

**Public Comments for Statewide Finfish, Supplemental Issues,
Subsistence Finding Standards, and Chitina Dipnet Fishery**

March 16 - 21, 2010
Hilton Hotel, Anchorage

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Darrell Kapp
338 Bayside Rd. Bellingham, WA 98225
(360)733-5455 (360)961-5706 Kapp_D@msu.com

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SEP 28 2009
BOARDS

September 28, 2009

To: Alaska Board of Fisheries
Mr. John Jensen, Chair
Mr. Jim Marcotte, Executive Director
PO Box 115526
Juneau, AK 99811-5526

Re: Support Documentation for Restructuring Proposal
Restructuring Proposal 168 – 5AAC39.117 Vessel Length

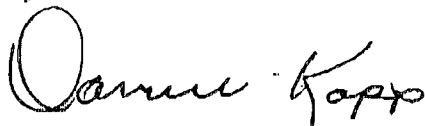
Dear Mr. Chairman, Director, and Board Members,

The following information is supporting proposal 168 which seeks to repeal the 58 foot salmon seine vessel length limit.

Included is a completed restructuring proposal form along with a document outlining the history of the regulation and examining the current need for it.

If you need any further information or clarification of this proposal please feel free to contact me.

Regards,



Darrell Kapp

**Alaska Board of Fisheries
Restructuring Proposal 168 – 5AAC39.117 Vessel Length**

Alaska Board of Fisheries – Restructuring Proposal Form

- 1) **What regulatory area, fishery, and gear type does this restructuring proposal affect?**

This restructuring proposal affects statewide salmon seine fisheries.

- 2) **Thorough proposal explanation:**

- a. **Will this proposal require initial harvester qualifications? If so, how are they determined?**

There are no initial qualifications associated with this proposal. The proposal simply allows participants to use larger boats in the fishery.

- b. **Are there new harvesting allocations?**

This proposal does not create new harvesting allocations. This proposal is in no way allocative in nature.

- c. **What means, methods, and permitted fishing gear are proposed?**

There are no new means, methods, or permitted fishing gear proposed. Every methodology of the fishery would remain the same. Time, area, and gear restrictions currently in use would still be necessary. The proposal only addresses the ability to use a larger boat to participate in the fishery.

- d. **Is a change in vessel length proposed?**

Yes, this proposal seeks to repeal the current 58 foot limit on salmon seine vessels. This proposal does not establish a new length limit nor does it set a minimum limit to participate in the fisheries. This proposal simply eliminates the 58 foot length limit.

- e. **Are the transferability of permits or harvest privileges affected? If so, explain.**

This proposal does not have anything to do with transferability of permits or harvest privileges. Some may find the proposal more palatable if the purchase of an additional CFEC permit were required to use a longer vessel in a permit area.

f. Is there a defined role for processors? If so, please describe.

Alaska processors may be affected if at sea processing is developed. Alaska at sea processors will demand regulation to protect their quality products from mishandling effects. Capitol investment in properly equipping seine vessels to at sea processing will demand regulation to keep "Alaska Processing At Sea Salmon Seiners" producing top quality products. Shore side processors could feel threatened by this proposal. A seiner processing at sea could be seen as a fisherman going into the processing business. The processors natural thought would be that the fisherman should be selling his fish to the shore side for processing. In reality the seine boat processing fish will need the shore side and will need to make arrangements to work closely with the shore side. Many logistical problems associated with the processing of salmon will need the shore side. For example, some days the catch will exceed the processing capacity of the vessel. Pumping off to the shore side processor is needed for extra capacity the vessel could not process on its own. The relation between the shore side and the at sea seine processor will likely be a stronger tie then most think. There may be enough margins in the products produced to allow existing processors to sell the new "frozen at sea" product through their existing market channels.

g. Will this proposal be a permanent change to regulation? If not, for how long?

Yes, this proposal is expected to be a permanent change to existing regulations.

h. If adopted, will your proposal require a change in monitoring and oversight by ADF&G?

ADF&G now regulates salmon fisheries with the tools of area, gear and time. This proposal does not change any of these management tools. Some change in oversight by ADF&G may occur if the ability to process at sea is developed. These changes would be reporting requirements from the "At Sea Processor". Regulation is now in place for floating processing new regulation surely will be brought forth when needed.

i. Will vertical integration (e.g. harvesting and/or processing) or consolidation occur? Will limits be imposed?

Consolidation is not a foreseen outcome from this proposal. However, vertical integration could occur in a limited basis in that with bigger vessels the harvester will have the ability to freeze and process on board a vessel with more space. This may or may not be seen as vertical integration. In this case the permit holder would still be required, per CFEC regulation, to be aboard the vessel while harvesting is taking place.

j. How do you propose to monitor and evaluate the restructured fishery?

This proposal does not restructure the fishery in such a manner to necessitate continued monitoring and evaluation. There should be no change in the manner by which the fishery takes place, the amount of fish that are harvested, or the manner by which those fish are harvested.

k. Is there a conservation motivation behind the proposal? If so, please explain.

There is no additional conservation motivation behind the proposal unless it is taken into account that longer vessels are more fuel efficient than shorter/wider vessels.

l. What practical challenges need to be overcome to implementing your proposal, and how do you propose overcoming them?

There are some challenges to this proposal but none of them can be viewed as practical. This proposal represents change and change scares people who are unwilling to embrace it. Repealing the 58 foot rule is something that is long overdue. There are many arguments for keeping it in place but as time has passed most of the arguments are no longer applicable and other arguments are just plain unfounded.

"My boat will lose value allowing boats longer than 58ft into the fishery" This is the most common opposition argument. It is false and it needs to be examined.

Today others are building boats that are 58ft with a width of 26-28ft and a depth of 11-12ft. Most of these people are doing this because they want to replace their existing vessel and they participate in the sablefish or halibut fishery in addition to salmon seine fisheries. The costs of these vessels are 1.5 million to over 3 million dollars. The fishermen have salmon limited entry permits and before long line rationalization, salmon was probably their most important fishery. With long line rationalization their business model changed and now sablefish or halibut fisheries are the driving capital contributors to their business. The vessels conform to the present vessel length restrictions in both fisheries because today's standard of measurement, between the Federal regulation of 60 feet in the rationalized fisheries and State regulation of 58 feet, is insignificant.

A vessel 58x 26x12 has the same capacity as a vessel 72x23x10.5. If it were the case that allowing longer vessels into the salmon seine fishery would drive down values on the 58 foot and less boats, it would already have happened with the current sponsoning and construction of vessels today. Larger boats, longer or wider and deeper, are all the same. The Alaska salmon seine fishery needs these boats because others are building them. The length restriction just causes others to build "bad" boats.

The restriction on vessel length does not determine value. Other criteria are much more significant. Construction material, general arrangement, engine size and condition, electronics packages, and level of maintenance and upkeep required are the value determining components.

Having the ability to use vessels over 58 feet does not mean vessels over 58 feet will be "better" than status quo. Many Alaska salmon seine fishermen use vessels shorter than 58 feet. Each fisherman uses a vessel which suits the area he intends to fish and the fishermen's idea of the tool he believes works.

Repealing the 58 foot restriction allows some to try new ideas and explore areas of marketing that are not possible with the current length limit. Why continue to build wider and deeper when efficiencies could be achieved with a longer length?

Believe it or not there is in fact a limit on the size of boat that can be efficiently used for seining. Seiners have to be very maneuverable to get close to shore so the skiff and seine can get to the beach. Also, seining does require some finesse in how the net is retrieved. Some say that a bigger boat is better to fish in rougher weather and this is somewhat true. What is overlooked is how much more wind the bigger vessel would catch as it is trying to retrieve the net making fishing in windy weather very difficult compared to a smaller more agile vessel.

The explanation of this proposal contained here and examination of the history of the rule should overcome the challenges to repealing this regulation.

3) What are the objectives of the proposal?

The objective of this proposal is to allow larger vessels to participate in Alaskan salmon seine fisheries. Elimination of the 58 foot rule allows fishermen to have a longer, safer, more efficient, and economical vessel.

4) How will this proposal meet the objectives in question #3?

Repealing the 58 foot rule allows longer boats to participate in the fishery.

5) Please identify the potential allocative impacts of your proposal. Is there an allocation or management plan that will be affected by this proposal?

There are no potential allocation impacts foreseen from this proposal. This proposal will not affect current fishery management plans.

6) If the total value of the resource is expected to increase, who will benefit?

This proposal will potentially increase the value of the resource through giving the vessel owner a platform to better create value added products. Larger boats would possibly have the ability to freeze and package on board creating a more valuable product. Anyone involved in the fishery would benefit from the ability to produce higher valued products. Value added creates a higher fishery value which benefits

fishermen, processors, and local communities. Permit values could also potentially increase benefiting every fisherman involved.

7) What will happen if your fishery is not restructured as your proposal recommends, and how is this proposal an improvement over current practices?

Please see the accompanying document outlining the history of the 58 foot rule. This regulation is outdated and unnecessary. The salmon seine fishery has so much more potential than to be limited in this manner. The business is already increasingly difficult. With the current market environment almost entirely predicated on quality why not allow a platform that will have the potential to increase quality. This elimination of the 58 foot rule would allow those that choose the ability to enhance the profitability of their salmon seine businesses.

8) Considering the history of the commercial fishery, what are the potential short- and long-term positive and negative impacts on:

- a. **The fishery resource:** The fishery resource will see no change short or long term as this proposal does not change the fishery management plan. The pressure on the fishery resource is dictated by regulating time, area, and gear.
- b. **Harvesters:** There will be no short or long term impacts on harvesters. Those that choose to will get a bigger boat and those that do not choose to will not. It will not change anything about how the fish are harvested. The lines at the hook offs will remain unchanged.
- c. **The sector, species, and regional interdependence relationships:** There will be no impacts at all in this area.
- d. **Safety:** Safety will be enhanced by the addition of larger boats. It is widely considered that larger boats are inherently safer than smaller ones. Vessel safety is largely interdependent on the captain and crew to achieve it.
- e. **The market:** There will be a positive impact to the market for salmon in both the short and especially the long term. The ability of using a larger boat to utilize freezing at sea would increase the market value of the product and thus increase the average market value of the fishery.
- f. **Processors:** The relationship between processors and fisherman will remain unchanged. There will always be salmon processors buying fish from seiners in Alaska no matter what size of boat they operate. Bigger vessels will not take away from the market share of the processors in the short term and in the long term there could be marketing agreements between the fishermen and processors to market the value added products through existing channels so everyone benefits.

- g. Local communities:** Local communities would benefit from increased value in the local fishery. Larger vessels that chose to process on board would likely need increased shoreside support for shipping logistics, inventory and supply storage, and possibly local workers to assist in packaging the product.

9) What is your understanding of the level of support for your proposal among harvesters, processors and local communities?

A problem with this proposal is the lack of understanding about it. Sure, it is obvious what the proposal intends to accomplish but many do not understand how we got here in the first place. There should be support from fishermen and processors who are concerned about long term solutions to increasing product quality and value in Alaska's salmon seine fisheries. Most people do not know that the 58 foot limit intended to lessen the importance of the seine vessel and maintain the importance of the fish traps. Most do not know that this regulation was created 50 years ago to hold back the potential of the seine fleet. Currently, the salmon fisheries in the state have stagnated and there has been very little to no investment back into them. Sure, there have been some good seasons for folks in various areas from time to time but when looking at participation and ex-vessel revenue over the last 20 years participation has declined a bit and ex-vessel revenue has remained largely unchanged and has declined greatly when adjusted for inflation. I am hopeful and believe that most seine fishermen, when made aware of all the facts, would feel it is time to support this idea.

A large number of fishermen approached about this don't really care either way they can see both sides of the argument and do not have a conviction either way.

The opposition to this change is those who fear their current equipment or operation will become obsolete or lose value but nobody can seem to quantify how much, if anything, would be lost. Also, some would be in opposition because they cannot currently afford to invest to upgrade their existing equipment to take advantage of producing better quality product so they would wish to hold others to their level. Another important thing to consider is there are a lot of fishermen nearing retirement age who don't want to "rock the boat" until they can get out of the industry. It is hard to convince people who are only going to be around for ten more years to support something that will not yield them immediate benefits even if they know it is the right thing to do. There are always going to be people who will oppose this change but I would implore them to offer suggestion on what we could do as an industry to improve things. After looking at the data it should become obvious that status quo in the seine industry will not work much longer.

10) What are the potential short and long-term impacts on conservation and resource habitat?

There are absolutely no short or long term impacts on conservation or resource habitat. The fishery controls that are currently employed are more than sufficient. The repeal of the 58 foot rule would not change any of this.

11) What are the potential legal, fishery management, and enforcement implications if this proposal is adopted? What other governmental actions may need to be taken into account?

Again, ADF&G now regulates salmon fisheries with the tools of area, gear and time. This proposal does not change any of these management tools. Some change in oversight by ADF&G may occur if the ability to process at sea is developed. These changes would be reporting requirements from the "At Sea Processor". Regulation is now in place for floating processing and we are sure new regulation can be brought forth when needed. Additionally, as mentioned in 2) e. above, the thought of the purchase of an additional area seine permit in order to operate a longer vessel may make this a more acceptable idea to some who may oppose this proposal. I have contacted CFEC and they do not see a problem in doing this and are willing to work with whatever the Board decides to do with this proposal.

Respectfully Submitted,
Darrell Kapp
338 Bayside Rd.
Bellingham, WA 98225

Alaska Board of Fisheries
Restructuring Proposal 168 – 5AAC39.117 Vessel Length

Proposal #168 seeks to repeal the 58 foot limit for salmon seiners in Alaska. This regulation has been in effect for a long time and a debate should be promoted to determine if it still necessary today.

- What was the intention when this regulation was enacted?
- Did the regulation accomplish the intended purpose?
- Is the rule still serving the needs of the salmon seine fishery in Alaska?
- If the rule no longer serves a purpose, why is it still part of Alaska's regulation?

In order to answer these questions the history of the law was examined and yielded some very interesting things.

The History of Alaska's "58 foot law"

Alaska fisheries, before statehood, were controlled and regulated by the federal government through the Department of Interior, Fish and Wildlife Office. The regulations were promulgated from Washington DC, released in brief form, and issued in March or May for that year's fishery. Reviewing the years from 1923 through 1960, a year after Statehood, several references to limiting salmon fishing vessels to length were located.

The Department of Interior established a length limit of 50 feet for salmon seine boats in Alaska. This may have began in 1939 because older generation fishermen remember boats were cut down in length (10ft off the bow or stern and/or rudders slanted forward) in 1939.

The following paragraph was taken from the regulations of March 9, 1959, Department of The Interior, Office of the Secretary:

"The regulations retain the "status quo" in regard to several issues debated at length by the various segments of the industry. No change is provided in the 50-foot limit on salmon purse seine vessels long in effect in most areas of Alaska."

The regulation was a 50 ft length limit because a standard measurement was needed. Federal measurement of vessels was not overall length. The 50 feet was measured by the distance on the tonnage deck, from the forward part of the rudder post, intersecting with the deck tonnage line to the rabbit line of the planking at the stem.

Before statehood salmon fish traps were prevalent in most areas of Alaska (traps were not north of the Alaska Peninsula). These traps, although said to be owned individually at first, were controlled by Seattle, WA companies. Two companies, Alaska Packers Association (APA) and Pacific American Fisheries (PAF), were the largest trap owners. These companies were a major influence to the fishery regulations proposed each year in Washington DC and used regulation to protect their trap operations. Washington State had two very powerful Senators, Warren G. Magnusson and Henry M. Jackson, who looked out for their constituents.

Salmon seiners produced fish during this time but were not as efficient as traps. In reality the companies did not want seine boats to be successful and diminish the production of the fish traps they controlled. Keeping a length limit on the seine vessel kept the traps importance.

Alaska, upon statehood in 1959, adopted the 50 foot measurement from the Department of Interior, Fish and Wildlife Office. Alaska later added 58 foot overall measurement and then clarified that description excluding the anchor roller extension. These regulations were legislative as well as Board regulations. The State Legislators in 2003 said the Board of Fisheries can regulate the length of vessels in fisheries and abolished the State laws controlling the length limits. The Board of Fisheries in 2008, made length limits below the water line not part of the measurement of a Salmon seine vessel.

The original purpose of the regulation was to keep the power of salmon production in the hands of the Seattle Companies who had control of the traps in Alaska. Did the rule serve the intended purpose and does the rule today serve an intended purpose? The answer is yes it served its intended purpose but the purpose faded through time and ended when salmon traps were abolished at Statehood in 1959.

Is the 58 foot law relevant today?

Understanding the history of the Alaska 58 foot law is necessary when evaluating if the 58 foot law is helpful in the present day salmon seine fishery. Today it is known "outside" fish Companies no longer control traps and influence Interior Department Regulations. The real question: Is this restriction on the length of a salmon seine vessel needed 50 years after statehood? Are the tools of present day management sufficient to deal with salmon harvest by seine boats of a length over 58 feet if there were no restriction on the length of salmon seine boats?

The present day 58ft. regulation is the out-growth and leftovers of past regulation. It was never a good constriction or limitation of fishery capacity. If it were, the regulation would have applied to the width and depth of the vessel. Over time the salmon seine vessel has been held to 58 feet but they grew considerably in both width and depth. Today's vessels are being constructed with widths of 25-29ft and depths of 11-13ft. This is a far cry from the vessels of fifty years ago. Even if this was unforeseen at the time it is good there were no restrictions placed on width and depth because it still allowed for some growth in the fishery. It could have possibly unforeseen as well that the restriction on length in the salmon seine fishery also influenced regulation in other fisheries and caused other problems.

Some outgrowth regulation and other problems

Alaska's sablefish and halibut fisheries

An outgrowth of the 58 foot restriction is the Federal 35, 60, and 125 foot rules. (Vessel categories) National Marine Fisheries Service wanted a way to determine when observers needed to be aboard in Federal fisheries and to forestall a full scale reorganization of the fleet which might result from NMFS actions of rationalizing the sablefish and halibut fisheries. The 58 foot limit influenced this and thus a 60 and 125 foot limit for regulation of observer coverage. Again, this is not a capacity issue because if it were there would be restrictions on width and depth of the vessel. It's an observer issue. But observer coverage is changing to electronic. With electronic observer coverage there is no need of a physical observer to be on board. With electronic coverage, coverage is 24-7 and if the hydraulics go on the cameras are on. The choice of having all observed when fishing is coming and the expense will be one time with monthly fees for the designated service provider. It's cheaper and it gives 24-7 full time coverage. Once electronic observer coverage is instated the 60ft regulation is no longer needed.

Fuel conservation and costs

Hull efficiency is an important thing today. Fuel prices are soaring and a boat 58ft x 26ft, even with a bulbous bow is not efficient. The following are facts of design from the Navy concerning hull efficiencies and length to width ratios.

2.1 Displacement Ships

2.1.1 Hydrostatic Displacement: Ships

2.1.1.1 Historical Origin

It is impossible and unnecessary to present here a history of the development of the displacement hull form. Let it suffice to point out that this hull concept dates to prehistoric times.

2.1.1.2 Dominant Physics

The lift/drag performance of displacement ships at high speeds is dominated by wave making drag. A displacement form moving through the water pushes the water aside as it moves. This disturbance of the water requires energy, specifically propulsive energy from the ship.

Two major parameters affect the wavemaking resistance of the ship: Speed and Slenderness. Ship wavemaking drag increases rapidly with increasing speed. It is not possible to state a specific law for this increase - a law that holds true for all ships - but it is common to refer to a cubic increase in drag with speed. Specifically, it is commonly understood that ship propulsive power will increase as the cube of ship speed. Thus a doubling of ship speed will require an octupling (8²) of installed power.

