

Uncovering the Fate of Tagged Reef Fish Through Marina Telemetry and Angler Participation

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Fish spawning aggregations are critical events for the reproductive success of many reef fish species, but these aggregations are often targeted by fishers due to their spatial and temporal predictability. To mitigate fishing pressure and protect multiple fish species during this vulnerable reproductive period, a seasonal closure was established at Western Dry Rocks, 10 miles SW of Key West, FL. To evaluate the effectiveness of this management decision, the Florida Fish and Wildlife Conservation's Fish and Wildlife Research Institute implemented a comprehensive monitoring strategy, with acoustic telemetry playing a key role in tracking fish movements. The fates of many acoustically tagged fish were unknown until the implementation of two complementary initiatives: 1) an angler participation program to increase voluntary reporting of harvested tagged fish, and 2) a marina detections project to identify the discard of tagged fish carcasses. These initiatives have provided valuable insight to the fate of tagged fish and demonstrated that involving stakeholders in collaborative research is valuable and provides information that would otherwise be absent. Our efforts demonstrate the value of using multiple data streams to better understand fish movement and anthropogenic interactions with tagged fish.