

Tracking coral trout

Coral trout have managed to keep very few secrets from postdoctoral research fellow Christopher Bunt, following a telemetry study tracking their behaviour and movements.

Trout implanted with depth-sensitive transmitters have sent hundreds of megabytes of data back to Dr Bunt at the One Tree Island research station via an array of sonobuoys.

"We're now piecing together a three-dimensional picture of their daily movement patterns, social dynamics and homing behaviour," Dr Bunt said.

This is the first time spawning coral trout have been tracked using telemetry, yielding valuable information about spawning behaviour and their range of movement to and from spawning aggregation sites.

"Biotelemetry's strength is that it offers researchers insight into the biological

aspects of the day-to-day, and even second-to-second activities of organisms, while allowing the research subject to behave normally in its natural environment."

Due to their great popularity on restaurant plates here and overseas, coral trout are threatened by over-fishing.

They are highly valued in Australia but are even more popular in Japan, where they can fetch more than \$100 per kilo.

In the future results from this project may be applied to conservation programs designed to protect spawning areas of this economically and ecologically important fish.

"Programs aimed at protecting replenishment zones for coral trout on the Great Barrier Reef are more likely to succeed if we have a clearer picture of their reproductive behaviour, movement and habitat requirements," Dr Bunt said.