

Sustainable Fisheries GIT Executive Committee Meeting Agenda

November 25, 2019 from 1:00pm – 2:00pm

Attendees

Sean Corson	Bruce Vogt	Mandy Bromilow	Carter Watterson
Morgan Corey	Marty Gary	Dave Secor	Mike Bednarski
Lynn Fegley	Matt Ogburn		

Informational

- Naval telemetry array status update and applications of existing data
 - Carter Watterson shared the current status of DOD-owned Naval telemetry system and changes planned for the Lower Chesapeake telemetry array in 2020
 - Background:
 - Established the array in 2012, starting at 80 receivers now grown to 100+
 - Receivers were placed around areas of Naval activity to determine when Atlantic sturgeon were present, in which rivers, and presence overlap with activities
 - In December 2015, BOEM asked to expand into Atlantic to cover wind energy areas for impact assessments before turbine placement
 - Most receivers are set to come out in January 2020, with the exception of 15 receivers around Naval center in Norfolk
 - Funding is available to keep those 15 in place year round and add 15 additional receivers
 - No other funding sources have yet been put in place to maintain a larger array
 - For the internal array and mouth of Bay, an estimated 6 million detections of animals carrying receivers are recorded, representing 3000 individual animals from 36 different species
 - For the offshore array, between December 2015 to 2018, 600,000 detections of 2000 individual animals from 29 different species are recorded
 - Also tagged harbor seals and sea turtles, minimizing impacts to vulnerable species once we know where they occur
 - Data used to anticipate timing of animal movements by multiple research projects up and down Atlantic coast
 - Discussion of Research Uses:
 - Data requests were not handled by MATOS until recently

- Rather, previous requests were handled directly through Carter
 - Shared data to researchers for tagged fish picked up by receivers
- Dave Secor: we have emerging capabilities to estimate mortality rates from biotelemetry data for sturgeon stock assessment
 - Estimating mortality requires consistent rates of detection from the array
 - Receivers need to remain in the water continuously for long-term to provide meaningful data
 - Opportunity to estimate mortality rates for striped bass too
- Matt Ogburn: as an example of use for other species, studying long term changes in phenology with earlier spring warming expected to increase temperatures, triggering movements of species in and out of the Bay
 - Receivers at Bay mouth provide a look at connections of Bay and coastal habitats for many species
 - Interest in applying to river herring, hickory shad, American shad spawning in the Bay
 - For summer flounder, black sea bass, not much telemetry work has been done before
 - Chesapeake Bay is a critical place on East coast for understanding habitat use and inshore-offshore movements
- More related to Mid-Atlantic Telemetry Observation System (MATOS):
 - [MATOS projects list](#)
 - SERC is taking over MATOS leadership and ACT network in 2020, the data sharing platform for telemetry researchers on Atlantic
 - Planning for future of Mid-Atlantic telemetry array
 - Discussions will focus on connectivity between habitats
 - Huge loss not to have an array at mouth of Bay for both managers and broader Atlantic community
 - Example: dusky sharks movement to overwintering
 - MATOS is making progress moving from website to a tool used extensively by research community with upgrades to bring into latest database structure developed by Ocean Tracking Network in Canada, connecting the entire Atlantic coast
 - Now we are getting to the point of full capability, and expect to see increased use of MATOS in the future
 - There is also opportunity to link receiver arrays on CBIBS to mouth of Chesapeake array
 - Exciting to see MATOS fully realized

- Perspectives from Management Community:
 - ASMFC used data for recent Atlantic sturgeon stock assessment
 - Previously, Bob Beal wrote a letter of support to NCBO
 - MD DNR requested striped bass movement data to better manage fishery
 - Now working on Bay-specific reference points for striped bass, a significant management need where the array data are helpful
 - Incredible resource for managers at DNR
 - Data particularly for sturgeon and cownose rays were critical for Maryland DNR
 - Now working on cownose ray management plan that requires biological information like that provided by array
 - Loss of array considered a significant loss to DNR
 - PRFC has heard report outs from Dave Secor and has continuing interest in the information shared
 - PRFC also values the array for striped bass, sturgeon, and cownose rays
 - In addition, the array informs understanding of cobia changes in distribution over time
 - Loss of technology could be impactful
 - VMRC confirmed also supportive of maintaining the array, relies on VIMS
- Next Steps Discussion:
 - Hearing support for the array and interest in finding ways to mitigate loss
 - What can be done in response? And at what scale? Funding?
 - Last year before BOEM provided funding for 2019, we asked about minimum array and what would be required maintain at a smaller scale
 - Some estimates were done with Dave and Matt, Carter
 - Minimal network around \$100K - \$125K each year to maintain the gate at mouth of Bay
 - A gate across the Bay mouth (11-12 miles) requires 20 - 25 receivers, for tracking everything moving in and out
 - Suggest advocating for sampling approach, not detecting all the time but providing consistent detections useful to research
 - For example, to track alosine fish a backbone approach is needed
 - Emphasis on the need for collaboration, current arrays have been valuable but not set up in the best way to answer research questions
 - Design array to address the most important questions for managers and researchers in the region
 - Data sharing needs incentives to report on where receivers are placed

- Before, trying to get funding through Section 6, but there is no permanence to competitive funding source
 - Are these issues time bound for management? Or would we anticipate checking every year if possible?
 - We need to demonstrate and clearly articulate a consistent need for the array, whether for Bay specific stock assessments or mitigation for offshore wind
 - There may be opportunity within NOAA to seek support
 - **Actions:**
 - Bruce will work with Carter and researchers (including Dave Secor and Matt Ogburn) to gather estimates of cost over a specific time period, document the management needs, and proposed scale of a future array
 - Ex Comm members will provide feedback on management need
 - Begin voicing as a Fisheries GIT science priority to Bay Program
 - Could also involve multiple groups for cost sharing
 - Consider frequency of checking receivers, tradeoffs in cost
- January GIT meeting agenda preview
- The Winter Fisheries GIT meeting is scheduled for **January 7-8, 2020** at the **Virginia Institute of Marine Science** in Gloucester Point, VA
 - Note meeting in January this year, hosted at new VIMS facility
 - Agenda highlights:
 - Day 1 – oyster restoration updates, research occurring in support of restoration including direct setting oyster larvae experiments, ORES researchers funded to quantify ecosystem services, denitrification, and fish utilization of restored reefs
 - Day 2 – focus on climate change issues and impacts to oysters from high precipitation/ low salinity, ocean acidification, middle peninsula VA priority watershed and interests for nearshore oyster restoration
 - Logistics:
 - Hotel block in Williamsburg VA and Day 1 dinner in Yorktown at Riverwalk – details will be sent first week of December
- Member Updates
- DNR: All striped bass all the time
 - PRFC: oysters triploid spat on shell, catching more than expected! Follow up MD
 - Include as Member Updates or report out for January GIT meeting