Transport Factor is a measure of merit developed by Dr. Colen G. Kennell of the David Taylor Model basin. Dr. Kennell's paper "Design Trends in High Speed Transport" was distributed to workshop attendees. Transport Factor is defined as:

$$TF = 1.6878 / 550 * 2240 * (\text{Full Load Displ. in Long Tons}) * (\text{Speed in knots}) / (\text{Total Installed SHP})$$

This cubic relationship is close to true for "normal" speeds. But at very high displacement speeds the curve becomes even more steep. It is common for naval architects to limit their investigation of displacement ships to a speed length ratio of about 1.30. (Speed length ratio is the ratio of ship speed in knots divided by the square root of the ship's length in feet. This is also known as the

Taylor quotient T_q , after ADM David W. Taylor.) Above a speed-length ratio of 1.3 the increase in drag with increasing speed becomes greater-than-cubic.

Speeds greater than 1.3 are present in some displacement hull designs. The dominant question is "how important is wavemaking?" for the particular design. If one can make the wavemaking problem of lesser importance overall, then one may more readily consider speeds higher than $T_q=1.3$. The tool (or "one tool") for this is ship slenderness. A slender ship disturbs the water less, and thus has less wavemaking drag. It also has more surface area and thus more frictional drag, but this does not suffer the same steep growth with speed as does the wavemaking drag.

Slenderness is measured as the Length over Displacement ratio ($L/V^{1/3}$).

Present regulation contributes to inefficient boats and increases the fuel needed to push the vessel through the water.

At Sea processing of Alaska Salmon on an Alaska seine boat

Processing aboard a salmon seiner is almost impossible today because of the physical area needed and the footprint of the equipment for a safe and efficient operation. Innovative ideas are hard to do because small does not lend itself to the space needs of at sea processing. The State of Alaska Department of Commerce Office of Fisheries Development website says fishermen processing fish is the fastest growing segment of the processing sector. The website goes on to say that processing is limited on salmon seiners because of the 58 foot restriction.

Conclusion

Alaska inherited from the Department of Interior a length limit on salmon seine vessels. This regulation is no longer needed. It does not assist in conservation of the resource; it promotes inefficiency in hull design, and stifles innovation in the market place. The length limit was instigated in the 1930's and 80 years later Alaska still has it. Why is this restriction still here? Sig Jeager saw this coming years ago when he said, "When you start to limit vessels by size, you distort what is usually a natural process and you create a resistance to further change when later on it becomes necessary."

The Alaska Board of Fisheries has the ability to repeal the 58 foot limit on salmon seine vessels and should do so now.

Mr. Vince Webster, Chairman
Alaska Board of Fisheries
P.O. 25526
Juneau, Alaska 99802-5526,
Fax No. 907-465-6094

February 26, 2010

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FEB 26 2010

BOARDS

Re: support of Proposal #168, repeal of the 58ft salmon seine vessel limit

Dear Chairman Webster and Board Members:

The Alaska Herring Fisheries Using Vessels Longer Than 58ft Purse Seining

Alaska Herring fisheries have no regulation limiting the overall vessel length to less than 58ft for use in the Alaska herring, purse seine fisheries. Looking at those fisheries as an example of what would happen if the Alaska Board of Fish repealed the "58ft rule", restricting salmon seine vessels, seems to be relevant. A close look at the SE Alaska roe herring purse seine fishery in Sitka may "shed some light" on the subject.

The roe herring purse seine fishery in Sitka Alaska occurs every March. In 2009 fifty permit holders participated using all forms of fishing vessels to catch their fish. The vessels are made of steel, aluminum, fiberglass and wood. They are single engine and some multipliable engine. Some carry one net and some carry two nets on board while fishing. Some use airplanes to help catch their fish and others do not. Some have nets on board that are made to the limits imposed by regulation and others do not. They range in length of 50ft to 73ft¹.

Prior to 2008 one vessel participating in the Sitka herring fishery was longer than 58ft. That vessel was 68ft. In 2009 two vessels fishing were longer than 58ft. One was 65ft and another 73ft. In 2009, or in other years, did those vessels longer than 58ft purse seining cause others to be at a disadvantage? Did they catch more fish? Did they change the management of the fishery? Did they devalue the other vessels in the fishery? The answer to all the questions is **NO**.

Most vessels fishing in the Sitka fishery are 58ft in length. Three are 50ft, three are 52ft, four are 54ft, one 56ft, most are 58ft, one 65ft, and one 73ft. The Alaska herring fisheries were not affected by the 1930s rules by the US Department of Fish and Wildlife limiting the length of seine vessels. The rules were not implemented upon statehood into the herring fisheries and today do not restrict the length of the vessels fishing herring in Alaska. The length of the vessel purse seining in Alaska herring fisheries is a non issue as it would be if the length limit did not limit Alaska salmon seine vessels. It's time to delete the 58ft rule for salmon purse seining.

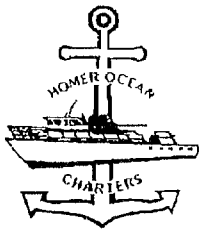
Best regards, Darrell Kapp

338 Bayside Rd.

Bellingham WA. 98225



¹ Alaska Entry Commission



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Box 2541y 28, 2009
 Homer, AK 99603

Attn: BOF Comments
 Alaska Department of Fish & Game
 PO Box 115526
 Juneau, AK 99811-5526

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JUL 28 2009

BOARDS

RE: Proposal 189

Dear Board of Fish,

I am speaking in opposition of this proposal to require a client-guide agreement for each client on a sport fishing charter trip.

This proposal creates an undue paperwork burden on legitimate charter businesses. A charter customer has a responsibility to do due diligence on their purchase just as they would with any other purchase. If it is a concern to them which boat they fish on and/or what captain they fish with, they can verify this at the time of booking. Just because someone has a written agreement that they are going to be on a certain boat with a certain captain, it does not guarantee them a quality boat and/or captain.

The proposal states that clients should know at the time of booking that they will be fishing with a licensed guide. If the guide is not licensed they are fishing illegally, there is already a law against this.

Booking agents have the right to charge what the market will bare, nobody forces a customer to make a purchase. This proposal would also prohibit sales by cruise companies as they are booking agents and mark up products at an agreed upon amount between the vendor and cruise company. This does not benefit the customer, the vendor (charter company), or the cruise line.

This proposal creates a new layer of bureaucracy, it does little to benefit the charter customer and in many cases it would make it difficult for those seeking a charter to connect with a vendor. This proposal would be a detriment to businesses that rely on third party sales in order to operate. This is a bad idea, please reject proposal 189. Thank you for the opportunity to comment.

Respectfully,

Roark

Captain Roark Brown
 Homer Ocean charters, Inc.

ADRIANA & LONNIE BROOKS

2020 Muldoon Rd. #344
Anchorage, Alaska 99504-3683

Home Phone 907/333-4529

EMAIL:lonnieb@acsalaska.net

FAX Phone 907/332-1400

09 November 2009

Attn: Shannon
Public Comment
Statewide BOF

Ms. Sherry Wright
ADF&G/Boards Support
333 Raspberry Road, Rm 1081
Anchorage AK 99518

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BOARDS
ANCHORAGE

Dear Ms. Wright:

Board of Fisheries Proposal #184, as I read it, if adopted as policy would prohibit the use by sport fishers of felt soled wading boots throughout the State of Alaska. The purpose stated for the proposed action would be to reduce the likelihood that invasive species would be spread into the waters of Alaska.

Whereas if enforcement measures were sufficiently rigorous this might lead to the elimination of this one vector for the targeted species, other vectors, such as but not limited to, boats, migratory birds, other wading equipment, nets, stringers, and terminal tackle, would not be affected. Thus this measure would have minimal impact on the problem, and it would have significant negative effect on the sport fishers of Alaska. Felt soled wading boots have become popular precisely because they are safer than any others that are currently available. So this measure, if implemented, would have an immediate negative impact, seen in a likely increase in slips and falls, dunkings, injuries, and possibly even deaths. Moreover, upon implementation, a preponderance of fishers who practice wade fishing would be required to buy new equipment to replace the banned felt soled wading boots.

I oppose the adoption of this proposal.

Yours truly,



Lonnie D. Brooks

Rec'd PFD

JAN 25 2010



**Kenai
Area
Fisherman's
Coalition**

PROTECTING YOUR FISHING RIGHTS & RESOURCES

P. O. Box 375 Kenai, Ak. 99611 (907) 283-1054 dwimar@gci.net

Board of Fisheries
ADF&G/ Board Support
P.O. Box 115526
Juneau, Ak. 99811-5526

January 21, 2010

Dear Chairman Webster,

We understand that the Board has denied the Tri-cities / Borough resolution to change the site of the upcoming 2011 UCI meeting from Anchorage to the Kenai / Soldotna area. At this point, we are resigned to the 2011 meeting being held in Anchorage, but still maintain that continual meetings in one location are detrimental to participation in the process by all parties. We will continue to ask that the Board consider alternating this meeting between the two major population centers involved in these important discussions of Upper Cook Inlet resources. A decision to go forward with an alternating plan would put to rest the discussions of fairness.

In the interim we would like to offer a compromise solution that would benefit both the Board and the residents of the Kenai/Soldotna area unable to participate in the Anchorage meeting. We request that the Board consider staying one additional day after the October 2010 work session in Kenai to hear public testimony on UCI issues. This would be in-lieu of the three-member panel visit prior to the UCI meeting for the same purpose. This strategy has been used by previous Boards and has the advantage of participation by the full Board and recorded testimony that can be archived for the full meeting.

We believe this is a fair interim solution for this issue and would like to thank the board for their diligence throughout this site selection process.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Dwight Kramer". The signature is fluid and cursive, written over a horizontal line.

Dwight Kramer – Chairman
Kenai Area Fisherman's Coalition

cc: Jim Marcotte, Board Support
Cora Campbell, Office of the Governor
Jason Hooley, Boards & Commissions

January 13, 2010

Alaska Department of Fish and Game
Board of Fisheries
P.O. Box 115526
Juneau, Alaska 9811-5526

RECEIVED
JAN 26 2010
BOARDS

Dear Board of Fish:

I am writing today to voice my support for the passage of Proposal 111 – “ Close the Waters of Unalaska Bay to Trawl Gear”.

I have been a resident of Unalaska for more than 30 years. During that time I have subsistence fished for my family and for elders in our community who could not. I have witnessed a decline of fish stocks in our bay over that time period that concerns me. I believe trawling inside the waters of Unalaska Bay has some effect on our fish stocks particularly Salmon and Halibut. Closing the bay to trawling will help to conserve our fish stocks and help them rebuild.


Unalaska Bay is a relatively small protected bay out in the middle of the Aleutian Islands. Small boats from the community cannot fish anywhere else because of weather constraints and safety issues. The Community has no other alternative for subsistence fishing. The trawlers are large vessels who can travel safely to other areas to find fish. There is no reason for them to target fish in the bay when they can safely go somewhere else.

The bottom line is this:

- * Unalaska Bay is the only subsistence fishing area that local residents can access.
- * Trawlers are competing with and catching fish that local residents use for subsistence.
- * The trawler can safely go somewhere else to fish.
- * The local residents cannot go anywhere else because of safety issues.
- * Unalaska Bay needs to be protected from Trawlers to allow fish stocks to rebuild so local residents can have a subsistence harvest to put food on their tables.

Thank you for the opportunity to comment on this important change needed to the Fisheries Regulations to protect our subsistence fishing.


Sincerely,


David Gregory, PO Box 156, Unalaska, Alaska 99685

TO: BOF Comments
Boards Support Section
Alaska Department of Fish and Game
Box 115526
Juneau, AK 99811-5526

February 10, 2010

RECEIVED
FEB 10 2010
BOARDS

From: Anna von Reitz 
Box 520994
Big Lake, AK 99652

RE: Comments on Statewide Proposals 2010

I would like to comment on a number of the statewide proposals, both for and against, as indicated.

Proposal 164 – 5 AAC 01.030 (3). Regarding the definition of family as “shall be authorized per family of two or more”. If we are going to define “family” we need to explain what that means---for many Alaska Natives family is a broad concept. Also, “two or more” can be problematic. What about families of one man or woman? Single people need access to fill their freezers and often don’t have the support network that others do. I would advise careful wording of this section to define terms precisely and consider individuals, maybe as “one or more persons per household”.

Proposal 165 -5AAC 77.xxx New Section. Meeting biological escapement goals is the first imperative, and it should matter which fishery is impacting the resource. Let all the various user groups stand down and wait until the fishery itself has been safeguarded for another year.

Proposals 166 and 167 - Our statutes and regulations need to mesh, one way or another. These are both common sense recommendations that would help achieve that goal.

Proposal 168 – 5 AAC 39.177 Vessel Length – “Bulbous Bow” --I am glad to see someone else paying attention to this and coming forward with this recommendation! The current regulations are a case study in unintended consequences. Purse seiners have been distorted until they no longer function efficiently and our purse seine fleet has been put at a definite disadvantage because of this restriction.

Proposal 174 – 5AAC 28.050 – Lawful Gear For Groundfish. This would indeed encourage the small boat fishery to make better use of our resources and by eliminating by-catch also be a more practical solution to those associated problems.

Proposal 175 5AAC.75xxx Bag limit on Sablefish (Black Cod) These are valuable long-lived fish and they are being wasted by the hundreds every day of every summer. I don’t know enough about this fishery to comment on the appropriateness of the specific bag limit that is being recommended, but I do know that a bag limit of some kind is appropriate.

Proposal 176 – 5AAC.75xxx. Increase bag limit on Spiny Dogfish. I have seen more Spiny Dogfish wasted over the years than I like to think about and never even knew they HAD a bag limit until now, so I guess

that speaks to public knowledge about this species and about enforcement in general----but there is definitely no scarcity of Spiny Dogfish and in my opinion increasing the bag limit would help the fishermen who want to retain more without harming the fishery at all.

Proposal 180 5AAC 75.020 Sport fishing gear. Something needs to be done about the use of commercial gear in our sport fisheries and that is certain. The big question seems to be what and how to gain a handle on it? Among those suggestions made thus far, this one walks a middle ground---puts control on using commercial jigs, but allow use of individual power reels---maybe with a restriction on the number of power reels per boat. If you allow one power reel per charter boat, anyone disabled or weak has the use of a good tool, but the charters can't run mini-commercial harvest operations.

Proposal 184 5AAC 75xxx –Invasive Species /Felt-Soled Waders. Speaking as someone who has fought invasive species, let me say that anything we can do to prevent them from taking root here, the better. Giving up felt-soled waders is a very small price to pay. I would recommend that the Board set up a special committee on invasive marine and freshwater species and pursue a more proactive stance on this and related issues.

Proposal 188 5AAC 75.067 Halibut regulations have been a nightmare for as long as I can remember. Putting something like this in place to track and comply automatically makes a lot of sense and ends a lot of unnecessary confusion.

Proposal 189 5AAC 75.075 Sport fishing services and sport guide services----YES!!! It is about time someone spoke up about this. Our summer visitors get ripped off enough without the guide scams that have become prevalent. We license guides for a reason. Don't let unscrupulous tour dealers cheat people and get around the guide provisions.

Proposal 190 5AAC 75.003 Emergency Order Authority –Allow crews to retain fish. So long as they stay in compliance on harvest per boat and are for personal use, crew members should be able to retain fish. They do anyway and enforcement is a nightmare---and the current situation is unfair to them as individuals.

Proposal 191 5AAC 75.995 Official time. If we are going to use time as a parameter to define openings and closings and if we enforce it to the minute, then we had better well define exactly what time standard is being used. Set it by atomic clock and be done with any confusion.

Thank you for the opportunity to comment.


Anna von Reitz

Juneau Sportfishing



Celebrating Our 28th Year!

phone 907-586-1887

fax 907-586-9769

www.juneausportfishing.com

Box 20438

Juneau, Alaska 99802

sportfishing@alaska.com

2/11/10

RECEIVED
FEB 11 2010
BOARDS


Alaska Board of Fisheries
Board Support Section
PO Box 115526
Juneau, AK 99811

Board Members:

Please reject proposal 189 which would require a client-guide agreement for each client on a sport fishing charter trip. This proposed rule would do NOTHING for fisheries management, while imposing needless requirements on fishermen, lodges, charter captains, booking agents, hotels, travel agents, shoreside sales facilities, cruise ships, B&B inns, air taxis, convention and visitors bureaus, and numerous other businesses which contribute to arranging fishing trips for fishermen.

If the proposer has a problem in his area, he should address it there, not as a statewide proposal affecting businesses, practices, and people he is not familiar with.

Thank you.


Sincerely,

Suparna, Owner

Juneau Sportfishing

907-586-1887



Post Office Box 32712 • Juneau, Alaska 99803

Telephone: (907) 789-2399 • Fax: (907) 586-6020

RECEIVED
FEB 12 2010
BOARDS

February 11, 2010

Denby Lloyd
Commissioner
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

Dear Commissioner Lloyd:

The Territorial Sportsmen board has become aware of the department's estimate of Southeast sport blackcod catch information for 2009. We believe these data are too uncertain to be used in making bag limit and allocation regulations under proposal 175, or any other regulatory vehicle.

The validity of the black cod catch data is in question. Charter captains were sent a letter in the spring asking them to record their catch of blackcod in the "other fish" column in their logbooks. The directions stated that only blackcod be recorded in this column. For several years, charter boat operators have recorded the catch of all other species in this column and it is very likely that many of them continued to record catches of cod, arrow-tooth founder and a variety of other species in this column.

Most charter boat operators likely ignored the letter because they never catch blackcod. On many charter boats, the deckhand fills out the logbook when the fishing trip is concluded. Deckhands may not have received proper instructions on what to include in the "other fish" column because the captain did not think the instructions applied to him. Finally, the letter was not an official regulation and many, if not most, logbooks were likely filled out as they had been in past years.

Data that have a high probability of being wrong should not be used to make regulatory decisions. Also, the Board of Fisheries has gone on record in other decisions to not change a regulatory regime based on a single year's data. TSI concurs with that practice. The data collected on blackcod comprise only a single year and were collected under dubious circumstances and uncertain requirements. For these reasons the 2009 southeast Alaska blackcod catch is likely to be overestimated by a large amount.

We recommend a decision on blackcod harvest regulations for sport fishermen be delayed until accurate and reliable data have been collected.

Thank you.

A handwritten signature in black ink that reads "Wayne Regelin". The signature is written in a cursive style with a large, sweeping initial 'W'.

Wayne Regelin
President TSI

CC: all Board of Fisheries members



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

1011 E. Tudor Road
Anchorage, Alaska 99503-6199



FWS/OSM 10009/BOF SWFINFISH

FEB 11 2010

RECEIVED

FEB 16 2010

BOARDS

Mr. Vince Webster, Chair
Alaska Board of Fisheries
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

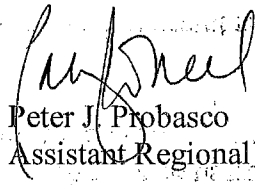
Dear Chair Webster;

The Alaska Board of Fisheries will deliberate 2009/2010 regulatory proposals that address Statewide finfish and supplemental issues beginning March 16, 2010. We understand that the Board will be considering approximately 30 proposals at this meeting.

The U.S. Fish and Wildlife Service (USFWS), Office of Subsistence Management, working with other Federal agencies, has reviewed these proposals and does not believe that adoption of any of these proposals will have an impact on Federal subsistence users and fisheries. We may wish to comment on these proposals if issues arise during the meeting which affect Federal subsistence users and fisheries.

We appreciate the opportunity to comment on these important regulatory matters and look forward to working with your Board and the Alaska Department of Fish and Game on these issues.

