

Herring

PROPOSAL 156

5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area.

Modify harvest rate control rule for Sitka Sound sac roe herring fishery, as follows:

Our recommended solution is to implement the herring harvest control rule that is used in all areas of Southeast Alaska except Sitka Sound. The proposed action would provide consistency in the management and regulation of herring populations throughout Southeast Alaska.

5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area

(g) The guideline harvest level for the herring sac roe fishery in Sections 13-A and 13-B shall be established by the department and will be a harvest rate percentage that is not less than 10[12] percent, not more than 20 percent, and within that range shall be determined by the following formula: Harvest Rate Percentage = 8 + 2[2 + 8] (Spawning Biomass (in tons)/20,000). The fishery will not be conducted if spawning biomass of is less than 25,000 tons.

What is the issue you would like the board to address and why? The Sitka Tribe of Alaska proposes changing the harvest control rule (HCR) for Sitka Sound herring to the same HCR that is used for herring throughout Southeast Alaska (SEAK). The SEAK HCR begins with a 10% harvest rate when the population is forecasted to reach the harvest threshold (currently 25,000 tons in Sitka Sound), then harvest rate is allowed to gradually increase until reaching the maximum 20% harvest rate when the population is six times greater than the harvest threshold, i.e., 150,000

tons. In 2019, the herring biomass was approximately 131,000 tons, and in 2020 the forecast biomass is 212,000 tons, which is well above 6X the threshold. In contrast to the SEAK HCR, the Sitka Sound HCR is much more aggressive and does not support the needs of subsistence users and many marine species. The Sitka Sound HCR begins with a 12% harvest rate when the population is forecasted to reach the harvest threshold (25,000 tons), then the harvest rate increases rapidly until reaching 20% at only 45,000 tons. During the past 20 years, the guideline harvest rate in Sitka Sound is always at or very close to the 20% maximum. This high harvest rate guideline stems in part from reliance on an average unfished biomass value that was developed from data collected -28 to 50 years ago (Carlile 1998). Recent biomass data indicate this critical management value is too low and contributes to overharvest of a forage fish that is also needed for food by subsistence users and many socially and economically important marine species. Subsistence users and marine species require much higher abundances of herring than a commercial purse seine fleet in order to meet their needs. Furthermore, a 20% annual commercial harvest rate on herring that return to spawn over many years leads to a very high lifetime harvest rate on each herring year class in Sitka Sound.

What would happen if nothing is changed?

Continued use of the existing Sitka Sound HCR is inconsistent with management of herring in all other regions of SEAK, and it would continue to inhibit population growth of herring and inhibit Alaskan subsistence users from meeting their needs (Shelton et al. 2014). The status quo would also reduce the ability of Sitka Sound herring to support the marine ecosystem, including depressed Chinook salmon and Pacific cod, both of whom rely upon herring for food. Furthermore, only a small fraction of the commercially caught herring (sac roe in females) are consumed by humans (e.g., in Japan not Alaska); more than ~90% of the commercially-caught herring becomes fish meal that is used to support salmon farms that compete with Alaska salmon fishermen. The content management approach (HCR) to maximize commercial harvests of Sitka Sound herring is counterproductive to the needs of the vast majority of Alaskans.

What are other solutions you considered? Why did you reject them?

This proposed action is less drastic than a moratorium of the commercial fishery or a significantly reduced maximum annual harvest rate (10%), which has been considered in British Columbia.

References

Carlile, D. W. 1998. Estimation and evaluation of a harvest threshold for management of the Sitka herring sac roe fishery based on a percentage of average unfished biomass. Alaska Department of Fish and Game, Division of Commercial Fisheries Regional Information Report 1198-18, Juneau.

Shelton, A.O., Samhouri, J.F., Stier, A.C. & Levin, P.S. 2014. Assessing trade-offs to inform ecosystem-based fisheries management of forage fish. *Sci. Rep.* 4, 711 O;
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PROPOSED BY: Sitka Tribe of Alaska

(HQ-F20-091)

PROPOSAL 157

5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area.

