OC19 - Amphibians as indicators of favorable Mediterranean temporary ponds (SW Portugal)

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The coastal plain of southwest Portugal is classified under the European Natura 2000 Network as Site of Community Importance (SCI Costa Sudoeste), because it also hosts a large number of priority Mediterranean temporary ponds (TMP). In the last two-decades, modern industrialized agriculture and tourism are causing a steep decline of this European habitat (H3170*). TMP are very shallow temporary ponds (less than 0.5m deep) which fill in during Autumn and Winter and dry out in late spring. From January 2014 until May 2015, about 82 TMP of this SCI were assessed for their conservation status, based on strictly plant criteria (H3170*). This assessment revealed 21 TMP in favourable condition, 25 in inadequate and 36 in unfavourable condition. We also assessed amphibian richness for this TPM set. In this coastal plain 13 amphibian species may be found, but on average we found 3.38±2.32 species per pond, with a maximum of 8 species. The five most recorded species were *Pelobates cultripes* (68.3% of all ponds), *Pleurodeles waltl* (47.6%), *Hyla meridionalis* (45.1%), *Pelodytes punctatus** (40.2%) and *Triturus pygmaeus* (34.2%), while the less recorded was *Salamandra salamandra* (2.4%). An indicator species analysis was run to check if any amphibian species are associated with the TMP conservation status. For favourable TMP, *Triturus pygmaeus* (IV = 0.74) and *Pleurodeles waltl* (IV = 0.72) show a high indicator value (IV) with p-value <0.001 based on 2000 randomizations (Monte Carlo test), followed by *Pelobates cultripes* (IV = 0.61), *Pelodytes punctatus** (IV = 0.58) and *Lissotriton boscai* (IV = 0.50) with p-value <0.05. There were no significant species associations neither with inadequate nor with unfavourable TMP conservation status. These results are relevant to implement a quick TMP conservation assessment for technical staff.