

**Atlantic States Marine Fisheries Commission
Shad and River Herring Technical Committee
June 21- 22, 2010
Holiday Inn Brownstone, Raleigh, NC**

Meeting Report

Committee Members Present: Mike Brown (ME), Kathy Hattala (NY), Joe Swann (DC), Eric Hilton (VA), Bennett Wynne (NC), Mike Stangl (DE), Bill Post (SC), Don Harrison (GA), Jacque Benway (CT), Michael Dionne (NH), Phillips Brady (MA), Phil Edwards (RI), Wilson Laney (USFWS), Sara Winslow (NC), Adam Kenyon (NC), Ruth Haas-Castro (NMFS), Mike Hendricks (PA), Larry Miller (USFWS), Ellen Cosby (PRFC)

Staff Present: Katie Drew, Kate Taylor

Public: Jamie Cournane (University of New Hampshire and Environmental Defense Fund).

Sustainable Fishing Plan Review

Maine

Mike Brown presented the ME sustainable fishing plan. In Maine there are 42 municipalities with fishing right and currently ~15 to 18 of these municipalities have been granted permission to fish annually. All other municipalities are closed due to fish passage, because of low population, or other reasons. The majority of the harvest is comprised of alewives. The harvesters primarily use fixed gear (box trap and weir). There is only one harvester per municipality and the season is open from May 1 through June 1, with a possible extension to June 15. The seasons require a three-day open period per week where alewives are allowed to pass freely through the gear. Conservation equivalency measures can be substituted for the three-day closure. The fishermen may dictate the location of the box trap, closed period, and how the fish are harvested. The 35 fish per surface-acre of spawning habitat is their target and the stocking rate they use is 6 fish-per-acre.

If you have a freshwater fishing license, you can take a bushel of fish, from any system which doesn't have a commercial fishery. The most prevalent recreational use is for striper bait, and a dozen herring would be adequate. In 2011 there will be a new license requirement, which will result in the documentation of bycatch in all the small-mesh fisheries by requiring fishermen to be report daily. Additionally there are gear restrictions going into place that will further reduce bycatch.

Q: What is a box trap?

A: It looks like what it sounds like. It is a box that the fish must pass through. They are one hundred percent efficient. The gear is opened three days per week (42 percent of the time) so that the fish can run up the stream.

Q: Is there any downstream movement?

A: We don't see much run-back. They do see spawned-out fish.

Q: Is there a pattern to the run? Are the fish are running constantly or in pulses?

A: They do run in pulses. Through fishery-independent sampling that the annual escapement ranged from 15-80 percent, with an average of 45 percent of the run annually.

Q: What are the weir regulations?

A: The weir has to have one-inch mesh.

Q: Are there any landlocked populations, which could compound the JAI analysis?

A: There are such populations, but they are not biasing the survey.

Requests from the TC

Include:

- A table showing all the runs and associated data
- A figure which shows the location of all the runs.
- Data on repeat spawning in a separate table
- A list documenting the conditions and status of each run
- Which rivers the independent data cover
- Text about the criteria associated with closure, and reopening
- Whether the ecosystem was a lake, a river, a tidal marsh, etc
- If the fishery has a box trap or a weir
- Additional information on the 35 fish per acre calculation

North Carolina

In NC there is a small research set-aside which provides for a 4,000-pound fishery . the Chowan River management area for cultural reasons. The fishery occurs around Easter, regardless of when Easter falls. The fishery closes at the end of the River Herring Festival. Commercial fishermen who want to participate have to obtain a permit. Sara noted they have had up to 28 permitted fishermen, but only up to 15 have participated. Three-inch mesh gill nets are banned. Since implementation there has been less than 1,500 pounds harvested each year. The DMF collects data from the fish landed.

NC DMF contracts with pound net fishermen each spring to get data from the same gears which were sampled dependently when the fishery was open. This has provided a time series back to 1972. There are less than 12 nets now set. Based on the previous NC assessment, it will take from 12-22 years before the fishery would be recovered and allowed to reopen.

Requests from the TC

- Include adaptive management and sustainability criteria as determined through the NC assessment.

DC

DC has only a very limited recreational fishery, although they are in the process now of closing it since DC is the only jurisdiction which has a season on the Potomac. They have no recreational data. There is no commercial fishery. DC may consider withdrawing the plan.

Q: Do you run a push net survey? It could be useful for DC to calculate their JAI and then compare it to the MD data from downstream.

A: They run night surveys once a week for eleven weeks, starting in July. They use the gear to collect American shad, blueback and alewife. They run fixed transects for 0.1 mile.

Requests from the TC

- Consider a MD, VA, PRFC and DC collaborative plan for the Potomac River

New Hampshire

There have been no reported commercial landings since 1999. Recreational fishermen must obtain a license to use a seine, net, or weir for river herring and there is no take of river herring in state waters on Wednesdays by any method. Recreational fishermen are required to annually submit reports of both fishing effort and harvest weight or numbers of river herring taken. The harvest of river herring by netting of any kind has been prohibited in the Taylor River since 2005. Regulations were put in place in 2005 for the Exeter/Squamscott River (Exeter Dam) restricting netting to only Saturdays and Mondays with a one tote (~250-280 fish) limit per day. This location accounts for the majority of harvest in New Hampshire and most of the harvest occurs by dip net. The opportunity to capture river herring at other locations is very minimal due to lack of access.