Modify harvest rate for Sitka Sound commercial sac roe herring fishery based on forecasted age structure, as follows:

Our recommended solution involves a slight modification of the existing harvest formula in Sitka Sound to reduce risk of harvesting more than 20% of the larger, older component of the population that is selectively harvested by the commercial fishery. This modification could be easily applied to the SEAK herring harvest formula, if it were to be adopted in Sitka Sound.

5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area

(g) The guideline harvest level for the herring sac roe fishery in Sections 13-A and 13-B **shall consider the preseason age structure as a means to prevent exceeding the 20% maximum harvest rate when targeting older herring. The guideline harvest level** shall be established by the department and will be a harvest rate percentage that is not less than **12** percent, not more than 20 percent **on each age group (i.e., "old" and "young" herring)**, and within that range shall be determined by the following **formulas** [FORMULA]:

GHLold fish = (% Old fish) * (Spawning Biomass) * (2 + 8 (Spawning Biomass/20,000))

GHLyoung fish = 0.5 *(%Young fish)* (Spawning Biomass)* (2 + 8 (Spawning Biomass/20,000))

Total GHL = GHLold fish+ GHLyoung fish

[HARVEST RATE PERCENTAGE = 2 + 8 (SPAWNING BIOMASS (IN TONS)/20,000).]

"Old fish" is defined as herring that are age-5 and older; "young fish" is defined as age-3 and age-4 herring. The selectivity correction factor (0.5) should be allowed to change in accordance with future selectivity patterns. The fishery will not be conducted if spawning biomass is less than 25,000 tons.

What is the issue you would like the board to address and why? Many herring captured by commercial purse seines in Sitka Sound are small/young fish that do not meet market demands. Therefore, the sac roe fishery conducts test fisheries and targets the largest, oldest, most fecund herring in the population. Regulations currently allow the harvest rate on specific age components to exceed 20% (i.e., high-grading) as long as the overall harvest rate is 20% or less. Theoretically, under current regulations, the entire guideline harvest level (GHL), or even 100% of the older population, could be taken with the largest most fecund herring leaving few large fish to spawn, if the fishery was efficient when selectively harvesting large herring. This is an obvious, unintended deficiency in the current regulation.

Fortunately, selectivity for larger older herring is not perfect, and analysis of the ADFG ASA model data shows that the harvest rate on age 5+ "old" herring is currently 2X that of younger herring (age 3-4) (Figure 1). In other words, only -0.5 "young" herring are harvested relative to each "old" herring (please see formula below). To avoid overharvest of the biologically important old, large females as well as to minimize the harvest of young fish that are not economically desirable, the guideline harvest level should consider the proportion of the population that meets market demands and not the entire population. Furthermore, the current maximum allowed harvest rate on herring (20%) should not be exceeded when targeting the larger, more biologically

productive component of the herring population. Our straightforward adjustment to the existing formula to set the guideline harvest level addresses this issue by accounting for the observed (modeled) selectivity of the commercial fishery while setting the maximum annual harvest rate on "old" herring at 20%.

In simple terms, this proposal provides a management tool that reduces the risk of harvesting more than 20% of the larger, older herring that are targeted by the commercial fishery.

What would happen if nothing is changed?

The negative consequences of high-grading the oldest, largest, most fecund females from a population is well known. These large, old fish contribute disproportionately more to future herring generations (Barneche et al. 2018) and they appear to guide younger herring back to suitable spawning areas (MacCall et al. 2018). Furthermore, recent evidence in Sitka Sound supports the "Go with Older Fish" hypothesis that is recognized in both western science and traditional ecological knowledge. For example, in 2019 and 2020 when the herring population was dominated by young fish (age 3 and age 4), few herring spawned in the "core" area where most herring have spawned in recent decades.

If nothing is changed, the sac roe seine fishery would be legally permitted to high-grade fish in a manner detrimental to the population structure and future herring generations. Existing regulations allow the harvest rate on specific age components to exceed 20% (i.e., high-grading) as long as the overall harvest rate is 20% or less. A truncated age structure with fewer experienced spawning adults would likely continue to result in erratic spawn, reduced future production, and the inability of subsistence harvesters to meet their needs.

