

Gulf Sturgeon Sampling Protocol and Monitoring

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.
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 - Total Length (TL) and Fork Length (FL), and weight in metric units
 - i. Length measurements should be taken at a straight line off the body when the fish is on its side.
 - 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.
 - c. Genetics sample - All samples should be collected, catalogued, and sent to Dr. Brian Kreiser, University of Southern Mississippi.
 - 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. Discretionary for each researcher, but recommended to reduce the stress of handling a recaptured fish, is the use of T-bar tags. T-bar tags should be placed in the pectorals. 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. Fish that are Age-1 or less do not need to have T-bar tags inserted.

Monitoring

1. Acoustic tags and receivers: VEMCO tags and receivers are to be used.
 - a. Tags - V16 6H tags will be used. At 90 second intervals these tags should last 6.4 years. Smaller tags (e.g., VEMCO VR-7) may be used for young-of-year and juvenile fish. These tags are expected to last 305 - 426 days.
 - b. VR2W receivers will be used.
 - c. Tags will be inserted internally via surgery into the gastric cavity.
2. Receivers are to be downloaded at least once per quarter.