PIT Tag: Mechanisms of density dependent regulation of YOY Brown trout (Salmo trutta) under different stocking densities

Type de projet	Recherche appliquée et Développement
Responsable projet	Alexandre RICHARD (PhD) and Franck CATTANEO (Prof)
Adresse Contact	Route de Presinge 150 1254 Jussy / GE Switzerland alexandre.richard@hesge.ch
Groupe	Ecologie et Ingénierie des Systèmes aquatiques / JF. RUBIN
Date	01.05.2011 au 31.12.2012
Participants hepia	Franck Cattanéo (Prof HES) Jane O'Rourke (Lab technician) Anne-Sophie Reymond (Assistant)
Partenaires	Federal office for the environment (OFEV) – Daniel HEFTI Department of Security and Environment of 'Canton de Vaud', Switzerland – Frédéric HOFMANN
Partenaires Financiers	Department of Security and Environment of 'Canton de Vaud', Switzerland

Résumé

Brown trout population are regulated by endogenous mechanisms, especially at ealy life stages. This project aims to assess the effect of the introduction of various densities of Brown trout stocked as summerlings on survival, migration and growth of young-of-the-year (wild-born and stocked). For this study, we used new HDX 12 mm PIT tags to mark both wild and stocked young-of-the year Brown trout in early summer. We worked on three different streams, and tested three stocking densities, calculated as a function of observed wild YOY density.
This in situ approach was combined with tests in hatchery in order to determine the minimum size at tagging.

Mots-clés: Brown trout, young-of-the-year, PIT Tag, stocking densities

Valorisation

- technical short note for the tagging of small 0+ Brown trout;
- population dynamics model;
- management tool for stocking practices.