Preliminary findings on the downstream movement of trout cod (Maccullochella macquariensis) within Seven Creek.

Author 1 Daniel Stoessel

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ABSTRACT: Seven Creeks supports the only self-maintaining population of the critically endangered trout cod Maccullochella macquariensis within Victoria. Previous research and monitoring suggests that as a result of the rivers steep cascading topography, the population is progressively moving downstream.

PROJECT AIM: To investigate as to what extent this movement is occurring, and under what conditions.

METHODS: The stretch of Sevens Creek between Galls Gap Road Bridge and 300m upstream of Gooram Falls was surveyed in April 2007. A total of 25 trout cod deemed to be of a suitable size had a microchip (i.e. Passive Integrated Transponder) injected under the skin. In order to monitor the movement of individuals into the degraded section a series of antennae were subsequently installed at the lower reaches of habitat improvement works (conducted by the Goulburn Broken Catchment Management Authority in 2002). When an individual with a PIT tag was within range of a magnetic field generated by the detection antennae’s the tag was energized and it transmitted a unique electronic code to the antennae.

PRELIMINARY RESULTS
1. trout cod utilise the site regularly;
2. one individual travelled a distance of approximately 2 km downstream (i.e. from where it was originally captured/tagged) but did not pass the monitoring site;
3. movement of trout cod at the site is both upstream and downstream;
4. activity of the species is greatest around midnight;
5. there has been no record of a tagged individual that has permanently moved downstream.

It must be noted however that long term monitoring of individuals of the species over different seasons and flow conditions will provide a more definitive answer as to the existence and timing of migration of the population.

APPLICATION TO MANAGEMENT / WORKS TO BE UNDERTAKEN
1. Continue monitoring of tagged individuals
2. re-survey the stretch of stream in which habitat restoration has previously taken place and compare it with data of the site previous to the works (i.e. prior to 2002).
3. tag additional individuals within the system thereby further adding to the monitoring component of the project.

PROJECT PHOTOGRAPHS

FURTHER INFORMATION:
Daniel Stoessel
Scientist – Freshwater Ecology
Arthur Rylah Institute for Environmental Research
Daniel.J.Stoessel@dse.vic.gov.au ph 0394508667 mob 0429900280

1 Author affiliation.
2 Co-author affiliation, address and contact details