Northeast Regional Office
Fisheries Statistics Office
Biological Sampling Manual

Approved by: _____

Rev.	Date	Sections Affected / Description
Rev. 0	02/23/10	Document Established

1.0 Applicable Standards / Regulations

The Northeast Region of the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (Fisheries) Fishery Information Section (FIS) is responsible for collecting fisheries statistics including catch-effort, landings, economic data, stock monitoring, and biological samples associated with marine fisheries. This manual provides the basic instructions or procedures for collecting and coding biological sampling information in preparation for data entry.

2.0 Purpose

Fish are primarily sampled to estimate length, age and species composition that assist in the characterization of the commercial catch. The standard procedures are designed to assure the most representative sample is obtained under prevailing conditions. It is, therefore, extremely important that there is no deviation from a procedure and that personal, or other selection bias, is minimized. **(Biological Sampling Work Instructions(BSWI) 1.0 and 3.0)**

3.0 Scope

Biological samples are gathered from federally permitted fishing vessels that have been fishing for federally managed species in the United States Economic Exclusion Zone (EEZ). Biological sampling requests may vary by species and market category. A basic sample of 100 fish measured and 25 fish must be selected on a stratified basis for aging (with the exception of shellfish) and the aggregate weight of the measured fished must be documented **(BSWI 2.0)**. When selecting fish for aging, at least one fish for each 1.0-cm interval as represented in the length sample must be contained in the age sample (the 1.0-cm rule). Measuring and handling techniques may also vary greatly, by species, as some samples use century structures to gather lengths while others require an entire fish be sent to the NEFSC for processing. These differences are noted in the species specific work instructions. **(BSWI 4.0, 5.0, 7.0 and 9.0-9.23)**

Post data gathering the data are transferred and manually documented on hard copy**(BSWI 6.0)**. Immediately following the data are entered into the BSMDBS system to allow for proper tracking and forward targeting of gathered data versus requested**(BSWI 8.0)**. On a rolling basis the samplers will update or complete the sample using data from other datasets**(BSWI 8.3)**.

4.0 Authority and Responsibility

The Biological Sampling Coordinator is responsible for ensuring that the requirements of this procedure are fulfilled and the samplers are adequately trained. Biological Samplers are responsible for performing activities described in this procedure.

5.0 Activities

	Resp.	Activity	Requirement
5.1	Biological Sampling Coordinator (BSC) (Task Leader)	Audits and displays the results of the sampling efforts.	Review biological data for common cause errors and completeness, by geographic team. Compare the gathered biological data to the NEFSC request list and produce a 'Concerns Document' for the field staff to use for targeting of data. Provide adequate training and support for all staff collecting biological data.
5.2	Biological Sampler	Target or identify biological samples.	The samplers shall use all available methods to target landings that may have the need requests, based on the 'Concerns Document' or the NEFSC's requests. • VMS Email • Concerns Document • BSMDBS • Hail Lines / Industry Contacts • Local Knowledge
5.3	Biological Sampler	Biological Sampling Biological Sampling (cont..)	Biological data are gathered per the requirements set forth from the NEFSC

			based on the species and market category. • Allegro Field PC • Punch Strips • Age Packets • BSWI
5.4	Biological Sampler	Transfer and handling of biological data.	The gathered data, within a sample, are then tallied based on length interval and manually keypunched into the BSMDBS. Immediately after entry an audit is performed, LENGTH SAMPLES, to identify common cause or special errors. Corrections are made. Age structures are packaged and readied for shipment to the NEFSC. • BSMDBS • Age Packets • Fedex Boxes • BSWI
5.5	Biological Sampler	Biological data is updated and age packets are shipped to the NEFSC.	Biological data are updated using several databases to verify the VTR Serial Number and Statistical Area Fished. Documentation are made within the BSMDBS and on existing age packets. Age packets are shipped to the NEFSC. Samples >60 days old are documented and forwarded to the BSC. • BSMDBS • VESLOG

		Biological data is updated and age packets are shipped to the NEFSC. (cont…)	• LES1 • CFDERS • BSWI • LatLon Conversion Site

6.0 Associated Documents / References

BSMDBS	Biological Sample Monitoring Database System
VMS	Vessel Monitoring System
VTR	Vessel Trip Report
VESLOG	VTR data system
CFDERS	Commercial Fisheries Landings Database
LES1	Dealer reports, days at sea, VTR serial numbers and other vessel data
Concerns Document	Excel based report
BSWI	Biological Sampling Work Instructions