Sincerely,

acting for 

Peter J. Probasco
Assistant Regional Director

cc: Denby S. Lloyd, ADF&G
Michael Fleagle, Chair FSB
John Hilsinger, ADF&G, Anchorage
Craig Fleener, ADF&G, Juneau
Charles Swanton, ADF&G, Juneau

Tina Cuning, ADF&G, Anchorage
George Pappas, ADF&G, Anchorage
Jim Marcotte, ADF&G, Juneau
Mitch Campbell, ADF&G, Anchorage
Interagency Staff Committee



RECEIVED
FEB 17 2010
BOARDS

To: The Alaska Board of Fisheries

SUBJECT: Proposal 192 for Statewide Consideration

I am concerned that my proposal lost something when it was transposed to the proposal book. My concerns are that the definition of "artificial fly" is ambiguous. Specifically the portion of the definition that alludes to "Common methods known as fly tying."

The state definition follows: **artificial fly** means a fly which is constructed by common methods known as fly tying, including a dry fly, wet fly, and nymph, which is free of bait as defined below. Materials and chemicals designed and produced primarily to cause flies to float or sink may be used on artificial flies.

I have discussed this definition with a number of ADF&G staff as well as a F&W State Trooper and have found that this definition leaves a lot of wiggle room. I understand that this may be on purpose.

If a control measure, such as imposing an artificial fly restriction on a body of water, is important enough to implement, then the resultant definition should enable the average fisherman to understand what is expected.

A couple of examples that fit (in my book) the State's definition but are, in reality questionable, include inserting yarn through an "Egg Loop" or even knotting yarn on the leader heading to the hook. Placing a bead on an egg loop could also fit the State definition.

I cannot provide a succinct definition that I recommend replace the current definition. Should the Board agree that a more precise definition be pursued, the following might be included. "Materials for flies must be physically tied or affixed onto the hook proper, utilizing a material different from the fishing line attached to the fly."

As a fisherman, I am attempting to follow definitions/laws/regulations I currently cannot thoroughly understand and ensure that when I am fishing that another's opinion will not affect my check book balance.

Thanks for your consideration.

MJS
Mark Sisinyak.

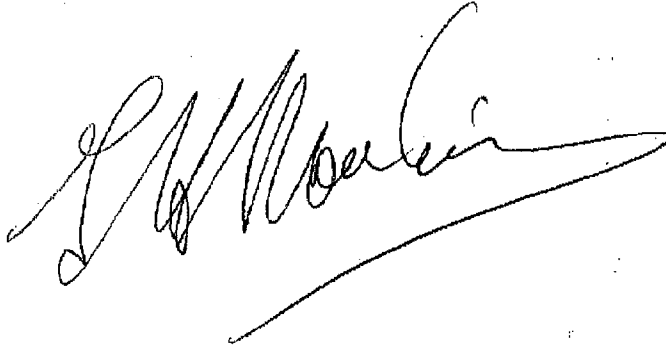
George A. Moerlein
7300 O'Malley Road
Anchorage, Alaska 99507
907-346-3784
February 18, 2010

RECEIVED
FEB 19 2010
BOARDS
ANCHORAGE

To -- Alaska Board of Fisheries

Re -- Proposal 200

I am in total approval of the proposed new section in 5 AAC 99 defining "subsistence way of life". I urge you to adopt it unchanged. It truly defines what I believe to be "a subsistence way of life".



Attn: Shannon
BOF Statewide Mar 2010
Public Comment
p1 of 2

George A. Moerlein
7300 O'Malley Road
Anchorage, Alaska 99507
907-346-3784
February 18, 2010

RECEIVED

FEB 19 2010

**BOARD
ANCHORAGE**

To -- Alaska Board of Fisheries

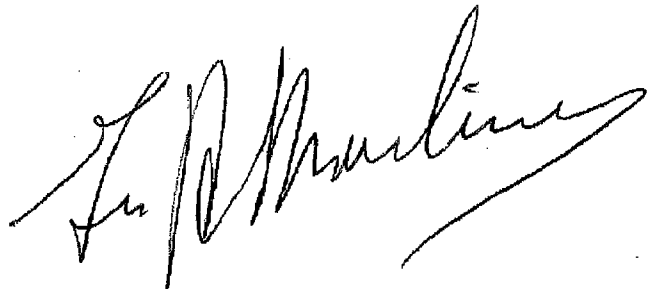
Re -- Proposal 201

I am opposed to amending 5AAC 01.616 in any way that would designate the Chitina Subdistrict of the Upper Copper River district as a "subsistence location".

The overwhelming majority of the people participating in this fishery DO NOT qualify as subsistence users as defined in Proposal 200.

A great majority of the people participating in this fishery are doing so for recreation. They are doing little more than sport fishing with dip nets. As such I do not believe they should have precedence over other sport or commercial fishermen.

This should continue to be a "Personal Use" fishery.



p202

James Marcotte
Executive Director
Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska 99811-5526

RECEIVED
FEB 22 2010
BOARDS

This is in support of proposal # 195 calling for closure of the commercial summer Dungeness crab fishery in area A District 2.

Questions to the board,

#1 does state law say in A.S. 16.05.258 (a) & (b) that the board shall establish customary and traditional subsistence levels prior to opening new fisheries.

#2 in AS 16.05.258 (b) (2) Does subsistence have preference over all other consumptive users?

#3 in AS 16.05.258 (b) (3) & (4) (A) where I gathered about 80 Dungeness crab a year in the past, to pick, vacuum pack and freeze. This does not include the occasions where we would go out and catch some to eat fresh. This would bring my yearly harvest up to about 120 crabs a year. In 2009 I had no crab to put up, vacuum pack and freeze, and I only got about 17 Dungeness crab in 2009 prior too, during and after the summer commercial Dungeness crab fishery in districts 2. Does this make this fishery a non-sustainable one?

#4 statistics from this fishery also point out where having the summer commercial Dungeness crab fishery, the records indicate that the fall Dungeness crab fishery caught only 50% of what they caught in the past, and does this indicate that this summer fishery is unsustainable?

#5 statistics of this summer commercial Dungeness fishery in district 2 indicate that the dead loss recorded at the processing facilities was 10 times more than in 2002/2003 and 24 times more than that of 2006/2007, is this considered acceptable? This does not figure in the mortality rate of caught and released female, undersized and soft-shelled crab as the industry has no observer program to log this. However recent studies by Gordon H. Kruse, David Hicks and Margaret C. Murphy state that 40%-50% mortality rate occurs on crabs caught and released and this increases as to the amount of times crabs are recaptured. This study says that crabs that are recaptured and released 4 times do not survive. These figures are astronomical given that subsistence only takes about 1% of the total commercial catch. Should this fishery be allowed to continue?

#6 having these statistics shows an unforeseen negative impact on the fishery; does this enable the board to stop the fishery?

Here are the times and how I fished for my subsistence Dungeness crab. On June 10th 2009, near latitude 55.20.12 and longitude 132.25. 28 near Rock Creek in Polk Inlet I placed 3 baited crab traps at about 7 p.m... On June 11th at about 7:30 p.m. I pulled the same three traps and inventoried the Dungeness crab that was caught as follows.

15 soft shelled Dungeness crab
2 female Dungeness crab
3 under sized Dungeness crab
13 legal hard shelled Dungeness crab
33 total Dungeness crab

On July 24th 2009 at about 6.20 p.m. near latitude 55.20.12 and longitude 132.25.28 located near Rock Creek in Polk Inlet I placed the same three baited crab traps there. On July 25th at about 6.50 p.m. I pulled the same three traps and inventoried the Dungeness crab they caught as follows.

4 soft shelled Dungeness crab
1 female Dungeness crab
2 under sized Dungeness crab
2 legal hard shelled Dungeness crab.
9 total Dungeness crab

On August 19th 2009 at about 5 p.m. I set three baited Dungeness crab traps in Little Goose Bay in Polk Inlet near latitude 55.23.15 and longitude 132.23.00 and pulled same three on August 20 2009 at about 6 p.m... This catch was horrible and recorded as follows.

8 soft shelled Dungeness crab
1 female Dungeness crab
2 under sized Dungeness crab
2 legal size hard shelled Dungeness crab
13 Total Dungeness crab

The Board of Fisheries on the 27th of January last day and near the close of your meeting voted to reconsider proposal 151. During the discussion it was mentioned that you have to base your decision on the best information you have to use. You had studies before you on studies of mortality of handling of soft-shelled Dungeness crab. During your deliberations it was stated that the studies were ancient and that things have a tendency to change over time. This maybe true with stock change in habitat and maybe population size, but the major mating cycles and the occurrence of soft-shelled Dungeness crab and their cause of mortality stay the same.

There is a more recent study conducted on the - **Handling Increases Mortality of Soft Shelled Dungeness Crabs Returned to The Sea** by Gordon H. Kruse, David Hicks and Margaret C. Murphy in 1994 that supported the previous studies of **Fishing Mortality to Soft Shelled Dungeness crab** by Herb Tegelberg 1970 & 1972. The studies verified one another! Both these studies also references 37 studies that took place over the years dating from the 1940s through the 1990s all the studies show that commercial harvest seasons for crabs must avoid the soft-shelled cycle periods. Please find attached the 1994 study and a Fishing Mortality to soft shelled Dungeness crab- Review of existing literature & evaluation of current practices.

The 1994 study hits on the mortality of crab while captured but these figures are not factored to included dead loss Also they say that the crab we caught and only handled once during the record keeping and they were handled more gently than a commercial catch would re-catch the same crabs over and over and they would not be treated as gently.

I would only hope that the board considers the impact this fishery has on our customary and traditional subsistence harvest levels and also the impact it has on the fall commercial Dungeness crab fishery. This shows me that this fishery is unsustainable.

Maybe using the previously mentioned studies the board could close the summer commercial Dungeness crab fishery in districts 1 and 2 totally and then eliminate the fall commercial Dungeness crab fishery and only open the winter fishery from December first through February fifteenth. I know that these studies say how the quality increases together with a weight increased from 15% of live weight during peak molting period to 26% three months later and to 30% seven months later.

Taking all this into consideration, figures show an increased weight by 15% in 7 months. By having the season in December, January and part of February would more than likely increase the total seasonal catch weight by 12% and at the same time decrease the dead loss along with dead loss on female soft-shell and then cannibalism during captivity on her eggs. The seasonal catch could increase here by another approximately 20% making a total weight increase of commercial harvest by about 32%. This would be good for the industry and at the same time lessen the impact on subsistence. This would be a win, win fishery for all users and also increase the economy in Alaska. Isn't that what our state constitution and laws say, to best utilize our economical development to its fullest extent.

For the word you call subsistence it is our way of life, it is our customary, traditional and cultural use of our ancestral recourses within our traditional hunting, fishing and gathering within our village traditional territories. This is on land and the surrounding waters. It is the heart beat of our society that makes us strong and brings us together in spirituality.

It is a deep bond we form with Mother Earth and with all things. We pledge to care for the Earth and all things, as we are greatly supplied with all our needs. We will demonstrate care and respect—always. We will always pray and give our thanks for the sacrifices made, to keep us strong and whole.

There was only one other thing that would bring Clans or Tribes together as fast and with as large of effort, with as much vigor and passion and that was war. And wars were brought about as a result of infringements on our territories, customary and cultural use of it.

It is also our legacy for generations to come, and it was passed onto us through time immemorial from our ancestors. We will teach our young the traditions of **our way of life**, so that they may continue it for generations to come. We preserve this in our totem poles, petro glyphs and through our story telling of both legends and myths. Potlatches will always be given to show our respect to other Tribes, Clans, individuals and events and all things that play a role in what has effect on our culture.

I would like to attempt to explain the damage this summer commercial Dungeness crab fishery has done to us. If I were rich and had a lot of time I may have been able to get our

customary and traditional levels of crab by going up and setting my three traps sixty times, but there is no guarantee by doing this that I would get my supply of crab that we need for the year. But that isn't what state law says. AS 16.05.258 (b) (3) (B) provides for the elimination of consumptive users in order to provide a reasonable opportunity for subsistence users and AS 16.05.258 (c) (13) (f) defines "reasonable opportunity"

Now put yourself in a small open skiff exposed to the elements and the sea. I think you get my drift. And actually this does not even come close to explaining what impact this fishery put on our ability to attempt at the impossible task of getting our customary and traditional harvest level of Dungeness crab. With the price of gasoline it totally denies us our opportunity to subsistence under the law.

I personally have participated in the subsistence gathering of Dungeness crab in area A, Districts 1 and 2 for approximately 50 years. I can tell you through experience that the catch levels went down in the late 70s early 80s to very drastic levels. In most areas you could not find crab. The catch levels only slowly got better in the late 80s early 90s through to 2008. I could go out with my family and easily catch my 60 or 70 crab with little effort.

As I indicated in the past that the residents of Kasaan, myself included traditionally do not crab amongst the commercial fleet as we suffer to much gear loss and damage. It is also hard to compete with commercial fishermen and for these reasons we do not crab during commercial Dungeness crab season. Another reason we do not fish in November through March is that the weather is too harsh with heavy winds and frozen bays. We only use for the most part small, opened skiffs. We also don't fish crab during November and December as the stocks were picked over fairly well, leaving us to sort through female, undersized and soft-shelled crab. We traditionally don't fish crab from January through May and into June because the crab is starved and in molt condition.

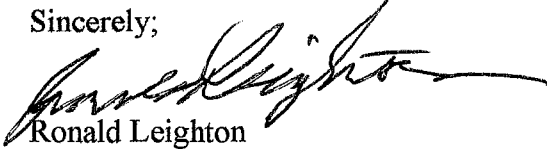
We as subsistence users treat the female and soft-shelled Dungeness crabs we catch very gently as we know they are very vulnerable when handling.

At your January meeting in Petersburg you mentioned that you have to make the best decision using the information you have at hand. You also inferred that you should open this fishery in order to gather information and data. We are here to give you our take on things that you may use to reconsider and close this summer commercial Dungeness fishery down making it back to what it was before your January 2009 meeting.

Thank you for allowing an agenda change as I know that the board does not very often make an out of cycle agenda change unless they feel there is some unforeseen reason for it. I'm going to be at the March 16th – the 20th 2010 meeting and will be giving oral testimony and I would hope that you have questions for me that I may have not covered in the letter of testimony. I would also like to be one of the stakeholders selected for the committee that will review this proposal.

If you have any questions of me prior to the March meeting you can reach me at (907) 617 2089 and or email me at ron@kasaan.org.
Thank you again for your trouble!

Sincerely;



Ronald Leighton
Council member of Organized Village of Kasaan
Chairman, Customary and Traditional Use Committee.
P.O.Box 26- Kasaan
Ketchikan, Alaska 99950-0340

Fishing Mortality to Soft Shelled Dungeness Crab - Review of Existing Literature & Evaluation of Current Fishing Practices

Note: Most of the studies included in this summary utilize a standard shell condition ranking system (included below) which classifies crab as Stage 1, 2 or 3 with intermediate grades within stages. Stage 3 crab are very soft and Stage 2 crab are somewhat soft. Late Stage 2 (2-1) crab meet minimum legal requirements for retention and sale and Stage 1 crab have hard shells and optimal meat yield.

Introduction:

Results from the studies summarized below indicate that soft shelled crab are subject to significant mortality from capture and handling. This mortality was observed during experiments in which crab were handled more carefully than during typical fishing. Handling mortality rates for stage 2 and/or stage 3 crab ranged from 8 to 45 percent, with most estimates from 18% to 30%, often from just one handling.

Experiments simulating the normal occurrence of soft crab hitting the deck (57% mortality) or the water (8.9% mortality) shows how easily and quickly soft crab can be killed by mechanical shock injury during typical fishing operations. The experiments also simulated typical injuries to soft shell crab by breaking legs and claws (42.2%), and by pinching shells (6.7% mortality). The impacts of leg and claw loss (up to 38% mortality) were also evaluated. The studies show that soft shell crab are fragile and can be killed by a variety of injury types. These injuries occur when crab interact with each other within pots on the bottom and during normal fishing operations when crab are sorted. The studies document impacts to legal size male crab, but similar types of impacts are expected to sub-legal and female crab.

The cannibalism study (6.8% mortality) and all the observations of cannibalism and broken pieces of carapace within pots indicate that cannibalism of soft shell crab does occur.

Review of available literature on soft shell Dungeness crab mortality:

Fred C. Cleaver - 1947

Cleaver conducted a tagging study in coastal Washington waters which indicated crab are killed by relatively minor injuries. Loss of a single leg lowered survival 6.5%; a single claw, 19%; two legs, 35.3%; one leg and one claw, 37.8%.

Fred C. Cleaver - 1949

Cleaver tagged over 9,000 crab in coastal Washington waters between December, 1946 and April, 1948. The commercial fishery was sampled intensively and 4,865 tags were recovered. Tag return data indicated that survival of "new soft shell" and "new slightly soft" crab was reduced by 68.5% and 8.1%, respectively, compared to "new hard shell" crab.

Kenneth D. Waldron - 1958

Sampling was conducted from November 1947 through January 1950 using commercial crab gear and methods, 6,249 crab were graded, tagged, and released. Tags were returned by fishers and buyers.

Waldron tagged 3,275 stage 1 crab and 817 stage 2 crab in coastal Oregon waters. Tags from 40% (1,318) of the stage 1 crab, and 20.4% of the (167) of stage two crab were recovered. The overall difference in recovery was 19.8%. A chi square test indicated that the reduced survival of stage 2 crab was significant for all seasons and areas tested.

Waldron also tagged 1,097 stage 1 crab and 1,060 stage 2 crab from four Oregon bays. Tags from 38% (414) of the stage 1 crab and 25% (265) of the stage 2 crab were recovered, indicating a 13% reduction in stage 2 survival. Chi square tests were not conducted for these data.

Waldron also noted observations of cannibalism within pots and in holding tanks, particularly when crab were molting.

Herb Tegelberg- 1970

Sampling was conducted in coastal Washington waters using commercial fishers and gear. Crab were graded into stages 1, 2, and 3, tagged with Peterson disks, and separated by stage into tanks.

Crab were then placed in replicate pots (separated by stage) and carefully lowered to the bottom in 3 to 7 fathoms of water in the same location where they had been caught. Experiments were conducted to test the effects of time and successive handling on mortality. Escape rings and entrance tunnels were wired shut in all pots. The first experiment was designed to test mortality effects related to the number of crab placed in holding pots, so that appropriate sample size could be determined. Crab were divided into hardshell and "soft shell" treatments: the soft shells were a mixture of stage 2 and 3 crab. About 10% of the soft shell crab died after two days, 15% died after four days, and 25% were dead after seven days. Hardshell mortality was less than 3% after two to four days. There was no indication that mortality was related to density and a sample size of 25 crab per pot was chosen for subsequent experiments.

The second experiment tested whether mortality was a function of time, additional handling, or both. Triplicate lots of 25 soft shells (again including some stage 2 crab) were held 2 days (handled once), 4 days (handled 1 vs. 2 times), and 6 days (handled 1 vs. 2 vs. 3 times). In all cases, for comparable holding periods, additional handling caused higher mortality. Total mortality was higher than in the first experiment. Mortality of untagged crab ranged from 15% (2 days, handled once) to 33% (6 days, handled 3 times), and from 23% (2 days, handled once) to 41% (6 days, handled 3 times) for tagged crab.

The third experiment compared mortality of tagged and untagged stage 1, 2, and 3 crab after 4 days of holding in pots. "Stage 3" crab were a mixture of stage 2 and stage 3. Mortality of "stage 3" untagged crab averaged 16% compared to 4% for the untagged stage 1 and 2 crab after four days. Mortality of tagged crab was about 9% for stage 1 crab, 18% for stage 2, and 23% for "stage 3". Four lots of untagged "stage 3" crab suffered 57% mortality after being individually dropped to the deck of the vessel.