What are other solutions you considered? Why did you reject them?

This is a less drastic action than a moratorium of the commercial fishery or a significantly reduced maximum annual harvest rate (10%), which has been considered in British Columbia. It is noteworthy that the current annual 20% maximum harvest rate equates to a much higher harvest rate over the life time of each herring year class because herring are harvested over many years.

References

- Barneche, D.R., D.R. Robertson, C.R. White and D.J. Marshall. 2018. Fish reproductive energy output increases disproportionately with body size. *Science* 360:642-645. DOI: 10.1126/science.aao6868 <http://science.sciencemag.org/content/360/6389/642>
- MacCall, A.D., T.B. Francis, A.B. Punt, M.C. Siple, D.R. Armitage, J.S. Cleary, S.C. Dressel, R.R. Jones, H. Kitka, L.C. Lee, P.S. Levin, J. McIsaac, D.K. Okamoto, M. Poe, S. Reifenstuhl, J.O. Schmidt, A.O. Shelton, J.J. Silver, T.F. Thornton, R. Voss, and J. Woodruff. 2018. A heuristic model of socially learned migration behaviour exhibits distinctive spatial and reproductive dynamics. *ICES Journal of Marine Science*, doi:10.1093/icesjms/fsy091.

PROPOSED BY: Sitka Tribe of Alaska

(HQ-F20-092)

PROPOSAL 158

5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area.

Incorporate forecasted age structure into Sitka Sound commercial sac roe herring fishery spawning biomass threshold, as follows:

Managers must ensure there are sufficient old and large fish in the population to lead younger fish to appropriate spawning grounds and increase the potential for successful recruitment to the population.

5 AAC 27.160. Quotas and guideline harvest levels for Southeastern Alaska Area

(g) The guideline harvest level for the herring sac roe fishery in Sections 13-A and 13-B shall be established by the department and will be a harvest rate percentage that is not less than 12 percent, not more than 20 percent and within that range shall be determined by the following formula: Harvest Rate Percentage = $2 + 8 (\text{Spawning Biomass (in tons)} / 20,000)$. The fishery will not be conducted if spawning biomass of is less than 25,000 tons **or the proportion of fish age 5 and older is less than or equal to 0.20, as determined by the pre-season bait fishery or test fishing completed by February 28th in District 13-B.**

What is the issue you would like the board to address and why? The oldest, largest herring are biologically the most important herring in the population. Older fish lead younger, inexperienced fish to appropriate spawning grounds (MacCall et al. 2018). Older, larger fish have relatively more fecundity and more well-provisioned eggs that are more likely to survive (Hixon et al. 2014; Barneche et al. 2018). A population of older, larger fish will have much greater fecundity and reproductive success than an equivalent biomass of younger, smaller fish (Venturelli et al. 2009).

Currently, many herring captured by the Sitka Sound sac roe herring fishery are young and small and do not meet market demands. Consequently, the Sitka Sound sac roe herring fishery consistently targets and harvests the oldest, largest, most fecund females in the population. These are the very fish we should protect to ensure the long-term health of the population. Industrial fishing pressure has been shown to lead to reduced size and truncated age structure in populations (Barnett et al. 2017) and traditional ecological knowledge indicates that the size and age structure of Sitka Sound herring has indeed been truncated since the advent of reduction fisheries in the 1800s. While a 20% harvest rate may not seem high to some, the compounding effects of a harvest of at least 20% annually on a relatively long-lived fish like a herring are quite large. Without older, larger fish in the population, spatiotemporal distribution of spawn has shifted and resulted in the inability of subsistence harvesters to meet their needs.

This proposal is a simple alteration to the current management threshold to ensure there is a minimum of relatively older fish in the population to lead younger fish to better spawning grounds and increase reproductive success of the population. When there aren't enough old fish in the population, fishing should not occur as a means to prevent further decline of these most important large herring.

What would happen if nothing is changed?

Continued fishing pressure on the oldest, largest fish will exacerbate size and age structure truncation issues in the Sitka Sound herring population. The frequency of abnormal spawning distribution (in terms of space and time) will likely increase and subsistence harvesters will be less likely to meet their needs.

