

# 超音波バイオテレメトリーを用いた魚類の行動追跡手法 —若狭湾および舞鶴湾におけるアカアマダイの研究例—\*1

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## 要約

Habitat information on aquatic animals can be acquired easily using underwater acoustic biotelemetry. The biotelemetry has been developed recently along with developments of micro-electronics. In this paper, an attempt to track red tilefish using ultrasonic coded transmitter and receiver system both in the Wakasa Bay and the Maizuru Bay was introduced. The Wakasa Bay is open to the Japan Sea and the Maizuru Bay is the typical semi-closed waters. Tracking in the Maizuru Bay was easier than in the Wakasa Bay, and some fish were passively tracked more than 100 days. The result indicated that the biotelemetry study in semi-closed water has a big advantage in order to study fish ecology. Some fish stayed relatively longer periods in the Maizuru Bay showed circadian rhythm. Successive tracking records can reveal the ecology of fish as well as their position. Behavior of hatchery-reared fish was different from that of wild fish. The underwater acoustic biotelemetry may be a tool to evaluate the fish quality for release.