

Did You Know?



Alaska Department of Fish & Game established the preliminary
2012 Guideline Harvest Level for the
Sitka Sound Sac Roe Fishery at:

29,008 tons

That Equals

58,016,000 Pounds

(a 33% increase from last year)

OR...

- 43,766 Totes of Herring
- 33 Miles of Totes End to End
- 21 Miles of Totes Stacked High

...which would be...

**78 X Higher than the
Empire State Building**

Excessive?

← **The Tote**



The Sitka Tribe of Alaska Resource Protection

Go to: <http://sitkatribes.org> and follow the herring link



No Free Lunch...

Pacific Herring are keystone forage fish in marine ecosystems
AND the only forage fish in Alaska commercially harvested

Recent studies show that herring make up over
62% of the diet for **King Salmon**
59% of the diet for **Coho Salmon**
53% of the diet for **Halibut**

Not to mention...

Around **5,000 Humpback Whales** feed in Southeast Alaska
A whale can eat **3,000 pounds** of krill & small fish a day

So, Each Day

Our whales need 15,000,000 pounds of krill & small fish (herring)

All other forage fish are considered vital to the health of our marine ecosystem and are protected from commercial fishing.

Why not herring?



Sitka Tribe of Alaska Resource Protection Department

Go to: <http://sitkatribes.org> and follow the herring link

Sitka Chamber of Commerce Protests Commercial Herring Fishery

Sitka Sound

1954

Herring Stock Decline

Salmon Trollers Claim Herring Stocks Depleted

July 3, 1954-

“Perhaps you are not aware of the **damage to the salmon industry that is being done with the depletion and destruction of the herring** the salmon’s natural food. ...Last year the same thing happened, with the result that **the salmon industry in this area was a complete failure.**” (Official Protest Lodged by the Sitka Chamber of Commerce)

Sitka Sound Herring Have Been Overexploited in the Past



Don't Let History Repeat Itself

Present Day 2012-

Alaska Department of Fish & Game established the preliminary
2012 Guideline Harvest Level for the Sitka Sound Sac Roe Fishery at:

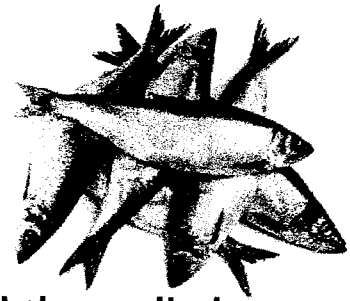
58,016,000 Pounds



Sitka Tribe of Alaska Resource Protection Department

Go to: <http://sitkatribes.org> and follow the herring link

Time Out...



Alaska Department of Fish & Game established the preliminary
2012 Guideline Harvest Level for the
Sitka Sound Sac Roe Fishery at:
58,016,000 Pounds

Or...
1.2 Million Cubic Feet of Herring

...which would FILL...

A Regulation Basketball Court

252 Cubic Feet or...

... 25 Stories High

A NFL Regulation Football Field

...Over 20 Cubic Feet High



Not to mention...

Filling 78 Sitka Centennial Hall City Assembly Chamber Rooms

Personal Foul ... Excessive Harvest



Sitka Tribe of Alaska Resource Protection Department

Go to: <http://sitkatribes.org> and follow the herring link

Do you Remember?



Remember when...

**You Could-
'Harvest Herring with Rakes' in Sitka Sound?**

Remember when...

**Southeast Alaskan Waters-
"Boiled with Herring as Far as the Eye could See?"**

Remember when...

**Herring Populations Thrived In-
Auke Bay, Lynn Canal, and Throughout Southeast Alaska?**



...Traditional Ecological Knowledge Remembers...

Fisheries scientists sometimes fail to identify how abundant a population was before human exploitation, creating a
'Shifted Baseline.'

So, when ADF&G began managing herring...the population was
Already Overexploited

...allowing a depleted state to be accepted as normal...or even High!

...Something's Fishy...



SITKA TRIBE OF ALASKA RESOURCE PROTECTION

Go to: <http://sitkatribe.org> and follow the herring link



Crunch the Numbers

- Fishery economists predict continued declines in the high end herring roe market.
- Based off of last year's trends, market analysts estimate as much as 6,000,000 lbs of herring roe inventory may be carried over from 2011 into 2012.
- Retailers have had to DROP the price of the roe 20% to stimulate sales.
- Wholesale markets dropped \$500/per ton from 2010 to 2011.

What will a 33% increase in the 2012 GHJ do to Sitka's fishery value?

<u>Year</u>	<u>Harvest/GHL Tons</u>	<u>Exvessel Price/Ton</u>	<u>Exvessel Value</u>	<u>City of Sitka Landing Tax Revenue</u>
2010	17,874	\$730	\$13,048,020	\$195,720
2011	19,430	\$150 - \$200	\$2,914,500 – \$3,886,000	\$43,717 – \$58,290
2012	29,008	?	?	?

At what point are herring worth more LEFT in the water?



Sitka Tribe of Alaska Resource Protection Department

Go to: <http://sitkatribes.org> and follow the herring link

SEAN PARNELL, GOVERNOR

DEPARTMENT OF LAW
OFFICE OF THE ATTORNEY GENERAL

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ANCHORAGE, ALASKA 99501-3903
PHONE: (907) 269-5100
FAX: (907) 269-5110

February 17, 2012

The Honorable Alan Austerman
Alaska State Legislature
State Capitol, Room 204
Juneau, Alaska 99801

Re: Letter of February 8, 2012
Conflicts of Interests for Board of Fisheries Members

Dear Representative Austerman:

Thank you for your letter of February 8, 2012 concerning the impacts on the Board of Fisheries process when members are prevented from deliberating and voting on regulatory proposals because of a conflict of interest. I can certainly understand the frustration that arises when Board members with the most expertise and experience with particular fishery issues are unable to participate. The Alaska Executive Branch Ethics Act, AS 39.52, is specific in its requirements, however, and limits our flexibility in advising the Board on these issues.

The Ethics Act, at AS 39.52.220, mandates that all Board members disclose on the public record matters they are involved in that may result in a violation of the Act if they participate in Board action, or in other words, they must disclose conflicts of interest. The Act also expressly bars both Board of Fisheries members and Board of Game members from acting on a matter before the Board if he or she has not disclosed, as set out in AS 39.52.220, all personal or financial interest in a business or organization relating to fish or game resources. AS 39.52.120(c).

The chair of the Board of Fisheries has the responsibility of deciding whether Board members have conflicts of interest in his role of decision-maker on the question of a member's qualification to participate under the Act. The Department of Law assists the chair in making those determinations. The Act prohibits a member from "taking or withholding official action in order to affect a matter in which the member has a personal or financial interest." AS 39.52.120(b)(4). "Official action" is defined under the Act to mean "advice, participation, or assistance, including for example, a recommendation,



Representative Alan Austerman
Re: February 8, 2012 Letter

February 17, 2012
Page 3

difficulties this may impose on Board members, and the Board as a whole, I do not believe it is appropriate for lawyers within the Department of Law to depart from the requirements of the statute, and I hope you can appreciate our position in that regard. We would be happy to review and discuss proposed legislative amendments that might allow the Board to waive these conflicts or otherwise ameliorate the impact on the Board's decision-making process, but those changes need to emanate from the Legislature.

In closing, I enjoyed meeting with you and Representative Seaton and I look forward to working with you. Please don't hesitate to contact me if we can answer any further questions you may have on this subject.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael C. Geraghty", written in a cursive style.

Michael C. Geraghty
Attorney General

decision, approval, disapproval, vote, or other similar action, including inaction by a public officer.” AS 39.52.960(14). We believe that definition necessarily includes deliberation on regulatory proposals, a primary responsibility of Board membership. The purpose of deliberations is primarily to advocate for, and explain the reason for taking, a position on whether or not a regulation should be adopted. It would be difficult to participate in deliberations without giving advice, recommending or approving or disapproving positions.

While participation as a Board member is limited, the member’s voice and views do not go unheard. The policy of both the Board of Fisheries and the Board of Game is that being on the Board does not take away the rights a person has in the regulatory process as a member of the public. Conflicted members may offer public testimony, may participate before Board committees as a member of the public can, and may submit written comments advocating for or against a regulatory proposal.

“Financial interest” is defined in the Ethics Act to mean “an interest held by a public officer or an immediate family member ... that is a source of income, or from which, or as a result of which, a person has received or expects to receive a financial benefit.” AS 39.52.960(9). “Personal interest” means an interest or involvement of the member or immediate family member in any organization from which the member or an organization receives a benefit. AS 39.52.960(18). And “immediate family member” includes a spouse, conjugal cohabiter, a child (including a stepchild or adopted child), a parent, sibling, grandparent, aunt, uncle or a spouse’s parent or sibling. AS 39.52.906(11).

When a possible personal or financial interest of a member is identified (by the member but sometimes by fishermen or others interested in proposals), the Board chair will also consider (1) whether the member’s interest in the matter is insignificant or of a type that is possessed by the public at large or a large class of persons, or (2) whether the member’s action or influence will have insignificant or conjectural effect on the matter. AS 39.52.110(b). In such cases, the member may be allowed to participate. We note that members often tend to take a careful approach to potential conflicts and recuse themselves, erring, if they err, on the side of protecting the integrity of the Board from potential complaints.

As you may be aware, there have been a number of bills introduced by the Legislature over the years to either (1) allow deliberation and voting by a member upon full disclosure of potential conflicts or (2) allow deliberation, but not voting by conflicted members. None of those have been enacted by the Legislature.

I hope this clarifies the statutory constraints on the Board and on our advice to the Board regarding conflicts of interest. While I am very sympathetic to the practical

Kevin Kristovich
2417 Tongass Ave. 111-114
Ketchikan, Ak. 99901

State of Alaska
Boards Support

Mr. Chairman and board members,

My name is Kevin Kristovich. I am here before you today to as a fisherman, both commercial and subsistence. My testimony will cover both. I ask you, mr. chairman and members of the board to consider and take action on the following proposals as submitted by myself with recommendations.

#273, Support . As a member of Ketchikan Indian Community which is a federally recognized tribe, it was good to see the herring egg boat, Julia Kae arrive in town 2 years ago. The dock was alive with people eagerly waiting. Attached in this testimony, you will see photos from Hoonah along with newspaper clippings to look over in reference. Personally speaking for myself and the support of others, I can not see what the problem is with Mr. Steve Demmert who owns and skips the Julia Kae bringing herring eggs on branches to other communities. The Julia Kae is providing for those in Southeast who cannot access the resource . With the Julia Kae, he is continuing a honored tradition that started with the former owner, Harold "Sonny" Elhoe a local Sitka resident fisherman when the boat was the Alice-H. In years past, there were 2 local Demmert boats that brought this precious food source to Ketchikan. Joe Jr. on the F/V Lovey Joann and his brother George on the F/V Lady Dianne.

Why is the Sitka tribe of Alaska fighting over one boat who is continuing a annual, traditional event ? Their case to argue, Mr. Demmert is a non resident. Mr. Demmert has aboriginal ties to the region as the Demmert family name is known throughout southeast communities and beyond and also is a respected name. I commended mr. Demmert on his efforts and support him 100 % as I'm sure other communities feel the same. There are planeloads of herring eggs being shipped out of sitka weeks after mr. Demmert is gone. Is anyone shaking their fists in anger or concern about that?

PROPOSALS 232, 238,239- Oppose, take no action

PROPOSALS 233, 234, -support, take action.

From the early 1980's to present time, I have watched the Sitka sac roe seine fishery go from a gentlemen like fishery to a runaway train wreck. Collisions are on the rise and incidents are being documented nets are still getting run over fish is lost, possible financial hardships occur lawsuits follow and fishermen are losing their insurance policy coverage wether they are in a insurance pool or an insurance underwriter. With reality television making their debut in Sitka to document the fishery the armchair fisherman is going to expect to see a smash and grab type of fishery which is clearly happening. This is unacceptable. The fishery needs to be safer and equitable for all. By supporting these proposals, higher quality roe percentages can be achieved fishermen can receive top price for their product and not be involved in a collision or lawsuit. Tenders will still be needed to transport fish to outlying processors as there are fishermen who fish for out of town markets. The days of the combined wolfpack tactics will be gone. What happened to individual acheivement and success? In the attachments I provided there are articles for reference to show why these proposals need to be supported.

I thank you for your time and if there any questions I will be happy to answer.

I am also available for committee work

PROPOSALS 233, 234

Commander skipper cleared by USCG in 2004 collision

May 4, 2006.

Alan Otness, skipper of the FV Commander has been cleared of charges filed by the U.S. Coast Guard, based upon allegations made following a collision that took place March 27, 2004 during the Sitka purse seine fishery.

Captain S. W. Fijalka, based in Arlington, VA, informed Otness by letter that, "I am not convinced (Otness) violated federal law," and further noted, he was not convinced that Otness' actions, "caused the collision between the Commander and the Lovey Joann," owned by the late Joe Demmert of Craig.

The Coast Guard charged Otness for, "Operating a vessel in a negligent manner or interfering with the safe operation that endangers life, limb or property of a person." They also alleged he failed to take appropriate action to avoid a collision. He faced fines totaling \$8,500 on both charges.

The charges were both dismissed without prejudice, meaning charges could be re-filed if new evidence was brought forth. The case has been pending for two years, and according to Fijalka's letter, the matter is closed.

Otness explained he still faces a civil action brought by the Demmert estate, seeking lost income, as a result of the collision. The Lovey Joann suffered \$27,000 damage when two planks were torn loose in the collision. The Commander was not damaged.

The collision resulted when Demmert maneuvered his vessel astern of the Commander while Otness was backing his vessel towards the beach. Otness' vessel was only two boat lengths away from the shore.

"Joe needed to go around my bow," Otness said. We were backing closer to the beach. We were backing slowly, so as not to capsize the seine skiff and Joe was coming at us full bore, he added.

Otness said he tried to move ahead, but too late to avoid the collision.

Joe Menish, who took photos from the crow's-nest atop the FV HI TECH, captured the incident on film. One of the photos appeared on the cover of *Alaska Fisherman's Journal*.

Otness said he could have requested an administrative hearing before a USCG Hearing Officer, but said the attorney fees to prepare for the case would have been exorbitant. "It's been a very frustrating process," said Otness.

With the perspective of hindsight, Otness said he would "be the first to call authorities," in a similar incident.

"The person that calls first is the oppressed party," said Otness. You can change the color of the event.

Otness suggested that Demmert's age and perhaps health, contributed to the accident. With age, a person's eyesight and reflexes can be diminished. Otness asked rhetorically, "Why do I need glasses to drive my car, but not to operate my boat?"

My dad is 80 years old. His eyesight is not as sharp and reflexes not as quick. "We took his keys away seven years ago," said Otness.

At minimum, boat operators should have to meet the minimum requirements for obtaining a drivers license. Vision standards should be met along with passing a rules of the road test for operation of a vessel as well as a motor vehicle. A boat operator endorsement could be noted on state drivers licenses, he explained.

The Coast Guard and Alaska State Troopers have monitored the Sitka fishery more closely in '05 and '06. "but it's still an aggressive fishery," Otness concluded.

Coast Guard says aggressive fishing tactics led to collision

Compiled from Coast Guard and AP reports

April 16, 2004.

KETCHIKAN (AP) The Coast Guard has determined that aggressive fishing tactics during a 15-minute Sitka Sound herring sac roe fishery left a Ketchikan boat with broken ribs and planking.

"The waters in Southeast Alaska are treacherous enough without mariners using their vessels aggressively against one another," said Lt. Gary Koehler, a senior investigating officer with the Coast Guard Marine Safety office in Juneau.

No one was injured in the March 27 incident, according to the Ketchikan Daily News. The incident occurred in Redoubt Bay near Sitka moments before the fishery's final 15-minute opening began at 3 p.m.

"We had seen a school (of herring) up at the head of the bay so we went up to check on it," said Ron Demmert, who was on the Lovey Joann bridge with his father, boat owner Joe Demmert Jr. Four other boats, Petersburg's Commander, Hi-Tech, and Aleutian Spirit, along with the FV Leading Lady of Cordova, were already at the top of the bay. The Commander, Hi-Tech and Aleutian Spirit are owned by Alan Otness, Bill Menish and Jim Miller, respectively.