Some Peterson disk tag loss among stage 3 crab was observed and the probable bias of differential tag loss in previous studies was noted. However, Tegelberg used approximately 2,100 crab in experiments to study mortality from handling that would be nearly typical of commercial fishing. He concluded that discard (removed from pots and thrown overboard) mortality is significant and causes direct loss of Dungeness crab resource production if fishing is permitted during molting periods. He also noted evidence of cannibalism within the wired shut pots from soft crab preying on each other soft crab. Often only pieces of carapace were all that remained of cannibalized crab.

Herb Tegelberg- 1972

Additional experiments were conducted to estimate mortality from specific injuries and treatments. A mixture of hard and soft (stage 3) crab were placed in pots to test cannibalism effects. Mortality was 6.8% for soft crab and 0.0% for hard crab. Soft crab were thrown into a 30 gallon box of water on deck to simulate being thrown from the boat during normal fishing operations. Mortality of these crab was 8.9%. Another group of stage 2 and stage 3 crab were subjected to a variety of injuries. The forward ventral edge of the carapace was crushed with needle nose pliers to simulate being pinched by another crab; mortality was just 6.7%. One claw or one of the first walking legs was broken to simulate typical injuries caused when crab are removed from traps; mortality was 42.2%. Tegelberg again notes that stage 3 crab were difficult to obtain for this experiment and a number of the "stage 3" crab were actually stage 2 crab.

Steve Barry, 1983

Crab from Gray's Harbor, Washington were graded, placed in holding pots and checked at one, two, or three day intervals in 1980. "Soft shell" crab were primarily stage 2 crab with some stage 3 crab. The soft shell crab experienced a mortality of 25.8% compared to 2.8 percent for stage 1 crab. The study was repeated in 1981 with a similar mixture of crab and similar results. Mortality of stage 2 and 3 crab was 22.9% compared to 9.6% for stage 1 crab. Three samples of stage 1 crab suffered higher mortality than stage 2 and 3 crab and Barry speculated that warm water and/or low dissolved oxygen values could have affected the results. Despite this anomaly Barry concluded that handling mortality of stage 2 and 3 crab can result in a significant loss to the fishery.

Steve Barry, 1984

Extremely careful and "normal" handling impacts to stage 1, 2, and 3 crab were compared. Results showed that regardless of handling practices, stage 2 and 3 crab suffer substantially higher mortality rates than stage 1 crab. Mortality of treatment (normally handled) stage 3 crab ranged from 26.7 to 40.0%, and was 20.0 to 40.0% for stage 3 control (handled with extreme care) crab. In most cases, large pieces of carapace were found within pots. Another experiment indicated handling mortality of 11.3, 7.5, and 1.4% for stage 3, 2, and 1 crab, respectively. Barry noted that the handling treatment used in this experiment was less severe than during typical commercial operations which would likely result in mortality rates 10 to 20% higher than observed in his study.

Kruse et. al, 1994

Legal size male crab caught near Kodiak, Alaska were graded with a durometer, tagged, exposed to a variety of air exposure treatments, and returned to sea. Based on tag returns from the commercial fishery, softshell crab experienced 45% higher mortality than hard shell crab. The authors concluded that mortality rates caused by fishing during molting periods would be higher because the crab used in the study were not very soft and because crab were handled more carefully than during normal commercial operations.

Discussion:

The intensive nature of the Puget Sound fishery leads to many legal and sub-legal crab being caught, handled, and released several times before they grow hard or large enough to be legally retained. The cumulative impacts of trapping, handling and discard may far exceed the low end of the mortality estimates derived from experimental fishing. Fisheries operating during the molt may kill 25% to 35% of the crab they catch that are subjected to careful handling. Rough handling, including dropping crab on deck, throwing crab into the water, and loss of several appendages, will increase the mortality rate.

The State and Tribes currently close their pot fisheries during primary molt periods to avoid these impacts. The impact of harvesting crab during soft shell periods using non-pot gear has traditionally been considered "acceptable". The popular recreational non-pot fishery includes harvest using ring nets or star traps fished from boats or docks, using dip nets from boats or while wading, and using SCUBA gear. A recent summary of data collected by enforcement staff during a portion of the spring 2000 crab molt period in north and central Puget Sound found that nearly half (137 of 284) the crab retained by recreational fishers were soft shelled and illegal to possess. The majority of these crab were caught using ring nets or star traps, and some were harvested by waders and SCUBA divers. The high rate of recreational non-compliance and associated resource impacts raises serious concerns. Additionally, some tribal crab fishery managers have recently suggested that they will initiate a new commercial ring net fishery if the State continues to allow harvest by non-pot gear during molt periods.

The legal definition of a soft shelled crab ("...shell flexes with digital pressure") is subjective, difficult to enforce, and controversial within the court system. The combination of the subjective rule and the opportunity to fish during major crab molt periods leads to unintended violations and erodes relations between WDFW and stakeholders. Enforcement staff are increasingly uncomfortable with their responsibility to enforce a regulation that often is not upheld in court.

Crab harvest using either ring net/star traps or pots involves trapping of crab on the sea bottom, lifting traps, catch sorting, and discard of crab which are too small, too soft, or female. Crab trapped within the confines of pot gear may be more likely to injure or cannibalize each other before they are handled. However, the research suggests that most fishing mortality impacts are the result of handling rather than cannibalism. Fishers using ring nets catch and handle far more crab per trap check and use shorter intervals (15 minutes to an hour or two) between checks. Most ring nets are constructed of soft mesh material which frequently entangles crab, and

entangled crab are more likely to be injured when removed from the gear. State and tribal crab managers believe that fishing with ring nets or star traps during soft shell periods is likely to kill more crab than fishing with pots.

Fishing induced mortality of soft shell crab, and retention of soft shell crab is a form of wastage that has allocation consequences. It is clear that soft shell harvest negatively affects resource yield, and impacts to the reproductive capacity of crab populations are likely. The amount of wastage by fisheries operating during soft shell periods cannot be estimated without fairly elaborate and expensive studies, but responsible management demands a good faith effort by all parties to minimize it. Initial discussions with representatives of Puget Sound treaty tribes indicate a willingness to eliminate tribal ring net fishing during molt periods.

Recreational crab fishery harvest shares have declined in most areas, primarily due to increased summer time tribal fishing pursuant to the Rafeedie decision. New cooperative state/tribal work to better define regional molt timing differences has determined that crab in central Puget Sound crab molt during the winter. This new information has been used to establish new opportunity to harvest hard shell crab during formerly closed spring months. The impact of closing ring net fishing during winter months would be these areas will be relatively small. In areas like north Puget Sound, where crab molt during the spring the impact would be greater. The molt cycle in Hood Canal, the Strait of Juan de Fuca, and other areas is poorly understood but is currently being studied.

Current recreational catch statistics do not include a separate estimate of ring net catch during molt closure periods but it may be significant in some areas. The recently initiated crab catch record card program is designed to produce estimates for all months, areas, and gear types but results are not yet available. It is incumbent upon managers to work with stakeholders to identify new management provisions that could help to replace the potential loss of the non-pot fishery during molt periods. It should also be noted that eliminating mortality caused by allowing harvest during soft shell periods will increase resource abundance and opportunity for all recreational, commercial, and tribal fishers.

In summary:

- Discussions will be held with the Puget Sound Crab Advisory Group and other stakeholders to discuss the concerns outlined above.
- Additional discussions will be held as needed with treaty tribe managers to develop State/Tribal agreements to close all fisheries during primary molt periods.
- A regulation proposal based on the outcome of these discussions will be advanced for broader public and WDFW Commission review.

Appendix: Dungeness Crab Shell Condition Stages

Stage Shell Condition Description

- 3-2 Newly molted - The exoskeleton feels like parchment, is very pliable and can be easily deformed without breaking. Endocuticle mineralization has begun.
- 3-1 Recently molted - The entire exoskeleton has begun to harden but can still be easily deformed. The dorsal side of the carapace will bend or crush under light pressure.
-
- 2-2 Early intermediate phase - This is the main period of tissue growth. The dorsal surface of the carapace continues to harden and is now only flexible at the posterior, left and right margins. The anterior ventral edge of the carapace and upper segment of the first walking leg are very flexible but will readily spring back into shape after pressure has been applied.
- 2-1 Late intermediate phase - Tissue growth continues. The dorsal side of the carapace is now hard. There is little to no flex left in the posterior dorsal edge of the carapace. The anterior ventral edge of the carapace and upper segment of the first walking leg are not yet firm. Additional tissue growth and endocuticle mineralization are needed to firm the exoskeleton at these points.
-
- 1-3 New hard shell stage - The entire exoskeleton is now rigid and tissue growth, for the most part, is complete. The carapace is light gray to tan and supports little or no epifaunal growth.
- 1-2 Late hard shell stage - The anterior ventral edge of the carapace and upper segment of the first walking leg are now firm when moderate pressure is applied. The color of the entire exoskeleton is beginning to darken and the crab is in prime quality for market.
- 1-1 Pre-molt stage - The color of the ventral surface of the exoskeleton is now dark yellow or brown. The crab may show signs of age; i.e. the exoskeleton may be damaged and may support sessile epifauna and may be starting to separate at the epimeral suture.

Handling Increases Mortality of Softshell Dungeness Crabs Returned to the Sea

Gordon H. Kruse, David Hicks, and Margaret C. Murphy

ABSTRACT: Effects of carapace hardness and air exposure duration on mortality were studied on Dungeness crabs *Cancer magister* off Kodiak Island, Alaska. We captured 516 legal male crabs and marked them with spaghetti tags. Carapace condition was recorded, and crabs were randomly selected for exposure to air for 5, 15, 30, and 60 min. Crabs were then returned to the sea. Subsequent recoveries from commercial catches included 11% of the tagged softshell crabs and 30% tagged hardshell crabs; these differences were statistically different. No statistical difference was found among exposure periods for hardshell crabs; low statistical power due to small sample size precluded similar tests for differences among exposure periods for softshell crabs. Low recovery rates of softshell crabs in Alaska is consistent with previous mark-recapture studies of Dungeness crabs conducted off Oregon and Washington. Previously published results from controlled experiments support our conclusion that differential recovery rates were primarily due to elevated handling mortality of softshell crabs. Our data suggest that softshell crabs experienced 45% higher mortality than hardshell crabs. However, this rate may not be representative of handling mortalities experienced during commercial fisheries because (1) during molting periods fisheries catch crabs much softer than those we encountered, (2) we handled crabs much more carefully than would normally occur during commercial operations, and (3) we were unable to derive separate estimates of differential natural and handling mortalities among softshell and hardshell crabs. Findings of handling mortalities of softshell crabs, coupled to considerations of cannibalism in crab pots, indicate that Dungeness crab fishing seasons in Alaska should be structured to avoid major molting periods as is the general practice along the coasts of California, Oregon, Washington and British Columbia. Such regulations will reduce mortality and commensurately increase the abundance of harvestable males and spawning biomass. Extended fishery closures until several months after molting will result in some economic benefits, as well. Meat yield and wholesale value are lowest during molting and increase until peaking several months later. These factors, plus other socioeconomic tradeoffs, should be weighed to determine net benefits to changes in fishing seasons for Dungeness crabs.

INTRODUCTION

This paper examines experimental effects of carapace hardness and air exposure duration on rates of recovery of tagged Dungeness crabs *Cancer magister* in the commercial fishery off Kodiak Island, Alaska, and discusses the associated management implications. The field investigations for this study were conducted, initially analyzed, and reported by Hicks and Murphy (1989). Further analysis of their data led to a different conclusion about statistically significant differences in tag recovery rates among hardshell and softshell crabs due to handling mortality. These revised findings are presented here.

In Alaska, Dungeness crab fisheries are managed primarily by size, sex, and season (3-S) regulations (ADF&G 1993). Typically, fishing seasons extend from June 15 through December 31, but significant variation in season dates occur among management areas. Only male crabs 6.5 in carapace width may be retained. Width is measured by the straight line distance across the carapace immediately anterior to the tenth anterolateral-spine, not including the spines.

Significant quantities of softshell Dungeness crabs may be handled during commercial fisheries in Alaska because seasons are protracted (ADF&G 1993) and crabs molt virtually year-round (Koeneman 1985). Further, with exceptions of Prince William Sound (Donaldson 1990) and Cook Inlet (Kimker

Authors: GORDON KRUSE is the marine fishery scientist and MARGARET MURPHY is the statewide shellfish biometrician for the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, P.O. Box 25526, Juneau, AK 99802-5526. DAVE HICKS was formerly a fishery biologist for the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, 211 Mission Road, Kodiak, AK 99615; his current address is 4414 North Camino Gacela, Tucson, AZ 85718.

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1991), fishing seasons do not necessarily avoid periods of heaviest molting that appear to occur from April (Koeneman 1985) through August (Kimker 1991). If handling lowers survival of softshell crabs returned to the sea, fishery productivity could be reduced by direct mortality of discarded males: legal softshell males are discarded because of low product quality and both hardshell and softshell sublegal males are discarded due to size limits. Excessive handling mortality of softshell females could reduce population egg production and subsequent recruitment strength.

Although we are unaware of studies on effects of air exposure on Dungeness crabs, several investigators have studied effects of carapace hardness on handling mortality. In these studies crabs were classified based on subjective measures of carapace hardness. Some investigators (e.g., Cleaver 1949) used terms such as *new hard*, *new slightly soft*, *new soft*, and *old shell*. Many others (e.g., Waldron 1958; Tegelberg 1972; Barry 1984) classified crabs as *grade 1* or *hardshell*, those having little or no flexibility in carapace; *grade 2* or *medium hardshell*, those having a somewhat flexible carapace; and *grade 3* or *softshell*, those with a very flexible carapace.

Two of these studies examined mortality directly through controlled experiments designed to mimic commercial fishing operations. In one study in Willapa Bay, Washington, Tegelberg (1972) captured and handled crabs, sorted them by grade, tagged them with Petersen disc tags, and placed 25 crabs for each hardness grade into separate Dungeness crab pots that had tunnels and escape rings wired shut. Pots were submerged in 5–13 m of water. Four-day mortality was approximately 9% for grade-1 crabs, 17% for grade-2 crabs, and 23% for grade-3 crabs. In the other study, Barry (1984) captured, handled, and placed crabs into holding pots in 16–20 m of water in Grays Harbor, Washington. In one set of trials, grade-1 crabs experienced 1% mortality, grade-2 crabs 7%, and grade-3 crabs 11% after 4 d. In another trial conducted during a major molting period, grade-1 and -2 crabs were not collected, but 30% of grade-3 crabs died and an additional 9% were moribund after 5 d.

Two other studies examined recovery rates of Dungeness crabs that had been marked with Petersen disc tags and were subsequently sampled from commercial catches. In the first study conducted off Washington (Cleaver 1949), the recovery rate of tagged new, slightly soft crabs was 7% lower than new, hard crabs, whereas new soft crabs were recovered at a rate 68% lower than that of new, hard crabs. However, rather than resulting from differences in handling mor-

tality, Cleaver attributed different return rates to higher tag loss among softshell crabs than hardshell crabs. In the second study off Oregon (Waldron 1958), the tag recovery rate for grade-2 crabs (20%) was half that for grade-1 crabs (40%); differences in recovery rates were statistically significant, but Waldron did not attribute these differences to specific cause.

METHODS

Field Methods

Dungeness crabs were captured with commercial pots in Alitak Bay (approximately 56° 50' N, 154° 10' W) at the southern end of Kodiak Island during June 6–15, 1987, using the Alaska Department of Fish and Game vessel *R/V Coho*. Females and sublegal males were not studied and were returned quickly to the sea. Captured legal male crabs were measured for carapace width, and objective estimates of carapace hardness were obtained with a model 307LCRB⁴ durometer using methods described by Hicks and Johnson (1991). The durometer measures the relative units (0–100 durometers) of pressure that must be applied to result in an indentation of the carapace. For frame of reference, using nonlinear regression of carapace hardness on time since molting for laboratory animals, Hicks and Johnson (1991) predicted that legal males average 19 durometers one month after molting, 46 durometers at 3 months, and 66 durometers at 5 months.

Legal male crabs were tagged with spaghetti tags using methods of Snow and Wagner (1965) and randomly assigned, regardless of carapace hardness, to treatment groups of 5, 15, 30, or 60 min of air exposure. After the prescribed period of air exposure, crabs were returned to the sea. During these procedures, all crabs were handled with great care; handling was not intended to simulate treatment experienced during the commercial fishery. Due to good cooperation by fishermen, tagged crabs were recovered by ADF&G biologists from dockside catch samples from the commercial fishery that opened on June 15 and closed on December 31, 1987. See Hicks and Murphy (1989) for more detail on field methods.

Our study is similar to the field studies conducted by Cleaver (1949) and Waldron (1958), but we believe that we made some notable advances. Unlike these earlier studies in which carapace hardness was subjectively classified, our study employed a durometer (Foyle et al. 1989; Hicks and Johnson 1991) to obtain

objective measures of carapace hardness. A spaghetti tag, applied to the epimeral suture line of the crab, was chosen rather than the Petersen disc tag used by Cleaver and Waldron. Spaghetti tags are superior to Petersen disc tags for study of differential mortality among softshell and hardshell crabs because (1) during molting spaghetti tags are retained (Snow and Wagner 1965), but disc tags are shed (Waldron 1958); (2) Petersen disc tags are lost at greater rates from softshell than hardshell crabs (Tegelberg 1972); (3) crabs marked with Petersen disc tags experienced higher short-term (6 d) mortalities than untagged crabs receiving identical handling treatments (Tegelberg 1972); and (4) there is no evidence of significant tag loss nor differential mortality among Dungeness crabs* marked and unmarked with suture line tags (Tegelberg 1972; Smith and Jamieson 1989). Unlike earlier studies with Petersen disc tags, we dismissed the importance of differential tag loss and tag-induced mortality in our investigation for these reasons. Last, we studied tag return rates for effects of air exposure — a factor not investigated previously for Dungeness crabs.

Analytical Methods

Tag recovery data were aggregated into two carapace-hardness categories (<70 and ≥70 durometers) and four exposure durations (5, 15, 30, and 60 min). Hicks and Johnson (1991) reported that 92% of the crabs with carapace hardness <70 durometers are "new soft shells." For notational shorthand, we refer to crabs with carapace hardness <70 durometers as *softshell* and those with hardness ≥70 durometers as *hardshell* hereafter.

Confidence intervals (CI) for recovery rates expressed as proportion recovered were estimated using two methods. For cases with sufficient recoveries (in this case, hardshell crabs), 95% confidence intervals were calculated as

95% CI for p_{hd} =

$$\hat{p}_{hd} \pm \left[1.96 \sqrt{\frac{\hat{p}_{hd} \hat{q}_{hd}}{N_{hd}}} + \frac{1}{2N_{hd}} \right]; \quad (1)$$

where:

$$\hat{q}_{hd} = 1 - \hat{p}_{hd};$$

N_{hd} = number of tagged hardshell crabs (\hat{n}) that were exposed to air for d min;

\hat{p}_{hd} = proportion of hardshell crabs exposed to air for d min that were subsequently recovered; and

$(2N_{hd})^{-1}$ = correction for continuity (Snedecor and Cochran 1967).

Because this approximation may be poor in data-limited situations where $N\hat{p} < 5$ (Sokal and Rohlf 1981), statistical tables calculated by Mainland et al. (1956) and reproduced by Rohlf and Sokal (1969) were used to estimate 95% C.I. of \hat{p}_{hd} , or the proportion of softshell crabs exposed to air for d min.

We subjected results to 2 x 2 and 4 x 2 tests of independence for tag recovery rates among carapace hardness and air exposure treatments. Results of these tests were evaluated with respect to statistical power (1-β). A 2 x 2 G-test with Williams' correction (G_{adj} ; Sokal and Rohlf 1981) was used to test for independence of tag recovery rates on carapace hardness alone and was compared to tabied values of (1-β) for differences between two proportions with unequal samples sizes (Cohen 1988).

