

Board of Fisheries  
Finding  
Hand Troll/Power Troll Coho Salmon Harvest Ratio  
1981

The Board of Fisheries recognizes that increased fishing effort in the troll fishery must be compensated for by additional regulatory restrictions as all chinook and coho stocks in Southeastern Alaska are fully utilized and/or depressed. However, due to the mixing of chinook and coho stocks in harvest areas and the incompleteness of the data base on which the troll fishery must be managed, time and area restrictions developed to compensate for increases in fishing effort may not be fully effective because the probability that management errors will occur is high. This means that the risk to the resource will increase as the units of gear and potential fleet efficiency increases. In recent years the major increases in troll effort have been within the hand troll segment of the fleet. The number of power trollers engaged in fishing has been stabilized by the application of the limited entry. The number of hand trollers and their efficiency, however, has increased with widespread conversion from the use of sport rods to the use of gurdy gear and the development of a full time "professional" fleet after limited entry was placed on other gear types. The development of this improved hand troll fleet resulted in major upward shifts in the proportion of the coho salmon catch taken by the hand troll fleet. The increasing hand troll catches during the 1975-1978 period were taken from the historical catches of other gear types and reduced their overall catches until the Board of Fisheries initiated regulations to limit hand troll gear effectiveness in order to maintain historical allocation balances and prevent further increases in overall effort on chinook and coho salmon in Southeastern Alaska.

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In order to stabilize fishing effort on coho salmon the Board established a policy for a 80% power troll and 20% hand troll harvest ratio for troll caught coho salmon. This balance not only satisfies conservation of the resource but also assures the continued economic viability of the power troll fleet and its access to the salmon resource of Southeastern Alaska. The harvest ratio approximately reflects the harvest levels by the power and hand troll fleets at the time limited entry became effective on power trollers and when a segment of the hand troll fleet began to rely on hand gurdies and participate in the fishery on a full time basis. The reservation of an equitable harvest ratio for the two fleets will also take into account the historical fishing opportunities to hand trollers with permanent and part-time commitments to the hand troll fishery. Historical catch distributions within the hand troll fleet will be maintained because fishermen with permanent commitments will continue a relatively more intense harvest during all fishing periods while part-time participants will not be able to take maximum advantage of all fishing times and areas and will not be able to operate daily on the fishing grounds due to more limited vessel capacity and a lower level of desire to participate in a full time fishery.

Because chinook salmon are not as available to hand troll harvest as coho salmon due to the inability of hand trollers to fish as effectively in deeper water and in more distant fishing grounds, the historical allocation of chinook salmon between troll gear types will be maintained by stabilizing the effectiveness of the hand troll fleet through the gear restrictions adopted for 1981.