What are other solutions you considered? Why did you reject them?

This is a less drastic action than a moratorium of the commercial fishery. This is also less drastic than setting higher thresholds using older age classes that would have likely better reflected the pristine age structure.

References

Barnett, L.A.K., T.A. Branch, R.A. Ranasinghe, and T.E. Essington. 2017. Old-growth fishes become scarce under fishing. *Current Biology*. 27: 2843-2848.

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Venturelli, P.A., B.J. Shuter, and C.A. Murphy. 2009. Evidence for harvest-induced maternal influences on the reproductive rates of fish populations. *Proc R Soc B*. 276:919-924.

PROPOSED BY: Sitka Tribe of Alaska (HQ-F20-093)

PROPOSAL 159

5 AAC 27.195. Sitka Sound commercial sac roe herring fishery.

Repeal this regulation related to management of the commercial sac roe herring fishery in Sitka Sound, as follows:

The Board should repeal 5 AAC 27.195. Other regulation, including 5 AAC 27.160(g) and 27.190 establish clear and sufficient guidance to the department for management of the commercial sac roe fishery and to assure reasonable subsistence opportunity. Reasonable subsistence opportunity was also enhanced with the biomass threshold increase of 5,000 tons (2 million pounds) and establishment of the “core area” closure of 2012 and then substantially increased again in 2018. In short, 5 AAC 27.195 is not necessary for the department to manage the two fisheries and, if interpreted as the Sitka Tribe of Alaska (STA) contends, will totally compromise commercial sac roe fishery in Sitka Sound.

What is the issue you would like the board to address and why? The board enacted 5 AAC 27.195 in 2002 in an effort to provide direction to the department regarding management of the

commercial herring sac roe and subsistence herring egg fisheries in Sitka Sound. This regulation, which the Board has not revisited since 2002, is outdated, ambiguous and subject to misinterpretation. Problems include (but are not limited to): 1) How the regulation should be applied in light of subsequent action by the Board to raise the recommended biomass of 20,000 tons by 25% (5,000 tons) to 25,000 tons as a buffer for subsistence. Also, in 2012, the board designated a “core area” closed to commercial sac roe fishing as the area most important for subsistence harvest of roe on branches; and (2) whether the regulation prohibits the department from opening the sac roe fishery prior to the onset of the herring spawn as argued by STA in a lawsuit against the Board and the department. STA contends that in adopting 5 AAC 27.195, the Board intended that the department delay opening the commercial fishery until enough herring have spawned to allow a determination that the subsistence harvest will be sufficient in both quantity and quality to meet subsistence needs. (Determination of quality and quantity is problematic and impossible to accomplish in-season). Delaying the commercial fishery as STA alleges that this regulation requires, would clearly eliminate the commercial sac roe fishery and cannot be the Board’s intent when the regulation was adopted.

PROPOSED BY: Southeast Herring Conservation Alliance (HQ-F20-106)

PROPOSAL 160

5 AAC 27.150. Waters closed to herring fishing in Southeastern Alaska Area.

Reduce closed waters in the Sitka Sound commercial sac roe herring fishery, as follows:

Returning to the ‘core area’ established in 2012 would still allow for a designated subsistence harvest area while reversing the unnecessary losses of commercial fishing access to available resources. From 2012 until 2018, the regulation 5 AAC 27.150 (7) stated that closed waters would be:

“District 13, in the waters north and west of the Eliason Harbor breakwater and Makhnati Island Causeway from the westernmost tip of Makhnati Island to the easternmost point on Bieli Rock to the southernmost tip of Gagarin Island to a point on the eastern shore of Crow Island at 56 degrees 06.43’ N. lat., 135 degrees 28.27’ W long. To a point on the western shore of Middle Island at 57 degrees 06.41’ N. lat., 135 degrees 28.11 W. long. To a point on the southeastern shore of Middle Island at 57 degrees 05.56’ N. lat., 135 degrees 26.23’W. long to the green navigation marker northeast of Kasiana Island, to the Baranof Island shore at 57 degrees 05.26’ N. lat, 135 degrees 22.95’ w. long.”

