

State of California
M e m o r a n d u m

The Resources Agency

To : Michelle Gilroy

Date: October 29, 2004

From : Department of Fish and Game - Healdsburg

Subject: Head removal and data collection protocol for ad-clipped salmon.

Below are the protocols for collection of salmon with adipose fin clips for coded-wire-tag (CWT) recovery. The data on the CWT tells us where, when and who released the salmon. This information is tied to the recovery data that is collected by hatcheries, creel surveys, carcass surveys and groups using traps.

1. Fill out the tag completely. Make sure that all fields are filled out using a pen or pencil that will not run or rub off. Record all information legibly. Lengths are recorded in millimeters (mm); measure from the tip of the snout to the inside fork of the tail. All fields are required for inclusion in the final database except for project which is used to get information back to the group that collected it. *Note: The tags can be difficult to fill out when wet, a good solution is to designate one person to fill out tags while the other handles the fish.
 2. The head and the tag must be kept together. Use the wire provided with the tag to secure it to the salmon head. When the data is separated from the fish head containing the CWT there is virtually no way to reunite them, the end result is that the data and head are discarded as useless.
 3. Cut off the entire head or at least 1 inch behind the eyes. Up to 20% of CWTs are found behind the eyes. To remove the head; lay the fish on one side, hold the knife perpendicular (tip to heel of the blade) relative to the axis of the salmon's body, lift the operculum, insert the blade behind the operculum, tilt the knife at a 45 degree angle relative to the axis and cut downward and forward (toward the head rather than the tail) while being sure to stop no closer than 1 inch behind the back of the fish's eye; then flip the fish over and repeat the procedure on the other side of the fish's body.
 4. Store the head in a clear plastic bag of at least 2 mil thickness and freeze as soon as possible. If freezing is not immediately available keep the heads in a cool place to slow the decomposition process. The bag helps the lab to separate frozen heads from one another which speeds processing.
 5. Store heads in a non-metallic container. A metal detector is used to locate the CWT. Introduced metal creates false detections which increase the time required to process the head. Secondly, the CWT may be impossible to locate resulting in loss of the data.
 6. The salmon heads should be sent to the Santa Rosa lab for removal and decoding. Small numbers of heads (< 5) may be shipped in the mail using an insulated Styrofoam box with dry ice or frozen gel packs. Larger numbers of heads need to be delivered to the Healdsburg lab. Call the lab at (707) 576-2878 to make arrangements. Collection protocols are to be followed completely. Incomplete data is of no use to anyone and collecting it will have been a waste of time.
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