**SouthEast Fishery-Independent Survey (SEFIS)**

**Update - SAFMC Meeting December, 2010**

**Objectives of SEFIS in 2010:**

1. Increase spatial footprint and sample sizes of fishery-independent sampling in US South Atlantic waters.
2. Deploy video cameras on previously used chevron traps to address trap selectivity issues and develop robust indices of abundance for reef fish species.
3. Map hardbottom habitats using multibeam sonar to increase reef fish sampling universe and improve survey design.
4. Use ROVs to assess habitat and red snapper densities in deep waters.
5. Compare red snapper age distribution in shelf-break waters versus those in continental shelf waters.

**2010 Results of SEFIS:**

*Chevron trapping*

* 63 days at-sea (34 on *Nancy Foster*, 29 on *R/V* *Savannah*)
* 480 traps deployed
* 142 red snapper collected in addition to many other species; data entry occurring
* Significant enhancement of MARMAP sampling (days at-sea have been increased over previous years)

*Trap videos*

* 468 traps outfitted with video cameras (> 97% of all traps deployed)
* More than 700 hours of video collected; developing viewing protocols
* Videos will be used to index red snapper and many other species

*ROV work*

* 32 ROV dives completed on Nancy Foster
* More than 50 hours of video collected and is currently being analyzed

*Multibeam sonar habitat mapping*

* 37 new areas mapped between SC and central FL, totaling 377 km2
* Habitat maps used to identify new hardbottom sites to expand sampling universe (see Figure 1 for example of multibeam sonar map)

*Commercial longlining project*

* 4 of 8 latitudinal bands (most northerly) have been completed
* 67 red snapper collected, 65 of which were aged
* Ages ranged from 3 to 15 (mean = 6.9; see Figure 2)
* Lengths ranged from 46 to 93 cm (mean = 73 cm; see Figure 3)

