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

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A project funded by the Goulburn Broken Catchment Management Authority

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:

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