The Lovey Joann was moving up the west shoreline of the bay when the Alaska Department of Fish and Game announced over the radio that the fishery would open in five minutes. As the Lovey Joann approached the other four boats, the Commander and Hi-Tech started to move, the Ketchikan Daily News reported.

The Coast Guard said the operators of the Commander and the Hi-Tech apparently cooperated in an aggressive attempt to deny the Lovey Joann access to the area. Investigators found that the captains deliberately maneuvered their vessels to block the Lovey Joann. The Aleutian Spirit was not involved in the collision.

Ron Demmert said he warned his father, who swerved the Lovey Joann away. The Commander and Lovey Joann collided, with the Commander's port stern against the Lovey Joann's port bow, Demmert said. There was a smaller collision with the Hi-Tech.

"We probably went sideways 8 to 10 feet," he said, adding that they could hear parts of their wooden boat breaking. They were concerned they would hit the beach, but the boat's skiff was able to move the Lovey Joann's bow away from shore.

When the fishery began, the Lovey Joann got skunked.

"We made a set, but we didn't get anything," Ron Demmert said. "My dad checked the damage and we filed a report."

The damage included two broken ribs and eight busted exterior planks, he said. Four planks on the boat's inner skin were broken, and the engine room bulkhead was pushed out of position.

Damage was estimated later to be in the \$50,000-\$70,000 range.

"The Coast Guard is authorized to assess fines of up to \$32,500 for negligent vessel operations and fines of up to \$6,500 for each violation of a prescribed vessel navigation safety rule. The Coast Guard may decide to pursue civil penalty fines against all parties involved in the incident," the USCG's press release stated.

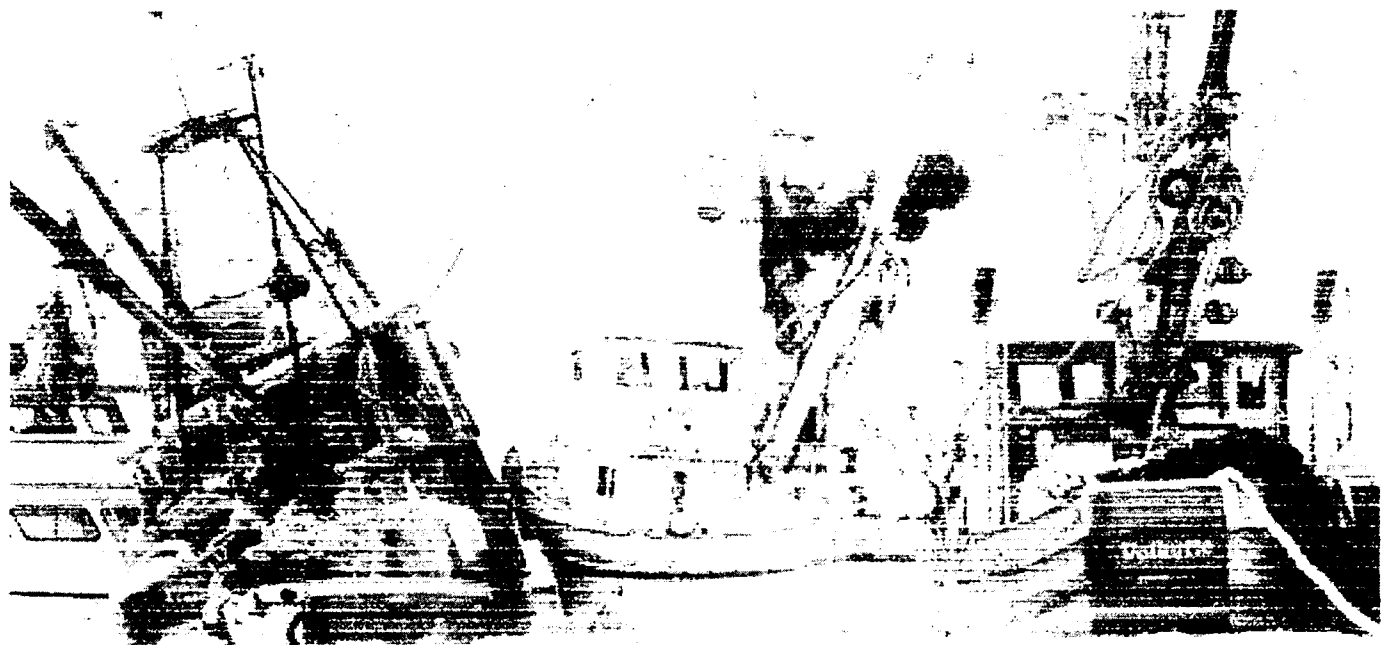
Coast Guard officials say they are viewing the situation seriously.

"The water here is cold year-round, survival time is short, and Coast Guard search and rescue assets are often spread thin," said Cdr. John Siffing, the agency's captain of the port for Southeast Alaska. "For these reasons, the Coast Guard relies on mariners to assist one another and will not tolerate deliberate actions that harm life and the environment."

Financial stakes are extremely high in the Sitka Sound seine herring sac roe fishery. Just getting into the fishery is expensive. The most recent asking price for one of the 51 limited-entry permits for the fishery was \$300,000.

Fishermen had three quick openings to catch this year's 10,618-ton quota. There were 100 minutes on March 21, 15 minutes on March 25, and 15 minutes on March 27. At last year's final price of about \$500 a ton, a single 300-ton set is worth about \$150,000.

"There were several sets made this year that were in the 300 ton-plus category," said Bill Davidson, the Sitka-area commercial fisheries management biologist for Fish and Game. "A good size set could be worth a couple hundred thousand dollars."



the carrier Valkyrie, at night, makes a run on the rocky island and the men on the deck and the ship's crew are seen to be in a state of confusion. The ship is seen to be in a state of confusion and the crew is seen to be in a state of confusion. The ship is seen to be in a state of confusion and the crew is seen to be in a state of confusion. The ship is seen to be in a state of confusion and the crew is seen to be in a state of confusion.

...and its... Alaska Wildlife Troopers... Alaska State Troopers...
...of the... Alaska Wildlife Troopers... Alaska State Troopers...
...of the... Alaska Wildlife Troopers... Alaska State Troopers...

Location: Sitka

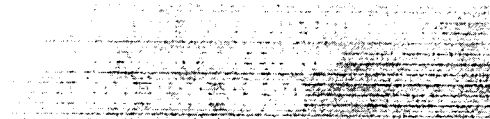
Case Number: 11-31536

Type: Reckless Operation of a Watercraft

Text: On 1/11/12, the Sitka District Attorney's office charged Daniel J. Crome age 35, of Seattle WA for Reckless Operation of Watercraft, based on an investigation by Alaska Wildlife Troopers, Sitka Post. The charge stems from a vessel collision during the April 2011 Sitka Sound Herring Sac Roe fishery, where the F/V Arctic Fox, operated by Crome, collided with the F/V Talia, operated by William Menish, of Petersburg. More than \$40,000 in damage was caused to the F/V Talia in the collision. Arraignment is set in Sitka District Court.

Coast guard works to promote safe Sitka sound herring fishery

Alaska Wildlife Troopers



...Alaska... The Coast Guard will offer courtesy dockside examinations of commercial fishing vessels in...
...of the... Alaska Wildlife Troopers... Alaska State Troopers...

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Troopers, Coast Guard investigate Sitka collision

Here's a news release from the Alaska State Troopers regarding the (sic) about herring fishing season:

Location: Sitka

Type: Vessel collision

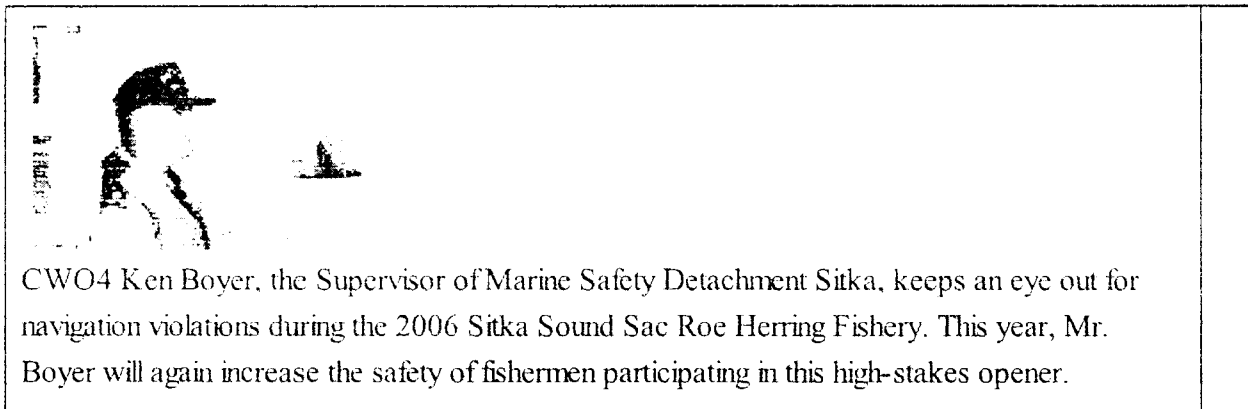
On 3/24/10 at approximately 12:12 hours a collision occurred during the Sitka sound herring fishery. The seiner F/V Confidence, operated by Leroy Johns, 46, of Sitka, collided with the seiner F/V Shady Lady, operated by Dean Andersen, 51, of Chignik. Both vessels were damaged, however, substantial damage was caused to the Shady Lady. No injuries were reported and alcohol does not appear to be a factor. The U.S. Coast Guard Marine Safety Office was contacted and is investigating a collision was reported which occurred during the Sitka sac roe herring fishery. Investigation revealed the seiner F/V Agave, operated by Kenneth M. Jones of Homer, collided with the seiner F/V Alaskan Rose operated by John Jonanson, 53, of Klawock

COAST GUARD TO MONITOR 2007 SITKA SOUND SAC ROE HERRING FISHERY

JUNEAU, Alaska - The Coast Guard has developed a multi-pronged approach to improve the safety of fishermen participating in the 2007 Sitka Sound Sac Roe Herring Fishery. The opener is slated to begin sometime in the next week or two, pursuant to the Alaska Department of Fish and Game's (ADF&G) assessment of herring stocks. Collisions between fishing vessels have occurred in the past during this fishery in which approximately fifty purse seiners compete in a limited area for the few hours the nets are allowed in the water.

In preparation for the opener, teams of Coast Guard Fishing Vessel Examiners have deployed to Sitka to conduct free dockside safety exams to participating vessels. Examiners award decals to vessels that are able to demonstrate full compliance with federal safety regulations.

When Alaska Department of Fish and Game (ADF&G) declares the fishery open, a Coast Guard cutter will be on scene to respond to vessel casualties or incidents that involve negligent or unsafe navigation. Teams from the cutter will also board fishing vessels to check for safety violations. Fishing vessels that have recently earned decals as a result of dock-side exams will be less likely to face Coast Guard boardings during this opener and throughout the 12 months the decals are valid.



Sitka Sound sac roe herring

season nears completion

Keith Chaplin

April 1, 2010.

The Sitka Sound sac roe herring fishery has had three openings netting 74 percent of the guideline harvest level set by fisheries management.

So far, 13,600 of the guideline harvest level (GHL) of 18,293 tons has been harvested, with the most recent harvest Mar. 30 yielded 4,000 tons and samples of 14.4 percent and 11.9 percent mature roe with 143 and 134 gram average weights.

The Mar. 24 opening yielded 6,100 tons and the Mar. 27 opening yielded 3,500 tons.

The fishery has had one boat collision Mar. 24 between the seiner FV Confidence and seiner FV Shady Lady. As a result of the collision, the Shady Lady sustained substantial damage and tipped steeply to the port side.

According to Coast Guard releases, both vessels were damaged, there were no injuries and alcohol was not a factor. Investigations by the U.S. Coast Guard Marine Safety Office are ongoing.

Sac roe herring fishery

finishes 550 tons below GHL

Keith Chaplin

April 8, 2010.

The 2010 Sitka Sound herring sac roe fishery has officially concluded.

The last opening, Apr. 2 lasted two hours 10 minutes, and brought in 4,050 tons.

Total harvest for the season was 17,743 tons, 550 tons short of the Guideline Harvest Level (GHL) of 18,293 tons.

An aerial survey Apr. 2 showed that a spawn of 0.3 nautical miles had begun, and would expand in coming days.

Reports estimate processors are paying a base price of \$550 a ton, meaning 49 permit holders take home part of the \$9.75 million haul.

The fishery had two reported collisions, the first, Mar. 24 between the seiner *FV Confidence* and seiner *FV Shady Lady*. As a result of the collision, the *Shady Lady* listed steeply to the port side.

The second collision, on Mar. 30 was between the seiner *FV Agave* and seiner *FV Alaskan Rose*. The *Agave* sustained \$1,500 in damages from the collision.

seiners voyage terminated following collision

March 30, 2005

Wednesday

The Coast Guard received a report of a collision between the Ketchikan fishing vessels *Star Shadow* and *Lovey Joann* in Sitka Sound during the herring fishery opener Friday.

Both vessels remained afloat, but the *Lovey Joann's* pilothouse sustained significant damage caused by the *Star Shadow's* bow.

The Coast Guard cutter *Anacapa* was pre-stationed in Sitka Sound to monitor the herring opener. An *Anacapa* boarding team boarded both vessels to conduct safety checks and interview the crews about the collision. During the boarding of the *Star Shadow*, the boarding team discovered the existence of only five immersion suits on board, but the vessel's crew consisted of seven people. The Coast Guard terminated the *Star Shadow's* voyage in Sitka Sound following the post incident boarding and the discovery of an insufficient number of immersion suits on board.

The *Star Shadow* is a 54-foot aluminum hulled seiner from Ketchikan. The *Lovey Joann* is a 49-foot wood hulled seiner from Ketchikan. The Coast Guard cutter *Anacapa* is based in Petersburg.

Coast Guard marine officials are investigating the collision.

Compiled from Coast Guard and AP reports

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No one was injured in the March 27 incident, according to the Ketchikan Daily News. The incident occurred in Redoubt Bay near Sitka moments before the fishery's final 15-minute opening began at 3 p.m.

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"The Coast Guard is authorized to assess fines of up to \$32,500 for negligent vessel operations and fines of up to \$6,500 for each violation of a prescribed vessel navigation safety rule. The Coast Guard may decide to pursue civil penalty fines against all parties involved in the incident," the USCG's press release stated.

Coast Guard officials say they are viewing the situation seriously.

"The water here is cold year-round, survival time is short, and Coast Guard search and rescue assets are often spread thin," said Cdr. John Sifling, the agency's captain of the port for Southeast Alaska. "For these reasons, the Coast Guard relies on mariners to assist one another and will not tolerate deliberate actions that harm life and the environment."

