

3170 *Mediterranean temporary ponds

Management of Natura 2000 habitats. Summary



Tesorero pond (Badajoz, Spain). Photo: J.L. Pérez-Bote..

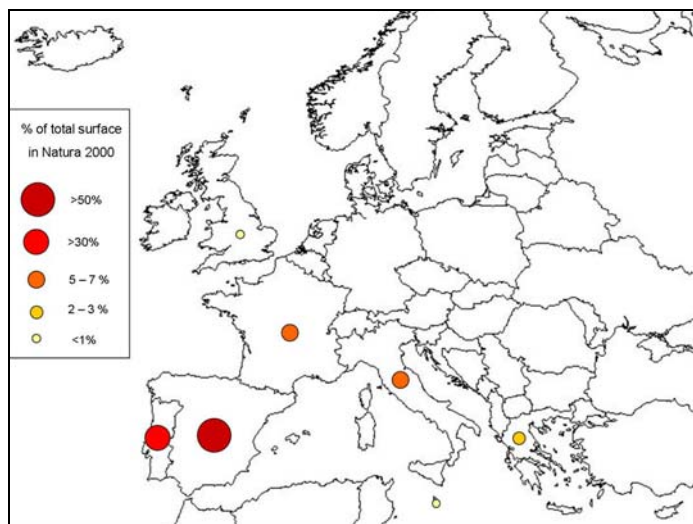
Mediterranean temporary ponds are very shallow ponds (a few centimetres deep), isolated from permanent water bodies, which undergo a periodic cycle of flooding and drought, and have a characteristic flora and fauna adapted to this alternation. This habitat is mainly distributed in southern EU countries especially in dry and sub-arid areas. They occur in substrate depressions that may have been created by various geomorphological processes. Some of these ponds may be of artificial origin, e.g. in abandoned quarries. Mediterranean temporary ponds show great variability depending on their geology, geomorphology, depth and source of water (ground or run-off).

The specific plant species present in temporary ponds depend to a large extent on the type of substrate beneath the pond, the depth of water and the duration of flooding. In general they are all conditioned by a short life cycle and are able to produce seeds in the short favourable season. Temporary ponds also host rare and threatened animal species, including some crustaceans such as *Triops* sp., which appear in ponds only when predation from fish or crabs is not present.

The present trend in Mediterranean temporary ponds is clearly regressive. The main problem for this habitat comes from its ephemeral nature and small size. Its limited visibility leads to a lack of recognition of its values and functions which causes them to be readily destroyed or transformed. Additionally, trends in the Mediterranean region due to climate change will probably alter the hydrological regimes of freshwater inland water bodies.

Usual threats come from an inadequate management of the basin due to human activities such as agriculture, tree planting, abandonment of traditional land use and an incompatible use of the temporary ponds, such as excessive grazing, over harvesting of vegetation or over extraction of water. Habitat management is mainly aimed at correcting the negative effects of these activities and at restoring the ecological functions of the ponds.

Conservation management of this habitat is usually related to adequate grazing management, control of agricultural activities in the surrounding catchment area and control of invasive alien species. Restoration activities are often necessary when the habitat is subject to severe degradation. However, temporary ponds show a high degree of variability and their management must be adapted to the specific conditions of each. Detailed site specific analysis of each pond should be carried out to determine the precise management measures required.



Percentage distribution of the total surface of Mediterranean temporary ponds in Natura 2000

The complete text of the document is available at: http://ec.europa.eu/environment/nature/natura2000/management/best_practice_en.htm

Management of Natura 2000 habitats is a project launched by the European Commission in January 2007 aimed at defining best practices for management of habitat types included in Annex I of the Habitat Directive (92/43/EEC) that need active recurring management. Twenty six habitat types that are representative of different bio-geographical regions have been considered.