To test for independence of tag recovery rates on exposure treatment, 4 x 2 tests were conducted on hardshell and softshell crabs separately. Hardshell crabs were subjected to a 4 x 2 G-test with Williams' correction. Because of the low number of treatments and small expected frequencies, we followed Conahan's (1970) advice and applied a 4 x 2 Fisher's exact test for softshell crabs. Because of difficulty in extending power analyses to more than two classes (Sokal and Rohlf 1981), we constructed Monte Carlo simulations of these two 4 x 2 tests of independence to examine statistical power. These Monte Carlo simulations were used to estimate the sample size in each exposure group that would have been needed to detect biologically meaningful differences in tag recovery rates.

We proposed that biologically meaningful differences in tag recovery rates would occur if the rate from at least one treatment (shortest exposure) was double the rates associated with other treatments. If reduced exposure times resulted in smaller improvements in tag recovery rates than this and presumably smaller reductions in handling mortality, we would not have bothered adjusting field estimates of handling mortality for exposure time, and we would have been dis-

clined to advocate changes in onboard handling procedures during surveys or commercial operations.

For each hardness category, we tested H_0 at $p_5 = p_{15} = p_{30} = p_{60}$ against H_a at $0.5p_5 = p_{15} = p_{30} = p_{60}$. For the simulations, sample sizes were set equal in each of the four exposure groups. Initial test sample sizes for each treatment were set equal to the average observed sample size for the hardness category. Next, we randomly sampled 1000 times from each of four binomial distributions, three with equal probabilities of tag recapture in the neighborhood of those observed and the fourth with a probability double the others. Then, sample size was systematically changed until statistical power of the test was approximated by the proportion of simulated occurrences in which significant ($\alpha = 0.05$) differences in tag recovery rates occurred. Given this α , we followed Cohen's (1988) suggestion and chose the desired statistical power ($1 - \beta_8$) to be 0.80. We were satisfied that there were no biologically meaningful effects of exposure on observed tag recovery rates, if H_0 was not rejected at $\alpha = 0.05$ and $(1 - \beta) \geq (1 - \beta_8)$.

RESULTS

During tagging operations, 516 legal Dungeness crabs with carapace hardness ranging from 26 to 98 durometers were captured and tagged. Of these, 116 crabs, all with carapace hardness >52 durometers, were recovered in the fishery. Recovery rates ranged from 9–13% for softshell crabs and 16–25% for hardshell crabs (Table 1). The 95% CI for \hat{p}_{sd} and \hat{p}_{hd} are shown in Figure 1; wider CI for \hat{p}_{sd} reflect lower sample size for softshell ($N_s = 114$) compared to hardshell crabs ($N_h = 516$).

The G -statistic from the 4×2 test for independence of the four exposure treatments on the number of hardshell crabs recovered and unrecovered (Table 1) was $G_{adj} = 3.381$. Because $G_{adj} < \chi_{0.05,3}^2 = 7.815$, we did not reject the null hypothesis that recovery rate of hardshell crabs was independent of exposure period for the exposure periods tested (≤ 1 h). However, simulated binomial observations of these true hardshell crab recovery rates and numbers of crab released in each exposure group resulted in low statistical power (0.31) for detecting differences among treatments.

To increase power of the test we averaged the observed recovery rates (20%), doubled the recovery

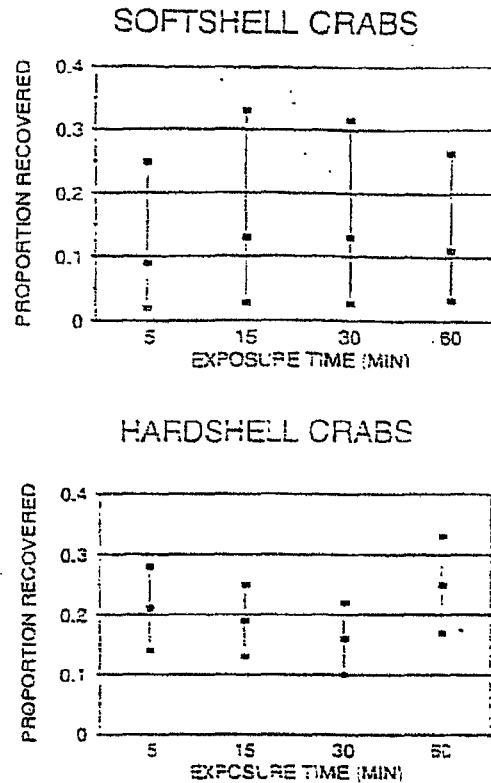


FIGURE 1. Proportion and 95% confidence intervals of tagged softshell (upper panel) and hardshell (lower panel) Dungeness crabs that were exposed to one of four air exposure treatments and subsequently recovered in the commercial fishery by dockside samplers. Methods for calculation of 95% confidence intervals are described in the text.

rate (40%) for the lowest exposure group (5 min) and set the number of crabs released in each exposure group to the average (129) of all groups. This increased power to 0.97. Additional simulations indicated that sample size for hardshell crabs could be decreased to 75 crabs per exposure group; this sample size would allow us to detect a halving of recovery rates as exposure duration increased while retaining statistical power of 0.80. These results imply that there were no biologically meaningful differences in tag recovery rates among exposure treatments for hardshell crabs.

Fisher's exact test of independence of the number of softshell crabs recovered on the four exposure treatments yielded $P = 0.978$; the null hypothesis that recovery rate of soft shell crabs was independent of exposure period was not rejected at $P = 0.978$. Monte Carlo simulation of binomial observations of the number of softshell crabs released and their recovery rates

Table 1. The number and percentage of recaptured Dungeness crabs for each of four exposure durations and two carapace hardness categories. The four exposure categories and two outcomes (recovered and unrecovered) for hardshell crabs formed the basis of the 4 x 2 G-test of independence.

Exposure Time (min)	Softshell Crabs				Hardshell Crabs			
	Number Recovered	Number Unrecovered	Total	Recovery Rate (%)	Number Recovered	Number Unrecovered	Total	Recovery Rate (%)
5	3	29	32	9.4	26	99	125	20.8
15	3	20	23	13.0	27	115	142	19.0
30	3	21	24	12.5	21	112	133	15.8
60	4	31	35	11.4	29	87	116	25.0
Grand Total	13	101	114	11.4	105	413	516	20.0

yielded low power (0.078) for detecting differences among treatments.

Statistical power was examined further by (1) setting recovery rates of softshell crabs exposed for 15, 30, and 60 min equal to the average rate (11.6%), (2) setting the recovery rate for the 5-min exposure group to double this level (23.2%), and (3) assuming equal numbers of released crabs for each treatment group. We estimated that a sample size of 155 crabs for each treatment would have been required to detect such differences in recovery rates with a power of 0.8. Thus, small sample sizes prevented conclusions about the existence of biologically meaningful differences in tag recovery rates among exposure treatments for softshell crabs.

Because the effects of exposure period on recovery rates were not evident for hardshell crabs and were unresolved for softshell crabs, we aggregated the tag recapture data into two hardness categories independent of exposure period (Table 2). This permitted a 2 x 2 G-test for independence of recovery rate on carapace hardness. For this test we estimated $(1-\beta) = 0.90$, given $\alpha = 0.05$, $N_s = 114$, $N_h = 516$, $\hat{p}_s = 0.11$, and $\hat{p}_h = 0.20$. The test statistic for independence of tag recovery rates on carapace hardness was $G_{adj} = 4.955$. Because G_{adj} was greater than the critical $\chi^2_{0.05,3}$ value ($\chi^2_{0.05,3} = 3.841$; $0.01 < P < 0.05$), we rejected the null hypothesis of independence. That is, the mean recovery rate for softshell crabs (11%) was 45% lower

than the mean recovery rate for hardshell crabs (20%), and this difference was statistically significant. If the recovery rate of tagged softshell crabs had been equal to the recovery rate of tagged hardshell crabs, then we would have expected 25 recoveries of tagged softshells rather than the 13 actually recovered.

DISCUSSION

In their analysis of the same data reported here, Hicks and Murphy (1989) found no significant differences in tag recovery rates of Dungeness crabs grouped into four exposure periods and six carapace hardness categories. Given total sample size and the number of exposure-hardness treatments considered, they were unable to distinguish handling effects due to low statistical power. We subsequently found that, when data were aggregated into two carapace hardness categories and four exposure treatments, sample size was sufficient to conclude that hardshell crabs showed no statistical evidence of detrimental impact due to air exposure at the four durations (≤ 1 h) tested. We also found that the number of hardshell crabs tagged in each treatment group was more than adequate to detect a biologically meaningful difference in recovery rates among exposure treatments, had such differences existed.

Sample sizes of tagged softshell crabs were too small to draw meaningful conclusions about effects of air exposure on recovery rates. When pooled across all exposure periods, however, we found that the recovery rate of tagged softshell crabs was lower than that of tagged hardshell crabs. This difference was statistically significant and biologically meaningful, and the power of this test was high. Hicks and Murphy (1989) did not reach this conclusion because they considered the exposure periods as different treatments and did not pool across them. Here, we did not consider the four exposure periods as different treatments for hard-

Table 2. The 2 x 2 table used to test for independence of tag recovery rates among softshell and hardshell Dungeness crabs.

Carapace Condition	Number of Tagged Crabs		
	Recovered	Unrecovered	Total
Softshell	13	101	114
Hardshell	105	413	516
Total	116	514	630

shell crabs because no biologically meaningful effects from air exposure were noted. Although statistical power was too low to fully discount exposure effects on recovery rates of softshells, these data were pooled to permit a test for the separate effect of carapace hardness — which we considered to be a primary question. We suspect that if exposures ≤ 1 have any effects on recovery, these effects would be secondary and would be manifested in crabs with very soft carapaces. Because we had dismissed the importance of differential tag loss and tag-induced mortality, we assumed that differential mortality was responsible for observed differences in tag recovery rates.

Carapace Hardness

Although we were unable to derive separate estimates of differential natural and handling mortalities among softshell and hardshell crabs, we concluded, as did Tegelberg (1972), that handling was largely responsible for the low recovery rates of tagged softshell crabs. Likewise, Smith and Jamieson (1989) surmised that handling of softshells contributed to higher mortality estimates for sublegal males that molted compared to crabs that did not molt. These conclusions are supported by controlled short-term experiments by Tegelberg (1972) and Barry (1984), who found that handling mortality was inversely related to carapace hardness. Even if differential "natural mortality" accounted for a significant portion of observed differences in tag recovery rates among softshell and hardshell crabs, handling may still be implicated. For example, Brown and Caputi (1983) and Gooding (1985) found that handled and released lobsters (*Panulirus*) experienced increased predation due to displacement from home range, lack of shelter at site of release, impairment of activity level, and reduced aptitude for defense against predators.

Unfortunately, our results cannot be used to infer the level of handling mortality of Dungeness crabs during commercial fisheries because (1) fisheries prosecuted during molting periods catch crabs much softer than we encountered, and (2) we handled crabs much more carefully than under commercial operations. For these reasons, estimates of handling mortality may be less than true mortality in commercial fisheries prosecuted on newly molted crabs.

Severity of Handling

Barry (1984) found that, if handled in a manner similar to conditions aboard commercial fishing ves-

sels, crabs experienced higher short-term (4–5 d) mortality than control crabs of the same carapace hardness that were captured and handled very gently. Softshell crabs that were handled three times in 6 d experienced 41% mortality compared to 23% for those that were handled once in 2 d, although sample size prevented tests for significance (Tegelberg 1972).

Impacts of crabs on the deck of a fishing vessel or on the surface of the sea could affect survival rate. In one study, short-term mortality was elevated to 57% for softshell crabs dropped onto the deck of a vessel (Tegelberg 1972). In another study (T. Shirley, University of Alaska Fairbanks, Juneau, personal communication), the commercial catching, sorting, and discarding processes were simulated in the laboratory. Mortality was found to be directly correlated to the number of times per month that Dungeness crabs were captured, handled, and dropped back into the water.

Appendage Loss

Dungeness crabs are vulnerable to appendage injury. Between 18–62% of captured Dungeness crabs were found to be injured along the coasts of Southeast Alaska (Shirley and Shirley 1988) and the Pacific northwest (Cleaver 1949; Waldron 1958; Durkin et al. 1984). Time of year and the level of fishing effort affect injury rates. Shirley and Shirley (1988) found the incidence of appendage injury of Dungeness crabs in Southeast Alaska to increase significantly with the prosecution of the commercial fishery and with the onset of mating and molting.

Dungeness crabs have the ability to survive amputation and regenerate lost limbs (MacKay 1942; Cleaver 1949). However, these crabs may suffer lower survival rates than crabs with all appendages intact. In our study, only three crabs had missing appendages (Hicks and Murphy 1989), so we were unable to analyze the possible effects of this factor. However, in a 2-year study Cleaver (1949) found that tagged crabs missing one appendage were recaptured at 73–93% of the recovery rates of tagged crabs without missing appendages; this fell to 50–65% for crabs missing two appendages. Similarly, data presented by Waldron (1958) reveal that crabs with some lost appendages were recovered at a lower rate (83%) than crabs with all appendages intact, but this difference was not statistically significant.

Air Exposure

Under field conditions — generally cool and overcast or rainy — that we encountered off Kodiak Island during tagging in June 1987 hardshell Dungeness crabs seemed to survive air exposures for up to 1 h. Because of lack of statistical power associated with small sample size, we could not discount possible effects of exposure on softshell crabs. Nonetheless, our finding of no effect for hardshell crabs is consistent with anecdotal observations by Cleaver (1949) that air exposure causes crabs no harm if they are kept cool and moist. However, it seems to us that desiccation could adversely affect survival at longer exposure periods or higher air temperatures especially for softshell crabs.

Management Implications

Handling mortality has significant implications for fishery management. Commercial fisheries prosecuted during molting periods reduce survival of Dungeness crabs returned to the sea. It follows that handling of molting prerecruit crabs reduces the size of the legal population available several months later when crabs are harvestable size. Handling mortality on females reduces population egg production. Unfortunately, it is very difficult to quantify in situ handling mortality and its affect on population dynamics and the commercial fishery for Dungeness crabs.

Fisheries may lead to other sources of mortality aside from handling. Cannibalism, particularly on softshells, occurs when crabs are contained in pots and aquaria (Cleaver 1949; Waldron 1958). Also, deaths occur due to starvation from confinement in pots for periods ≥ 30 d (Paul et al. 1993b). These mortalities may be problematic in fisheries in which pots are fished with lengthy soak times or in fisheries with significant pot loss. Based on experiments (Kimker 1990; Paul et al. 1993a) and analyses of alternatives (Kruse and Kimker 1993), in February 1993 the Alaska Board of Fisheries adopted new fishing regulations (ADF&G 1993) that require all shellfish and groundfish pots to be installed with a degradable mechanism made of cotton twine or a galvanic timed release device. These provide for escape from lost pots.

Economic considerations are important, as well. Tegelberg (1972) showed that mean percentage picked weight increased from 15% of live weight during peak molting period to 26% three months later for Washington coastal crabs and to 30% seven months after molting for Willapa Bay crabs. Also, he

documented a relationship between carapace hardness and product quality. The weight of meat recovered from softshell crabs was lower than that of hardshell crabs of the same size regardless of month of year. For example, in December the picked weight of hardshell crabs (grade 1) was 25% of live weight as compared to only 15% for softshell crabs (grade 3). Additionally, there is a negative linear relationship between percentage of meat yield and percentage of softshell crabs in the catch (PMFC 1978).

Meat yield affects economic rent. Even if wholesale price was fixed, lower product recovery rates reduce gross receipts paid to processors for a given number of crabs (PMFC 1978). Yet, carapace condition may have no effect on unprocessed weight because softshell crabs with low meat yields have high water content (Taylor and Warren 1991). These conditions provide incentives for processors either to refuse purchase of landings dominated by softshell crabs or to offer lower exvessel prices for these catches. Regardless, increased quantities of softshell crabs in landed catches reduce gross earnings of harvesting and processing segments of the crab industry.

Given all of these considerations, we believe that Dungeness crab fisheries in Alaska should avoid major molting periods, as is the general practice off California (Warner 1985), Oregon (Demory 1985), Washington (Barry 1985), and British Columbia (Jamieson 1985). If fixed openings and closures are used, then seasons should be selected that acknowledge extensive interannual variability in molting periods typical of Dungeness crabs (Tegelberg 1972; Snow 1963).

Alternatively, as recommended by Jamieson (1985), fishing seasons could be flexed to avoid major molting periods based on inseason monitoring of carapace hardness. Waldron (1958) reported on a management plan developed in Oregon in the late 1940s in which the fishery was open only when <10% of legal size male crabs were softshell. A similar strategy is employed currently in Washington, Prince William Sound (Donaldson 1990), and lower Cook Inlet (Kimker 1991). The primary advantage over a fixed season is that handling mortality is reduced in years when crabs molt so late that softshells would have occurred in commercial catches despite planned seasonal closures. On the other hand, increased fishing opportunities could be provided in years when the molting cycle is advanced.

CONCLUSIONS

(1) We believe that handling mortality caused the statistically different (0.01) tag recovery rate noted between softshell crabs (11%) and hardshell crabs (20%) in the 1987 commercial fishery off Kodiak Island, Alaska.

(2) The 45% lower recovery rate for softshell crabs than for hardshell crabs may have been partially influenced by tag loss or tag-induced mortality, but these influences were believed to be relatively minor. Furthermore, our conclusions about handling mortality for softshell crabs are quite consistent with other Dungeness crab studies.

(3) Hardshell crab survival does not appear to be affected by exposure to air up to 60 min during the cool and overcast or rainy conditions that we encountered off Kodiak Island while tagging. Sample size was too small to test the effects of different exposures on softshell crabs, and no conclusions were possible.

(4) In commercial fisheries severe handling and multiple recaptures will increase handling stress and associated mortality of softshell crabs beyond that indicated by our study, in which crabs were handled only once and with great care.

RECOMMENDATIONS

(1) We recommend a statewide study of Dungeness crabs to estimate molting timing and its interannual variability by area. At present, molting timing is poorly known in most areas of the state.

(2) Dungeness crab fisheries in Alaska should be closed during major molting events. This may be achieved by two methods. Fixed closure periods that account for interannual variability in molting timing may be established for each regulatory area. Alternatively, variable season opening dates could be set based on annual pre-season sampling programs as currently practiced in Prince William Sound and lower Cook Inlet.

(3) A bioeconomic simulation study is recommended to guide considerations of optimal fishing seasons for Dungeness crabs. Relevant factors include results of the proposed molting timing study, handling mortality related to carapace condition, mean percentage picked weight as a function of shell hardness, and seasonal effects of U.S. supply of Dungeness crabs on price paid per pound.

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James Marcotte
Executive Director
Alaska Board of Fisheries
P.O. Box 115526
Juneau, Alaska
99811-5526

RECEIVED
FEB 22 2010
BOARDS

February 17, 2010

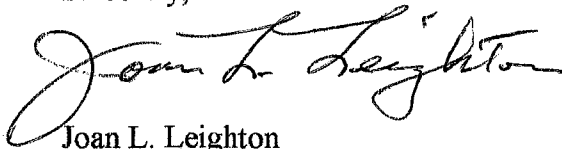
Dear Mr. Marcotte:

As a subsistence user in District 2 for many years I would like to go on record stating that I strongly object to the new Summer Commercial Dungeness Crab Fishery in District 2 in 2009.

Our family normally puts up crab for our yearly supply of subsistence crab in the summer. As a direct result of this new crab fishery, we do not have any crab for our coming year supply and probably will have none again unless this wanton waste of our resources is not stopped as this new summer Commercial Fishery has made it impossible for us to get our customary and traditional subsistence level met.

