Brief Summary of FWRI-FDM Tag-Recapture Program and Brief Summary of FWRI-FIM Tag-Recapture Data

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Brief Summary of FWRI-FDM Tag-Recapture Program

The FWC Fish and Wildlife Research Institute's Fisheries Dependent Monitoring (FDM) tag-recapture program has been operating since 2009. Staff ride along on head-boat and charter fishing trips in order to measure and tag reef fish that are released as a consequence of harvest restrictions. The project has tagged over 74,000 reef fish in Florida's coastal waters; of which 737 were gray snapper (*Lutjanus qriseus*).

Twenty-eight gray snapper (3.7%) have been recaptured by anglers or subsequent FDM sampling trips. The recaptured fish spent between 3 and 343 days at large, with an average of 54 days at large. Nine of the 28 returns had associated GPS coordinates. Of those nine returns with GPS coordinates, eight either did not move or moved less than five miles, and one moved 9.5 miles from its original location.

Nineteen returns provided descriptions of the recapture location, and 17 of these fish were recaptured in the same general area or less than five miles away. One return moved less than ten miles and one was tagged near the Elbow in the Gulf of Mexico and recaptured in the Florida Middle Grounds, a distance of at least 30 miles.

Tagged Gray Snapper	Gray Snapper Recaptures	Min and Max Days At Large	Average Days At Large	Number of Recaps with Coord.	Number Stationary or Moved > 5 Miles	Number moved > 5 Miles
737	28	3-343 days	54	9	8	1

Table 1. Gray snapper tagged, days at large and movement of returns with associated coordinates.

Number of Recaps w/o Coord.	Number w/o Coord., Stationary or moved <5 miles	Number w/o Coord., moved <10 miles	Number w/o Coord., moved >10 miles
19	17	1	1

Table 2. Movement of returns without associated coordinates.

Brief Summary of FWRI-FIM Tag-Recapture Data

The FWC Fish and Wildlife Research Institute's Fisheries Independent Monitoring program has tagged reef fish species encountered during sampling projects from 2009 – 2013 and to a lesser extent through the present. Staff have measured and tagged reef fish captured in chevron traps or with hooked gear such as rod and reel, bandit rigs, or vertical longlines. During these projects, 865 gray snapper (*Lutjanus griseus*) have been tagged in Florida's estuaries and coastal waters. Many of these gray snapper were tagged in association with a discard mortality study conducted in Tampa Bay and associated nearshore waters (Flaherty-Walia et al. 2016).

Twenty gray snapper (2.3%) have been recaptured by anglers or subsequent scientific surveys; two individuals were recaptured twice. The recaptured fish spent between 1 and 721 days at large, with an average of 110 days at large. Seven of the 20 returns had associated GPS coordinates. Of those seven

returns with GPS coordinates, six either did not move or moved less than five miles, and one moved 8 miles from its original location.

Thirteen returns provided descriptions of the recapture location, and 11 of these fish were recaptured in the same general area or less than five miles away. Two fish moved greater than 5 miles.

Tagged Gray Snapper	Gray Snapper Recaptures	Min and Max Days At Large	Average Days At Large	Number of Recaps with Coord.	Number Stationary or Moved > 5 Miles	Number moved > 5 Miles
865	20	1-721 days	110	7	6	1

Table 1. Gray snapper tagged, days at large and movement of returns with associated coordinates.

Number of	Number w/o	Number w/o
Recaps w/o	Coord., Stationary	Coord., moved
Coord.	or moved <5 miles	>5 miles
13	11	2

Table 2. Movement of returns without associated coordinates.

Reference

Flaherty-Walia, K.E., B.L. Winner, A.J. Tyler-Jedlund, and J.P. Davis. 2016. Short-term discard mortality estimates for Gray Snapper within a west-central Florida estuary and nearshore Gulf of Mexico waters. North American Journal of Fisheries Management 36(2):329-340.