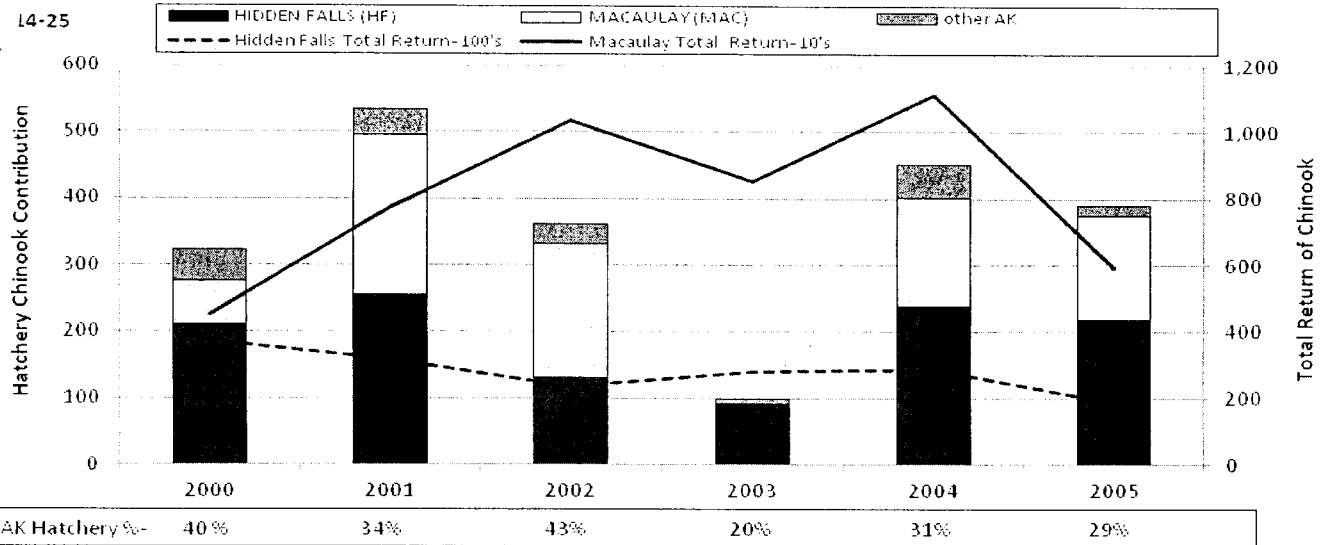
Financial stakes are extremely high in the Sitka Sound seine herring sac roe fishery. Just getting into the fishery is expensive. The most recent asking price for one of the 51 limited-entry permits for the fishery was \$300,000.

Fishermen had three quick openings to catch this year's 10,618-ton quota. There were 100 minutes on March 21, 15 minutes on March 25, and 15 minutes on March 27. At last year's final price of about \$500 a ton, a single 300-ton set is worth about \$150,000.

"There were several sets made this year that were in the 300 ton-plus category," said Bill Davidson, the Sitka-area commercial fisheries management biologist for Fish and Game. "A good size set could be worth a couple hundred thousand dollars."

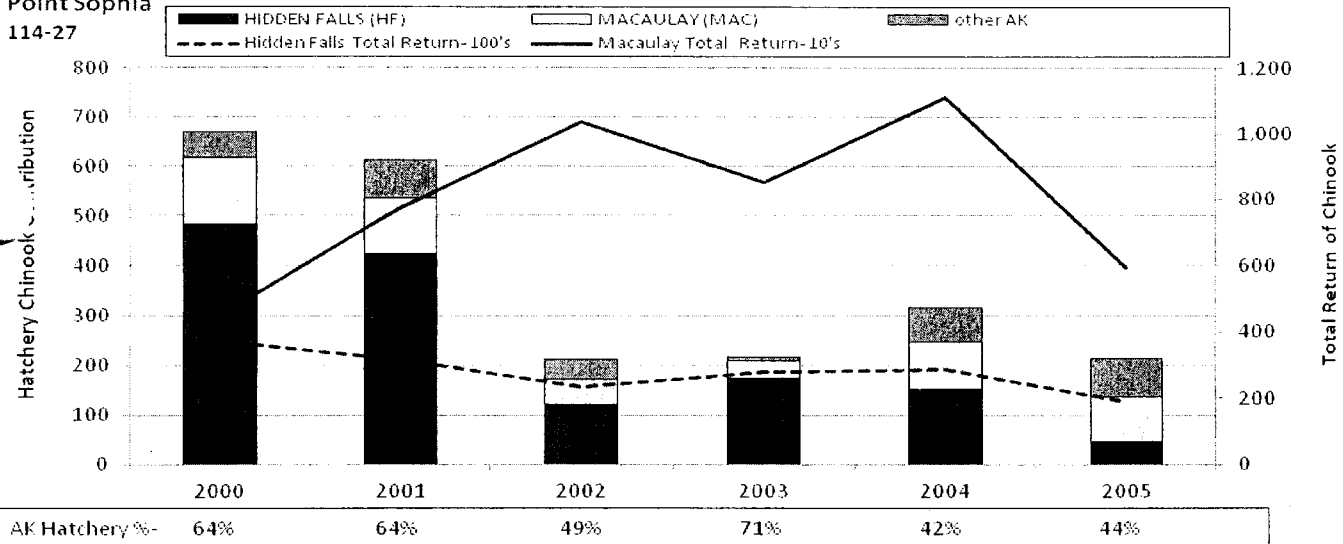
Spring Troll AK Hatchery Chinook Harvest and Total Returns

Homesore
14-25



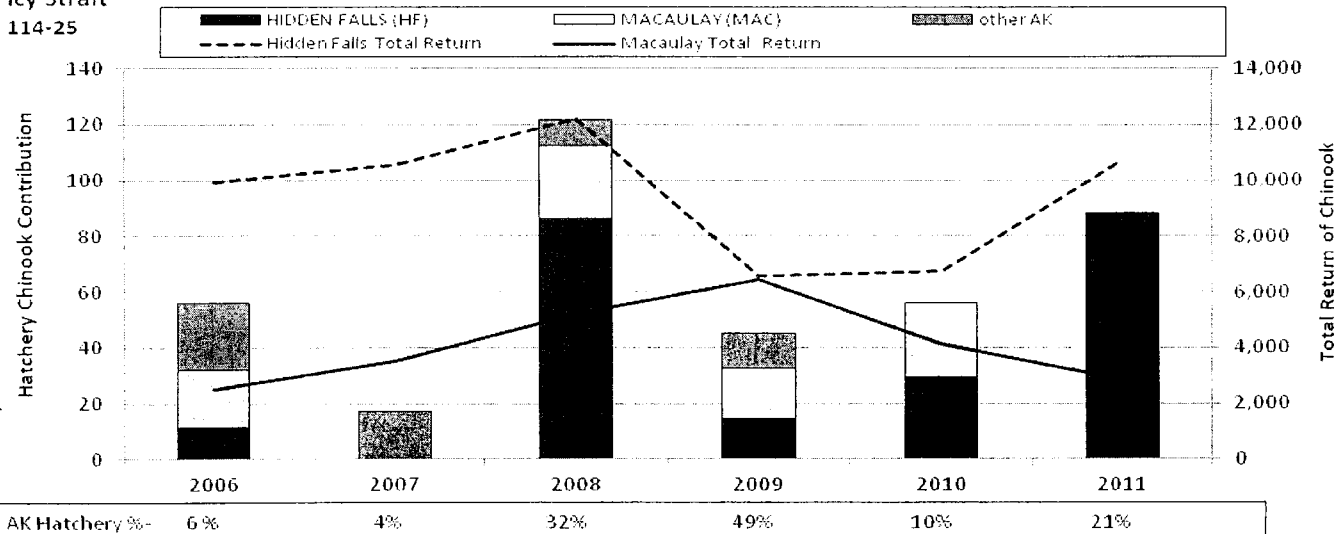
Spring Troll AK Hatchery Chinook Harvest and Total Returns

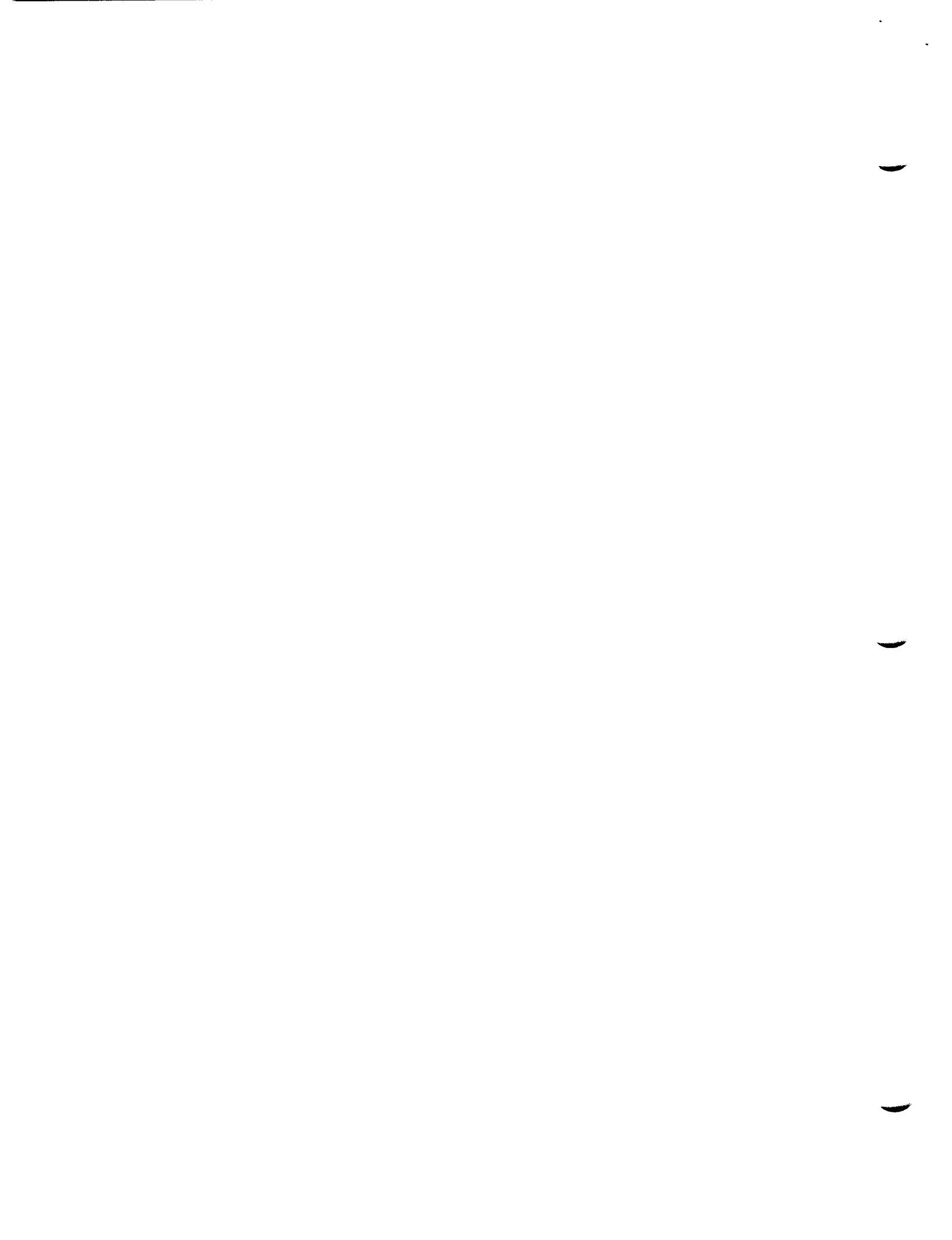
Point Sophia
114-27



Spring Troll AK Hatchery Chinook Harvest and Total Returns

Icy Strait
114-25



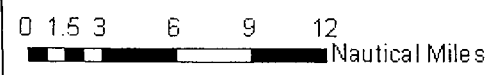
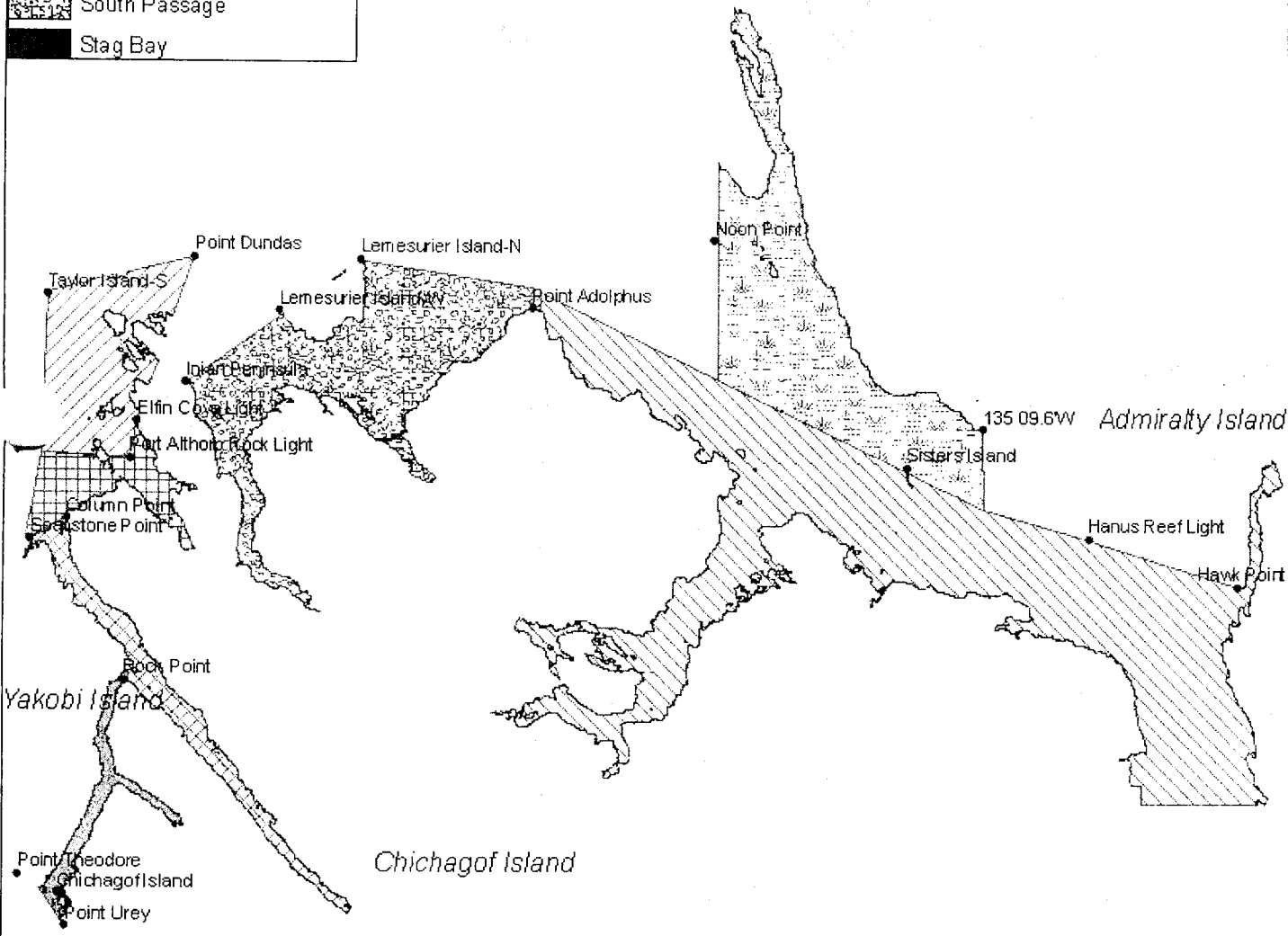
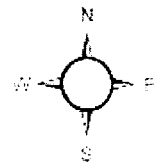


