

GAMEFISH – a novel and integrated approach for the promotion and management of recreational fishing in Mediterranean reservoirs

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Reservoirs are the preferred locations for anglers in Mediterranean regions. However, management programs devoted to the promotion of Mediterranean reservoirs for recreational fisheries are scarce, but of urgent need when the main objective is to diminish constraints and increase interest and suitability of these water bodies for anglers. The project “GAMEFISH – Management of Mediterranean Reservoirs for the Promotion of Recreational Fishing Activities” aims to develop a management plan for small-to-medium Mediterranean reservoirs that will promote these water bodies for recreational fisheries.

The project focus on the development of a sustainable fisheries targeting highly valuable species for anglers, the prevention of massive mortality phenomena in periods of water scarcity, and the evaluation of the potential and risks related with the integration of non-indigenous species into fisheries management programs. Reservoir typologies in southern Portugal were defined according to their suitability for recreational fisheries, based on their macroscale geography, fish assemblage composition and existing features of interest for anglers. Main environmental and ecological indicators of fish mass-mortality were also evaluated during a one-year period in five southern reservoirs. Results reveal significant temporal and spatial variability in fish assemblage abundance and biomass within studied reservoirs, as well as of their abiotic characteristics, especially dissolved oxygen, which can contribute in the future for a timely prediction and prevention of fish mass mortality phenomena. GAMEFISH also aims to evaluate largemouth bass (*Micropterus salmoides* Lacépède, 1802) behavior, habitat preferences and nutritional lipid profile in several Mediterranean reservoirs, contributing to integrate the species in national fisheries management programs and enhance its socioeconomic and gastronomic value. Ultimately, the project will integrate all the information into a management plan to be applied by authorities and private managers of Mediterranean reservoirs to increase their suitability and interest for recreational fishing activities