In past years, our levels were in excess of 100 crabs. This past year (2009) we had a very difficult time gathering only 17 crab, needless to say that is not enough to supply our needs.

Sincerely,



Joan L. Leighton
Tribal Member
Organized Village of Kasaan
P.O. Box 342
Kasaan, Alaska
99950-0340

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Summary of Personal Use Salmon Regulations Statewide

Intent

5 AAC 77.001. INTENT AND APPLICATION OF THIS CHAPTER.

(b) It is the intent of the board that the taking of fish under 5 AAC 77 will be allowed when the taking does not jeopardize the sustained yield of a resource and either does not negatively impact an existing resource use or is in the broad public interest.

(f) In this chapter, "personal use" means the taking, attempting to take or possession of finfish, shellfish or aquatic plants by an individual for consumption as food or use as bait by that individual or his immediate family.

5 AAC 77.010. METHODS, MEANS, AND GENERAL RESTRICTIONS.

(b) It is unlawful to buy, sell, trade or barter fish or their parts taken under the regulations in 5 AAC 77.

(f) A person may not possess salmon taken under the authority of a personal use salmon fishing permit unless both tipsof the tail fin have been removed from the salmon before the salmon us concealed from plain view or transported from the fishing site.

Salmon Personal Use (PU) Bag & Possession Limits

	Annual PU Permits Allowed	Head of Household	Additional Harvest For Family Members	Gear Allowed	Household Annual Limit
Bristol Bay	Regulations Not Clear	70 Salmon 5 Kings Allowed	None Allowed	Set Gillnet	None Specified
Cook Inlet	1/Household	25 Sockeye Plus Sport Limit 1 King	10/Family Member	Set Gillnet 10 Fathoms Dipnet - Gillnet	25 Minimum
Prince William Sound	1/Household	15 Head of Household 1 King	15/Family Member	Dipnets	30 10 by E.O.

From UCIDA

	Annual PU Permits Allowed	Head of Household	Additional Harvest For Family Members	Gear Allowed	Household Annual Limit
Southeast	1/Household	2 Kings 6 Coho PU and Sport Harvest Not allowed In The Same Day	By E.O. 10 Sockeye Households of 2 or more	Set Gillnet 50 Fathom Taku - 15 Fathom	Taku - 10 Sockeye
Yakutat	1/Household	15 Sockeye 2 Kings 15 Coho	10 Sockeye Households of 2 or more	Set Gillnet 50 Fathom	25 Sockeye 25 Coho
Yukon	1/Household	10 Kings - Annual 75 Chum - Before 8/15 75 Chum/Coho - After 8/15	None Allowed	150 Fathom Net 1 Fishwheel Dipnets	Same as Head of Household
Kuskokwim	Deleted - No Current Regulation				
Aleutian Islands	Repealed - No Current Regulation				
Kotzebue	Repealed 1990 - No Current Regulation				
Norton Sound	Repealed 1990 - No Current Regulation				
AK Peninsula	No Current Regulation				
Chignik	No Current Regulation				
Kodiak	No Current Regulation				

465-6094

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South Central Alaska Dipnetters ASSOCIATION

Chair, BOF,

Please let me say thank you to all on the BOF that are involved with proposal 200 and 201. I am glad to see that you are looking to ensure that Alaskan residents would have some priority when it comes to our resources, in times of shortages.

As you all must be aware, there are over 90,000 Alaskan residents that benefit from personal use fishing in our great state. Whether it is done in Chitina, The Kenai/Kasilof or even China poot, Alaskans from through out the state put fish into their freezers because of dipnetting.

I have to admit I am somewhat biased since I started SCADA a number of years ago. What keeps me working on keeping dipnetting from getting cut back is the feedback I get from mostly elderly Alaskan residents. Let me explain. Whenever I am quoted in the newspaper or go on talk radio, concerning dipnetting, I start to receive cold phone calls, usually that night.

It turns out that a lot of our elderly really depend on fish from personal use and these phone calls are a lot of "thank you's" for standing up and fighting to keep personal use in play. I have been amazed at the amount of seniors that have looked up my last name in the phone book to call and tell me that they appreciate my efforts and really depend on these fish. That is what keeps me going.

My hat is off to all of you that support Alaskan residents.

I am a little confused as to the argument years ago, by Commercial Fishers that wanted to exclude all Non Basin users under the eight point criteria. Now we have Commercial fishers that are suing in federal court, to include all people for personal use, to include Non-Alaskans. So, my quandary is which argument is going to be used to keep the status quo? It seems that certain groups want it both ways.

SCADA, hopes that you will use common sense and right this wrong.

Thank you again,

Ken Federico, SCADA, 715-8363

February 16, 2010
7511 Labrador Circle
Anchorage, AK 99502

Mr. Vince Webster
Chair, Board of Fisheries
PO Box 121
King Salmon, AK 99613

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FEB 23 2010
BOARDS

Dear Mr. Chairman,

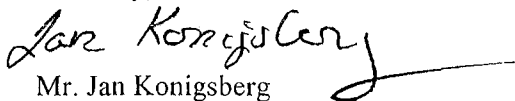
I very much appreciate the Board of Fisheries urging the legislature to investigate whether statute and regulation are sufficient to ensure the protection of fish and wildlife if the Pebble mine were to be constructed and operated.

I believe what standards exist in statute and regulation are not sufficiently quantitative or comprehensive to protect the biological resources of Bristol Bay – or elsewhere in Alaska, for that matter. "Protecting Salmon Habitat through the State Permitting Process," which Jim Marcotte forwarded to you last month, explains my reasoning.

Apart from the question of adequacy of statute and regulation to provide for protection of fish and wildlife, the Board ought to question the wisdom of the Department of Natural Resources serving as the lead agency in the large-mine permitting process for a project as significant as the proposed Pebble mine. Given that the fishery resource is presumed to be at least as important and valuable as the subsurface minerals, then the agency charged with developing the fisheries ought to have an equal seat at the permitting table with the agency charged with developing the mineral resources: placing DNR in a superior position to ADF&G cannot help but reinforce the perception that fish and fisheries will get the short shrift as the permitting process plays out. Indeed, if the permitting process goes ahead, public concern may be somewhat allayed if ADF&G were the lead agency.

Thus, I would urge the Board of Fisheries to consider an addendum to its January 30 letter: request the governor reconsider the large-mine permitting program and DNR's dominant role.

Sincerely,



Mr. Jan Konigsberg
jkberg@gci.net

cc: Board of Fisheries
Governor Sean Parnell
Representative Mike Chenault
Senator Gary Stevens
Jim Marcotte, Executive Director, BOF
Denby Lloyd, Commissioner, Department of Fish and Game
Thomas Irwin, Commissioner, Department of Natural Resources
Larry Hartig, Commissioner, Department of Environmental Conservation

Sterling W. Muth
912 N. STOL Dr.
North Pole, AK 99705

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FEB 23 2010
BOARDS

ATTN:BOF COMMENTS
Boards Support Section
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, AK 99811-5526

12 Feb 2010

Dear Sirs

Proposals 200 and 201

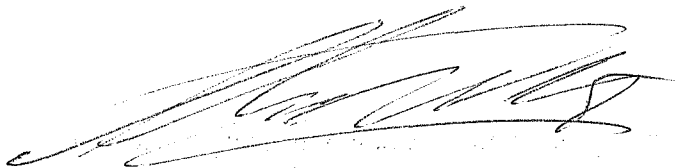
Please do the right thing! We Alaskans, all Alaskans, should have first priority to the Copper river fish for our families.

Commercial Copper river salmon sold all over the world are important to our economy, however, There should always be a priority in fish in the river first for dip netting.

As an alternative, perhaps, is closing the dip netting altogether and requiring commercial fishermen to provide 30 fish free to any Alaska resident that desires them.

Please do the right thing for Alaska residents. We depend on the salmon from the Chitina dip netting to feed our families. That should be first priority.

Thank You



Sterling W. Muth

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FEB 23 2010

BOARDS

12 FEB 2010

Dear Fishery Board members,

I support changing the Criteria Dep
net fishery back to subsistence.
This fishery is subsistence to me and
my Alaskan and immediate family
as well. Since changing to personal
use the limit has gone down
drastically for subsistence users. I
can not feed my family properly
now. These fish belong to God.
I have a very strong spiritual
time with God every time I catch
a subsistence fish. The board is
not God. My way of life has
been taken away from me by men,
who may not have a strong tie to
God. I will not let you take away
my familys subsistence life style
and priority. I will not eat
commercial caught fish. The quality
is very poor. It is not my family

providing for my family with
Gods bounty. Subsistence draws
the family together the way God
intended. Personal use tears
it down.

Sincerely

GARY L. CORLE

Gary L. Corle

2614 GORDON RD
NORTH POLE AK
99705

P. S. I am also a U.S. and Alaskan veteran.
I and family have fought and shed blood
to preserve the right to a subsistence
life style. How far you ever consider
taking this away. We will never give
up this life style, subsistence. All the
battles I fought in the military were for all
Alaskans. Not for certain zip codes.

Alaska Department of Fish & Game

Feb. 21, 2010

Boards Support Section

P.O. Box 115526

Juneau, AK 99811-5526

RE: Board of Fisheries

Supplemental Proposal 200

RECEIVED
FEB 24 2010
BOARDS

Gentlemen:

What I understand the basic thrust of the Court's ruling in the Chitina Personal Use vs. Subsistence question to be was to require you to use a definition of "subsistence user" that was not essentially circular – that is it is not sufficient to say a subsistence user is someone who practices subsistence. It does not appear to me that the definition you have crafted in Proposal 200 is responsive to this demand. The wording in this proposal suffers from the same deficiencies of previous ones in that it does not provide an objective, measurable and enforceable means for anyone to readily determine if he meets the definition or not.

I consider myself to have enjoyed a "consistent, long-term reliance upon the fish and game resources for the basic necessities of life". Would I have starved to death without them, probably not. But your definition provides no guidance as to what any of these terms mean or by what measure I will be judged to have met the test.

Furthermore, I can't see how yet another attempt to nail down this abstruse concept independent of the Board of Game cannot lead to even more confusion and frustration than already exists.

Proposal 200 appears to me to do no more than kick the can down the road once again. I suggest you stop, back up, wait for a meeting of the Joint Boards and attempt to give us an objective definition.

Thank you for considering my views,



John A. Miller

1260 March Dr.

Fairbanks, AK 99709



RECEIVED
FEB 24 2010
BOARDS

United Cook Inlet Drift Association

43961 K-Beach Road, Suite E • Soldotna, Alaska 99669 • (907) 260-9436 • fax (907) 260-9438
• info@ucida.org •

Date: February 22, 2010

Addressee: Jim Marcotte, Executive Director
Board of Fisheries
PO Box 115526
Juneau, AK 99811

RE: Proposal 165

Dear Board of Fisheries Members:

In reviewing the personal use and educational regulations, we find that there are no State-wide criteria. In many other sectors, there are criteria or guidelines established by the Board or Legislature. These then are used by all stakeholders, public and the Board to use as guidelines when preparing, discussing and deliberating specific proposals. At the present time, the regulations concerning personal use are highly variable between different areas of the State. Please see attached summary of personal use salmon regulations.

Establish criteria or guidelines that address the following issues for personal use and educational permits:

A. Household

- The criteria concerning the number of permits that would be allowed annually
- The criteria concerning the areas of the State that permits could be fished

B. Bag Limits

- Establish the criteria for bag limits by households per day

C. Possession Limits

- Establish the criteria for possession limits by households per day
- Establish the criteria for annual harvest limits by household

D. Conservation Burden Coordination

- Establish the criteria that describes the conservation burden relative to other fisheries
- Establish the criteria that describes the conservation burden relative to escapement goals

E. Gear Allowed

- Establish the criteria used to determine gear types and specifications

F. Shipments out of State

- What criteria are there concerning the shipping of harvested seafoods

G. Coordination

- Establish the criteria on the above throughout State, subsistence, personal use, sport-caught, educational and commercial fisheries.

Sincerely,

A handwritten signature in cursive script that reads "Roland Maw".

Roland Maw, PhD
UCIDA Executive Director

ams

February 24, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526
FAX: (907) 465-6094

RECEIVED
FEB 24 2010
BOARDS

SUBJECT: Proposals 200 & 201 – 2010 Statewide Finfish Meeting

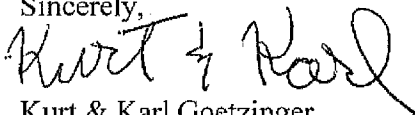
To the Board-of-Fisheries,

This letter is in opposition to BOF Proposals 200 & 201 which intend to have the Chitina “personal use” fishery on the Copper River re-classified as a “subsistence” fishery. This re-classification could restrict the commercial fishery at the mouth of the Copper River and negatively impact the incomes of those 500 permit holders who rely on this fishery to support themselves and their families.

In addition, such a re-classification would put the majority of the Copper River salmon escapement burden onto the valuable commercial and sport fisheries and could possibly restrict the Glennallen subsistence fishery in low run years. All are very negative potential outcomes as a result of a re-classification of this recreational dip net fishery from personal use to subsistence.

Please place working people, family incomes and the economy of the Prince William Sound region before the Chitina recreational dip net fishery and reject BOF Proposals 200 & 201.

Sincerely,



Kurt & Karl Goetzing
F/V Janda II
Cordova, AK. 99574



February 26, 2010

Alaska Board of Fisheries
Board Support Section, ADFG
ATTN: Jim Marcotte
PO Box 115526
Juneau, AK 99811-5526

Delivered via FAX: 907-465-6094

RE: KRSA Comments on 2010 Board of Fisheries (BOF) Statewide Finfish Proposals

Dear Chairman Webster and members of the Board of Fisheries:

Kenai River Sportfishing Association (KRSA) is a professional, 501 (c) 3 charitable non-profit, dedicated to ensuring the sustainability of one of the world's premier sportfishing rivers --- the Kenai. The association's area of responsibility encompasses the Kenai River watershed, the greater Cook Inlet basin and Alaska, with programs focused on habitat, fisheries management, research and education. Since 1984, KRSA has been a leading advocate for fisheries conservation in Alaska, working diligently to ensure Alaskan's recreational fishery rights are protected and the fisheries are healthy for generations to come.

Please see the attached comments from KRSA regarding the 2010 BOF statewide finfish proposals at the regularly scheduled meeting in Anchorage in March, 2010. Comments on proposals have been organized by committee in an effort to assist BOF members in their review. Thank you for your time and attention to our comments in your consideration of these proposals.

Respectfully,

Ricky Gease, Executive Director
Kenai River Sportfishing Association
907-262-8588
ricky@kenairiversportfishing.com

//attachment

COMMITTEE A: Commercial Fisheries, General Provisions, and Sustainable Salmon/Escapement Goal Policies

(11 Proposals)

Commercial KRSA has no recommendation or comment on this group of proposals.

Proposal Recommendation and Comment

- | | |
|------------|---|
| 167 | <i>Modify definition of mechanical jigging machine</i> |
| 168 | <i>Repeal length limit on salmon seine vessels in Alaska</i> |
| 173 | <i>Amend management plan for parallel groundfish fisheries</i> |
| 174 | <i>Amend lawful gear for groundfish</i> |
| 195 | <i>Close summer commercial Dungeness crab fishery in Southeast Alaska District 2</i> |
| 196 | <i>Adjust the total allowable catch for the Bering Sea C. opilio Tanner crab commercial fishery</i> |
| 197 | <i>Reduce the minimum size limit for Tanner crab in the Bering Sea commercial fishery</i> |
| 198 | <i>Remove the minimum total allowable catch in the Saint Matthew Island blue king crab fishery</i> |

General Provisions and Policy

Proposal Recommendation and Comment

169 **Oppose**

Amend criteria for the allocation of fishery resources

This proposal seeks to amend the State’s fishery allocation criteria to address the board’s ability to deny an individual or group reasonable opportunity to harvest. We are not made aware of who this individual or group is or where the alleged denial occurred. In addition, although the allocation criteria are referenced in 5 AAC 39.205 they are not found in that regulation but in Statute in Section 16.05.251 Regulations of the Board of Fisheries.

The proposal also alludes to a conflict in definition. At the present time “reasonable opportunity” is defined in Section 16.05.258, the law that sets forth the State’s subsistence fishery law. In that section there is specific language that states for the purpose of this section, ”reasonable opportunity” means an opportunity, as determined by the appropriate board, that allows a subsistence user to participate in a subsistence hunt or fishery that provides a normally diligent participant with a reasonable expectation of success of taking of fish or game. The language “fair and reasonable opportunity” is used in Section 16.05.251, the regulations that govern the Board of Fisheries. This phrase is used in the part of Section 16.05.251 that lays out the allocation criteria. There is no definition. The Board has situational defined “fair and reasonable” many times over the years by adoption of regulations on a regional and local basis. There is no conflict in regulation as relates to the definition of reasonable opportunity as defined in subsistence law and the definition of fair and reasonable opportunity as it has been used by the Board to justify the allocation of fisheries resources. The terms are different in code and have been used differently by the Board for years.

KRSA is opposed to this proposal.

170

Oppose

Clarify regulations establishing escapement goals

This proposal provides specific language for a definition of “sustainable escapement goal threshold” which the author seeks to have adopted in the Policy for management of sustainable fisheries.

KRSA is opposed to the adoption of this proposal as written and recommends that the Board refer to the comments provided by the Department and also our comments on Proposal 172.

171

Oppose

Clarify escapement goals and establish ranges

This proposal provides specific language for a definition of “sustainable escapement goal threshold” which the author seeks to have adopted in the Policy for statewide salmon escapement goals. The proposal also seeks to restrict the Department’s flexibility in managing salmon fisheries during periods of low returns.

KRSA is opposed to the adoption of this proposal as written and recommends that the Board refer to the comments provided by the Department and also our comments on Proposal 172.

172

Support

Provide definition for escapement goal threshold

This proposal seeks to establish in both the Policy for sustainable salmon fisheries and the Policy for statewide escapement goals a definition for “sustainable escapement goal threshold” (SEGT).

KRSA has read the Department’s comments on this issue and agrees with the Department’s desire to establish a definition of SEGT that is consistent with their current management practices. KRSA supports ONLY developing and adoption a definition of SEGT into the Policy for the management of sustainable salmon fisheries and, if appropriate, the Policy for statewide salmon escapement goals. KRSA supports ONLY the concept of codifying what the Department states in their comments is already there practice in 40 some situations around the state. Prior to adoption of a definition of SEGT KRSA would like to hear a discussion around how adoption of this definition for SEGT will affect the way the Department and the Board handle situations like Susitna/Yentna sockeye and also Anchor River Chinook. We would also like included in that discussion an understanding of how defining SEGT in code could affect the management of sockeye in a mixed stock fishery like Upper Cook Inlet mean to the Department when the management plans also call for minimizing Kenai and Susitna coho which are intended "primarily" for sport fisheries.

Committee B: Subsistence, Personal Use and Sport

(21 Proposals)

Subsistence/Personal Use

Proposal Recommendation and Comment

164

Oppose

Revise unlawful possession of subsistence finfish

Reclassifying fish caught in commercial fisheries as subsistence fish, according to comment by the Department of Law, appears to be outside the jurisdiction of the Board of Fisheries. As a legal alternative, KRSA suggests that the Board may want a discussion on whether it is prudent to consider a change to the current situation whereby an unlimited number is available for harvest in the commercial home pack regulations to mirror either the subsistence or personal use limits in that region of the state. KRSA is opposed to the proposal as written.

165

Oppose

Delay opening personal use fishery until escapement goal is met

This proposal seeks to delay opening all Personal Use fisheries in the State until an escapement goal is met. Regulations governing the Personal Use Fisheries in the State of Alaska are provided in Chapter 77 of the Administrative Code. Statewide Provisions are spelled out in 5 AAC 77.003.