Legend

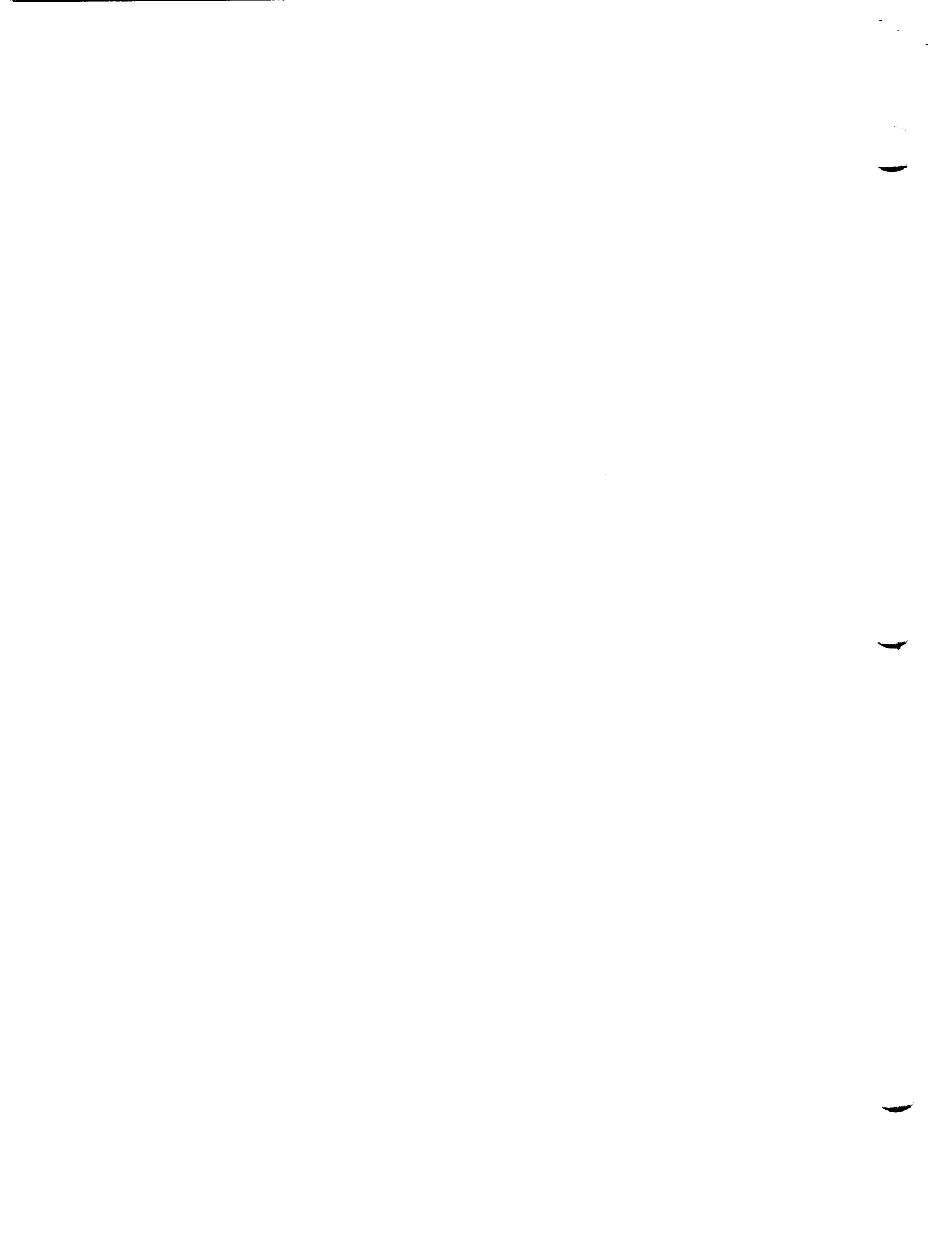
ngTroll_2005

NAME

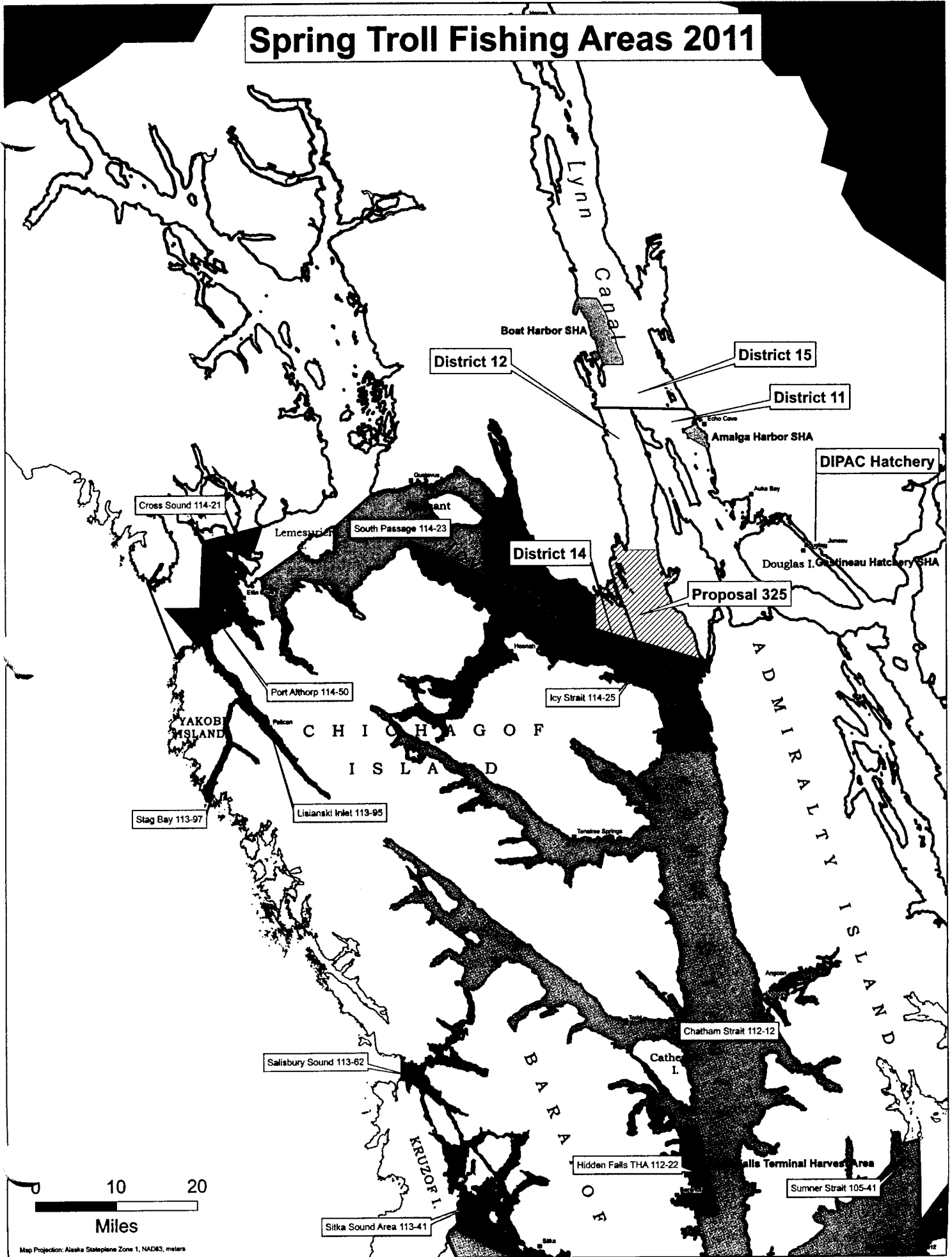
- Cross Sound Pink and Churn
- Hornshore
- Lisianski Inlet
- Point Sophia Area
- Port Althorp
- South Passage
- Stag Bay



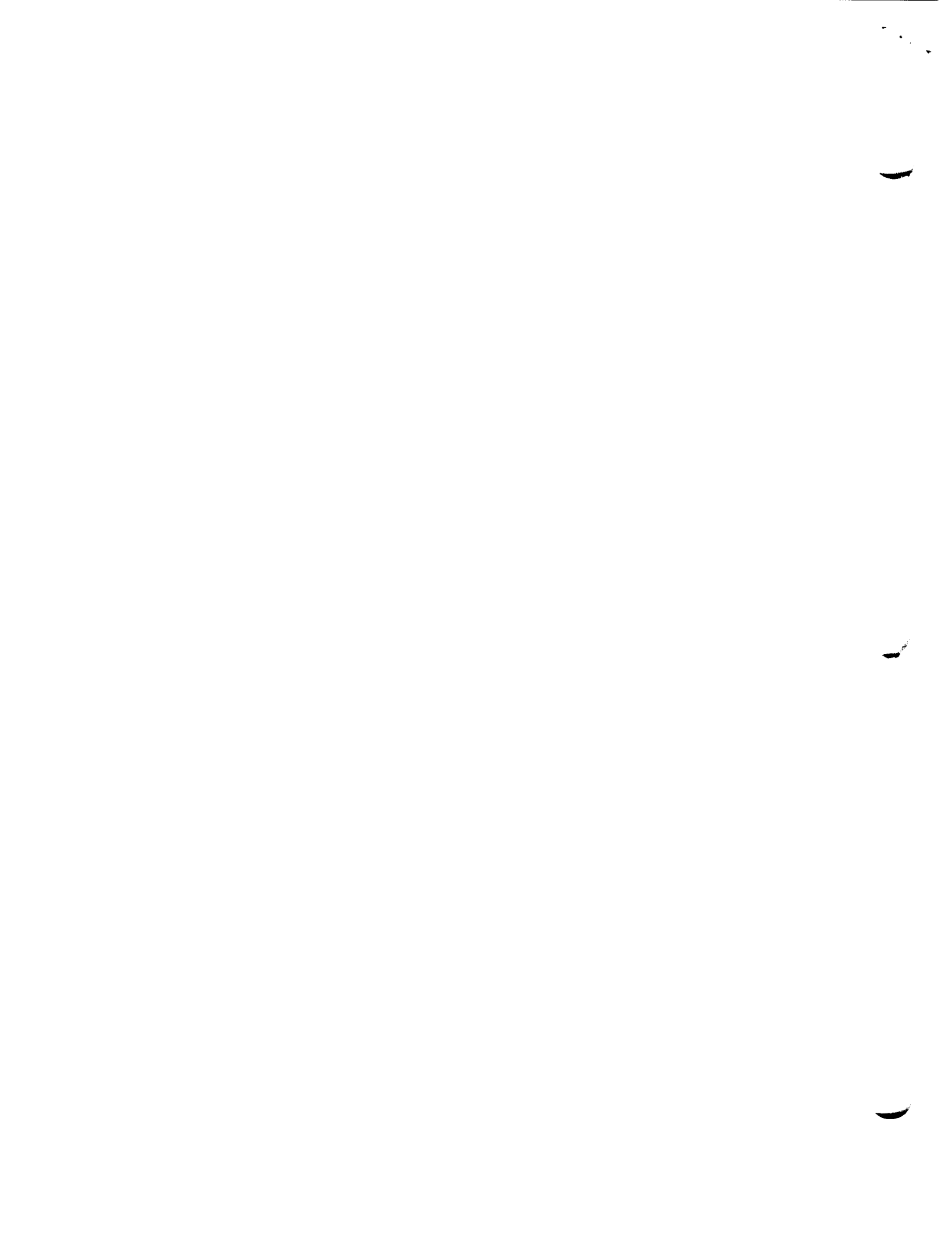
Baranof Island



Spring Troll Fishing Areas 2011



Map Projection: Alaska Stateplane Zone 1, NAD83, meters



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Hello, My name is Casey Mapes, and I am the chairman of the Yakutat Fish & game Advisory committee.

I have been asked by our counsel to write to you in an attempt to garner some clarification on a couple of issues that evolved this past season that pertain to how our salmon setnet fisheries is conducted. It is our concern that left un-clarified, there exists the potential for either of these issues to set potentially disastrous precedence.

First, it's come our attention that a citation was issued regarding how 2 permit holders fishing together chose to split their catch.

The historical background of splitting a delivery of gillnet fish from our perspective is this. Yakutat set gillnets are fished out of small, open, 20 ft. skiffs, and very often under hazardous and rough conditions. For reasons of safety, conservation of fuel, and general overall ease of operations for the fishermen, temporary partnerships will often arise. There may 2, 3, or on occasion even more permits all being fished out of one small skiff. Keeping track of which fish came from which net is impossible most times under these conditions, and to avoid anyone feeling shorted, historically these fish are considered common property and distributed on a percentage that the fishermen agree upon prior to their first delivery. Typically 50/50 is the ratio of split, but there are instances of extraordinary circumstance when this is not the case. An example of this would be when a permit holder with a vessel fishes with a permit holder without a vessel. They might agree upon a different percentage ratio in order to make up the difference.

Fish ticket splits in the Yakutat salmon gillnet fishery has been a common and excepted practice since before it became a limited entry fishery. Simply said, fish tickets are a means for processors and fishermen to keep an accurate account and receipt of monies owed. It is also a management tool to keep an accurate account of how many fish were harested and where.

If it is enforcement's intention to begin curtailing split deliveries of gillnet salmon, or ban them entirely, then we respectfully ask for a detailed explanation of the legalities involved, and what permit holders can expect in the future. We understand that in some cases you as enforcement are bound by the laws on the books. If this is the case in your interpretation of this circumstance, please point out which law would need to be changed, and in what wording, so that we as a community advisory committee might put forth the necessary proposal to affect the changes required to allow for split tickets to be possible in the future.

The second concern that has come to our attention pertains to whether or not a gillnet permit holder may be sighted for discarding a salmon that has no market value, not due to any fault of the fishermen. The specific case called into question is, during the latter part of the fall coho season, humpies are on occasion incidentally harvested which have out lived their marketable life cycle. It is of course up to individual interpretation as to what is edible and what isn't, but the fact remains that if the processor doesn't see enough redeemable quality in them to afford shipping them in from remote locations, then they will refuse to buy them.

Our question is, in this particular circumstance, what is enforcement's official interpretation? This has the potential for leaving the fishermen and or the processor potentially liable. One wouldn't think that this would be something that would ever be much of an issue, and for years it hasn't been, but lately some streams have become more congested with different user groups causing some to point out the little idiosyncrasies of others. In light of that, we are seeking up front clarity to hopefully avoid any potential and needless litigation.

Again, if there are any proposals that we as an advisory committee can put forth at your

Untitled

recommendation that might alleviate any of the gray areas and make it easier for our fishermen and your enforcement officers to do their respective jobs, we would be happy to try and accommodate.

Thank you for your consideration and response on these concerns.

On behalf of the Yakutat Fish & Game Advisory Committee,
Casey Mapes- Chairman



State of Alaska
Department of Public Safety
Division of Alaska Wildlife Troopers

Sean Parnell, Governor
Joseph A. Masters, Commissioner

May 18, 2010

Mr. Casey Mapes
Chairman, Yakutat Fish and Game Advisory Committee
PO Box 215
Yakutat, AK 99689

Mr. Mapes,

I received your letter dated May 3, 2010 on behalf of the Yakutat Fish and Game Advisory Committee. I appreciate the opportunity to communicate with you and the committee about these issues. In answering your questions, I will address what Alaska law requires, but not past practice in the Yakutat set gillnet fishery.

Your first question was regarding "split deliveries" of gillnet salmon. The example you gave was: two or more fishers utilize one vessel to work their gear. When delivering the catch, they split the catch 50 / 50 in most circumstances. Although you indicate that sometimes this percentage differs.

The information contained on a fish ticket is, as you said, an important tool in the management of fishery resources. Information recorded on fish tickets are also used for many other purposes. The Alaska Department of Revenue uses fish ticket information to assess fish taxes. The information may also be provided to agencies for child support purposes. Fishers and buyers also use fish tickets to record what was sold, and what monies are owed from that sale. However, I find no indication fish tickets were intended to be used as a method for cooperating fishermen to settle their debts by shifting fish taken in one persons unit of gear to another person in the group. In fact, the law consistently states that the person who operates the unit of gear, sell only fish caught in that unit of gear.

Alaska Statute 16.05.690 addresses purchases of commercially taken fish. This statute directs the Commissioner of the Department of Fish and Game and the Board of Fish to create regulations regarding how commercial fish purchases are documented. It also states that false information may not be recorded on fish tickets or provided to a person recording the information on the fish ticket.

16.05.690. Record of purchases.

- (a) *Each buyer of fish shall keep a record of each purchase showing the name or number of the vessel from which the catch involved is taken, the date of landing, vessel license number, pounds purchased of each species, number of each species, and the Department of Fish and Game statistical area in which the fish were taken, and other information the department requires. Records may be kept on forms provided by the department. Each person charged with keeping the records shall report them to the department in accordance with regulations adopted by the department.*
- (b) *A person may not knowingly enter false information on a fish ticket or supply false information to a person who is recording information on a fish ticket.*

Alaska Statute 16.05.680 addresses general "unlawful practices" involving the sale, transport, and purchase of fishery resources. Important to the discussion about "split deliveries", AS16.05.680(b) states that ... a person may not sell salmon that was not harvested under the authority of the ... permit.. under

which the salmon is sold... Note that this is a statutory requirement, enacted by the legislature and not a regulation created by the Board of Fish.

