

Summary of Gulf Sturgeon Sampling Protocol and Monitoring Survey

August 2010

This document is a summary of decisions made by Gulf sturgeon researchers April 15-16, 2010 at a meeting in Cedar Key, Florida to discuss Gulf sturgeon research. The following practices will be utilized to standardize sampling and conduct a monitoring program for Gulf sturgeon expected to be conducted for the next 5 years.

This protocol should be cited as: NMFS and USFWS. 2010. Gulf sturgeon sampling protocol and monitoring survey. 2pp.

Standardized Sampling

1. Nets – net attributes need to be recorded on data sheets: twine, mesh, hanging ratio, length.
 - a. For capture and monitoring of adult Gulf sturgeon, nets should be 4-12 inch stretch.
 - b. To capture juvenile Gulf sturgeon, nets are generally 2-6 inch stretch
 - c. Some experimental nets do get fishes.
2. Soak time - A 2 hour maximum soak time for anchored nets is common. All nets are to be manned.
3. Morphometric and Environmental Data to record:
 - a. Fish – TL and FL, and weight in metric
 - i. Length measurements should be taken at a straight line off the body when the fish is on its side
 - ii. Weight – record when possible
 - b. Environmental – Record at benthos when possible (or at 3 m from surface) water temperature, salinity, DO, conductivity, pH, GPS coordinates in decimal degrees at location where net is placed. Depth is often recorded at the mid-point of the net.
 - c. Genetics sample – kits for genetic samples along with protocol to take tissue samples will be distributed. Vials will come with a genetic code on them. Record this code on data sheet so we can track samples.
 - d. Date.
 - e. Time: start time of net fishing and end time.
4. PIT tags and Readers:
 - a. PIT tags – we will standardize to 134.2 kHz tags (12.5 mm x 2.07mm). All fish handled will be re-tagged with a new 134.2 PIT tag. PIT tags will be placed in the soft tissue at the base of the dorsal fin on either side of fish.
 - b. A Power Tracker V or VIII will be standard reader.
5. T-bar tags will continue to be placed in the pectorals. Each researcher has their own tags with telephone numbers. Tag color and full number (including leading zeros) will be

indicated on data sheet. T-Bar tags will be replaced as they are sloughed off or become fouled. It is suggested that the tag number appear twice on each t-bar tag (distal and proximal) in case part of tag becomes broken off.

Monitoring Survey

1. Acoustic tags and receivers: VEMCO is choice of researchers and many have equipment in hand.
 - a. Tags – V16 6H tags will be used. At 90 second intervals these tags should last 6.4 years.
 - b. VR2W receivers will be used.
 - c. Tags will be inserted internally via surgery into the gastric cavity. A surgery workshop will be held.
2. Adults will be targeted: fish greater than 1350 mm TL.
3. We target 20 acoustic tags per core river during years 1, 2 and 3 (2010, 2011, and 2012). Data will be recorded via receivers in years 1, 2, 3, 4 and 5 (2010 – 2014). See attached worksheet for core rivers.
4. Receivers are to be downloaded at least once per quarter. Only data recording the transmitter number, receiver number, date and time are required for the universal data warehouse.
5. Core rivers will have 5 receivers; one at mouth and one above the uppermost known/suspected spawning site.
6. Ancillary rivers will have a receiver in the mouth to detect inter-riverine movement.
7. This telemetry effort should be complimented with a long-term traditional passive tagging program. We are hopeful that our state partners will work together on a proposal for NMFS Section 6 funds to support such a study. The Federal Register Notice calling for Section 6 proposals will be posted on the list serve when it becomes available this summer.
8. Database: Ivy Baremore presented a draft datasheet. She will modify per comments at the meeting and will send all an electronic copy. We still need to finalize details about data access. An online query is sought that would allow one to search by tag number to identify researcher.