Atlantic sturgeon General Discussion
February 8, 2011
NMFS Sturgeon workshop; Alexandria, VA

Summary of General Discussion

Permitting: 10(a)(1)(A) Scientific Research Permits —

Collette Cairns provided most of the information here
Atlantic sturgeon (ASN) Permit applications should be submitted ASAP for NEPA analysis, etc.
If methods to be used are already published, can reference the publications and briefly describe them rather than provide exhaustive methods.
For live or captured Atlantic sturgeon, is there a need for submission of a permit application now? Yes, the sooner better, although this hasn’t been a focus to this point.
Umbrella 10(a)(1)(A) permit application: How involved would this be, and would it be especially arduous for the PI? Researchers responsible for fish sampling directly would have most responsibility (the individual Co-Is on the permit).

ASN proposed listing update —

At the beginning of the workshop in the introductory statements, NMFS representatives indicated that the purpose of the workshop was not to discuss the proposed rules. However, NMFS staff wanted to provide an update on the process being undertaken and what the next steps were. Consequently, several participants had questions and comments about the process. It was explained that the two proposed rules (one for the SE and one for the NE) published on Oct. 6, 2010. The initial 90 day public comment period was until January 4, 2011; however, it was subsequently extended for an additional 30 days and closed Feb 3, 2011. If listing proceeds as proposed, the GOM DPS would be listed as threatened, and the four others as endangered. Peer review of the proposed rules has begun.

For threatened species a 4(d) rule is necessary to provide what is deemed to be “necessary and advisable for the conservation of the species.” Thus, NMFS is working on a 4d rule for the GOM threatened DPS. We are currently preparing the 4(d) rule, but listing is not finalized. We are preparing this in advance to publish in a timely fashion if listing is finalized. Would first be proposed, and have a comment period, and subsequently finalized if the listing is finalized.

Questions about status review and role in listing: The status review is a synopsis of the best available scientific evidence, and a status review team is not even necessarily charged with providing an ESA recommendation. Under the ESA, the information in the Status Review is considered and is used as part of the “best available” information to make a final decision. It was noted that some information became available after the status review was completed. The proposed rule itself is also peer reviewed, and commented on by the public, to ensure that the decision made is not arbitrary.

Who peer reviews these documents? Academics, other Federal or State experts...
How are the peer reviewers comments addressed? If substantial changes need to be made to the rule, it might need to put back before the public, but it depends on the extent of change. For example, the GOM DPS is labeled as the Gulf of Mexico rather than Gulf of Maine in one part of the proposed rule, and for this editorial revision there is no need to go back to public. However, if one of the proposed endangered DPSs was going to change to threatened as a result of the peer review, then the rule might need to go back before the public for additional comment.
Who is the final decision-maker? Eric Schwaab is has signatory authority; however, the rules are reviewed and cleared by NOAA and DOC.

How are the public comments addressed? They are made available to public, and addressed in final listing determination. Response to comments can either be grouped, in the case of comments getting at the same thing (e.g., there should not be DPSs, or they should not be listed), or they can be responded to individually. If interested, see regulations.gov for the published comments.

**Fisheries that may capture Atlantic sturgeon as bycatch and other take issues—**

Already have examples of protected species as bycatch (e.g. sea turtles).

If there is a Federal hook, or connection, such as a Federal agency as the management authority, or Federal funding, a Section 7 consultation under the ESA occur between the action agency and NMFS (in this case). For fisheries that might catch threatened or endangered species, if a Biological Opinion is issued at the end of a Section 7 consultation, an incidental take statement can be issued and the take can be covered in this way.

For fisheries with no Federal connection, with no take coverage, the ESA is being violated. In this case, the prosecutor(s) of the fishery need an incidental take permit under Sect 10 of ESA. Section 10(a)(1)(B) authorizes non-directed take during otherwise lawful activity.

Could ASMFC get an umbrella incidental take permit? Perhaps they could create a Habitat Conservation Plan to get this done.

Does the Section 7 process occur exclusively among NMFS divisions (i.e. between Protected Resources and Sustainable Fisheries only)? For Federal fisheries, this is the case. Magnusson and ESA are “consulting authorities”. NMFS has the authority to implement Federal fisheries, but must also protect “Protected Resources”, so NMFS in this case must consult with NMFS. Sustainable Fisheries Division consults with Protected Resources Division about an FMP that might cause take of Protected Resources. Here SFD becomes the “action” agency.

Must states monitor fisheries if they know illegal take is occurring? Not necessarily, but if they know the takes are occurring they are violating the ESA by not coming in for an incidental take permit. NMFS money for state enforcement can be pulled as penalty. Joint enforcement agreements (JEAs) with states allow state enforcement of Federal regulations. If this is not happening, the money could be revoked.

