

OC23 - Building a pond network for biodiversity in Lousada

Couto, A.P.^{a,b}, Alves, A.^a, Matos, M.^a, Ferreira, E.^a, Fonseca, C.^a, and Nunes, M.^b

^aDepartment of Biology and CESAM, University of Aveiro, Aveiro, Portugal

^bDepartment of Environment, Municipality of Lousada, Lousada, Portugal

Ponds are invaluable arks for biodiversity. Among many other important ecosystem services, they provide essential habitats for a broad range of fauna and flora. Until recent years, however, their role in ecosystems has been largely unrecognized in conservation and management strategies, resulting in ponds being increasingly threatened by anthropogenic activity. These pressures are evident in Lousada, a small yet densely populated Municipality in northwestern Portugal, where most of the territory is devoted to urban development, agriculture and forest monocultures. In order to ensure the conservation of existing aquatic habitats and mitigate present and past impacts an action plan has been put in motion with the following goals: i) mapping ponds and other aquatic habitats such as small dams, tanks and water mines; ii) building ponds in critical areas for biodiversity; iii) engaging the public in the management and conservation of aquatic habitats and their organisms. The final ambition of this plan is to have a healthy network of aquatic habitats supporting a stable, resilient and diverse metacommunity. These goals are within the scope of IMPRINT+, an Erasmus+ environmental project involving Lousada, the University of Aveiro, and several international partners. The fieldwork and data collected at the start of this project allowed the identification of critical areas and habitats for biodiversity in the municipality. Since almost all of the territory in Lousada is privately owned the success of the first two goals depends on the involvement of the local population, which in turn contributes towards the third goal. Landowners, local schools, and the general public participate in the construction of ponds, receiving theoretical and practical training on conservation and management of biodiversity. This knowledge is complemented with additional IMPRINT+ activities including other environmental offset actions and fauna and flora workshops. The first pond was already built on public owned deciduous woods, and nine more ponds, seven of which in private lands, are already planned. These numbers will likely increase until the end of 2017.