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.

In order to stabilize fishing effort on coho salmon the Board estab-
lished a policy for a 80% power troll and 20% hand troll harvest ratio
for troll caught coho salmon. This balance not only satisfies conserv-
vation 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.