Is the incidental take permit process the same process as for 10(a)(1)(A) scientific research permits? No it is a different, and longer process, completed through NMFS headquarters. Go to [http://www.nmfs.noaa.gov/pr/permits/cp.htm](http://www.nmfs.noaa.gov/pr/permits/cp.htm) for more information. There are some Atlantic salmon HCPs under development, and some info is available. North Carolina has an incidental take permit for a fishery.

Because of illegal catch of sea turtles in recreational fisheries, Florida should have an incidental take permit to be in compliance with the ESA.

Ship strikes (Atlantic sturgeon): Does the shipping industry need an incidental take permit? This is probably more a Section 7 process.

Section 10: If state gets one, are there other conditions besides take number limitations that are put as conditions, such as monitoring? HCPs will spell all that out, but minimization and mitigation measures such as required monitoring can be a part of HCPs.

ESA mentions in the application requirements for Sect 10 permits, that there must be a reliable funding source, but these sources can be worked on, and interested parties should contact NMFS to explore options. For example, people have used Section 6 funds to support development of HCPs. For things like gathering data, filling out applications
Nobody can be forced to apply for an incidental take permit.

Is there an upper bound on take for all of the permits together? There is no upper bound, as each is evaluated as part of the jeopardy analysis. During a Section 7 consultation, NMFS does consider the environmental baseline, which takes into account other projects and their potential for take.

Are there other species that are similar to ASN? Are there unique challenges with abundance (higher) and more widely distributed compared to other species? Perhaps sea turtles, which have wide distribution, and use estuary areas of major rivers, although not river mainstems. Some fisheries where definitely a problem for both ASN and turtles.

How does NMFS concentrate efforts on enforcement and focus Section 7 in light of oceanic mixing behavior? Allocating take will be difficult between DPSs in marine environments, another example of this would be green sturgeon (2 DPSs, one is listed under ESA as threatened, other not listed).

**Tissue Archive**

Discussion over methods for preserving and shipping samples—

The issues with shipping samples in EtOH: Julie Carter at the NOS tissue archive can’t accept samples if the sender does not have certification. Does this Apply to other carriers or just fedEX? it is DOT regulations, so all carriers would probably be affected by this.

FTA cards: Cellulose based, cell lyse solution, can use a fin clip and press it onto an FTA card, or drop of blood, or mucous from fish. Blood appears to be ideal though. Many samples can be placed on 1 card. Then you can hole punch the FTA card and use subsamples for extraction, potentially getting 15-20 punches per card. Turtle DNA was able to be extracted years later from FTA cards.

RNA Later preservation— Could ship to the facility, put some into EtOH and some kept in RNA Later. This would allow for multiple uses of the samples.

EtOH—Could pour off EtOH prior to shipping, and tissues could be rehydrated upon receipt at the archive. This way the DNA would remain fixed.

Might need another archive because Julie C. would have added duties. Managing sturgeon samples is not her primary responsibility, need to find out if she can handle this or if we need another option. Workload might go up if ASN listed and if a condition of 10a1a permits.

Important note—Note: If have ASN or SNS, a tissue sample should be taken (Tim K recommendation) as many different analyses can result from these, and the tissues are very useful.

Note on retention during fishing activities—Can’t retain sturgeon on board commercial fishing vessel if fishing is occurring at same time. So, can’t sample them, but there is a permit process to get around this. But, if there is no commercial fishing happening concurrently, there is no need for this permit. Because of this requirement there have been lost sampling opportunities. The process has a 6 week peer-review process, and is not an ESA requirement.

NEAMAP landing flouynder under RSA, which funds the research. Legal issues surrounding this on whether this is commercial fishing. A 10a1b permit (incidental take permit an conservation plan) would be the easiest way to get around this. For now is state permit okay for this? As long as commercial fishing is not going on at same time, because this triggers the Federal law. So any research and commercial fishing at same time in Federal waters is regulated this way. Not clear about whether if fishing in state waters, can land and sample fish or if the same law applies.

Is there a requirement for Federally funded projects, for tissues to be collected, and submitted to the NOS archive? It is a condition of SNS permits to send to NOS, but nobody is required to take a tissue sample.

Regardless of the fate of the archive, in light of the EtOH issue, we should be sending samples of one species to one location, as we currently are.
Ike Wirgin suggests we put samples into EtOH, pour off before sending, then rehydrate, as some other options, such as DMSO, are not nearly as effective (perhaps up to 25% waste when stored in DMSO).

Fin spines? Can be useful for genetic sampling, but not as easy as fin clips. Some folks have many fin spine samples from aging that could be analyzed for genetics.

Additional EtOH note—Denatured alcohol does not work, need non-denatured, check with your local geneticist to learn their preference.

**Research Questions**

None arose during this discussion, which centered on ESA requirements and preservation of sturgeon tissues.

**Action Items**

- NMFS will work with Julie Carter on EtOH issues and whether or not we would qualify for the small quantity exception to the DOT regs.