



Atlantic States Marine Fisheries Commission

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Atlantic Sturgeon Bycatch Working Group Conference Call

June 16, 2015

2:00pm

Sturgeon Bycatch Working Group: Bill Post, Kathy Hattala, Dave Secor, Gary Shepherd, Eric Schneider, Lisa Bonacci, Jason Didden, Ed Hale, Amanda Higgs, Ian Park

Staff: Katie Drew, Jeff Kipp, Max Appelman

The Bycatch Working Group (BWG) met via conference call to discuss methods of developing relative abundance indices and bycatch estimates at various scales (i.e., state-specific, Distinct Population Segment (DPS)-level, coast-wide) for the 2017 Atlantic sturgeon benchmark stock assessment.

Several bycatch estimation approaches were suggested; two methods were previously discussed by the BWG last year (i.e., quasi-Poisson GLM, and ratio-based estimator), and a zero-inflated Poisson GLM. BWG members quickly acknowledged that their efforts would be heavily dependent on the degree of data coverage in terms of geographic area and information.

It was discussed that effort data from fishery-dependent data sources is a critical component to developing reliable bycatch estimates. **ACTION: Staff will work with states to determine what state fisheries are required to report effort.** Also, in areas, seasons and commercial gears with limited or no bycatch monitoring, fishery-independent data sources could be used to estimate bycatch. **ACTION: Staff will sift through known data sources to find programs that implement sampling methods (both gear and time of fishing operations) which are comparable to commercial fishing operations in the same region.** BWG members will then have a better understanding of data limitations for various bycatch estimation approaches.

Next, the BWG discussed DPS-level bycatch estimates. In order to address stock mixing in the estimates, it would be ideal to apply existing genetics data to identify which DPS bycaught fish originated from. However, it was explained that genetic analysis is ongoing, and there is little insight to what genetic data will be available by the time estimates will likely be developed.

Some BWG members suggested that the stock assessment need not bother with DPS-level bycatch estimates since stock specific estimates are more appropriate. Other members suggested that DPS-level estimates should be explored to address ESA listing related inquiries down the road, and as support for conclusions in the final assessment.

The BWG stipulated that federal data sources (e.g., NEFOP) may overlap with state waters in some cases. Therefore, those working on the coast-wide estimates should be cautious when combining the state-specific estimates to the federal estimates. **ACTION: Staff will look to see where Federal/State catches overlap.**

BWG members also addressed the need for length data so that bycatch estimates accurately reflect respective size-classes of Atlantic sturgeon. Since many of the survey and commercial gear types are size selective for small individuals.

It was suggest that NEFOP, SC shad bycatch, and the NC observer program are likely the only reliable data sources for developing relative abundance indices from bycatch data. Some BWG members explained the difficulty in developing relative abundance estimates due to the ban of directed fishing on Atlantic sturgeon since 1998, and the loss of other fishery-dependent data sources over the years (e.g., the NY shad fishery closed in 2001).

The BWG agreed to reconvene sometime in July, after the states have updated their data through 2014 on the ASMFC FTP site (deadline for data updates is July 1st), to review **ACTION** items and continue discussion of potential abundance and bycatch estimation methods.