Habitat Selection By Native and Stocked Trouts (*Salmo trutta* L.) in Northeast Streams, Portugal

Amílcar Teixeira[1], Rui M. V. Cortes[2], Daniel Oliveira[2]

[1] CIMO- Escola Superior Agrária do Instituto Politécnico de Bragança, Campus de Santa Apolónia, Apartado 1172, 5301-855 Bragança. e-mail: amilt@ipb.pt

[2] Universidade de Trás-os-Montes e Alto Douro, Departamento Florestal, Apartado 1013, 5001-801 Vila Real.

ABSTRACT

Underwater observations were made during the summer season in three successive years to assess the effect of supplemental stocking of brown trout (*Salmo trutta* L.) in two headwater streams of northeastern Portugal. Significant differences were found in microhabitat used. Focal point position, total depth and cover were the variables contributing to the discrimination between stocked and native trout. Preference curves executed for native and stocked trout of the same age (1^{+}), exhibited a distinct pattern in the capacity to explore the available microhabitat resources. In both streams, stocked trout tended to occupy deeper pools, while holding higher focal positions. All size classes of native trout show an overlap in microhabitat use, but smaller ones (< 10.0 cm), which showed a preference for shallow habitats with fast currents, typically riffle conditions. These results do not display obvious effects of competition on habitat exploitation between stocked and native trout but additional information related to feeding, reproduction and other biotic interactions is necessary to define adequate management strategies of salmonid streams.