What is the issue you would like the board to address and why? Waters closed to the commercial sac roe fishery in District 13 have been increased three times in the last ten years under the guise of increasing reasonable subsistence harvest opportunity based on purported failure of subsistence harvesters to reach the artificially inflated 136,000 to 227,000 pound ‘Amount Necessary for Subsistence’. The commercial sac roe fishery has lost access to areas that had previously yielded substantial portions of the harvest while the closures have had little or no effect on reasonable harvest opportunity or participation of subsistence users. In 2018, the ‘core’ area established in 2012 was increased with no demonstrated benefits to subsistence users. Returning

to the 'core area' established in 2012 would still allow for a designated subsistence harvest area while reversing the unnecessary losses of commercial fishing access to available resources.

PROPOSED BY: Southeast Herring Conservation Alliance (HQ-F20-105)

PROPOSAL 161

5 AAC 01.730. Subsistence fishing permits.

Require a subsistence fishing permit to harvest herring roe on branches in the Sitka Sound area, as follows:

Require a permit or registration for participation in the subsistence harvest under 5AAC 01.716 that can assist the department in managing the fishery and ensuring that subsistence harvesters have 'reasonable opportunity' to harvest herring eggs in the Sitka Sound Area.

What is the issue you would like the board to address and why? Many if not most of the subsistence fisheries in SE Alaska require a permit or registration in order to participate. The Sitka Sound subsistence fishery for herring eggs on branches and kelp does not have that requirement despite the need for accurate and timely information on harvest and participation. Present monitoring is done using a survey and interview system undertaken in part by some who have an interest in particular outcomes. While the department's Subsistence Division participates in the process, the reports are not released in a timely manner and could benefit from a permit data collection program. Given the Sitka Tribe of Alaska lawsuit against the State of Alaska and Board of Fish, there is an even greater need for accurate information related to subsistence use of the Sitka sound herring resource. The Division of Subsistence has experienced significant reductions in budget that compromise the division's capability to collect and compile data. A permit system for collecting data would assist the department in gathering more robust data and more timely reporting.

PROPOSED BY: Southeast Herring Conservation Alliance (HQ-F20-108)

PROPOSAL 162

5 AAC 01.730. Subsistence fishing permits.

Increase the possession limit for subsistence spawn-on-kelp harvest, as follows:

(g) When issuing a herring spawn-on-kelp subsistence fishing permit, the department may specify on the permit the times and locations for harvesting and the species of kelp that may be taken. The annual possession limit for herring spawn on kelp is [32] **75** pounds for an individual or [158] **325** pounds for a household of two or more persons. [THE DEPARTMENT MAY ISSUE AN ADDITIONAL PERMIT FOR HERRING SPAWN ON KELP ABOVE THE ANNUAL POSSESSION LIMIT IF HARVESTABLE SURPLUSES OF HERRING SPAWN ON KELP ARE AVAILABLE.]

What is the issue you would like the board to address and why? The current possession limits of herring roe-on-kelp of 32 lbs per individual or 158 lbs per household are too low for efficient

harvesting and too precise to be easily measured in the field. The current regulations allow for an annual harvest of twice the possession limit, but the permit holder must return to the ADF&G office after harvesting their first possession limit to renew their permit. This necessitates two fishing trips thus burning twice the fuel and taking twice the time. If the ADF&G office is closed for the weekend after the harvester's first trip, the harvest opportunity may be lost due to tides no longer being low enough to harvest or a change in weather. This proposal would allow the full annual limit to be harvested in a single fishing trip and rounds the allowable limit up to the nearest 25 pound increment. Herring roe is often stored in 50 pound wet-lock boxes, making 75 pounds or 325 pounds quantities that can be measured in the field much more easily than 64 pounds or 316 pounds.

While macrocystis kelp was once in limited supply, the now-abundant sea otters have eaten enough sea urchins (which eat kelp), that now great kelp forests flourish. Hence, the amounts of herring roe and kelp taken under roe-on-kelp subsistence permits is negligible compared to the currently available resources.

