

Atlantic Sturgeon Technical Committee Meeting Summary

Alexandria, Virginia
September 27 – 28, 2005

Attendees

Committee Members:

Russ Allen (NJDMF)
Dr. Jed Brown (USFWS-DERC)
Dr. Mark Collins (SCDNR)
Kristen Ferry (MADNR)
Joel Fleming (GADNR)
Jerre Mohler (USFWS-LFTC)
Vincent Mudrak (USFWS-WSFTC)
Greg Murphy (DEFW)
Dr. Jack Music (VIMS)
Fritz Rohde (NCDMF)
Bob Sadzinski (MDDNR)
Tom Savoy (CTDMF)
Dr. Dave Secor (UMD)
Dr. Ted Smith (SCDNR)
Brad Spear (ASMFC)
Tom Squiers (MEDMF)

Other Participants:

Sheila Eyler (USFWS-MDFRO)
Dr. Dewayne Fox (DESU)
James Henne (USFWS-Bears Bluff NFH)
Dr. Wilson Laney (USFWS-SAFCO)
Steve Minkkinen (USFWS-MDFRO)
Kelly Place (VA Waterman)
Brian Richardson (MDDNR)
Albert Spells (USFWS-VAFRO)
Chuck Spence (MDDNR)
Dick St. Pierre (USFWS-SRC)

Nomination/Election of Vice Chair

Dave Secor succeeded Andy Kahnle as Chair of the committee at this meeting. Mark Collins was nominated as Vice Chair. After no other nominations, the present committee members had no objection to Mark starting his two-year term as Vice Chair. Dave Secor recognized new TC members and requested that the new TC membership be listed on the ASMFC website.

Update on Activities since Last Meeting

At the last technical committee (TC) meeting/workshop (November 2003) the group recommended that the 1996 Stocking Guidelines be updated. Since then the Culture and Stocking Committee met and revised the document under the guidance of Chair, Dick St. Pierre. The document was reviewed by TC members and outstanding issues were addressed later in this meeting (see below "Stocking Guidelines Document"). A final draft will be circulated to the TC. Also, the editors of the November '03 workshop proceedings will finish the document and distribute accordingly.

A separate Atlantic sturgeon workshop was held in November 2004 to discuss issues and strategies for sturgeon recovery and involved several TC members. Workshop participants focused on bycatch, habitat, and restoration stocking. A draft set of recommendations was produced for each topic. The recommendations under bycatch or incidental mortality were

discussed on the second day of this meeting (see below “Bycatch”). Steve Minkkinen will work with Brad Spear to complete products from the 2004 workshop.

Maryland DNR is taking the lead on a sturgeon nutritional and breeding study. It imported sturgeon fry with the intent of rearing them and developing a protocol. More detailed information on this project was presented later in this meeting (see below “Research Updates”).

North Carolina received a request from a private company to begin a commercial aquaculture operation. As a result Addendum II to the Atlantic Sturgeon FMP was developed and approved by the Board. It allows importation of sturgeon fry from Canada and the development of a commercial aquaculture operation in North Carolina for the company. Construction of the facility is underway and production of sturgeon is expected within a year.

The latest word from NMFS is the status review of Atlantic sturgeon has been put on hold for the time being. Other species (American eel and Eastern oyster) that have been formally petitioned for listing have higher priority for reviews. NMFS NE Regional Office has the lead on the status review, but there has been no word on assembling a review team. Brad will follow up with NMFS for another update and to encourage participation of members of the ASMFC’s technical committee.

Stocking Guidelines Document

Dick St. Pierre gave the group an overview of the document and provided a list of outstanding issues. The group discussed the issues and Dick felt he had enough input and agreement from the group to modify the draft guidelines. Once he is finished with the last revisions, the final document will be distributed to the TC and Board for its final approval. The next Board meeting is tentatively scheduled for early 2006.

Diadromous Species Habitat Document

Jennifer Lowery, author of the Atlantic sturgeon chapter, and Karen Greene, editor of the document, had several questions for the TC regarding the document. The TC provided answers that Wilson Laney will forward to Jennifer and Karen. The TC also discussed how to define age class terms: young of the year, yearling, juvenile, sub-adult. There was no formal conclusion but it was agreed the terms used in a particular document should be clearly defined.

Research Updates

Jerre Mohler spoke about the stocking and ultrasonic tagging study being conducted in the Hudson River. The study is still underway but they have been getting information on sturgeon (wild v. hatchery-raised) movement and habitat preferences. Jerre mentioned that UFWWS has another project with NY for next summer to capture broodstock as they enter the Hudson and track them as they move upriver.