16.05.680. Unlawful practices.

- (a) *It is unlawful for a person, or an agent or representative of the person,*
 - (1) *to employ, in the harvesting, transporting, or purchasing of fish, a fisherman who neither is licensed under AS 16.05.480 nor is the holder of a permit issued under AS 16.43;*
 - (2) *to purchase fish from a person who is not*
 - (A) *the holder of a limited entry, interim-use, or landing permit issued under AS 16.43;*
 - (B) *a fish transporter who is selling the fish as the agent of the holder of a limited entry, interim-use, or landing permit issued under AS 16.43; or*
 - (C) *exempt under AS 16.05.660; or*
 - (3) *to purchase fish from an association other than one to which a permit has been issued under AS 16.05.662.*
- (b) *A person may not sell salmon that was not harvested under the authority of the entry permit, interim-use permit, or landing permit under which the salmon is sold. For purposes of this subsection, salmon sold by a fish transporter on behalf of the commercial fisherman who harvested the salmon is salmon harvested under the authority of the limited entry, interim-use, or landing permit under which the salmon is sold.*

The Alaska Board of Fish created regulation 5AAC 39.130 which addresses the information which is to be recorded on fish tickets. This is a complex regulation concerning buyers, sellers, and all species of fish resources. 5AAC 39.130(c) (9) has language pertinent to this discussion.

5AAC 39.130 Reports required of fishermen, processors, buyers, exporters, and operators of certain commercial fishing vessel; transporting requirements.

- (c) ...
 - (9) *the CFEC permit number of the operator of the unit of gear with which the fish were taken, imprinted on the fish ticket from the valid permit card or electronically captured from the valid permit card; the imprinting requirement under this paragraph may be suspended by a local representative of the department after presentation by the commercial fisherman of documentation from the department or CFEC that the permit card has been lost, transferred or destroyed; if a suspension is granted, the buyer or commercial fisherman must write the permit number on the fish ticket;*

Based on this review, both Alaska Statutes and Regulations prohibit what you describe as "split deliveries".

You also asked for suggestions which you might put forth as a proposal to make this practice legal. This is a complex issue, but I suggest you review regulations from other areas to determine what might be a workable system. In some areas of the State, permit holders are allowed to fish dual permits from a vessel. You might review Alaska Regulation 5AAC 06.333 *Requirements and specifications for use of 200 fathoms of drift gillnet in Bristol Bay.*

The second concern you raised was discarding salmon with no market value and "enforcement's official interpretation." In answering this question, I reviewed the regulations below.

Sec. 16.05.831. Waste of salmon.

- (a) *A person may not waste salmon intentionally, knowingly, or with reckless disregard for the consequences. In this section, "waste" means the failure to utilize the majority of the carcass, excluding viscera and sex parts, of a salmon intended for*
 - (1) *sale to a commercial buyer or processor;*
 - (2) *consumption by humans or domesticated animals; or*
 - (3) *scientific, educational, or display purposes.*
- (b) *The commissioner, upon request, may authorize other uses of salmon that would be consistent with maximum and wise use of the resource.*
- (c) *A person who violates this section or a regulation adopted under it is punishable by a fine of not more than \$10,000, or by imprisonment for not more than six months, or by both. In addition, a person who violates this section is subject to a civil action by the state for the cost of replacing the salmon wasted.*

5AAC 39.265 Retention of salmon taken in a commercial net fishery

- (a) *The Board of Fisheries recognizes that at times during a commercial salmon season it may be necessary to require retention of all salmon species taken in a commercial net fishery for the purpose of conservation or development of the salmon resource.*

"A" Detachment

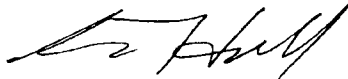
2760 Sherwood Lane - Juneau, Alaska 99801 - Voice (907) 465-4000 - Facsimile (907) 465-3333

(b) *In a commercial salmon net fishery, if the commissioner determines that retention of all salmon species is necessary under this section, the commissioner may, by emergency order, close a commercial salmon net fishery and immediately reopen the fishery, during which all salmon species caught must be retained, unless otherwise specified in 5 AAC 01 - 77.*

In addition, you may refer to 5AAC 93.310 and 5AAC 93.350. The waste of salmon statute is broadly constructed to include fishers, buyers, and processors. Salmon retained by a commercial fisher cannot be wasted. Allowable uses of salmon are: processing for human consumption, use as bait, for the production of fertilizer or fish meal. Again, Alaska statutes and regulations prohibit the waste of salmon. A fisher closely attending a gillnet and treating fish with care could release unwanted species alive. This would not be waste of salmon. Salmon brought aboard the vessel, or those which are killed being removed from the net cannot be released alive. If the Alaska Department of Fish and Game enacts 5AAC 39.265 by emergency order, full retention of all salmon caught is required. Alaska Wildlife Troopers will continue to use good judgement when they encounter fishers who are releasing live fish from their nets. Fishers must also use good judgement so they do not waste salmon.

Thank you for the opportunity to discuss these regulations with you, and I hope this is helpful to others involved with the Advisory Committee and Yakutat salmon fisheries.

Sincerely

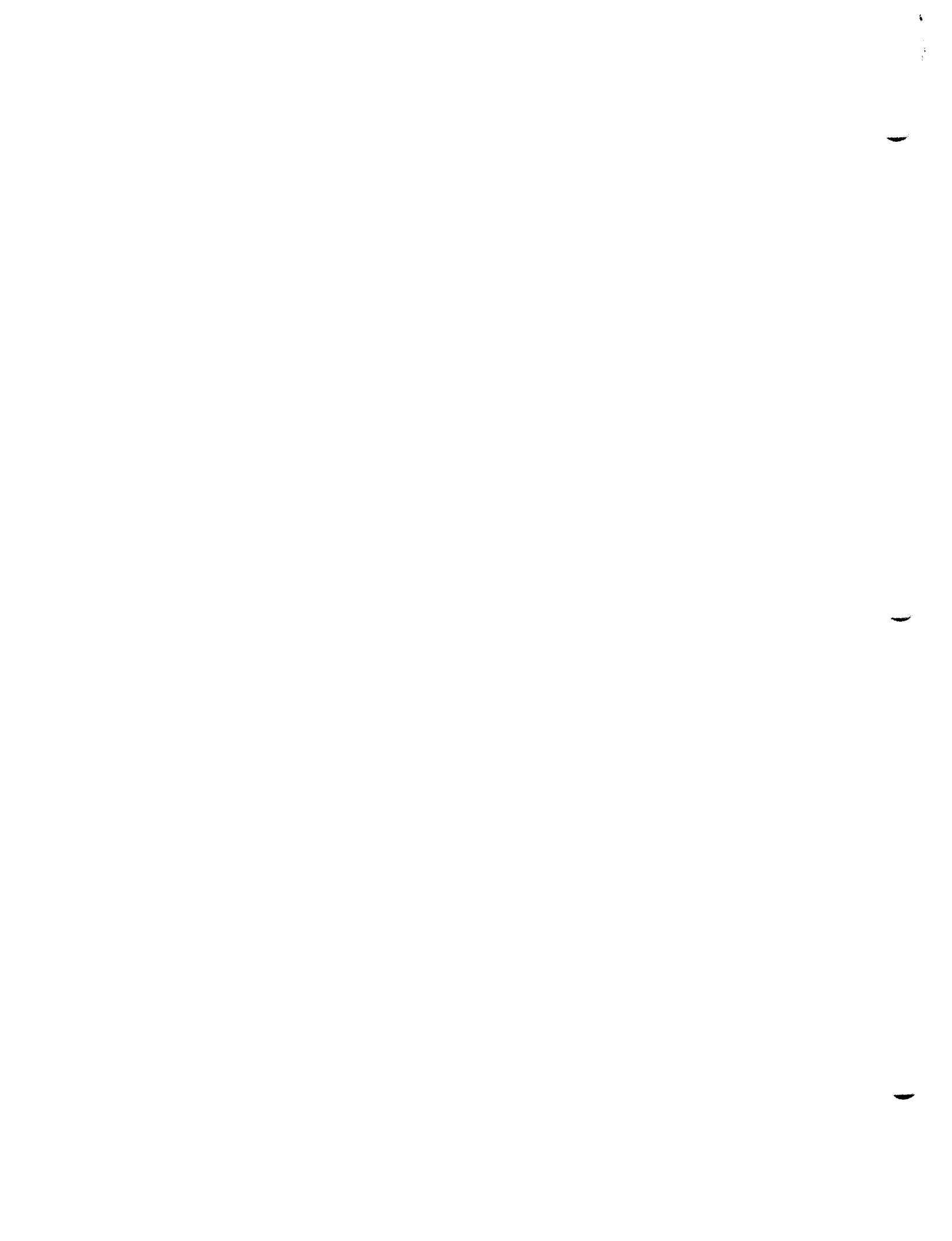


Lieutenant Steven Hall
Commander, "A" Detachment
Alaska Wildlife Troopers

Cc: Major Steve Bear, Alaska Wildlife Troopers
Captain Burke Waldron, Alaska Wildlife Troopers
Sergeant Matthew Dobson, Alaska Wildlife Troopers
Alan Cain, ADF&G Regulations Specialist
Scott Kelley, ADF&G Regional Supervisor
William Davidson, ADF&G Fishery Biologist VI
Gordie Woods, Yakutat Area Management Biologist
Nicole Zeiser, Yakutat Assistant Area Management Biologist

"A" Detachment

2760 Sherwood Lane - Juneau, Alaska 99801 - Voice (907) 465-4000 - Facsimile (907) 465-3333



H letter to BOF

From: greg dierick <>
Sent: Sat Feb 11 16:00:05 AKST 2012
To: Casey Mapes <yak2you2@yahoo.com>
Subject: Re: letter to BOF

On Sat, Feb 11, 2012 at 4:52 PM, greg dierick <tsiuriver@gmail.com> wrote:
Board of Fisheries members,
I oppose proposals 301, 302, and 303 as the fishery is very healthy on the Tsiu River.
thank you for considering this,
Greg Dierick

|
|
|



Page 1-3 submitted at the request of Board member Webster

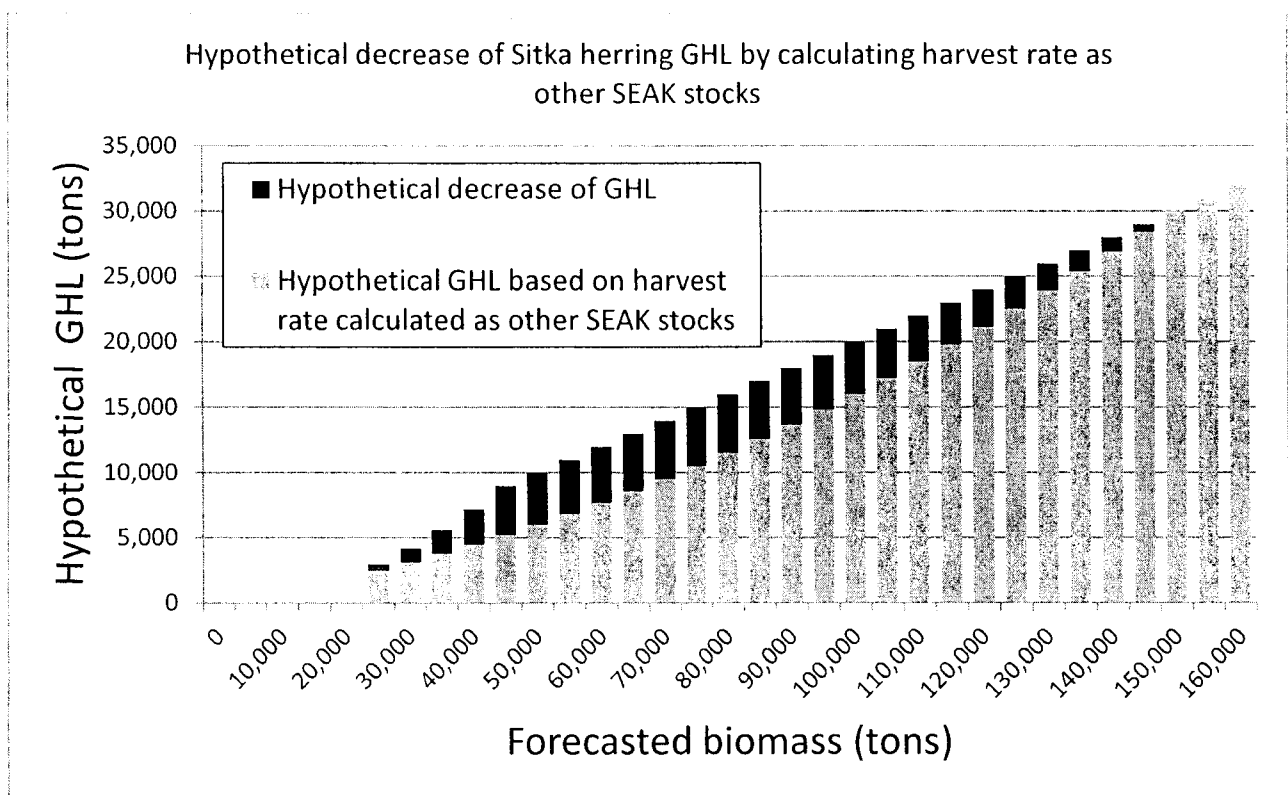
Page 4 submitted at the request of Board member Brown

February 25, 2012

Table 1. Hypothetical harvest rate and guideline harvest level (GHL) changes for Sitka Sound herring fishery by using sliding scale harvest rate used for other Southeast Alaska herring stocks.

Multiple of 25,000 ton threshold	Forecast	Current Sitka harvest rate (25,000 threshold, 12-20%)	Hypothetical Sitka harvest rate calculated as other SEAK stocks	Hypothetical GHL based on current harvest rate	Hypothetical GHL based on harvest rate calculated as other SEAK stocks	Hypothetical decrease of GHL	Hypothetical percent decrease of GHL
0	0	0%	0%	0	0	0	0%
0.2	5,000	0%	0%	0	0	0	0%
0.4	10,000	0%	0%	0	0	0	0%
0.6	15,000	0%	0%	0	0	0	0%
0.8	20,000	0%	0%	0	0	0	0%
1	25,000	12%	10%	3,000	2,500	500	17%
1.2	30,000	14%	10%	4,200	3,120	1,080	26%
1.4	35,000	16%	11%	5,600	3,780	1,820	33%
1.6	40,000	18%	11%	7,200	4,480	2,720	38%
1.8	45,000	20%	12%	9,000	5,220	3,780	42%
2	50,000	20%	12%	10,000	6,000	4,000	40%
2.2	55,000	20%	12%	11,000	6,820	4,180	38%
2.4	60,000	20%	13%	12,000	7,680	4,320	36%
2.6	65,000	20%	13%	13,000	8,580	4,420	34%
2.8	70,000	20%	14%	14,000	9,520	4,480	32%
3	75,000	20%	14%	15,000	10,500	4,500	30%
3.2	80,000	20%	14%	16,000	11,520	4,480	28%
3.4	85,000	20%	15%	17,000	12,580	4,420	26%
3.6	90,000	20%	15%	18,000	13,680	4,320	24%
3.8	95,000	20%	16%	19,000	14,820	4,180	22%
4	100,000	20%	16%	20,000	16,000	4,000	20%
4.2	105,000	20%	16%	21,000	17,220	3,780	18%
4.4	110,000	20%	17%	22,000	18,480	3,520	16%
4.6	115,000	20%	17%	23,000	19,780	3,220	14%
4.8	120,000	20%	18%	24,000	21,120	2,880	12%
5	125,000	20%	18%	25,000	22,500	2,500	10%
5.2	130,000	20%	18%	26,000	23,920	2,080	8%
5.4	135,000	20%	19%	27,000	25,380	1,620	6%
5.6	140,000	20%	19%	28,000	26,880	1,120	4%
5.8	145,000	20%	20%	29,000	28,420	580	2%
6	150,000	20%	20%	30,000	30,000	0	0%
6.2	155,000	20%	20%	31,000	31,000	0	0%
6.4	160,000	20%	20%	32,000	32,000	0	0%

Figure 1. Hypothetical harvest rate and guideline harvest level (GHL) changes for Sitka Sound herring fishery by using sliding scale harvest rate used for other Southeast Alaska herring stocks.