PROPOSED BY: Tad Fujioka (EF-F20-018)

PROPOSAL 163

5 AAC 27.195. Sitka Sound commercial sac roe herring fishery.

Establish equal share quotas for the Sitka sac roe purse seine fishery, as follows:

Assign equal quota shares in the Sitka Sound commercial sac roe herring fishery as follows: For the G01A herring fishery, the quota shall be divided equally amongst all permit holders who currently own a permit for that fishery.

Under 5 AAC 27.195 part (a), include a section that establishes an equal quota share management strategy that allocated an equal share of the guideline harvest level each year to each G01A permit holder.

Suggested regulation would read: 5 AAC 27.195 (a) (3) manage the purse seine fishery so that each G01A permit holder is allocated an equal portion of the guideline harvest level. The Department shall open the fishery by emergency order and may impose conditions that allow for and orderly and controlled fishery including limiting the number of vessels on the grounds at any given time and allowing for consolidation of more than one permit on each vessel participating in the fishery, provided that the permit holders are onboard the vessel while fishing and delivering.

What is the issue you would like the board to address and why? The current management of the Sitka Sound sac roe fishery creates an extremely dangerous fishery that results in multiple damages to vessels, nets, and persons involved in the fishery. Further it does not adequately address the needs for conservation of the resource and the ability to meet the concerns of the subsistence users.

If this issue is not addressed the fishery will remain dangerous and expensive to manage. The Department of Public Safety and the United States Coast Guard will spend thousands of dollars

trying to control the fishery. The issues of conservation won't be addressed and it will not address the concerns of the subsistence users. With an equal quota share permit some permits could be held by persons not wanting to harvest their share of the quota thereby adding to the escaping biomass and providing for more subsistence harvest opportunities.

PROPOSED BY: Charles Olson

(EF-F20-049)

PROPOSAL 164

5 AAC 27.195. Sitka Sound commercial sac roe herring fishery.

Establish equal share quotas for the Sitka Sound sac roe herring purse seine fishery, as follows:

5 AAC 27.195 would be amended to read:

(c) A permit holder of a CFEC permit in the G01A fishery may not retain more herring in the Sitka Sound commercial sac roe fishery than the annual amount of herring equal quota share that is specified by the department. The department shall determine the annual amount of herring equal quota share by dividing the annual harvest objective by the number of CFEC permits and interim use permits eligible to be fished in the fishery.

(d) When participating in the Sitka Sound commercial sac roe herring fishery, a person holding a CFEC permit or interim permit for that fishery must retain in that persons possession and present for inspection on board the vessel on which that person is registered to fish, a copy of each completed fish ticket issued to that person during the current season. The permit holder shall provide each buyer with the total weight of herring that the permit holder has landed to date in the fishery for that year.

(e) If a person harvest exceeds the permit holders equal quota share established under (c) and (d) of this section for that year, by not more than ten percent, the department shall reduce the permit holders equal quota share for the following year by the amount of the overage. The adjusted quota share is the permit holders quota share for that year. If a permit holders harvest exceeds the permit holders equal quota share by more than ten percent, the proceeds from the sale of the overage in excess of then percent shall be surrendered to the state. A permit holder may not assume that the ability to adjust a equal quota share under this section is an opportunity to knowingly exceed a quota share or to exceed the equal quota in an amount greater than ten percent as such actions may be prosecuted under AS 16.05.722 or AS 16.05.723

(f) If a permit holders harvest is less than the permit holders equal quota share established under (c) or (d) of this section for that year, the department shall increase the permit holders equal quota share only for the following year by the amount of underage that does not exceed ten percent of the equal quota share.

(g) In the Sitka Sound commercial sac roe fishery, herring may only be taken daily from 8:00am to 5:00pm from March 1 until April 30. Permit holders must register with the department before fishing.

