

*Adopted
1/24/81*

BOARD OF FISHERIES
FINDINGS ON PROPOSAL NO. 277
TREBLE HOOK BAN
JANUARY 1981

*See also
#82-98-FB*

Testimony to the Board of Fisheries indicated conflict of opinion and experience regarding the effect of treble hooks on smaller "shaker" salmon. A "shaker" is a troll fishery term referring to a small salmon or one less than the minimum legal size that is released when caught during commercial trolling operations. The magnitude of the "shaker" catch of coho is undocumented, but involves large numbers of outmigrating juveniles 8 to 15 inches long or chinook salmon less than 28 inches.

The depressed status of the stocks and need to enhance survival and growth of chinook and coho salmon requires adoption of efforts to reduce mortalities to younger age class salmon that would either spawn as jack males or continue saltwater feeding and growth before commencing their spawning migrations.

Some testimony referred to the three dimensional nature of treble hooks that would make it more likely to become impinged on outer mouth parts rather than in interior portions where damage to gills, eye orbits, opercular coverings, etc. could lead to mortalities. Testimony from witnesses indicated that single hooks with larger barbs are more likely to damage the interior mouth and head parts.

Other witnesses pointed out the multiple hooks result in serious damage to outer mouth parts and also indirectly increase mortalities because the release procedure requires that the fish is kept out of the water longer with increased potential for other external and internal damage and physical trauma prior to release.

Board members expressed concern that the treble hook could promote harvests of shaker size salmon, particularly in areas where a shaker-sized age class is congregated. Consequently, increased mortalities could result because more fish are being subjected to additional handling time to free the hooks prior to release.

Treble hooks commonly used by commercial troll fleet have a smaller point to shank gap than do the single hooks. It is a common practice in commercial as well as other fisheries to select a hook size which will maximize effectiveness to larger fish. Accordingly, most fishermen select a hook with greater point to shank gap to hook and hold larger fish more effectively. Additionally, hooks with a smaller gap will hook and hold a larger percentage of small fish (because the larger the hook the less chance of successfully hooking smaller fish).

When a shaker size salmon (i.e. under the legal size limit) takes (bites) bait on a treble hook, the fish is likely to be hooked in the front/center of the mouth with one tine imbedded in the roof (top) of the mouth and at least one of the other tines imbedded in the lower portion

of the mouth. When this occurs, the fish's mouth is "pinned shut" and immobilized. It is not only very difficult to remove the hook from a fish hooked in this manner without doing extensive physical damage to the fish, but the breathing ability that depends on steady opening and closing of the mouth is also prevented, thereby causing the fish to suffocate. The three tines of a treble hook are also more likely to tear the respiratory flap on the roof of the mouth. This interferes with the ability of the fish to force adequate quantities of oxygen-bearing water over its gills for respiratory purposes.

The effectiveness of treble hooks is so obvious that such proposals have been submitted several times in the past. There has never been a proposal submitted to ban single hooks for purposes of conservation (or any other justification).

11/24/81