Other current research projects include two from SC. A diet study is showing very different results than the study conducted by Tom Savoy in CT. SC is also archiving fin spines for aging

and genetic study. Jack Musick noted that he and others have tracked juveniles in VA waters. He sent around copies of a recent report that provided information on essential spawning and nursery habitat. Joel Fleming reported that GA is engaged in a cooperative effort with Doug Peterson (Univ. GA) in the Altamaha River. They have estimated abundances ranging up to 500-600 adult fish in the system during the spawning period.

Steve Minkinen presented an update on restoration and monitoring efforts in MD. MD DNR is culturing sturgeon in captivity largely based on work from USFWS in Lamar, PA. Feeding trials have been conducted on wild fish while larval nutrition studies have been done with imported Canadian fish. Steve noted MD still maintains a reward program to collect and tag fish. He proposed a standardized approach for tagging Atlantics and that it is coordinated through ASMFC.

PIT Tagging Study

Vince Mudrak and James Henne presented background and results of a study of PIT tag systems performance and compatibility. A variety of tags and tag readers are used along the Atlantic coast for various species and are commonly applied in Atlantic sturgeon studies. Many tags are incompatible with readers and some readers are much less effective than others. A general conclusion from the study is that readers (tag detectors) should be compatible with multiple tag types. For future tagging efforts, ISO-formatted tags were recommended. Several meeting participants were tasked with drafting a proposal that provides guidance and some degree of standardization on the use of PIT tags and the implementation of a single coast-wide database that builds on the current one maintained by USFWS. The TC believed that the USFWS could have a central role in providing tags, readers, and maintaining a database.

The group discussed a preliminary draft of the PIT tag proposal and suggested changes. Once a final document is ready it will be forwarded to the Sturgeon Board for their adoption. An important step that can be taken prior to adoption is to begin collecting information on all the sturgeon tagging programs currently taking place. Brad Spear will poll meeting participants as a start to compile this information into a centralized database at USFWS MRFO. He will also send out the standardized tagging proposal for review by meeting participants.

Bycatch

Brad and Tom Meyer (NMFS) followed up on a recommendation from the November 2004 workshop to improve sturgeon identification training and incorporate tissue sampling on NMFS observer programs out of the northeast. The program coordinators were willing to do so given proper guidance. They were not willing to PIT tag the sturgeon they encounter. Participants at the TC meeting had mixed feelings as to whether it was more important to scan and PIT tag the animals that were encountered or to take tissue samples for the depository in SC. Brad will continue to follow up with the NMFS observer program folks.

The group discussed the Stein et al. (2004) paper that investigated on sturgeon bycatch data from federal observer data and reported high bycatch rates and mortality of Atlantic sturgeon in anchor gill nets in coastal mid-Atlantic waters. While this study is the most recent

comprehensive look at sturgeon bycatch in the northeast and mid-Atlantic, the TC believed that the information it contains may be dated and the analysis needed to be revisited. Data for the study was through 2000 and meeting participants agreed that many changes have occurred since then. For example, dogfish fisheries are now closed and monkfish fisheries may be having less of an impact on sturgeon populations because of recent changes in gear set practices. Updating the Stein et al. study with recent data and information on fishery interactions is important to evaluate likely recovery rates during the current moratorium.

Kelly Place presented on behalf of Chris Hager (VIMS) results from a study they are conducting on sturgeon bycatch and mortality in VA's gill net fisheries. The three-part study includes a fishery dependent observer program, a fishery independent program in the James River, and a volunteer reward program. In this first year of the study, they have collected data on mortality rates (approx. 8%) of Atlantic sturgeon in gill nets similar to those from past studies. They observed no clear size selectivity by mesh size, but sample sizes are still low. This research will continue at least through fall 2005 and spring 2006.

Dave Secor drafted a proposal for a technical sturgeon bycatch workshop. The purpose would be to analyze likely bycatch and mortality during the past 5-10 years in coastal waters, compare bycatch losses with estimates of Atlantic sturgeon abundance and productivity, and thereby update the Stein et al. study. Dave received suggestions from the group and plans to revise and redistribute the proposal. While the original scope of the workshop was focused on the northeast, several participants felt a coastwide review of bycatch is warranted. In particular, it was agreed that a review of the quality of bycatch data, which states report each year would be valuable. Brad will work with Dave on the final design of the workshop. Norfolk, Virginia was discussed as a possible venue for the workshop.