What is the issue you would like the board to address and why? The Sitka Sound commercial sac roe fishery is one of the most hazardous fisheries in the state. Fishermen are put into small areas for even smaller amounts of time to fight over the resource. Vessels are routinely in collisions, vessels have rolled over, gear is frequently destroyed and injuries are not uncommon. Fishermen and insurance companies have frequent claims, and the State of Alaska, USCG and local law enforcement are forced to spend limited and valuable resources to patrol the derby fishery. This is not only costly to the fishermen and government, but taking these limited enforcement resources away from their usual duties to monitor a derby makes the residents of the region less safe. We, permit holders in the Sitka Sound commercial sac roe fishery, would like this dangerous derby style fishery to end. We should not have to needlessly risk our equipment and crew just to go fishing.

There are several fisheries in the State of Alaska that are managed under a equal quota share system. These are the PWS sablefish fishery, Northern SE sablefish fishery and Southern SE sablefish fishery. These are all some of the safest and orderly fisheries in the state. These fisheries require very little enforcement and in season management. GHl's are never exceeded and the resources are healthy. We, permit holders in the Sitka Sound commercial sac roe herring fishery, would like to be managed under a similar safe and orderly system.

PROPOSED BY: Andrew Kittams, Alan Otness, Nels Otness, and Jim Bodding (EF-F20-060)

PROPOSAL 165

5 AAC 27.110. Fishing seasons for Southeastern Alaska Area.

Allow unharvested Sitka sac roe quota to be harvested for food and bait by herring sac roe purse seine permit holders, as follows:

Allow the harvest of the uncaught quota from the Sitka Sound herring sac roe fishery to be harvested during a food and bait fishery by G01A permit holders in Sitka Sound as follows:

5 AAC 27.110 (a) delete [SOUTH OF THE LATITUDE OF CAPE ASPID (56 41.75 N LAT)]
(b) Herring may be taken in the sac roe fishery [ONLY] during seasons established by emergency order in the following sections;

Add section: **(g) In section 13b herring can only be taken for food or bait by G01A permit holders.**

What is the issue you would like the board to address and why? When the market for sac roe herring is weak the quota for the Sitka Sound sac roe fishery goes unharvested. There is no other way to harvest the herring and generate revenue for the fleet, their crews, the processors, and the community. By allowing the harvest of the quota for other usages it creates the opportunity to develop new markets and products for the resource.

PROPOSED BY: Charles Olson (EF-F20-050)

PROPOSAL 166

5 AAC 27.1XX. New Section.

Create an open pound herring spawn on kelp fishery in Sitka Sound, as follows:

An experimental open pound herring spawn on kelp fishery was conducted in Sitka Sound in 1998 and 1999. This project identified open pounds as a viable alternative to the sac roe fishery and produced published studies, data, and video which demonstrate the positive results of this alternative harvest method. The time is overdue to make a positive change in the Sitka herring fishery. Allowing existing G01A permit holders the option of using open pound roe on kelp instead of seining for sac roe would increase the value of the fishery and promote conservation of the resource. Fishermen and Permit Holders, Processors, Subsistence users, and the community of Sitka would all see an increase in benefit from the Sitka herring resource by allowing existing permit holders a choice between sac roe seining and utilizing open pound roe on kelp.

Please allow existing G01A permit holders the alternative harvest method of open pound roe on kelp contingent on later action by CFEC.

What is the issue you would like the board to address and why? Fisheries for forage species such as herring are seeing increased scrutiny and market conditions for traditional sac roe product have never been worse. It is more important than ever to make changes to the fishery which promote conservation and increase the value of the extracted resource. In short, allowing open pound spawn on kelp as an alternative harvest method would increase the value of the Sitka Sound herring fishery while removing less fish from the biomass which are two things fishery managers should strive for.

The Board of Fisheries (BOF) has written two letters to the Commercial Fisheries Entry Commission (CFEC) asking the CFEC to take the Sitka Area (GO1A) limited entry administrative area out of the Northern Pound (L21A) limited entry administrative area. CFEC has taken no action on either request. This inaction has stopped the BOF from deliberating and deciding on this proposal which would allow those with GO1A permits the alternative of using open pounds to harvest their Sitka Sound herring stock. The Board needs to let CFEC know if they favor this proposal so CFEC would be compelled to make the necessary complementary regulatory changes. Without the Board demonstrating support for this proposal CFEC will not act.

