

Re; Support Proposal 112, new metrics for spawn-on-kelp

FISHERY MANAGEMENT REPORT NO. 17-58
2018 REPORT TO THE ALASKA BOARD OF FISHERIES:
SOUTHEAST ALASKA—YAKUTAT HERRING FISHERIES

by
Kyle Hebert

Dear Chairman Jensen and Board of Fisheries Members,

Reading the Kyle Hebert report identifies some problems the Board should consider. It seems the formula used by ADF&G for closed pounding herring for spawn-on-kelp, 12.5 tons of biomass = 1 ton of SOK, is the goal of harvest in the Craig/Klawock herring pound fishery. Using the numbers provided in the report, the harvest in the area should have been 27.92 tons, but the harvest was 69.9 tons. Thus in Craig/Klawock, in 2017, the harvest was 2.5 times the quota.

In 2017, the harvest biomass to use was 349 tons.

The ADF&G conversion metric is 12.5 tons of biomass = 1 ton. ($1 / 12.5 = .08 = 8\%$)

$349 / 12.5 = 27.92$ tons.

The landing for SOK in Craig/klawock in 2017 was 69.9 tons.

Thus an overharvest of 2.5 times quota.

What is contributing to this overharvest? Our suggestion is the State is using for control of harvest, the size of the raft and the number of kelp blades placed into the raft. Instead, they should be using the weight of SOK product coming out of the raft.

The ADF&G in 1998 and 1999 studied the open pound harvest in Sitka and counting the eggs in the herring and counting the eggs on the kelp determined the conversion ratio for open pounds to be 27.3%. This means if you want to harvest 100 tons of biomass using open pounds harvest 27.3 tons of spawn-on-kelp.

As far as we know no State study has occurred using closed pounds. But the State is using the ADF&G conversion metric of 12.5 tons of biomass = 1 ton SOK. This is a conversion factor of 8%. If you wish to harvest 100 tons of biomass harvest 8 tons of spawn-on-kelp using the closed pound method.

The States of California, Washington and the province of British Columbia, Canada all use the metric of weight of product coming out of the pound for control of the extraction from their stocks. Alaska is the only place using the size of pound and number of kelp blades for harvest control. This metric of control, in Alaska, seems to contribute to no control as shown by the overharvest in 2017.

The way to fix some of the problem with overharvest is: Weigh the spawn-on-kelp coming out of the pounds. Do this weighing as the product is harvested. When the quota is reached the permittee stops harvesting, the kelp is left in the raft and the spawn attached to the kelp is allowed to hatch.

Don't worry about the amount of kelp placed into the raft. Kelp is plentiful and a study has been done by the ADF&G that shows this. Also, kelp is a costly thing and the permittee will soon learn to control the amount of kelp placed into the raft because kelp is an expense to the bottom line.

Let's look at the proposed 2018 Craig/Klawock harvest quota of 925 tons.

The permit holder should be allowed to pick the type of gear used, open or closed. If 13 chose open pound and 30 chose closed pound that's a total of 43 permittee fishing. The 13 open pound permittee get 30.2% of the 925 tons quota and the closed permittee gets 69.7% of the quota of 925 tons. The 13 open pounders get 11,732 lbs each. The 30 closed pounders get 3,438 lbs each.

The 2018 Craig/Klawock harvest quota is 925 tons. (Forgetting about the excess bait quota)

The 13 open pounders calculations:

13 pounders/ 43 total participants = 30.2%

$925 \times 30.2\% = 279.35$ tons

$279.35 \times .273 = 76.26$ tons (conversion factor for open Pounds)

$76.26 / 13 = 5.866$ tons = 11,732 lbs per open pound per permit.

The 30 closed pounders calculations:

30 pounders/ 43 total participants = 69.7%

$925 \times 69.7\% = 644.725$ tons

$644.72 \times .08 = 51.577$ tons (conversion factor for closed pounds)

$51.577 / 30 = 1.719$ tons = 3,438.4 lbs per closed pound permit.

Overharvests and other factors, in all the Spawn-on-kelp fisheries in SE Alaska, has probably contributed to the below threshold biomass of most of the herring pound fisheries. The reason for overharvest is the measurement of extraction from the stock using pound size and the number of kelp blades for control. A better metric would be weight of product. And better too, would be using the open pound method instead of the closed pound method.

Best Regards,
Darrell Kapp