



December 11, 2012

MEMORANDUM FOR: Northeast Fisheries Observers & At Sea Monitors
FROM: Amy Van Atten
Branch Chief, FSB 
SUBJECT: Protocols for Biological Sample Preparation and Shipping

The instructions contained in this document apply to all observers/monitors working for the Fisheries Sampling Branch. Please follow these protocols when submitting age structures, whole animals, and incidental take samples.

Scales & Otoliths:

- Do your best to remove mucus, debris, and epidermis from the fish before collecting scales. Refer to the Biological Sampling Manual for location of scale collection. Only scales collected from the proper locations can be used for aging.
- Place samples from a single animal in an age structure envelope with a liner. Be careful not to crush the otoliths.
- Group sample envelopes from each haul, species, and disposition code, and rubber band them together. The first envelope ("header") should be completely filled out, in pencil. After the header envelope, only the length needs to be filled out.
- Thoroughly dry all envelopes before bagging for shipment.
- Keep all scales and otoliths at room temperature; do not freeze.
- Place the bundles of envelopes inside a plastic bag, and submit with your trip paperwork.

Samples in Vials of DMSO:

- Place DNA samples from a single animal in each vial.
- Put parafilm wrap around each cap to prevent leaking. Place the vials in a Whirl-Pac bag as a secondary precaution.
- Label each vial with tripid, haul number, and sequence number or PSID.
- Keep samples at room temperature; do not freeze.
- Submit with your trip paperwork.

Seabird Feathers:

- Place feathers from a single animal in a Ziploc bag with a fully completed Tyvek tag (front and back, using a fine-point permanent marker).
- Place first bag inside a second Ziploc bag with a second fully completed Tyvek tag. Arrange the tag so that it can be read from the outside of the bag.
- Keep feathers at room temperature; do not freeze.
- Submit with you trip paperwork.

Monkfish Vertebrae:

- Clean excess tissue from vertebrae.
- Place each sample in a separate Ziploc bag with a fully completed Tyvek tag (front and back, using a fine-point permanent marker). Arrange the tag so that it can be read from the outside of the bag.
- Group samples from each haul and disposition code, and place them in a larger Ziploc bag.
- Freeze and submit in a cooler*.

Heads (e.g., Mackerel, Butterfish):

- Place each sample in a separate Ziploc bag with a fully completed Tyvek tag (front and back, using a fine-point permanent marker). Arrange the tag so that it can be read from the outside of the bag.
- Group samples from each haul, species, and disposition code, and place them in a larger Ziploc bag.
- Freeze and submit in a cooler*.

Whole Fish/Invertebrates:

- Place each single animal in a separate Ziploc bag with a fully completed Tyvek tag (front and back, using a fine-point permanent marker). Arrange the tag so that it can be read from the outside of the bag.
- Always use disposition code '007' when whole animals are retained. Record the weight on a separate species line on the *Haul Log*.
- Freeze and submit in a cooler*.

Marine Mammal Tissue Samples:

- Place each sample in a separate Ziploc bag with a fully completed Tyvek tag (front and back, using a fine-point permanent marker).
- Place first bag inside a second Ziploc bag with a second fully completed Tyvek tag. Arrange the tag so that it can be read from the outside of the bag.
- Freeze and submit in a cooler*.

Oversize Samples/Whole Animals:

- Contact your Area Coordinator or Program Manager as soon as possible to alert them that you will need instructions for delivering an oversize animal/sample.

***Notes on Frozen Samples**

- Delivery of biological specimens is due within 5 calendar days (120 hours) of the vessel landing for ASM and NEFOP trips, and within 7 calendar days (168 hours) for IFS trips.
- All frozen samples should be frozen solid before being placed in the cooler.
- Use sufficient ice packs to keep samples frozen during shipment (at least 2).
- Use crumpled newspaper to fill the extra air space in the cooler. This will help keep the samples cold.
- Ship all coolers overnight. Do not ship coolers so that they will arrive on a weekend or holiday; the ice packs will not keep the sample frozen for that long. Do not include samples from more than 2 trips in a single cooler.
- Do not include trip paperwork in cooler.
- If freezing and shipping as described above is not possible, contact your Area Coordinator or Program Manager to locate a freezer available in your area.

Quick reference table

Sample Type	Container Type	Grouping	Freeze?	Submit
Scales & Otoliths	age structure envelope w/ liner	by haul, species, and disposition	no	with trip paperwork
Vials of DMSO	vial w/ parafilm, in Whirl-Pac bag	none	no	with trip paperwork
Seabird Feathers	double bag, double tag	none	no	with trip paperwork
Monkfish Vertebrae	single bag, single tag	by haul and disposition	yes	in cooler
Heads	single bag, single tag	by haul, species, and disposition	yes	in cooler
Whole Fish & Invertebrates	single bag, single tag	none	yes	in cooler
Marine Mammal Tissue Samples	double bag, double tag	none	yes	in cooler
Oversize Samples & Whole Animals	Contact your AC or Program Manager			

Thank you!