


# Assessing the conservation status of Mediterranean temporary ponds using biodiversity: a new tool for practitioners

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**Abstract** The assessment of the habitat condition is the first step of conservation actions and several tools are available to assess wetlands. However, only a few tools are adapted to the priority habitat Mediterranean temporary ponds. Thus, our objectives were (i) to identify biological indicators associated with the different conservation status of Mediterranean temporary ponds and (ii) to create an efficient evaluation tool for non-experts using indicators of conservation

status. A total of 87 ponds were sampled in southwest Portugal to assess the presence of plants, large branchiopods, amphibians, threatened voles and bats. Ponds with favourable conservation status showed higher species richness of plants, large branchiopods and amphibians. We identified eighteen indicators for favourable ponds: 15 plants, one large branchiopod and two amphibian taxa. We propose a new tool to assess the conservation status of Mediterranean temporary ponds based on the presence of these indicators. This tool is an alternative to other common, but time-consuming, methods and can be readily used by trained practitioners. The replication and adaptation of this tool to other regions and habitats enables the collection of comparable data and the geographical scaling-up of the assessments.

A. Lumbreras and J. Tiago Marques have contributed equally to this work.

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