeper and more humid, downy oaks are also present. The most emblematic examples are in Can Morgat forest, in Estunes or in Espolla, among others. The undergrowth is diverse, with plants such as laurustinus, mock privet, lentisc and some creeper plants such as common smilax and ivy. It is in these woodlands that tits, green woodpeckers, foxes, squirrels and badgers find a suitable habitat.