

## Procedure for obtaining fin clips from sturgeon for genetic analysis

**Supplies:** You will need disposable gloves, 2 ml screw top plastic vials, RNAlater™ (a non-hazardous preservative), a knife, scalpel, or scissors, alcohol for cleaning the cutting tool, and sample boxes to keep the vials upright when packaged.

### Instructions

1. Wash hands and use disposable gloves. Ensure that any knife, scalpel or scissors used for sampling has been thoroughly cleaned and wiped with alcohol to minimize the risk of contamination. Clean cutting tool before sampling each sturgeon.
2. For each sturgeon being sampled, after the specimen has been measured and photographed, take a one-cm square clip from the pelvic fin. If subsampling is necessary (see Step 5 below), then divide the fin clip sample into equal parts.
3. Place each fin clip or fin clip subsample into a 2 ml screw top plastic vial filled with 1.5 ml of RNAlater preservative. Do not use glass vials. Do not use other plastic containers.
4. Label each vial with fish's unique ID number that matches the ID number you record on the metadata sheet. This is critical for accurate tracking and record keeping.
5. **Subsampling:** The USGS Leetown Science center hosts the Atlantic Coast Sturgeon Tissue Research Repository (ACSTRR), and has been designated as the repository for shortnose and Atlantic sturgeon by NOAA. If you selected the USGS Leetown Science Center to analyze your fin clip samples, then the entire sample can be sent to the facility. Leetown Science Center staff will retain part of the sample for ACSTRR. If you selected a facility other than the USGS facility in Leetown, WV to analyze the fin clip sample for genetics, then a subsample as described in Step 2 must be sent to the USGS facility in Leetown, WV for the ACSTRR.
6. For archive purposes, samples should be sent to the ACSTRR at Leetown Science Center at the end of the project or annually, whichever comes first. If you are experiencing a high volume of sampling (e.g., >500 samples per year), contact Robin Johnson, USGS (contact information below) to determine if you need to send samples more frequently.
7. Samples being sent for genetic analysis must be submitted to the selected lab on the schedule indicated in the Incidental Take Statement included with the Biological Opinion.
8. To send vials to the USGS Leetown Science Center, package vials together (e.g., in one box) with an absorbent material within a double-sealed container (e.g., zip lock baggie). Containers that ensure the samples remain upright during transport are preferred. Fin clip samples preserved and packaged correctly should look like this:



a. Mail samples to:

Robin Johnson  
U.S. Geological Survey  
Leetown Science Center  
Aquatic Ecology Branch  
11649 Leetown Road  
Kearneysville, WV 25430

b. Submit sample metadata to [rjohnson1@usgs.gov](mailto:rjohnson1@usgs.gov) with a cc to [incidental.take@noaa.gov](mailto:incidental.take@noaa.gov). Electronic metadata must be provided in order to properly identify and archive samples. A copy of the electronic metadata was emailed to the Federal agency point of contact for this Opinion and a list of the metadata fields is included below. Retain a copy of metadata sheets for your records.

8. If you selected a facility other than the USGS facility in Leetown, WV to genetically-analyze the fin clip sample, send the remaining subsample and associated metadata to the NMFS-approved lab for processing to determine DPS or river of origin per the agreement you have with that facility.

Metadata to be recorded for each genetic sample submitted to USGS and other NMFS-approved lab:

- Collection Date
- Species (ATS/SNS)
- Collector
- Collector Email
- Collector Phone Number
- Permit/Biological Opinion Number
- Permit Holder, Responsible Party (RP), or Principal Investigator (PI)
- Holder, RP, or PI Email
- Holder, RP, or PI Phone Number
- Unique Fish ID
- PIT Tag Number
- Location Collected
- Latitude
- Longitude
- Fork Length (mm)
- Total Length (mm)
- Weight (g)
- Sex
- Preservative
- Tag Info Available (Y/N)
- Tag Info
- Mortality (Y/N)
- Mortality Type
- Release of Information to Interested Party
- Recapture (Y/N)
- Comments