Conversion of ANS spawn on hemlock to tons of herring:

conversion of the total weight of herring (male and female) needed to produce a given weight of spawn-on-kelp (*Macrocystis*) is 0.273 (95% CL 0.247-0.299). This conversion factor was developed from sampling conducted during experimental spawn-on-kelp open pound test fisheries conducted in Sitka Sound during the years 1998 and 1999 (Davidson, et al., 2000).

Assuming a similar conversion of weight of spawn-on-hemlock to weight of herring, the conversion of the Sitka Sound subsistence herring spawn ANS of 136,000-227,000 pounds would be:

$136,000 \div 0.273 = 498,168$ pounds (249 tons) of herring

$227,000 \div 0.273 = 831,502$ pounds (416 tons) of herring

ANS expressed in tons of herring = **249-416** tons.

Davidson, B., D. Gordon, and D. Carlile, 2000, Report to the Alaska Board of Fisheries 1998 and 1999 Sitka Sound Herring Spawn-on-Kelp Experimental Test Fisheries. Regional Information Report 1J00-01, Alaska Department of Fish and Game, Juneau, Alaska.

Table 2. Historical exploitation rate of Sitka Sound herring for the period 1980-2011.

Year	Forecast biomass (tons)	Hindcast biomass (tons)	Quota (tons)	Harvest (tons)	Target			Under- or over harvest based on hindcast population estimates (tons)
					harvest rate	Exploitation rate	Target harvest rate - exploitation rate	
1980	39,500	45,781	4,000	4,385	10.1%	9.6%	-0.5%	-251
1981	27,000	46,435	3,000	3,506	11.1%	7.6%	-3.6%	-1,653
1982	30,000	32,879	3,000	4,363	10.0%	13.3%	3.3%	1,075
1983	32,850	39,103	5,500	5,450	16.7%	13.9%	-2.8%	-1,097
1984	30,550	46,926	5,000	5,830	16.4%	12.4%	-3.9%	-1,850
1985	38,500	40,972	7,700	7,475	20.0%	18.2%	-1.8%	-719
1986	30,950	32,524	5,029	5,443	16.2%	16.7%	0.5%	158
1987	24,750	49,239	3,600	4,216	14.5%	8.6%	-6.0%	-2,946
1988	46,050	65,088	9,200	9,575	20.0%	14.7%	-5.3%	-3,428
1989	58,500	45,510	11,700	12,135	20.0%	26.7%	6.7%	3,033
1990	27,200	27,082	4,150	3,804	15.3%	14.0%	-1.2%	-328
1991	22,750	32,553	3,200	1,908	14.1%	5.9%	-8.2%	-2,671
1992	23,450	52,217	3,356	5,368	14.3%	10.3%	-4.0%	-2,105
1993	48,500	36,224	9,700	10,186	20.0%	28.1%	8.1%	2,941
1994	28,439	22,711	4,432	4,758	15.6%	21.0%	5.4%	1,219
1995	19,688	31,452	2,609	2,908	13.3%	9.2%	-4.0%	-1,259
1996	42,264	40,030	8,144	8,144	19.3%	20.3%	1.1%	430
1997	54,476	46,051	10,900	11,147	20.0%	24.2%	4.2%	1,933
1998	39,213	49,409	6,900	6,705	17.6%	13.6%	-4.0%	-1,989
1999	43,602	59,257	8,476	9,136	19.4%	15.4%	-4.0%	-2,384
2000	33,365	59,236	5,120	4,813	15.3%	8.1%	-7.2%	-4,277
2001	52,985	64,881	10,597	11,972	20.0%	18.5%	-1.5%	-1,004
2002	55,209	66,435	11,042	9,789	20.0%	14.7%	-5.3%	-3,498
2003	39,319	77,030	6,970	7,051	17.7%	9.2%	-8.6%	-6,604
2004	53,088	97,700	10,618	10,492	20.0%	10.7%	-9.3%	-9,048
2005	55,962	95,518	11,192	11,366	20.0%	11.9%	-8.1%	-7,738
2006	52,059	88,675	10,412	9,967	20.0%	11.2%	-8.8%	-7,768
2007	59,519	95,223	11,904	11,571	20.0%	12.2%	-7.8%	-7,474
2008	87,715	110,776	14,723	14,386	16.8%	13.0%	-3.8%	-4,208
2009	72,521	130,815	14,504	14,755	20.0%	11.3%	-8.7%	-11,408
2010	91,467	137,736	18,293	17,602	20.0%	12.8%	-7.2%	-9,945
2011	97,449	151,527	19,490	19,419	20.0%	12.8%	-7.2%	-10,886
1980-1998 average	34,981	41,168	5,848	6,174	16.0%	15.2%	-0.9%	-500
1999-2001 average	61,097	94,985	11,796	11,717	19.2%	12.4%	-6.7%	-6,634
Overall average	45,590	63,031	8,264	8,426	17.3%	14.1%	-3.2%	-2,992

Submitted at the
request of Board member Smith
2/26/2012

RC 64

Stock Assessment and 2012 Forecast Sitka Sound, Alaska



Sherri Dressel
Alaska Department of
Fish and Game

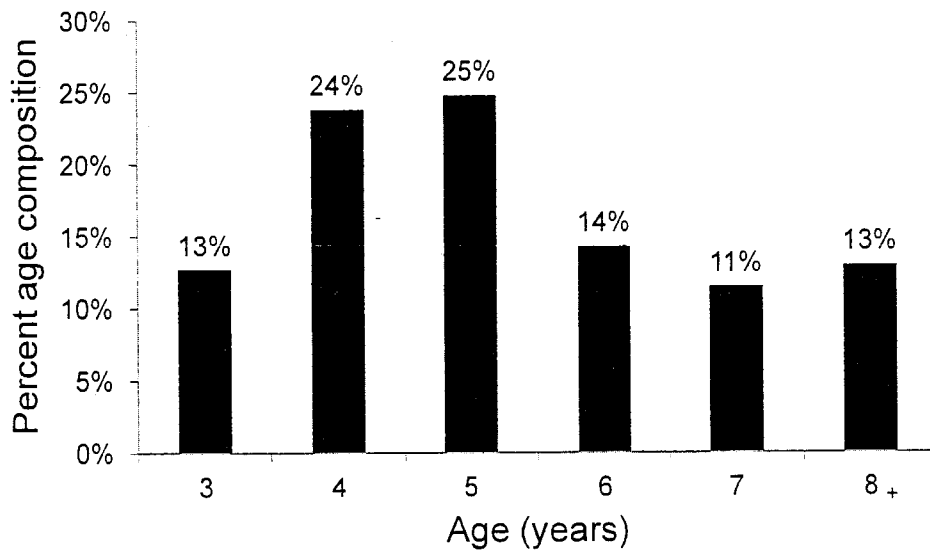
February 24, 2012
Ketchikan, Alaska

Overview

- 2012 quota and forecasted age composition
- Model inputs
- Model outputs
- Why is the 2012 quota greater than 2011?
- How does modeling differ after re-aging?

2012 Preliminary quota and forecasted age composition

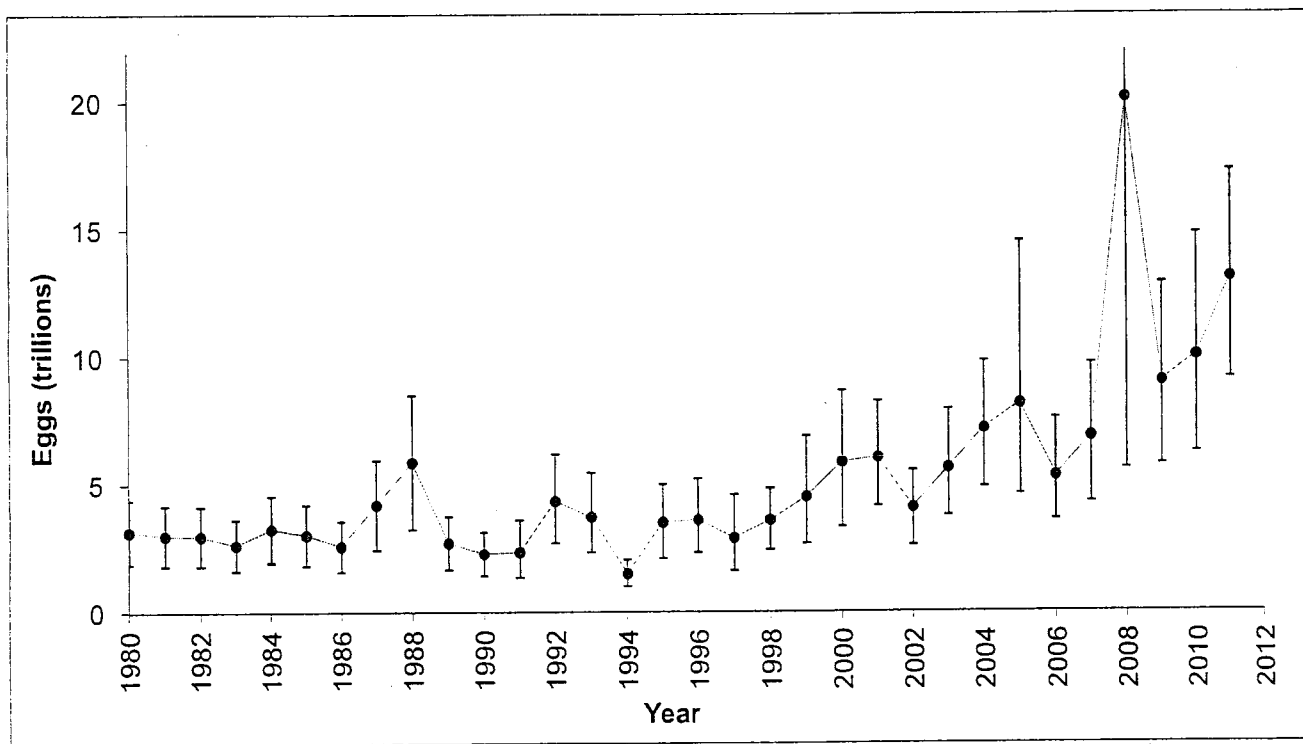
2012 preliminary quota = 29,008 tons



Input data to the age-structured analysis (ASA) model

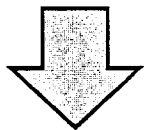
- Spawn deposition (trillions of eggs)
- Age composition - spawning population (cast net)
- Age composition - commercial harvest (purse seine)

Spawn deposition survey estimates with 95% confidence intervals



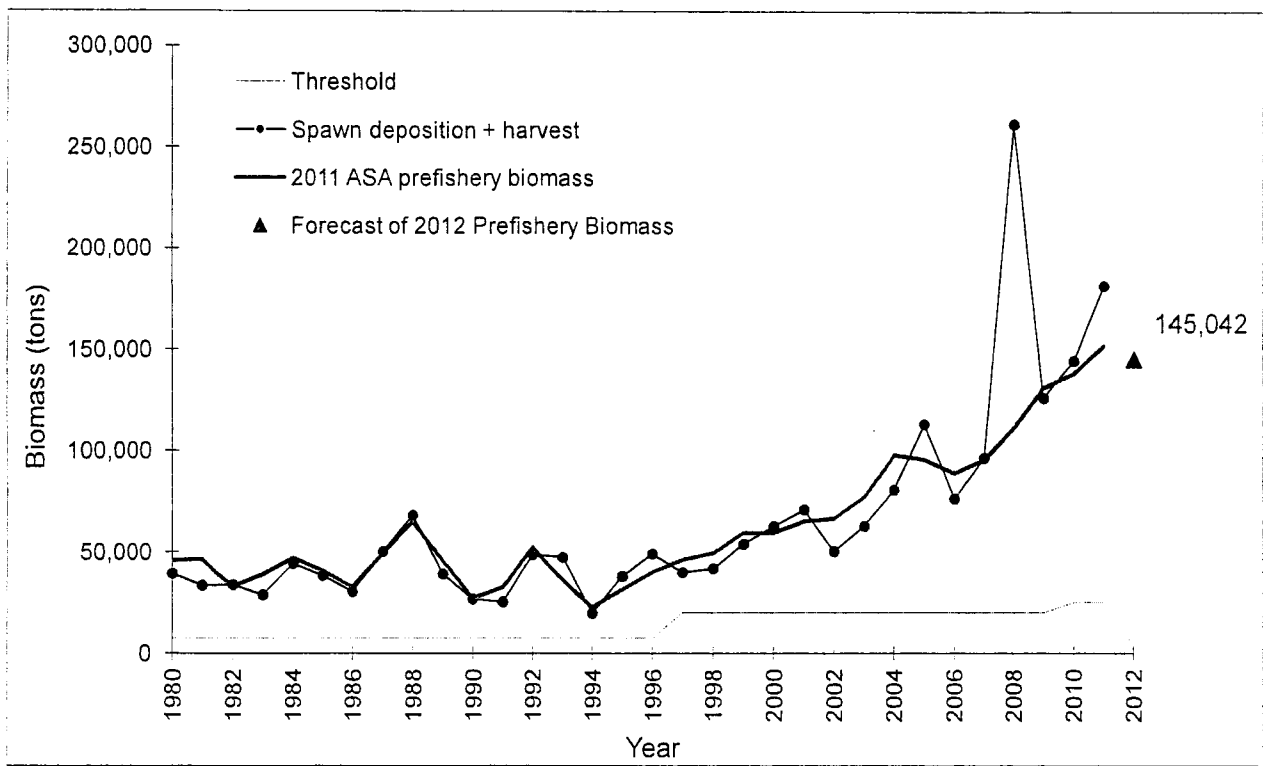
ASA model outputs

- Annual biomass 1980-2011
- Age-3 recruitment 1980-2011
- Percent mature at age
- Percent selected by the gear at age
- Percent annual survival



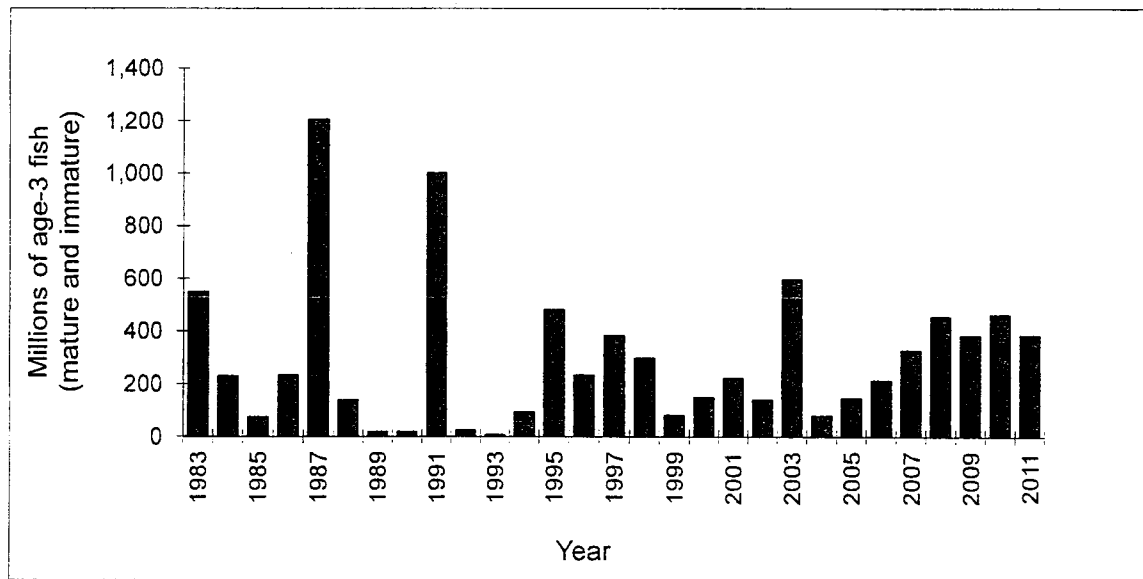
- Forecast of 2012 biomass
- Forecast of 2012 age composition