A cursory review of the remainder of Chapter 77 results in a review of approximately 88 different Personal Use Fisheries addressed in regulation. These fisheries harvest king, tanner and Dungeness crab, shrimp, bottom fish, smelt, cod, halibut and all species of salmon. This estimate does not expand regulations for salmon fisheries where up to five species are harvested and accounted for. Proposal #165 references “dipnetting” but nothing in its wording limits this proposal, as written, from affecting other Personal Use Fisheries. At the present time all Personal Use Dipnet Fisheries provided for in regulation are governed by management plans specific to those fisheries.

If Proposal #165 would be adopted as written, it is unclear just how many Personal Use Fisheries in the State would be affected. What is clear is that if adopted as written, this proposal would result in a delay in the opening of any Personal Use Fishery implemented by dipnet for any species. What is also clear is that any delay in the opening of a Personal Use Fishery would result in a loss of fishing opportunity for Alaska Resident who chooses to participate.

Proposal #165 would result in a clear and likely significant reallocation of fish and fishing opportunity away from any Personal Use Fishery implemented by dipnet. Because of the diverse fisheries utilizing dipnets it is unclear all who would be the recipient of this reallocation. It is also clear that adoption of this proposal as written would reallocate significant numbers of sockeye salmon away from personal use fishermen who participate in the dipnet fisheries for salmon in the Kenai and Kasilof River in the Upper Cook Inlet area.

KRSA stands in opposition to Proposal #165. Proposal #165 as written is vague, has enormous allocation implications and certainly appears to be an attempt to have the Board address a regionally important issue out of context thru the vehicle of a statewide proposal.

166

Oppose

Eliminate requirement of having a sport fishing license to fish in personal use fisheries

This proposal seeks to eliminate the requirement of an Alaskan resident to purchase a sport fish license to participate in personal use fisheries. KRSA understands that the author’s intent of this proposal would be to seek to replace the sport fish requirement with a requirement to purchase a separate license for personal use fisheries, and funds from such a license would go towards the management of personal use fisheries throughout the state. However, such details are lacking as written and we can see no reason for people who participate in any non-subsistence fisheries to be exempt for a licensing requirement.

Currently the sport fish license requirement provides the state with funding for ADFG management of the personal use fisheries and with an important law enforcement tool through the Department of Public Safety. KRSA is aware of the costs involved in managing fisheries, particularly high-use fisheries such as those that take place on the Kenai Peninsula; this proposal appears to be an attempt to address a regionally important issue of adequate funding to manage the personal use fisheries in Upper Cook Inlet.

KRSA stands in opposition to Proposal #166. We feel that the Alaska State Legislature is the appropriate venue to deal with funding levels of important services involved in the responsible management of high-use fisheries, such as adequate access to the fishery and appropriate infrastructure for human waste, trash, cleaning tables, fish carcass management and habitat protection.

Sport

175

Oppose

Establish bag limit for sablefish

This proposal seeks to establish a statewide year-round sablefish bag limit of two fish and a possession limit of four fish, with an annual limit of four fish for nonresidents.

KRSA is opposed to this proposal. In 2009 the Board implemented very conservative sport fish bag (four fish) and possession (four fish) limits for all anglers and additionally put in place an annual limit (eight fish) for nonresidents in Southeast Alaska.

This proposal appears to be an attempt to deal with a regional issue in the guise of a statewide proposal, which the Board addressed already in 2009. In 2010 ADFG will start systematically collecting data in the SWHS and charter log books that specifically require sport fish harvest data for sable fish. Current harvest data, though incomplete, suggests that sport fish harvest accounts for less than 1% of the total harvest of sable fish statewide, implying that under current regulations with no statewide bag, possession or annual limits sport anglers have little impact on overall catch. Thus KRSA feels that no conservation issue has been quantified to date to justify adoption of a proposal that seeks statewide sport harvest limits more draconian than the already implemented very conservative limits for Southeast.

176

Support

Increase bag limit for spiny dogfish

This proposal seeks to increase the daily bag and possession limit for Spiny Dog Fish.

KRSA supports this proposal. It is our understanding that the Department has confirmed that there is a very low harvest of Spiny Dog Fish at present and that they are not aware of a conservation concern that would be addressed by a more restrictive harvest strategy.

177

Support

Establish bag limit for thornyhead rockfish

KRSA supports this proposal. We understand from the Department that no conservation concerns exist for this species of rockfish that would be addressed by more restrictive harvest strategies, and we support the Department's recommendation for addressing the issue through inclusion into already existing bag and possession limits for rockfish.

178

Support ONLY as an effort to clarify wording

Clarify emergency order authority

This Department submitted proposal seeks to clarify the emergency order provided the State's sport fish managers authority.

5 AAC 75.003 provides the Department's sportfish managers the flexibility to change bag and possession limits and annual limits and alter methods and means in sport fisheries. This regulation also defines when and how this flexibility should and should not be applied. This provision was originally submitted by the Department and adopted by the BOF in the early 1990's. One important consideration, at the time of adoption, was to differentiate the use of Emergency Order Authority to implement Board adopted management plans that spell out the steps to be taken and the observations required to trigger those steps versus the Department's use of Emergency Use Authority to address fishery issues not spelled out in a Board adopted management plan. If actions were spelled out in management plans then those plans would guide the Department's emergency orders. The Department would use the authority provided them in 5 AAC 75.003 only in the absence of a management plan.

In addition to the discussion regarding in versus outside of a regulatory management plans, two principles were used to guide the original development of this regulation. The first was the

conservation of fishery resources. The second was an acknowledgement of the economic and social benefit created by the maintenance of opportunity to participate in sport fisheries. Both the Department and public advised the Board that sport fishing opportunity should be provided and would be taken advantage of even when limits are reduced even to the point of prohibiting retention.

Proposal #178 is submitted by the Department. If adopted, the language provided in this proposal would make it clear that the Department may modify bag and possession limits, annual limits and methods and means under this section only when there are not explicit provisions in an adopted management plan for taking these actions.

KRSA supports this proposal as written. KRSA believes that this proposal clarifies the language contained in 5 AAC 75.003 in a manner that is completely consistent with Department, Board and public intent at the time of passage and that passage of this regulation and does nothing to jeopardize fishery resources or weaken the utility of the management tools use to optimize economic and social benefits.

179

Oppose

Clarify emergency order authority

The author of this proposal states that he seeks only to clarify the emergency order authority provided the State's sport fishery managers but in fact, this proposal asks the BOF to do much more than clarify the emergency order authority provided the Department to implement management of sport fisheries.

5 AAC 75.003 provides the Department's sportfish managers the flexibility to change bag and possession limits and annual limits and alter methods and means in sport fisheries. This regulation also defines when and how this flexibility should and should not be applied. This provision was originally submitted by the Department and adopted by the BOF in the early 1990's. One important consideration, at the time of adoption, was to differentiate between the use of Emergency Order Authority to implement a Board adopted management plans that spell out the steps to be taken and the observations required to trigger those steps versus the Department's use of Emergency Use Authority to address fishery issues not spelled out in a Board adopted management plans. If actions were spelled out in management plans then those plans would guide the Department's emergency orders. The Department would use the authority provided them in 5 AAC 75.003 only in the absence of a management plan.

In along with the discussion regarding in versus outside of a regulatory management plans, two principles were used to guide the original development of this regulation. The first was the conservation of fishery resources. The second was an acknowledgement of the economic and social benefit created by the maintenance of opportunity to participate in sport fisheries. Both the Department and public advised the Board that sport fishing opportunity should be provided and would be taken advantage of even when limits are reduced even to the point of prohibiting retention.

Proposal #179, as written, seeks to reduce the flexibility afforded the managers of our State's sport fisheries and further restrict sport fishing opportunity during periods of lower escapement of salmon populations targeted by sport fisheries. Proposal #179 also seeks to trigger this reduced flexibility and periods of more restrictive opportunity to an effort to "ensure" that the "escapement goal" is achieved.

Sport fishing provides substantial economic and social benefit to the State. Even in times of low returns much of the benefit can be salvaged by maintenance of fishing opportunity even at very low levels of harvest of and/or mortality to the target species. 5 AAC 39.222 Policy for the management of sustainable salmon fisheries provides definitions for specific types of escapement objectives such as a biological escapement goal (BEG), optimal escapement goal (OEG), and

sustainable escapement goal (SEG) but provides no definition for the more generic term “escapement goal”. Proposal #179 seems particularly focused on preventing the Department from establishing periods during which retention of a specific species is prohibited in response to a low return. “Conservation catch and release” as this management tool is described in section (1)(B) of 5 AAC 75.003 was specifically provided for when this regulation was originally adopted because its use can allow for minimal fishing opportunity during low returns. KRSA is not aware of an instance when use of this tool has jeopardized the sustainability of a fishery resource.

If adopted as written, the language provide by proposal #179 would make it more difficult for the Department to maintain minimal levels of sportfishing opportunity in the face of low returns. Loss of this opportunity would have questionable positive impacts on sustainability of target species but an unquestioned negative impact on opportunity and the benefits derived by the State from preservation of that opportunity. This marginal increase in shouldering the burden of conservation would be costly to the sport fishery.

KRSA is opposed to proposal #179. KRSA was a member of the committee assigned by the Board to discuss and comment back to the Board on 5 AAC 75.003 when this regulation was originally adopted. We continue to support the authority given the Department by this regulation as it appears in code at this time. We note that we are in favor of the clarifying language submitted to the Board by the Department in proposal #178. We are in favor of “conservation catch and release” as presently described in code and feel that it is a valuable tool for our fishery managers to have. KRSA is not aware of any substantive benefit whether in terms of conservation, economic or social benefits that would accrue from adoption of this proposal.

180 Support with modification

Define electric fishing reels

This proposal seeks to establish a definition of electric fishing reels. KRSA believes that the Board should use this proposal to establish a consistent definition regulating methods and means.

181 Oppose

Clarify definition of fishing rod and electric reel

No Action subject to action on proposal 180.

182 Oppose

Prohibit use of electric reels

No Action subject to action on proposal 180.

183 Oppose

Prohibit use of electric reels

No Action subject to action on proposal 180.

184 Neutral

Prohibit use of felt sole wading boots

Proposal #184 if adopted as written would prohibit the use of felt soled boots while sport fishing in freshwaters of the State of Alaska.

KRSA is neutral on adoption of this proposal. KRSA understands the threat to Alaska's aquatic systems posed by the unintended introduction of invasive species and we appreciate the effort put out by Trout Unlimited to address this issue. KRSA is neutral on proposal #184, as written, for the following reasons:

1) KRSA believes that the threat of unintended introduction of invasive species comes from a multitude of sources only one of which is the felt soles worn by sport fishermen who bring boots into the State. KRSA supports addressing this issue not only through a narrowly focused regulation but through a more comprehensive education campaign aimed at all potential sources.

2) KRSA understands the limited nature of our fish and game law enforcement coverage and capability. KRSA does not support diverting enforcement efforts to the point of asking anglers to step out of streams so that their foot gear can be examined.

3) KRSA recommends that if proposal #184 is adopted, an adequate voluntary phase in period is delineated to allow for existing efforts underway in the industry for new products to come to the market place and allows for anglers to replace existing gear on a normal replacement schedule without undue financial hardship. The voluntary phase in period could then be combined with a more comprehensive education program all aimed at all potential sources.

185

Support

Clarify definition of underwater spear

This proposal submitted by ADFG seeks to clarify the definition of spear and spear-gun and their legal use for fishing while submerged, and the prohibition of a shaft tipped with an explosive charge, commonly known as a bangstick or powerhead, in fresh and salt water. KRSA supports this proposal.

186

Oppose

Allow the use of underwater spear

No Action subject to action on proposal 185, as KRSA supports the clarification language offered by ADFG.

187

Oppose

Allow the use of bait by disabled anglers

KRSA is opposed to this proposal. We feel that existing regulations provide for a reasonable and enforceable avenue for persons with a disability to seek an exemption from existing regulations which prohibit the person from meaningful access to the fishery. KRSA has used the state exemption procedure adopted in 2002 for the Kenai River and have found it not to be overly burdensome.

188

Support

Modify sport fishing regulations for halibut

This proposal is a housekeeping measure submitted by ADFG to make federal and state regulations consistent. KRSA supports this proposal.

189

Oppose

Require a client-guide agreement for each client on a sport fishing charter trip

This proposal seeks to mandate an agreement between a client and a sport fishing guide who provides the client with sport fishing guide services, and appears to be contradictory with the sport fishing guide statute AS 16.40.270 (d). As such, adoption of this proposal would be inconsistent with an applicable statute. Therefore, KRSA opposes the proposal.

190

Oppose

Allow crew members to retain fish when clients are onboard

This proposal seeks to remove the commissioner's authority to issue an emergency order prohibiting the retention of fish by a sport fishing guide and sport fishing guide crew members while clients are on board a charter vessel in salt water. This proposal appears to be an attempt to deal with a regional issue in the guise of a statewide proposal. KRSA opposes the removal of a fisheries management tool that has proven effective for ADFG to use in situations where there are guideline harvest levels or allocation targets.

191

Oppose

Define official time for sport fisheries

This proposal seeks to define “official time” in regards to fisheries which have established fishing times. As “official time” is established in court to be “Universal Coordinated Time (UTC)”, there does not appear to be a justification to adopt this proposal in fisheries regulations that deal with time requirements.

192

Oppose

Modify the definition of artificial fly

This proposal seeks to modify the existing definition of artificial fly. KRSA opposes this proposal, we feel the current definition provides sufficient clarity.

Additional Proposals not scheduled for committee

Additional Proposals

KRSA has no recommendation or comment on this group of proposals.

Proposal

Recommendation and Comment

200

Adopt subsistence finding standards

201

Find a customary and traditional use of salmon stocks in the Chitina Subdistrict and establish amounts necessary for subsistence

February 19, 2010

Mr. Marcotte, Executive Director
Alaska Board of Fisheries
P. O. Box 115526
Juneau, Alaska 99811-5526

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Dear Mr. Marcotte,

I am a tribal member and resident of Kasaan, Alaska. My husband and I are raising three children and we depend on Dungeness crab as one of our traditional food sources.

Please, don't continue what always happens, don't wait until its too late, stop the commercial Dungeness Crab fisheries that are destroying our capability to catch crab that we have always had available to us to eat. Since before the early 70's I've been told by elders and then have seen the depletion of salmon, shrimp, and even the fact that we can no longer go out and get abalone and herring eggs. This is all due to the fact that there is no protection for villages and communities to survive on what we've survived on since time immortal, and it because of over harvesting by commercial fisheries.

I think it's only common sense that fisheries should not be allowed within so many miles of a village or community, yet it happens. I think it's only common sense that to have two openings, winter and summer is crazy. When do these resources have time to reproduce and multiply?

The pressure from the commercial fishing community should not out weigh the rights of villages and communities to continue to have their traditional and customary resources available to them.

Agencies such as yours are to "Protect the Resources", not be bullied by those out there that just want a fast buck. Our resources must be protected for generations to come, some of which may be yours too.

Haw'aa,

Paula Peterson

Dan & Liz Williams
Box KXA
Ketchikan, Alaska 99950

February 26, 2010

James Marcotte
Executive Director
Alaska Board of Fisheries
P O Box 115526
Juneau, Alaska 99811-5526

RECEIVED
FEB 26 2010
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**Subject: Support of Proposal #195 for the Closure of the Commercial
Summer Dungeness Crab Fishery in Area A, District 2**

We live in Saltery Cove, Skowl Arm, Prince of Wales Island. In years past it has been our practice to secure crab for our personal use in the following 3 areas, the Karta River, Polk Inlet and Mckenzie Inlet.

Our subsistence fishing ended up with some pretty dismal results this year. Our normal practice is to set 3 pots, let them soak overnight, pull them, take the largest and return the females and small (though legal) crabs to the water. In the past this has given us enough crab to eat fresh and to can some for winter eating. This summer we set 3 crab pots near the Karta River, let them soak overnight, pulled them and got 1 legal crab. We went up Polk Inlet to crab and there were so many pots blanketing the area that we did not attempt to fish there. In Mckenzie Inlet we ended up with 3 legal size crab. We gave up trying to get crab in 2009 because the amount of crab we caught was not worth the time and fuel invested to catch them.

We believe that the summer crab fishery was instituted without any science or prior study applied to protect the long term viability of the Dungeness crab in this area and that the continued summer fishery of Dungeness crab in this area is destructive and should be ceased immediately.

Sincerely,
Dan Williams
Liz Williams
Dan & Liz Williams



Trout Unlimited Alaska

February 27, 2010

BOF COMMENTS
Boards Support Section
ADFG
PO Box 115526
Juneau, AK 99811-5526
Fax- 907-465-6094

RECEIVED
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BOARDS

Dear Board of Fish Members:

As a group working to promote sustainable wild fish populations for all users in Alaska, the Alaska Office of Trout Unlimited (TU) offered Proposal 184 which would prohibit the use of felt soled wading products in Alaska.

As you are no doubt aware, the Board of Fisheries passed a similar proposal for the Southeast Region at the 2009 meeting in Sitka. TU's support of that proposal was largely based on the same argument we now make for applying this regulation on a statewide basis; Fisheries in Alaska are simply too valuable to too many of us not to take every reasonable action possible to protect them from aquatic invasive species into the future.

Aquatic invasive species have devastated fisheries in many states and countries and enormous amounts of money and time have been expended in working to eradicate them from the waterways they have invaded. In this sense, proactive measures which reduce the chances that an invasion will occur, like prohibiting felt products, are an investment in the future of our fisheries. We are, however, mindful that the cost of switching from felt to other non-absorbent wading products will be borne by individual fishermen and fishing businesses. Because of that we have recommended that this regulation not be implemented until January 2011 in the hope it will allow individuals and businesses to fully utilize the felt products they own now and plan accordingly for future purchases. TU would be open to amending the proposed effective date, should the Board foresee the need for a longer phase-in period for this regulation.

Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization

Alaska Office: 419 Sixth Street, Suite 200, Juneau, AK 99801 • (907) 321-3725

www.savebristoleggy.org • www.tu.org

Public Comment #25

Since our testimony on the Southeast version of this proposal it has become even more apparent that a transition away from the production of felt products has been embraced by retail manufacturers. At present, most if not all major manufacturers, offer non-absorbent soled wading boots and several have committed to producing only non felt products in the future. These manufacturers have also made great strides in producing non-felt products which are safe, durable and which represent a good value for consumers. We do acknowledge that more can be done in these regards and believe that will be the case as of the proposed implementation date.

Studies on the sediment transported by anglers* conducted in Montana indicate the average angler wearing felt wading products transports some 16 grams of sediment in these products. We recognize that sediment transferred on felt products is only one of many vectors for the transmission of invasive species but it is a significant vector, and one that can and should be addressed through regulation.

Both Dave Kumlien of Trout Unlimited and the Whirling Disease Foundation and I look forward to participating in the committee discussions which take place on this proposal. We hope the Board once again sees the virtue of this regulation and passes it for implementation on a statewide basis.

Thank you,

A handwritten signature in black ink, appearing to read 'Mark Kaelke', written in a cursive style.

Mark Kaelke
SE Alaska Project Director

* Gates, Horton et al. Movement of Sediment by Anglers and the Implications for Transporting Aquatic Nuisance Species. Wild Trout Symposium IX. Montana, 2007.