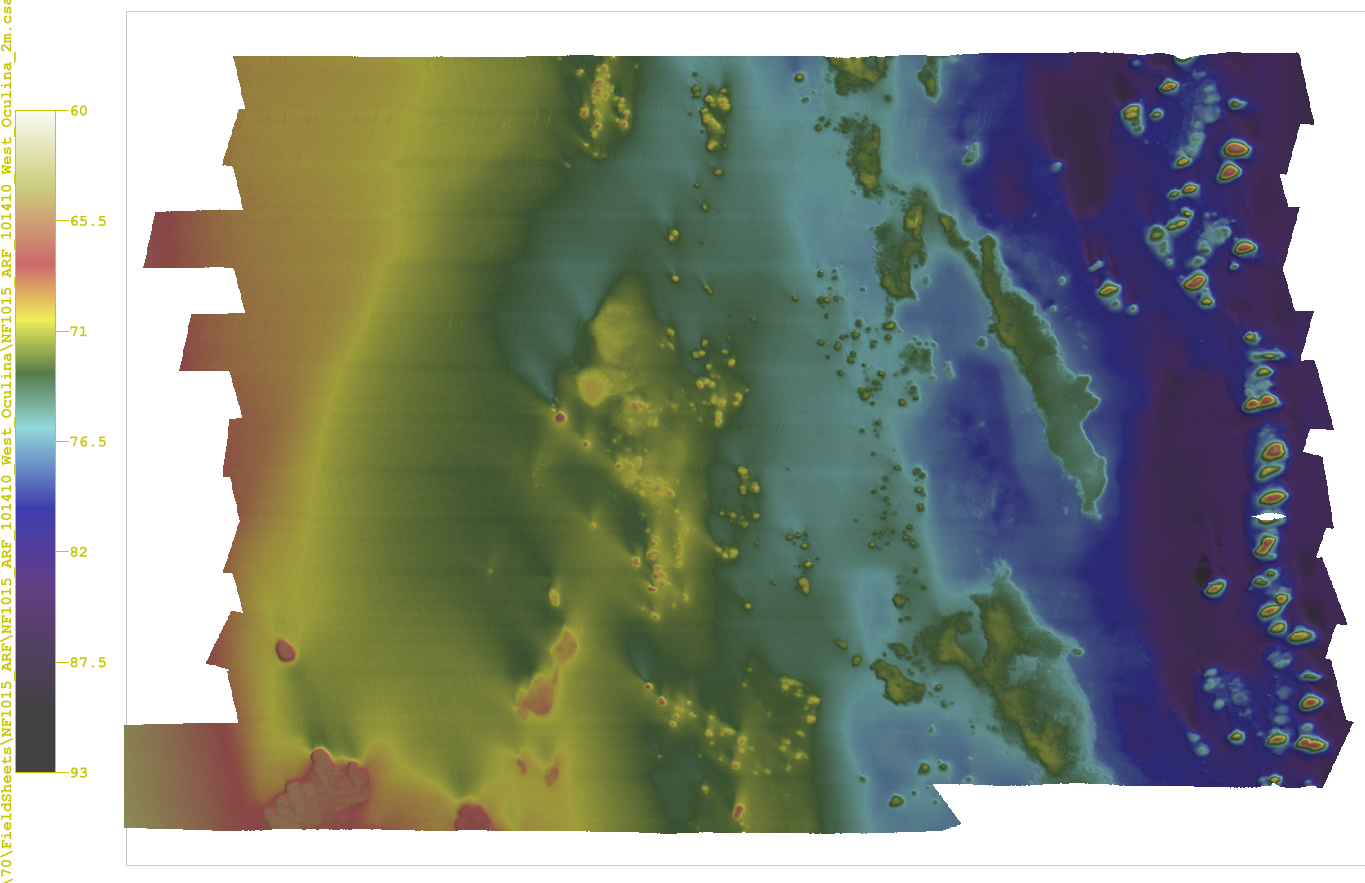


Figure 1. Example of a multibeam sonar habitat map from 25 miles east of Cape Canaveral, Florida. Colors correspond to bathymetric depths provided in legend on left. Mapped on 10/14/2010 from the NOAA ship *Nancy Foster*.

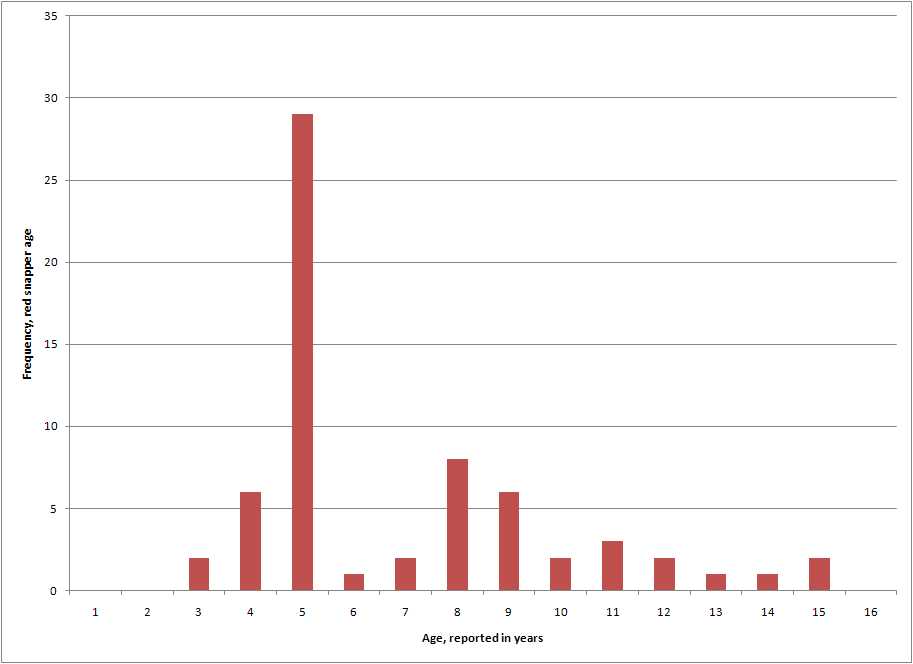


Figure 2. Age-frequency distribution of red snapper caught in the commercial longline project, 2010. Note that only 4 of 8 latitudinal bands have been fished thus far (the most northerly bands).

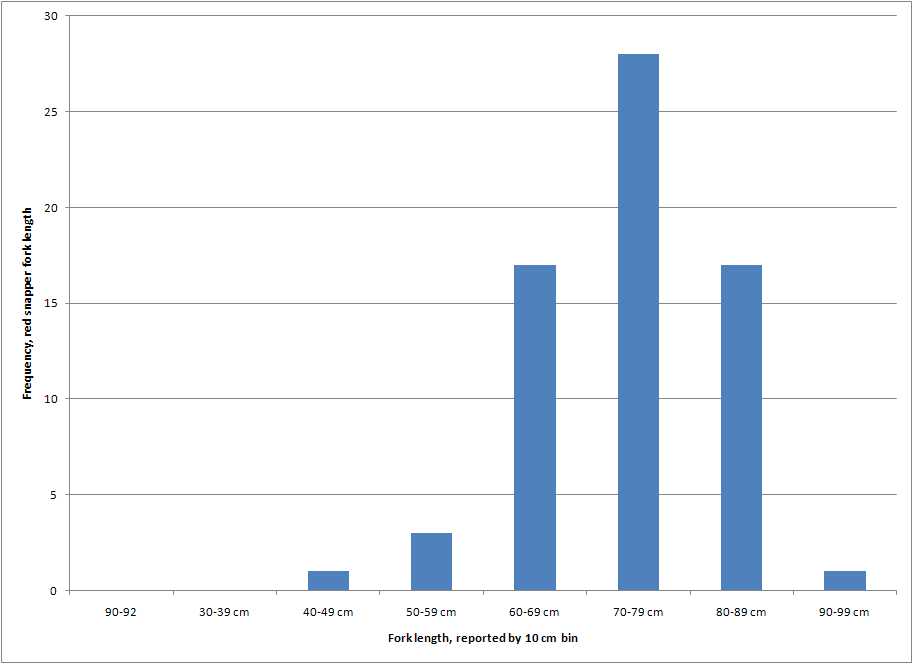


Figure 3. Length-frequency distribution of red snapper caught in the commercial longline project, 2010. Note that only 4 of 8 latitudinal bands have been fished thus far (the most northerly bands).