Sitka mature pre-fishery biomass and 2012 forecast



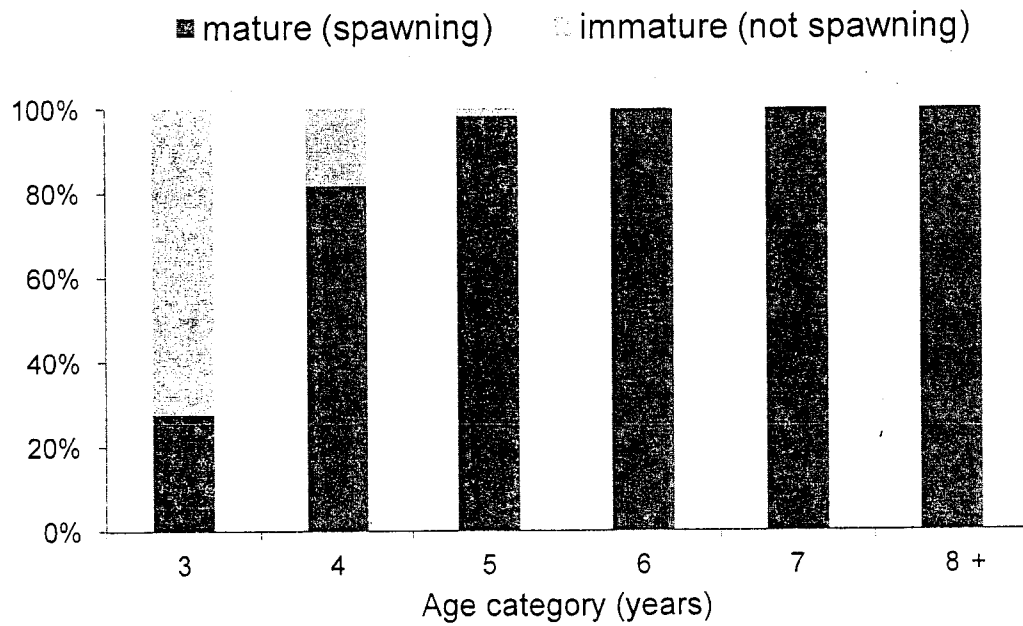
Sitka Sound recruitment

2012 forecast ASA model
(mature and immature age-3 fish)



Sitka Sound 1980-2011 maturity

2012 forecast ASA model



Sitka Sound survival

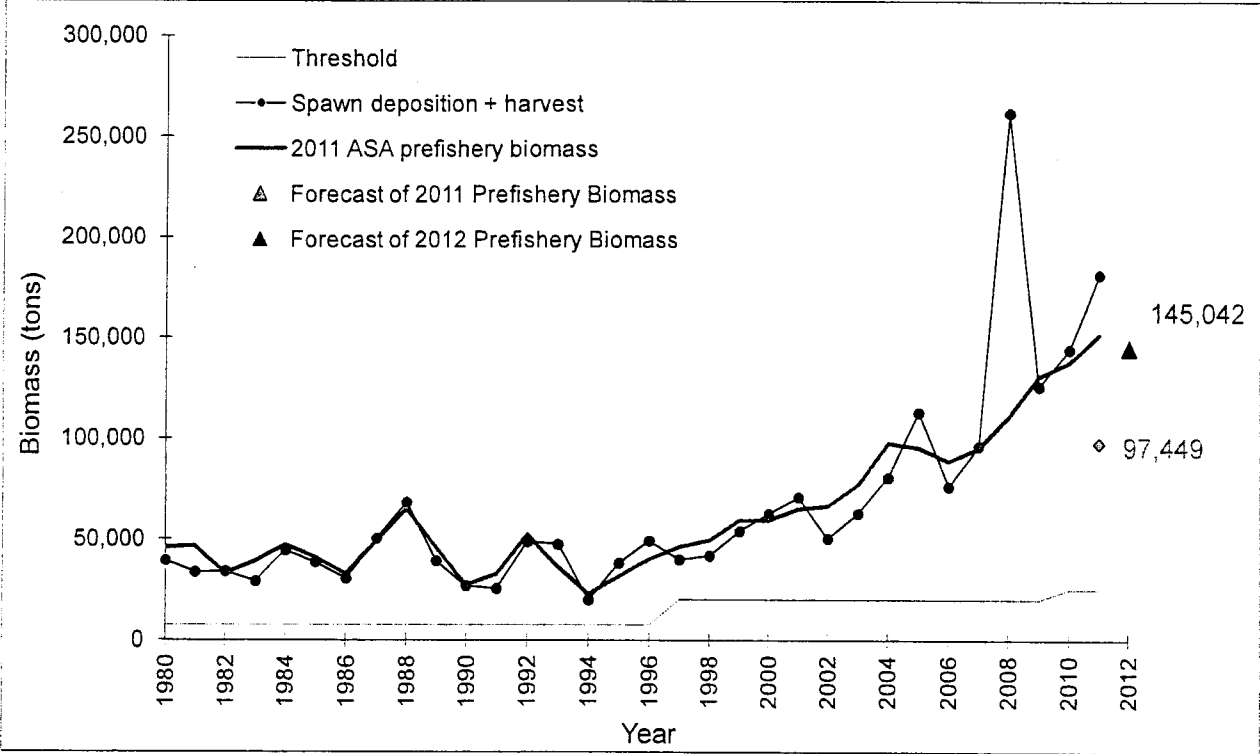
2012 forecast ASA model

	<u>Survival</u>
1980-1998	57%
1999-2011	79%

Overview

- 2012 quota and forecasted age composition
- Model inputs
- Model outputs
- Why is the 2012 quota greater than 2011?
- How does modeling differ after re-aging?

Sitka mature pre-fishery biomass and forecast



Why is the 2012 quota greater than 2011?

- Egg deposition has been increasing and was high in 2011

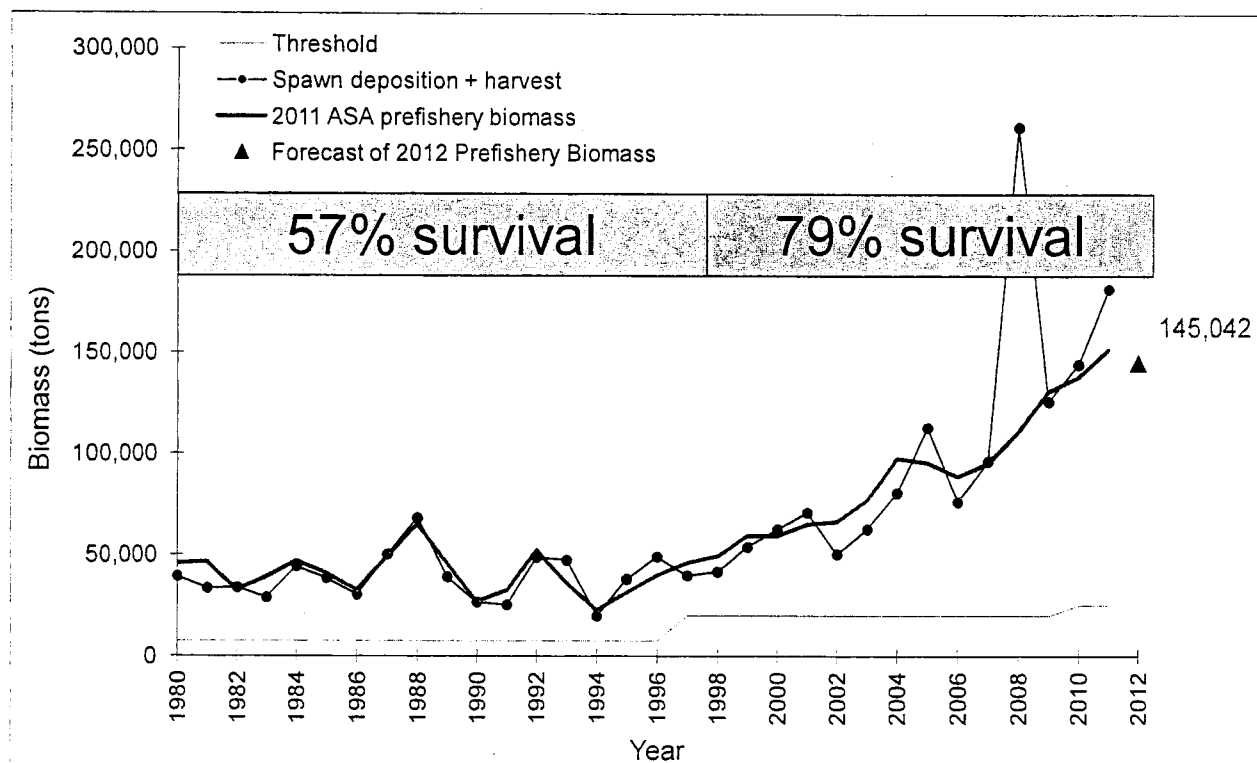
Forecasting methods for Sitka Sound herring

- Age structured analysis (ASA)
 - Used for 1995-2010 and 2012 forecasts
 - Estimates survival, maturity, and forecasted age-3 recruits
- Biomass accounting
 - Used for 2011 forecast
 - Borrowed estimates of survival, maturity, and forecasted age-3 recruits from 1999 forecast ASA model (1971-1998 data)

TOO LOW



Sitka Sound 2012 forecast ASA



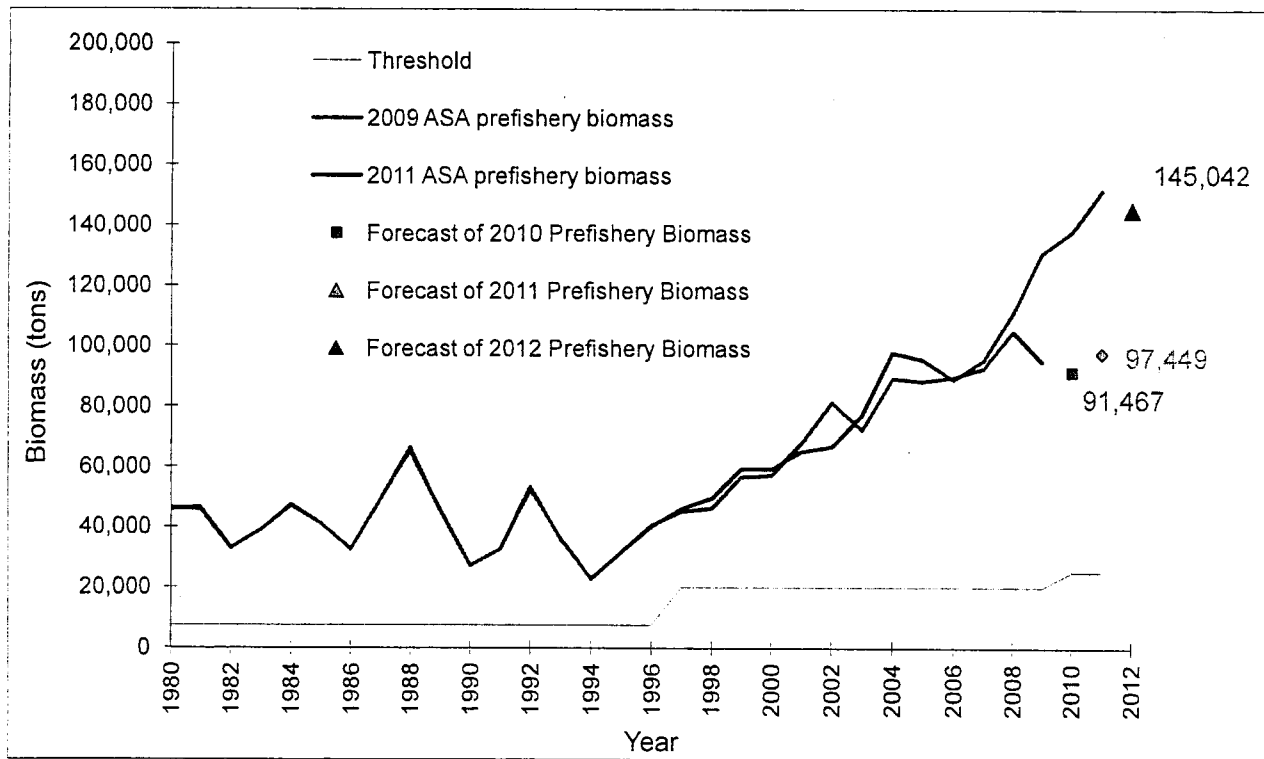
Why is the 2012 quota greater than 2011?

- Egg deposition has been increasing and was high in 2011
- The survival estimate used for the 2011 forecast was too low

Overview

- 2012 quota and forecasted age composition
- Model inputs
- Model outputs
- Why is the 2012 quota greater than 2011?
- How does modeling differ after re-aging?

2012 forecast model vs. 2010 forecast model

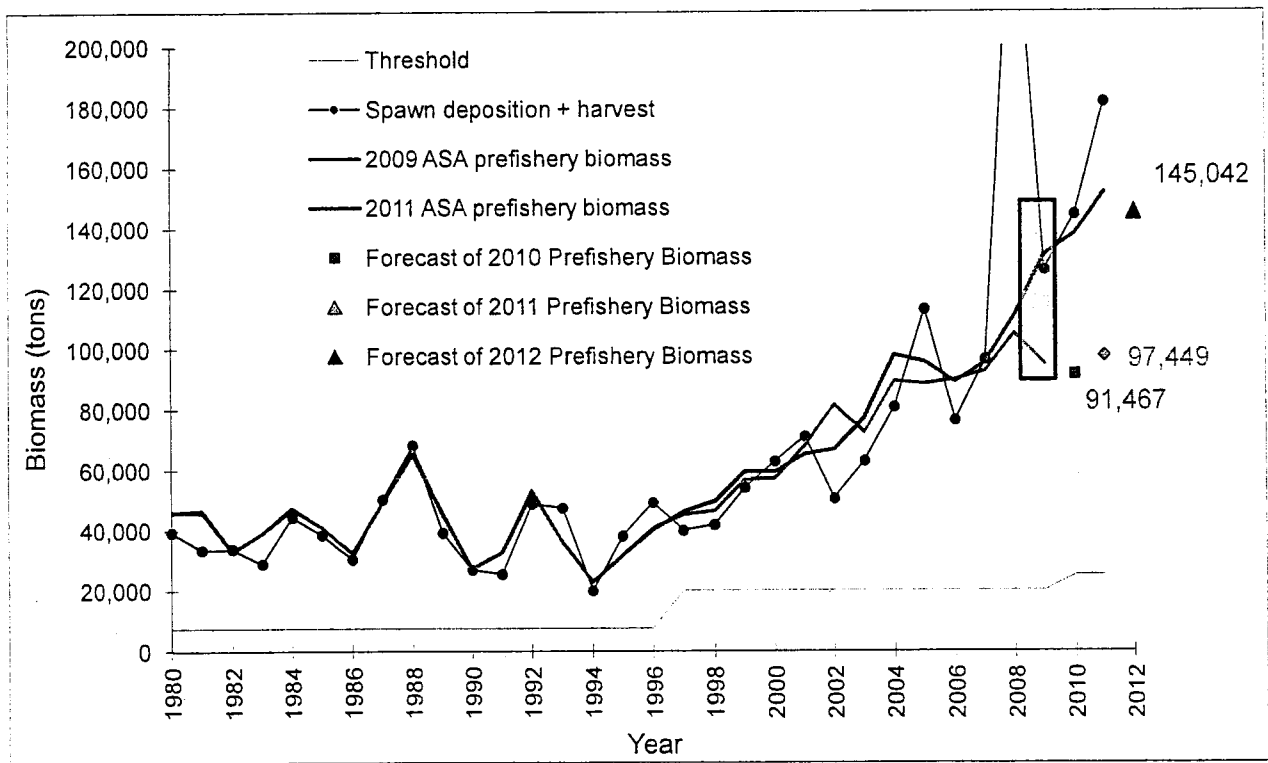


Why was 2009 lower in the
2010 forecast model than the 2012 model?