PROPOSED BY: Darrell Kapp

(EF-F20-039)

PROPOSAL 167

5 AAC 27.110. Fishing seasons for Southeastern Alaska Area and 5 AAC 27.160. Quotas and Guideline harvest levels for Southeastern Alaska Area.

Redefine the boundaries of the Hoonah Sound spawn-on-kelp fishery (13-C) and the Sitka sac roe fishery (13-A/B), as follows:

Remove Salisbury sound from the Sac Roe seine fishery and open it for spawn on kelp. The last time Hoonah sound had a fishery was when seiners fished in Salisbury sound after that there were

no more fisheries in Hoonah sound. Hoonah sound is only 11 miles away from Salisbury sound and the stocks are one.

What is the issue you would like the board to address and why? Designate Salisbury sound for the Northern Southeast spawn on kelp fishery. The Salisbury sound stock is Hoonah fish. It should be a spawn on kelp area for northern southeast permit holders. It is 11 miles from Hoonah sound and there hasn't been much if any spawn in Hoonah lately, they just moved south 11 miles, which is not unreasonable.

PROPOSED BY: Larry Demmert (EF-F20-046)

PROPOSAL 168

5 AAC 27.110. Fishing seasons for Southeastern Alaska Area.

Repeal commercial set gillnet sac roe herring fisheries in Section 1-F, as follows:

5 AAC 27.110. Repeal commercial sac roe herring fishing in Section 1F (Revilla Channel, Kak Shakes, Dog, Cat Island)

What is the issue you would like the board to address and why? To repeal commercial sac roe fishing in Section 1F (Revilla Channel). Fishery started 1976 fished until 1998. Has not been fished for 22 years, stock have not recovered.

We have King salmon stock of concern that depend on the herring for food year round. I believe this warrants the board to take the same action it took in 2018 for Sections 15B, 15C and 11A.

PROPOSED BY: Donald Westlund (HQ-F20-030)

PROPOSAL 169

5 AAC 27.110. Fishing seasons for Southeastern Alaska Area.

Repeal commercial set gillnet sac roe herring fisheries in Sections 1-E and 1-F, as follows:

5 AAC 27.110. Repeal commercial sac roe herring fishing in Sections 1E and 1F.

What is the issue you would like the board to address and why?

West Behm Canal Herring Fishery Background

West Behm Canal is located in Southeast Alaska, approximately nine nautical miles north of downtown Ketchikan. Before statehood when the federal government was managing and assessing herring stocks in the Ketchikan area, the West Behm Canal herring stock was considered a minor stock of herring. Historical records from the 1950' s show that the nautical miles of herring spawn fluctuated between 1 and 8 miles in West Behm Canal on an annual basis. Fisheries occurred in the area throughout the 1960' s and 1970' s with the purse seine bait fishery as the largest component. The department of Fish and Game, under a more conservative fishery regime, closed the fisheries in 1980. The amount of spawn continued to fluctuate between 1 and 6.5 miles of

between 1980 and 1992. So, during the 42 years from 1950 and 1992 the miles of spawn ranged from 1 and 8 miles.

The Board of Fisheries, during the January 2003 meeting in Sitka, established a herring fishery in West Behm Canal after hearing and reading extensive testimony from interested parties with widely differing viewpoints.

Since then there has only been one opening in 2011. And none since. The herring in this area have still not recovered. Taking the action the board took in 2018 on repealing sac roe fishing in Sections 15B, 15C, and 11A. I believe the same action is warranted for the same reasons in Sections 1E and 1F (West Behm Canal).

PROPOSED BY: Don Westlund (HQ-F20-029)

PROPOSAL 233

5 AAC 33.200. Fishing districts and sections.

Remove districts 13-A and 13-B from Northern Southeast herring spawn on kelp pound fishery administrative area, as follows:

Remove districts 13A and 13B from L21A administrative areas.

What is the issue you would like the board to address and why? There is an overlap in administrative areas for G01A permits and L21A permits. L21A permittees were mistakenly given access to an already fully allocated and utilized herring stock.

PROPOSED BY: Southeast Herring Conservation Alliance (HQ-F20-107)
