

Project Title: 2016 Monkfish RSA - Estimating Growth and Movement of Juvenile Monkfish

Award Number: NA16NMF4540108

Award Period: 05/01/2016 - 04/30/2018

Report Type: Project Progress Report

Reporting Period: 05/01/2018 - 10/31/2018

Tasks Accomplished:

- Fourteen fishermen continued to opportunistically tagged juvenile monkfish during this reporting period. Ports and gears include:
 - Massachusetts (Gloucester, New Bedford, Cape Cod) gillnet and a dragger
 - Rhode Island (Tiverton, Newport, Pt. Judith) gillnet / scallop
 - New York (Shinnecock, Montauk) gillnet
 - New Jersey (Point Pleasant, Barnegat Light) lobster, scallop, gillnet
- 1705 Juvenile monkfish have been tagged
 - 23 tagged monkfish were recaptured
 - Reporting rate (1.35%) was less than the reporting rates from the previous RSA adult monkfish tagging study (2.7% conventional tags, 7.6% data storage tags)
 - Eleven tags were reported from a dealer, seven were reported by fishermen (4 draggers and 3 gillnetters), and four were reported by scientific samplers (observers, port sampler, SMAST)
 - 16 recaptured fish had measurement data, seven of which were tail measurements that were converted to total length.
 - 13 were at large long enough (>82 days) to provide reliable growth estimates
 - Several tag recaptures documented the first evidence of fish moving from the Southern Management Area to the Northern Management Area (Figure 1).
 - Our previous RSA tagging of adult monkfish indicated that 13% of monkfish tagged in the Northern Area moved to the Southern Area, but none of the adult monkfish tagged in the southern areas were recaptured in the northern area.
- Growth observations from tagged juveniles were consistent with growth observations from the previous RSA tagging study of adult monkfish, lab observations, and growth between survey length modes (Figure 2).
 - Adult tagging showed weak negative relationship between growth and size
 - The smallest fish held in the laboratory was 15 cm and doubled in size over four months (to 31.5 cm), but over the next four months only grew 4 cm (20.5 cm of growth in eight months).
 - Survey data showed high growth for young-of-year monkfish (from mean size of smallest cohort)
- Outreach continued to solicit tag reporting (Figure 3).

Special Problems: Obtaining complete recapture information continues to be problematic. Many tags are being missed by fishermen at sea and are instead being reported through a New Bedford fish house. Some accurate fish measurements are possible, but recapture position and vessel information might be lost.



Figure 1. First observations of recaptured juvenile monkfish that crossed management boundary. White line delineates the Southern Management Area from the Northern Management Area.

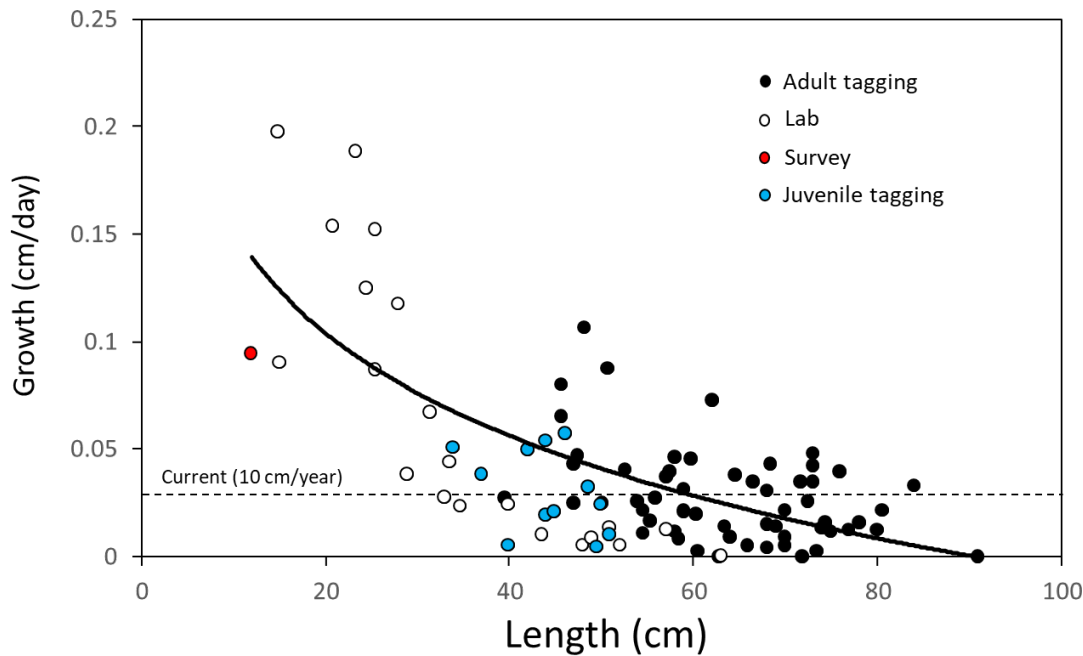


Figure 2. Average growth for tagged adult and juvenile monkfish as well as laboratory growth observations and the apparent growth of survey length modes.

JUVENILE MONKFISH TAGGED FOR GROWTH STUDY IF CAPTURED

MEASURE FISH AND RECORD POSITION

CALL 866-447-2111 for reward





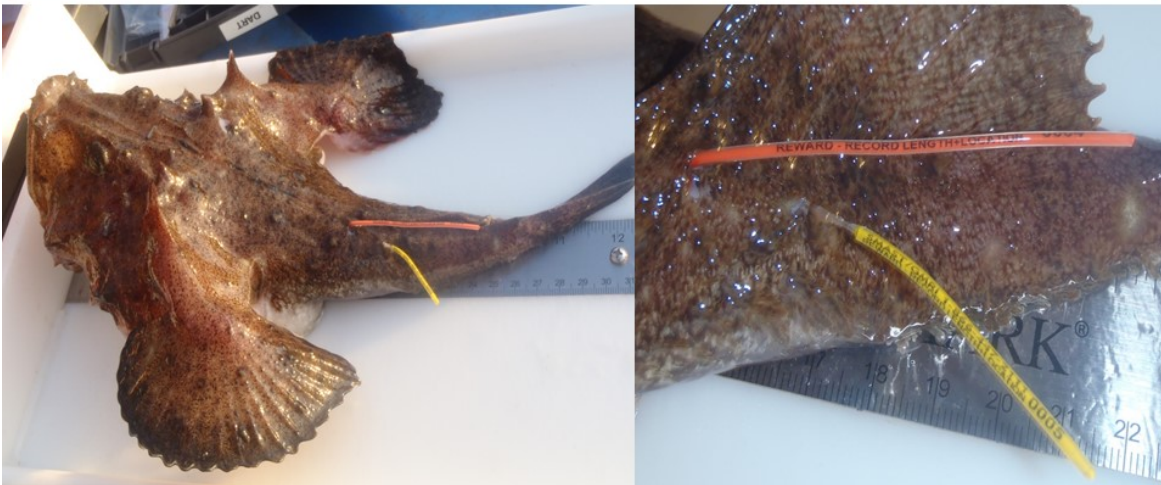


Figure 3. Flyers distributed at Boston Seafood Festival (August 13, 2017) and the Working Waterfront Festival in New Bedford, MA (September 23, 2017) and a scallop steering group meeting at SMAST (August 17, 2017).