- No 2010 and 2011 data yet

Why was 2009 lower in the 2010 forecast model?

Reason 1: no 2010 and 2011 data yet



Why was 2009 lower in the
2010 forecast model than the 2012 model?

- No 2010 and 2011 data yet
- Effects of aging errors

ASA model

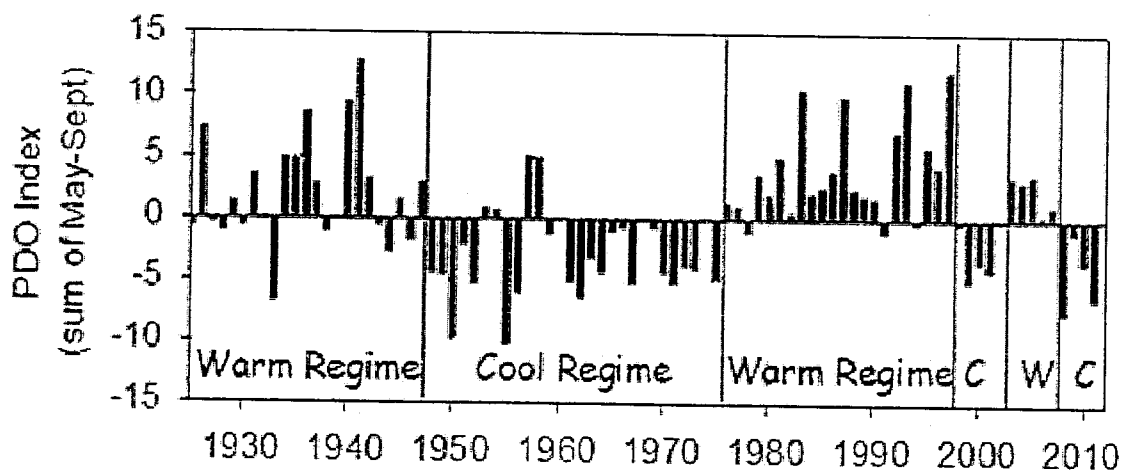
- Used to combine multiple years and multiple types of data
- Used to estimate things beyond the data (e.g. survival, maturity, gear selectivity, recruitment) which
 - Can explain how the data fit together
 - Can be used to forecast biomass
- Minimize what you need to estimate
 - Annual estimates (recruitment)
 - Multi-year estimates (survival, maturity, gear selectivity)
- Best model is one that can link datasets the most closely and estimates the fewest things

Determine the best combination of multi-year estimates

- Select points in time where survival, maturity, or selectivity can change

Pacific Decadal Oscillation Index

Basin-scale index of North Pacific sea surface temperatures



<http://www.nwfsc.noaa.gov/research/divisions/fed/oeip/ca-pdo.cfm>

Determine the best combination of multi-year estimates

- Select points in time where survival, maturity, or selectivity can change
- Try different combinations
 - Examples:
 - One survival, one maturity, one selectivity
 - Two survivals, one maturity, one selectivity
 - Two survivals, three maturities, two selectivities

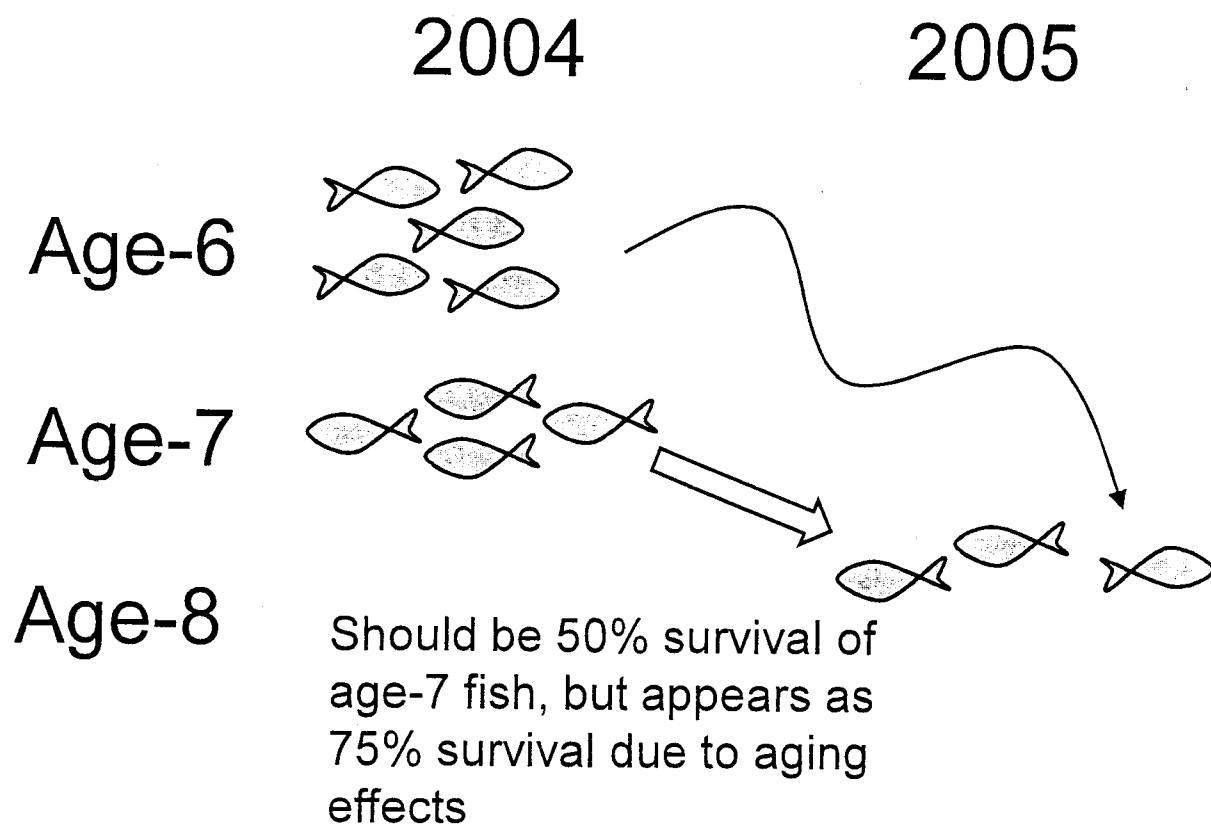
Determine the best combination of multi-year estimates

- Select points in time where survival, maturity, or selectivity can change
- Try different combinations
 - Examples:
 - One survival, one maturity, one selectivity
 - Two survivals, one maturity, one selectivity
 - Two survivals, three maturities, two selectivities
- Eliminate explanations that are “impossible”
 - Impossible (e.g. 120% survival)
 - Incredibly unlikely (e.g. >90% survival not seen in other eastern North Pacific herring populations)

Explanations differ based on age data

- 2010 forecast model (before re-aging)
 - Two survival periods
 - Two maturity periods
 - Two selectivity periods
- } Aging effects were mixed in with parameters

Aging effects were mixed in with parameters



Best explanation affected by errors in age data

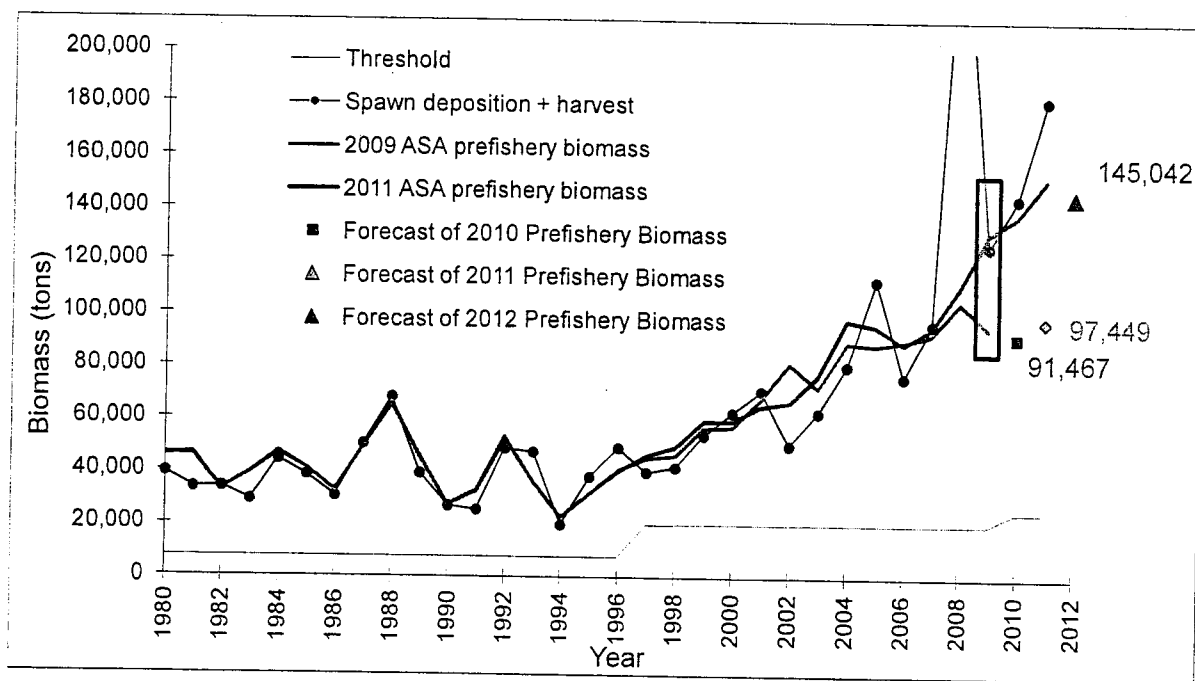
- 2010 forecast model (before re-aging)
 - Two survival periods
 - Two maturity periods
 - Two selectivity periods

} Aging effects were mixed in with parameters
- Some combinations fit better and resulted in higher biomass but had survival >90% (it wasn't only survival – it was survival and aging effects!)

Why was 2009 lower in the 2010 forecast model?

Reason 1: no 2010 and 2011 data yet

Reason 2: aging effects



How does modeling differ after re-aging?

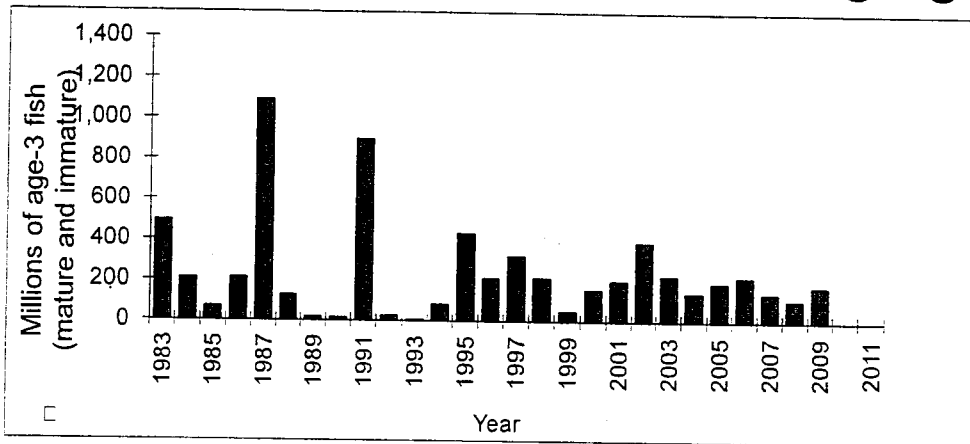
Parameterization changes after re-aging

- 2010 forecast model (before re-aging)
 - Two survival periods
 - Two maturity periods
 - Two selectivity periods
- 2012 forecast model (after re-aging)
 - Two survival periods
 - Constant maturity
 - Constant selectivity

How does modeling differ after re-aging?

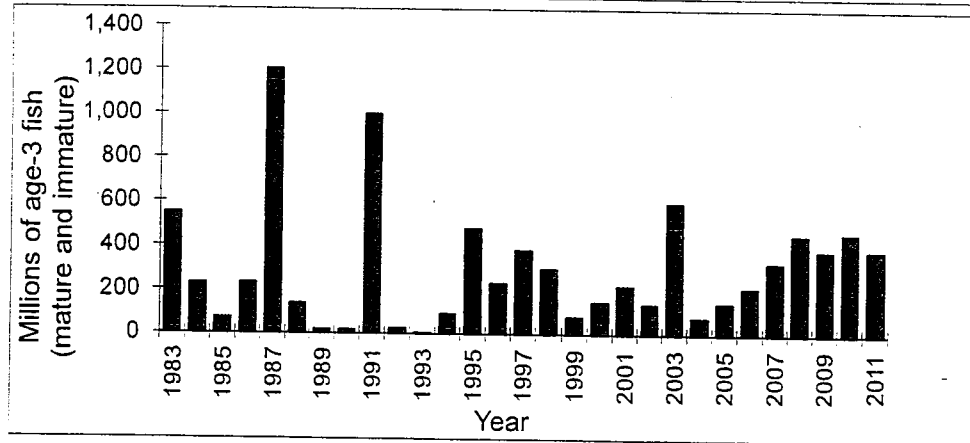
2010

forecast
model



2012

forecast
model



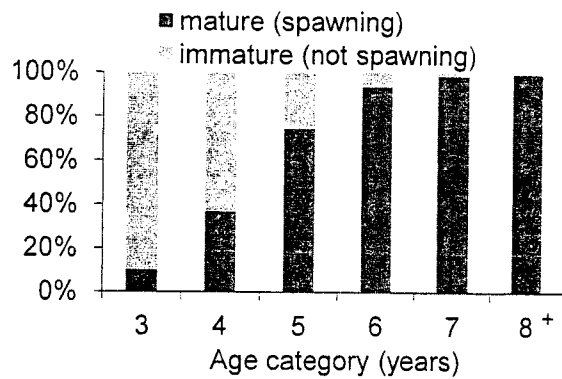
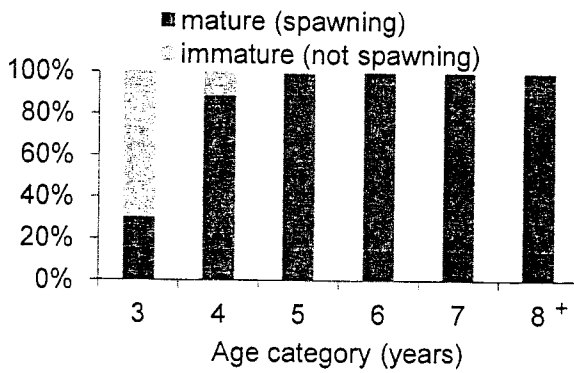
How does modeling differ after re-aging?

1980-2002

2003-2009

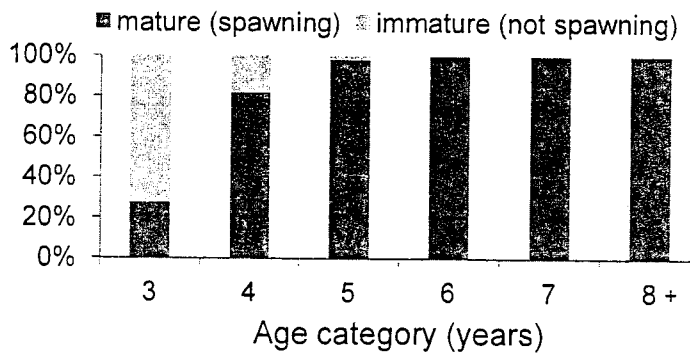
2010

forecast
model



2012

forecast
model



1980-2011

How does modeling differ after re-aging?

2010

forecast
model

	<u>Survival</u>
1980-1998	60%
1999-2009	87%

2012

forecast
model

1980-1998	57%
1999-2011	79%

Summary

- Why is the 2012 quota greater than 2011?
 - Egg deposition has been increasing and was high in 2011
 - The survival estimate used for the 2011 forecast was too low
- How does modeling differ after re-aging?
 - Model parameterization changed
 - Recent recruitment higher
 - Percent maturity of young fish is higher
 - Recent survival is lower