Recreational Blue Crab Harvest Estimate Study Update July 8, 2016

Previous Update

September 2016

Presentation at the Ex Comm Conference Call by Matthew Ogburn



Summary: The goal of the study is to update the recreational exploitation rate of blue crabs in Maryland for use in the blue crab stock assessment. SERC utilized tagging methods with a reward system for harvesters to report the tagged crabs. They will combine seasonal and spatial data after the fishery closes in the fall to evaluate the full data set. Data analyses are expected to be final by the summer of 2016 or later.

Further Work: SERC is working on another project in which they are using the chemical signature of where female crabs molt to distinguish the locations of nursery areas for blue crabs. This will provide more insight into the female recreational exploitation rate estimate.

Current Update

July 2016

Status: The mark-recapture experiment and preliminary data analysis are completed. UMD Grad Student Bobby Semmler is currently writing his thesis which includes the results. Bobby is hoping to defend his thesis in the early fall and submit a manuscript for publication by the end of fall. The project officially ends at the end of January and the final report will be completed by April. SERC will likely be ready to present results at the December Fish GIT meeting if there is interest.

Release Locations of Tagged Crabs:

Little Choptank,

Honga River,

Fishing Bay,

Patuxent River,

Eastern Bay,

Wicomico River (Potomac tributary),

Rhode/West River,

South River,

Magothy River,

Tred Avon,

Miles River,

Severn River,

Nanticoke River,

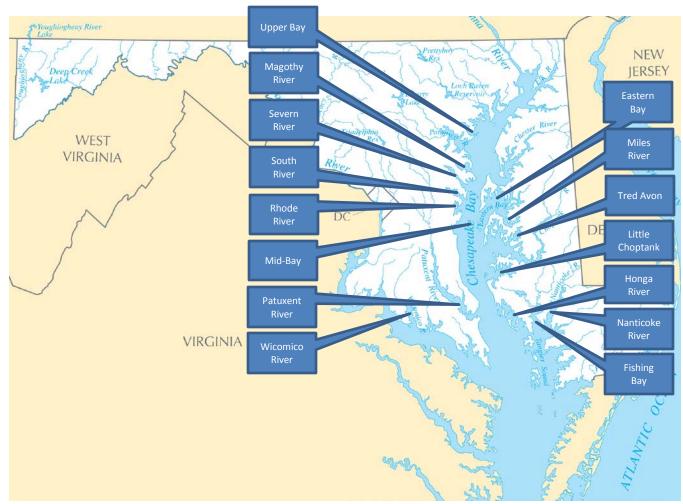
and two locations in the main bay.

The above locations represent 15 of the 25 harvest reporting areas in Maryland. For the 10 sites that did not release tags in, they were paired with adjacent areas with tagging data to develop relative rates of commercial and recreational harvest pressure for each of the 25 reporting areas. The researchers then used commercial catch data and the relative exploitation rates to estimate state-wide recreational catch. This part of the analysis is complete.

Reported Locations of Caught Tagged Crabs:

Males – Upper Bay to Virginia Females – Upper Bay to North Carolina





Approximate locations of tag releases