Luke Carpenter-Bundhoo

BSc. (Honours)

Luke.carpenter-bundhoo@griffithuni.edu.au

https://www.researchgate.net/profile/Luke_Carpenter-Bundhoo

Summary

Movement allows an organism to find habitats most suitable for survival and growth, allows migration between different habitats used by different life-history stages, access to refugia from disturbances, gene flow and colonization or recolonization of unoccupied areas. For fish in rivers, variation in river flow and hydraulic conditions is thought to be a key determinant of the nature, timing and extent of movement. Almost 60% of rivers in across the globe are seriously altered by water infrastructure development and extraction, which means that most riverine fish are existing in altered flow regimes.

Riverine fishes world over are subject to natural river flows and controlled ‘environmental flows’ (in the form of environmental water allocations). Environmental flows are released in regulated rivers with the intention of benefiting native flora and fauna. However, the outcomes for biodiversity and the mechanisms that underpin changes due to these manipulations are poorly understood. Little is known of how environmental flows affect fish movements. My research aims to investigate how fish movement is affected by altered flow regimes, environmental flows and methods used to study fish movements in these systems.

Research Expertise

- Movement ecology
- Freshwater ecology
- Acoustic telemetry