

On-board Histamine Control and Monitoring Model for Pound Net Fisheries

Fishing method

Pound nets (stationary entrapment gear)

Fish species typical of method

In mid-Atlantic: Bluefish and Spanish mackerel

Fish handling methods

Fish are concentrated by lifting the net, then brailed into a pound boat. These are small open boats, lacking holds. The fish are harvested alive. Commonly, much of the catch is non-food fish species. The food fish may be separated by species and placed in open storage crates on deck.

Chilling method

Fish are not iced or otherwise chilled onboard.

Storage method

Fish are held crated on the deck until they are offloaded.

Off-loading method

Crates of fish are lifted off the boat and onto the dock by hand or by hoist.

Time-temperature controls

Fish are iced at the dock prior to loading onto trucks. Icing entails placing a layer of ice in the bottom of each box, filling with approximately 20-25 pounds of fish, layering with ice, adding another 20-25 pounds of fish and top icing. Histamine-forming species (bluefish and Spanish mackerel) are iced first. Boxes of iced fish are transported to the processing plant in an enclosed insulated truck.

Monitoring (choose one of two options)

Fish temperature monitoring option:

An integrated temperature monitoring device (HOBO logger, Onset Computer Corp.) is inserted orally into the stomach of one bluefish per net fished (or Spanish mackerel if no bluefish are harvested). The insertion is performed at time of sorting, immediately after brailing the net. These loggers are furnished by the fish buyer, who programs them and uploads the data when they are retrieved during processing. Time-temperature records are retained by the buyer but results are shared with fishermen.

Procedure monitoring option:

A form is completed on the boat during harvesting which identifies, 1) the date and 2) time that each net is fished, 3) the number of crates harvested (histamine-forming species), 4) the time that the last box of fish is iced on the dock, and 5) the initials of the record-keeper.

Maximum air and water temperatures are also recorded when delays longer than 5 hours occur between harvesting and icing. Histamine-forming fish must be iced within 6 hours of harvesting unless deck temperatures are below 40°F (must be recorded on form). Any fish that exceed this time period are discarded or are held in ice and found to be acceptable when analyzed according to procedures described in U.S. Food and Drug Administration guidance.

Applicable form(s) (Not necessary if Fish Temperature Monitoring option is selected)

“Time Record for Bluefish and Spanish Mackerel”

The completed form is provided to buyer when fish are delivered (received by buyer).

