Invasive Catfish Task Force Meeting
Potomac River Fisheries Commission – Colonial Beach Virginia
October 30, 2013

Meeting Summary

Background

The Invasive Catfish Task Force met in-person at the Potomac River Fisheries Commission in Colonial Beach, VA. The Task Force is a workgroup under the Sustainable Fisheries GIT and is comprised of fisheries biologists, academics and resource managers from Maryland, Virginia, the Potomac, Delaware, and Pennsylvania. The Task Force was charged by the Fisheries GIT to coordinate activities and explore potential management measures to mitigate the negative impacts of invasive catfish in the Bay. The Task Force is currently drafting the *Chesapeake Bay Invasive Catfish Response Plan*.

Meeting Objectives

- Present new work around catfish in the Bay including pilot removal effort in Dragon Run and spatial modeling work.
- Provide updates on research that is in-progress and discuss challenges and initial results with the full Task Force.
- Review the management recommendations in the draft report and work to refine them to present to the Ex Comm and the full GIT at the December 2013 full Fisheries GIT meeting.

Summary and Outcomes

2013 Pilot Removals – Greg Garman and Bob Greenlee

- Pilot removals were attempted in early August 2013 in Dragon Run and were unsuccessful overall.
- Challenges: the conditions were not ideal for low-frequency electrofishing; there was no baseline abundance estimate and therefore no clear removal target
- Future considerations:
    - Factors that drive success of catfish spread (tide flow, salinity, etc)
    - Gear type and catchability
    - Development of removal target
    - Environmental surveillance (DNA markers)

Catfish Spatial Modeling – Mejs Hasan and Howard Townsend

- Update the current "bay as bathtub" model to be a spatially explicit model with environmental drivers and be able to explore the effects of proposed management strategies for blue catfish
- The distribution of blue catfish in the model is based on 1) salinity/temperature preferences of blue catfish and its prey and 2) the predator-prey interactions of species
- Future considerations:
    - Base data map that includes the upper, freshwater reaches of tributaries
    - Incorporate seasonal and interannual variability in salinity and water temperature

Fisheries Dependent Data Compilation

- Andrew Turner worked with MD, VA, and PRFC to obtain commercial landings data for blue catfish

- Greg Garman and his GIS team are working to build a map of catfish distribution based on these landings in addition to the existing distribution map based on scientifically-verified data
- The distribution maps will have to be updated each year as new data come in

Public Messaging

- In order to communicate the message about invasive catfish and their potential negative impacts, jurisdictions can include messaging on their websites to emphasize that live transport is illegal and that blue and flathead catfish are invasive species.
- Other outreach ideas include school curriculum, Sea Grant, and smart phone apps

Science Updates:

Matt Ogburn

- Studying multiple species of catfish (white, blue, channel, bullhead) in Maryland tributaries (Patuxent, Nanticoke, Sassafras, Upper Bay)
- Objectives: abundance, diet preference, individual movement on daily to seasonal time scales, tracking catfish spread
- Initial Findings: blue catfish eat more fish and bivalve species than other catfish species
- Trying the use of a publically accessible smart phone app to track catfish encounters

Mary Fabrizio and Alicia Norris

- Objective: estimate population size and survival rate of blue catfish in the James River
- Just finished Year 2 of the 3-year study
- Year 1 recapture rate is ~6% and Year 2 recapture rate is lower at ~2-3%
- Challenges: waterman accidentally removing tagged fish for harvest

Greg Garman

- Final report for predation study was just released
- Study on James, Rappahannock, and small part of MD
- Catfish were collected in very high salinities (up to 17 ppt)
- Found that <20% of blue catfish diets were alosines

Branson Williams and Mary Groves

- Diet studies are shifting to larger fish
- Diet studies will move next year to the Patuxent
- Tagging study continues on the Potomac (tag ~700 fish per year)
    - Fish move great distances in short time periods
- Potentially do small removal studies next spring (considering Patuxent or Potomac)

Bob Greenlee

- Objectives: Seasonal and spatial diet characterization
- 3 year project in James, Rappahannock, and York

Jurisdictional Updates

PRFC

- Some commercial catch of blue catfish on the Potomac exists
- Do market options exist?

Pennsylvania

- Age and distribution studies on the Susquehanna for channel and flathead catfish
    - Using both electrofishing and hoop nets depending on the area
- Seen a 50 mile range extension of flatheads
- Consumption advisories have recently changed to 2 meals/week for large flatheads and 1 meal/week for small flatheads

Delaware

- Strict no consumption still in place for most of the state
- Potential ID of a blue catfish off the Delaware River

Virginia

- VDGIF is working on their invasive species campaign which will highlight the negative impacts of invasive species to help the public understand the why invasive species are a problem in the Bay and tributaries

Maryland

- Reworked the invasive species page for the 2014 Fishing Guide and will include the invasive catfish language worked on by the Task Force
- Added an invasive species component to the 2013/14 Maryland Fishing Challenge to highlight concerns about invasive species and creates a separate award category
- MD Seafood Marketing Division has been successful at promoting the harvest of almost 400,000 pounds of catfish for the restaurant trade
- A blue catfish was recently caught on the Pocomoke

<u>Management Recommendations</u>

- The group discussed each of the draft recommendations and suggested edits
- Significant edits:
    - Ensure that the recommendation for removals includes actions to determine the feasibility of removals in different areas with different physical conditions and catfish population establishment
    - Re-organize the fishery and market recommendation to more specifically explain the type of fishery (long-term vs. short-term) and reflect that the Task Force recognizes the potential for a fishery and that the creation of the fishery is not under the Task Force's authority
    - Ensure that the current research and future research is better integrated into the recommendations to show how the results helps inform management
- All comments were recorded in the current draft and will be incorporated

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Actions and Next Steps

- Bruce and Emilie will incorporate changes to the recommendation language and organization and present to the Task Force for their input.
- These revised recommendations will be presented at the December full Fisheries GIT meeting.
- Task Force members will update the science portion of the report with relevant updates on their research progress and results and the management questions this research addresses.
- Task Force members will being developing a protocol for pilot removals in the Patuxent in MD and a VA tributary.

Meeting Attendance

Nancy Butowski (MD DNR)
Ellen Cosby (PRFC)
Mary Fabrizio (VIMS)
Matt Fisher (DE Division of fish & Wildlife)
Emilie Franke (CRC)
Greg Garman (VCU)
Bob Greenlee (VDGIF)
Joe Grist (VMRC)
Mejs Hasan (NOAA)
Alicia Norris (VIMS)
Matt Ogburn (SERC)
Geoff Smith (teleconference) (PA FBC)

Howard Townsend (NOAA)
Andrew Turner (NOAA)
Bruce Vogt (NOAA)
Branson Williams (MD DNR)