The sustainability target will be established using counts of river herring returning to fish ladders and numbers of river herring harvested in the Great Bay Estuary (Great Bay Indicator Stock) which accounts for more than 80% of the returning fish annually. The sustainability target will be set at a harvest level that is 25% (three year running average) of returning river herring within the Great Bay. We have remained below the sustainability target level for all but three of the past 18 years. We will monitor the return of river herring on the Cocheco, Lamprey, Oyster, and Exeter Rivers on an annual basis and conduct a beach seine sampling study to determine occurrences of spawning activity between years, especially when high river flows or drought years. If harvest exceeds 25% we can add additional days of prohibited harvest of river herring, implement / lower daily harvest limit (statewide or identified problem areas), or implement a daily recreational catch limit (statewide or in problem areas).

Q: How close are commercial fishermen to the dam?

A: They can stand on the entrance of the dam and see them. Less than 1,000 feet.

Q: Do you have a good estimate of the run?

A: No, it's all anecdotal.

Q: The harvest is being used for lobster bait and striper bait. Isn't this a commercial fishery?

A: Maybe. We don't call it that because it's for personal use.

Q: When fish spawn how do they get out?

A: They go over the fishway.

Q: Have you sampled the fish below the dam?

A: The Exeter is a big black hole. We know that the fish are spawning below the dam. We know that the population is going down. The harvesters collect scales. Only ~ 75 fish get up over the dam. We have 500 a few years ago.

Requests from the TC

- Include a short description of the rivers and problems
- Use repeat spawning marks to determine mortality rates
- Weight effort by day so the trend is not related to the catch

South Carolina

The commercial catch from SC is exported to NC. The fishermen are required to report what they catch and if they sell it to whole sale dealers and it goes to NC. The system is very complex. Blueback herring only use the Santee River when we don't have flows coming out of the Rediversion Canal. They will flow the flow.

Q: Is the minimum populations what goes over the fish lift?

A: No that's the landings plus the fish lift numbers.

Q: Why is there such a wide variation in the pop size?

A: It is because it is more flow dependant than anything else, and the flows can be erratic.

Q: Is there any type of control increase? Is there a cap?

A: No it's a open fishery, but it is capped at ten bushels a day. There are 2 or 3 fishermen from NC that usually come down. If there were more entering into the fishery and the exploitation rate increases then we would make some changes.

Q: Is the reproductive population getting over the dam?

A: In years when there is no flow in Rediversion Canal and they enter the Santee River the fish encounter tons of habitat. If they go in the lake via the Rediversion Canal, they have been seen spawning there. We don't know if the young get out. Not until recently have we been doing any juvenile studies.

Q: Can you use the percent virgins coming back as an est of recruitment? Are you looking at scales?

A: We have been collecting them but we haven't been able to look at them.

Q: Do take data on the adults?

A: Yes, we take length and scales. We haven't seen any changes in the lengths.

Requests from the TC

- Include a table with number of participants.
- Send scales to MD
- Include information on the data being collected

- Include information on change in the size of the fish.
- List environmental conditions annually

Interim target: Three year running average to compare to the exploitation rate target (0.18). If exceeded then we would have to make changes.

Additional State Submitting Plans

New York, PRFC and Virginia (maybe early next year)

The TC will need time to review these prior to receiving the shad plans. The TC should request time and fund to meet to review the river herring plans. Shad plans are due August 1st of next year. There was a suggestion that if PRFC is going to do a plan for herring then they should include data from MD, DC, VA (ie a basin wide plan).

The TC asked for clarification between the habitat plans and the fishing plans. The TC asked for clarification on the timeline for completion of the sustainable reports and habitat plans. Staff will provide this information to TC members. The TC comments on the ability of the plans to go out to the public. As long as there is no confidential data contained in the report then this would be up to states to decide.

Bycatch

Please refer to Jamie's presentation (*Cournane RH Bycatch*).

Council Actions

Mid Atlantic Council is developing Amendment 14 to the Squid, Mackerel, Butterfish plan. Comments are being accepted through Friday July 9th at 5pm. ASMFC requested the inclusion of shad in the development of the document. Monitoring needs to be increased to find out what proportions of the population are being fished. We need to identify age classes. We need to get away from the semantics: bycatch, discards, captured herring.

New England Council is continuing to develop Amendment 5 to the Atlantic Herring Plan. The next Plan Development Team meeting is going to be held in Mid-July.

Shad in Schools Program

The TC offered to review material and make suggestions. It was pointed out that shad is a good model to teach kids because they connect several areas, freshwater, the bay, the ocean. It was suggested that eels in the classrooms are a better alternative because the classrooms get too hot and the shad die easily. The TC discussed that hatchery reared fish are the last resort and the focus should be on conservation before it gets to the point where hatcheries are necessary. States that currently have Shad in Schools programs need to monitor carefully where the shad are released, inter-basin transfers and the number of fish used to collect eggs for these programs. The TC will continue discussion on the merits and methods of this program at a later date.

Interactions between Sturgeon and Shad Fisheries

There have been high rates of interaction in the Georgia shad fishery. One fisherman caught 36 in a small time frame. When this was expanded out that it could have been 10 percent of the population in the Altamaha. The state may have to do section 10 consultations. NMFS may be contacting all states that have a shad fishery. The TC discussed whether this should be included in the sustainability plans. The TC discussed the possibility of a meeting with the Sturgeon TC. Given the large size of both TCs it would be unlikely until next year.