ATTN: Board of Fish Comments
Boards Support Section
Alaska Department of Fish & Game

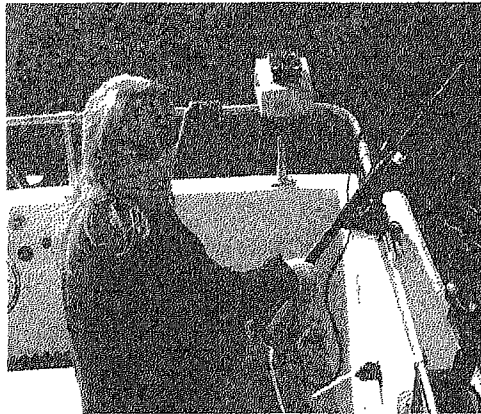
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February 28, 2010

Re: Proposal 180

I am writing to voice my support of Proposal 180. I am a disabled person who lives to fish. In spite of a progressive neuromuscular disease, I am, so far, still able to catch large salmon by resting the pole on the tops of the boat rail and laying my upper body over the reel to stabilize it, while I reel for dear life. My husband has 2 electric reels on board, but they add extra weight and are not designed for salmon fishing- it would be near impossible to use them to play a salmon while they run, jump, and dart in all directions. But I simply could not catch a halibut, or any bottom fish, even a small one, without the aid of an electric reel. I cannot reel up 260 foot or more of weighted line, especially while supporting all that weight on the rod trying to pull a halibut off the bottom. It does not help me catch more halibut, it only assists me in reeling up the ones that I do catch. The definition, as written, describes perfectly the electric reels I use for bottom fishing. I have included a picture taken while halibut fishing. I am not playing a fish at the time it was taken, so my hands are not in the position I would use for bringing up a fish. I have to change positions and grip of my hands when I can, because of arthritis.

But this proposal does not just effect disabled persons. When my children were younger, they were only able to bring halibut up with the help of the electric reels, and my husband is a Charter boat operator who has many very elderly and/or infirm clients, as well as children, who also would never be able to enjoy bringing up a halibut with out the aid of an electric reel. Without these reels, many sports fishermen will be unable to bottom fish, not just charter clients who are disabled, or very young, or very elderly.



Re: Proposal 181

I oppose this proposal as inaccurate & inadequate. Proposal 180 is a much better definition of the electric reels I and other disabled persons and also elderly or very small or young sport fishermen use.

Thank you for your time,

Lorita A. Leighton

Lorita Leighton
PO Box 5175
Ketchikan, Alaska 99901

ATTN: Board of Fish Comments
Boards Support Section
Alaska Department of Fish & Game

February 28, 2010

Re: Proposal 182

I oppose Proposal 182 for two reasons:

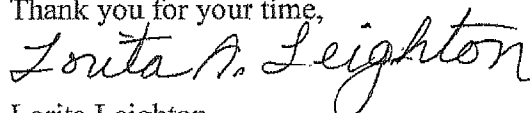
1. As a disabled person, I object to having to prove my disability in order to use an aid to fish, which itself is already embarrassing enough for me. I am disabled according to the Social Security Dept.-I receive SSI, but the only thing I have in writing to prove that, is copies of my bank records showing the direct deposit I receive monthly. I also have a 17 pg court document related to child support modification which mentions my permanent and progressive disability- am I to bring along these documents with my account numbers and other private information on our boat with me every trip? The only other documentation of disability I have is my Handicapped Sticker for my car- am I to bring it on the boat and park a block or more away instead of parking in a handicapped spot?
2. But this proposal does not just effect disabled persons. When my children were younger, they were only able to bring halibut up with the help of the electric reels, and my husband is a Charter boat operator who has many very elderly and/or infirm clients, as well as children, who also would never be able to enjoy bringing up a halibut with out the aid of an electric reel, as they cannot reel up 260 foot or more of weighted line, especially while supporting all that weight on the rod trying to pull a halibut off the bottom. It does not help catch more halibut, it only assists in reeling up the ones that you do catch. It also does not help you catch bigger fish- using these reels, I still cannot bring up a halibut larger than 45-60lbs, because you still have to lift the rod up and the halibut below off the bottom and to the surface. And they are not designed for salmon fishing- it would be near impossible to use them to play a salmon while they run, jump, and dart in all directions, especially with the extra weight added. Without these reels, many sports fishermen will be unable to bottom fish, not just charter clients who are disabled, or very young, or very elderly. I guess the author of this proposal believes that only big, strong, burly men should be allowed to catch halibut! Does the same apply to taking your young son deer hunting- if he can't pack his own deer out by himself, he shouldn't be allowed to hunt?

Proposal 183

If the author of this proposal had ever fished using the electric reels I use (aptly and accurately described in Proposal 180), he would know how slow and cumbersome they are, and that all they do is reel for you (slowly, with no control over the speed). They do nothing for control of the fishing rod. They don't even level the playing field- much less give you any advantage over an able-bodied fisherman. How many hundreds of thousands of dollars would the author have the Department waste on unnecessary studies? Again, I guess the author of this proposal believes that only big, strong, burly men should be allowed to catch halibut!

And by the way, charter clients already have bag limits in place restricting their catch, hardly "allowing them to catch more than they could eat".

Thank you for your time,



Lorita Leighton
PO Box 5175
Ketchikan, Alaska 99901

Curran Comments

page 1 of 3

Mr. Vince Webster
Chairman
Alaska Board of Fisheries
Juneau, AK

Re: Statewide Finfish Proposals
Support: 175, 177, 182, 188
Oppose: 174, 180, 181,

February 28, 2010

Dear Vince,

I am writing to give my support for Statewide proposals 175, 177, 182, and 188 and my opposition to proposals 174, 180, 181, and 190. I will focus my written comments on the general topics of electric reels and sablefish bag limits and trust that the Board will read these with an open mind.

Electric Reels: Support 182, Oppose 180 and 181

The Board has the opportunity to continue to lead the nation in forward thinking management of fisheries resources by supporting Proposal 182, prohibiting the use of electric reels while sport fishing (unless handicapped). The Sitka AC is made up of a diverse group of individuals, including charter fishing, guides, and sport fishermen. They unanimously supported this proposal. Please consider the public process involved in generation of this proposal and support this community effort.

I refer you to Tad Fujioka's excellent comments about this issue. It is not necessary to provide recreational anglers tools to make sport fishing effortless and efficient. Sport-fishing first and foremost should provide recreation. Allowing sport anglers access to deep water without any effort on their part changes the very nature of the fishery and provides increased pressure and unknown impacts to deep waters species. The charter halibut fishery in area 2C is already well over quota. Providing them additional tools to take fish in deeper water will exacerbate this issue that the federal government and state managers seem unable to control.

The Board generated a proposal (177) to limit the bag limit of thornyhead to 1 fish per day and one fish in possession, which I support. Like sablefish, this is a deepwater fish that can only be consistently accessed by electric reels or other commercial type gear. Allowing electric reels as a "sport" gear is contradictory to the concerns addressed in the Board Proposal. Other species accessed by electric reels are fish that have not traditionally been a sport fish because of their inaccessibility to hand cranked gear: sablefish, slope rockfish, grenadier. Some of these species are very valuable to the commercial fishery and are in a declining stock trend while others have unknown stock levels and are prohibited from targeting by commercial fisheries.

There is in excess of 100,000 sq miles of seafloor available to anglers inside the 200 fm contour. Is it really necessary to allow access to all water depths in the quest for recreation? When sablefish and halibut are in high abundance fish are available to anglers in shallower depths.

Finally, if the Board makes the short-sighted decision to allow electric reels as sport gear I request that they limit the use of this gear to residents. Nearly all of the charter fishermen in Southeast Alaska are non-resident, surely their vacation experience would not be negatively impacted by the requirement to be sporting and use hand-cranked gear. At the Sitka Advisory Committee we heard that Jack Lorrigan's Haida grandmother, Mrs. Blanche Isaacs Ohneck, used a hand cranked Penn reel to fish for sablefish from her whaler, even though her hands were severely injured from burns and she was in her seventies. I'm sure anglers who knew of this extraordinary woman would take pleasure in trying to duplicate her Alaskan methods rather than standing around with their hands in their pockets waiting for an electric motor to return their fish from the depths.

Sablefish Bag Limits: Support Proposal 175

I urge the Board to put aside the polarization that surrounded this issue last spring and carefully consider the facts regarding sablefish.

Fact: A daily bag limit 2 and an annual limit of 4 are consistent with Board policy on a wide range of species that are high value and/or vulnerable species. Sablefish are the most valuable commercial groundfish managed by the state of Alaska. Halibut, king salmon, lingcod, yelloweye, and shark all have daily bag limits of 1 or 2 fish per day and several have annual limits of 3 or less.

Consider that the Board generated a proposal (177) to limit thornyhead rockfish to **1 fish per day** and one in possession because - "*they are one of the longest-lived fishes in the world...females can live up to 45 years. The Board seeks to establish "bag and possession limits that provide for a reasonable level of angling opportunity and harvest while at the same time providing for protection against high levels of harvest that could be harmful for the stock"*.

Fact: sablefish also are one of the oldest fishes in the world (Alaskan sablefish have been aged to 94 years).

Fact: The stock is in serious decline, even in the face of very conservative management of the commercial fishery. Likely this is a natural decline due to recruitment weakness as it is occurring in areas throughout the North Pacific but it has a serious impact on the resource and the historic commercial fishery none the less. The Department comments are disappointing in what they do not reveal. Last month the SE Groundfish staff held permit holder meetings discussing the Chatham Strait sablefish fishery and said that an independent review of their assessment underscored the low stock condition, possibly as low as B_{17%} and that they would likely be significantly reducing the harvest rate yet again. This fishery is already managed at B_{45%} one of the most conservative harvest rate policies in the country. The NMFS assessment scientists are projecting further declines (beyond the 36% Gulfwide decline seen since 2005) even if there is average recruitment, with serious declines in a poor recruitment scenario.

At the February and March 2009 meetings the staff would not estimate the sport harvest but there was much discussion about it being insignificant (creel data indicated 7 fish had been taken). The assessment staff utilizes a 3% deduction for **all** sport harvest, subsistence harvest, and unknown bycatch with most of this deduction attributed to the long standing subsistence harvest.

Curran Comments

page 3 of 3

Now staff comments reveal self-reported charter catch for 2009 as being 3,844 in Southeast Alaska with 81% of this coming from 4 facilities. At a 10 pound average this is 3.5% of the 2009 commercial quota of 1.07 million pounds and is equivalent to more than 2 equal quota shares in the commercial fishery. Given that the commercial quota is likely to fall yet again next year the Board is allowing a new fishery, primarily fished by nonresidents, to substantially impact a hundred year old fishery, primarily fished by residents. This is counter to the Board's own allocation criteria. Remember that all of the data collected from this fishery is self-reported and unverifiable. Can we really afford to allow this fishery to develop in a declining stock condition without accurate catch accounting? Simply requesting this information on charter logbooks does not solve the problem.

Two other things to consider in the statewide discussion of sablefish bag limits:

The commercial fleet pays for the stock assessment of sablefish in state waters through deduction of the test fish take off of the commercial fishery quota. If the charter fishery is allowed to access this resource through liberal bag and annual limits they should help to pay for the assessment either through a sablefish stamp, similar to salmon (which would also aid in catch accounting), or through adjustment of their bag limits downward based on the reduction from test fish – in 2009 that adjustment was nearly 11% of the commercial quota.

The Gulf of Alaska fishery is managed through Individual Fishing Quotas. Any sablefish taken from federal waters is subject to Federal management and there is no provision for this take under the current IFQ program. Any reporting requirement for sablefish must also detail where the fish is taken by commercial fishery management areas, not just state sport fishery designation areas.

I urge the Board to adopt proposal 175, developed through public process by the Sitka AC. It provides ***“reasonable level of angling opportunity and harvest while at the same time providing for protection against high levels of harvest that could be harmful for the stock”***.

In closing I hope the Board can look to the future while deliberating and make decisions now that will carry us forward into the future with sound management and use principles statewide. Please don't continue to provide unreasonable opportunity in means, methods, and bag limits for our valuable resources – banning electric reels and establishing a 2 fish bag limit for our most valuable groundfish species will go a long way to providing for a sustainable future and access to resources by anglers into the future.

Sincerely,




Richard Curran
Sitka Alaska
CC Cora Crome, Governor's Office

RECEIVED
MAR 01 2010
BOARDS

Subject: commercial Dungeness fishery.

After reading the article in the Ketchikan daily news I also am in agreement with Mr. Ronald Leighton , I am a long time resident of Ketchikan Ak
And am now also experiencing difficulty locating Dungeness crab ,
Example the carrol inlet area had a large amount of crab and the local residents
Had no problem obtaining crab, after the commercial crab fishery opening
Was over there was nothing left good luck trying to find crab there now .
I know that the commercial fisherys is important to people who work in the industry
But the seafood is so depleted by over fishing the local residents can not even
Get any and the areas such as kasaan and around Ketchikan should be closed for
Commercial fishing for awhile to allow the crab to replenish.

Dennis Such FEB. 2010





RECEIVED
MAR 01 2010
BOARDS

28 February 2010

ATTN: BOF COMMENTS
Boards Support Section
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, AK 99811-5526
Delivered via Fax: 907-465-6094

RE: Recommendations on 2010 Statewide Finfish Proposals

Dear Chairman Webster & Board Members,
The Southeast Alaska Guides Organization, (SEAGO) represents charter operators, lodges, and our angler customers throughout the region. Our mission is to promote the tradition of sport fishing in Southeast Alaska through reasonable regulations that ensure the long-term sustainability of our fisheries and businesses.

We are commenting on proposals (see attachment) that either directly affect the overall health of the resource or our industry. In addition to ensuring the sustainability of our fisheries, we believe that it is important to fully understand the economic contribution and different business models employed by various user groups and to craft regulations that optimize the economic value of Alaska's resources for the greater good. Sportfishing in Southeast hosts 100,000 anglers each year and makes a substantial contribution to the communities where we live and work by adding \$300M in economic value and creating 3,000+ jobs annually. We respectfully request that the Board of Fisheries consider these proposals based on both sound science and financial facts.

We appreciate your commitment to ensuring that Southeast sport and guided sport anglers continue to have fair access to the resource. SEAGO welcomes the opportunity to work with all stakeholders to arrive at decisions that are in the best economic interests of our communities, the sustainability and conservation of our fisheries, and towards preserving Southeast Alaska as a premier sport fishing destination. You have SEAGO's pledge to work constructively to that end.

Thank you for taking our recommendations into consideration.

Sincerely,

A handwritten signature in black ink that reads "John A. Blair".

John A. Blair
Executive Director
925-366-6638
john@seagoalaska.org

//attach

p. 1



Attachment – SEAGO Recommendations on 2010 Statewide Finfish Proposals

SEAGO offers the following recommendations listed below. We may also wish to provide additional information via public testimony and Recorded Comments during the BOF meeting in Anchorage in March.

<u>Proposal</u>	<u>Recommendation</u>
164	<p>OPPOSE <i>Unlawful Possession of Subsistence Finfish</i> We understand the desire to stop reported abuse of selling subsistence or personal use fish but we don't see how this proposal could be enforced. For example, how could species determined or number of fish be counted once processed? Reclassifying commercially-caught fish as subsistence fish appears to be counter to current statutory language.</p>
165	<p>OPPOSE <i>Delay opening personal use fishery until escapement goals met</i> ADF&G should retain management flexibility to use best science in determining when the fishery should open. Current Emergency Order management tools are satisfactory to meet established escapement goals and harvest objectives.</p>
166	<p>OPPOSE <i>Eliminate requirement to have a sport fishing license to fish in personal use fisheries</i> The sport fish license requirement provides the state with both enforcement capability and funding for management of personal use fisheries.</p>
169	<p>OPPOSE <i>Amend criteria for allocation of fishery resources</i> We oppose this regulation because it reduces flexibility of managers to exercise sound judgment in their decisions and the intention of the proposal is already addressed in Emergency Order authority.</p>
170	<p>OPPOSE <i>Clarify regulations establishing escapement goals</i> We oppose this regulation because it reduces flexibility of managers to use best science and sound judgment in their decisions and the intention of the proposal is already addressed in Emergency Order authority.</p>
171	<p>OPPOSE <i>Clarify escapement goals and establish ranges</i> We oppose this regulation because it reduces flexibility of managers to exercise judgment in their decisions and the intention of the proposal is already addressed in Emergency Order authority.</p>



- 172** **SUPPORT**
Provide definition for escapement goal thresholds
We support this proposal to clarify establishment of lower bound sustainable escapement goals to distinguish between a SEG range and a lower bound SEG.
- 175** **OPPOSE – (amendment proposed)**
Establish bag limit for sablefish
No sport fishing conservation issues have been quantified to warrant approval of this proposal.
- Sablefish quotas were addressed twice in 2009, first at the February BOF meeting in Sitka, and then again at the March BOF meeting and follow-up conference call in April. Through this process, the BOF established extremely conservative sport fish harvest regulations in Southeast for the first time.
- 2009 was the first year that sablefish data was collected for sport fish sector. Partial season estimates of sport caught sablefish indicate a catch of less than 1.0% of the total catch and therefore have a de minimus impact on this fishery. We recommend that no final action be taken on sport allocation of sablefish until adequate data on catch rates are accumulated and a thorough economic analysis is completed to determine optimal allocations between sectors.
- Alternative Language – Very conservative initial quotas were established in 2009 to ensure conservation of the fishery and because there was insufficient historical sport catch information upon which to base a realistic quota. As first year data showed minimal sport harvest of sablefish we believe it is prudent to assess sport market demand through a change in catch parameters. Information gained from an additional data point will be very valuable when establishing future quotas. As an interim measure, we support alternative language to rescind resident limits, and establish nonresident limits as follows: daily bag limit 8; possession limit 16, and an annual limit of 16.
- 176** **SUPPORT**
Increase bag limit for spiny dogfish
No known conservation issue exists with this fishery. Liberalization of the bag limit would provide increased harvest opportunity but is unlikely to harm the stock because there is little recreational demand.
- 178** **SUPPORT**
Clarify emergency order authority
This as an ADF&G housekeeping proposal with clarification edits. We support this proposal to resolve internal inconsistencies in emergency order authority wording.



- 179** **OPPOSE**
Clarify emergency order authority
 We oppose this regulation because it reduces flexibility for managers to exercise judgment in their decisions and the intention of the proposal is already addressed in Emergency Order authority.
- 180** **SUPPORT (as amended)**
Define electric fishing reel
 As long as terminal gear is consistent with state sport regulations and bag and possession limits are adhered to, there is no reason for regulating the type of gear used to deploy and retrieve baits and fish.
- Alternative Language - We support this proposal with two wording changes:
 a) The weight restriction should apply to the reel and attachments up to the first power cord disconnect and should not include the weight of power source and cabling. This modification is required for setups where the electric reel is powered by boat power or other non portable sources.
 b) Reference to line guides should be changed to read: "one or more line guides".
- 181,**
182,
183 **OPPOSE**
Prohibit use of electric reels
 There is no conservation basis for these proposals and we consider them an unnecessary restriction. Proposal 180 is the preferred alternative.
- 184** **SUPPORT**
Prohibit use of felt soled wading boots
 This proposal will reduce the probability of introduction of non-native invasive organisms.
- 185** **SUPPORT**
Clarify Use of underwater spear
 We support clarification language offered by ADF&G
- 186** **OPPOSE**
Clarify Use of underwater spear
 Preferred language is found in proposal 185 submitted by ADF&G
- 187** **OPPOSE**
Allow use of bait by disabled anglers
 Special provisions are necessary for disabled anglers, but not this proposal.
- 188** **SUPPORT**
Modify halibut regulations to be consistent with federal regulations



This is a housekeeping change submitted by ADF&G to make state and federal regulations consistent.

189

OPPOSE

Require a client-guide agreement for each client on a sport charter trip.

We believe that this proposal would conflict with existing law. Current laws require a charter operation to be run by a licensed guide. We are aware of no enforcement or customer service issues with current laws. This proposal attempts impose solutions to a non-existent problem. The author offers no quantitative information to support his argument nor justification for added costs that would be incurred by both charter operators and AWT enforcement officers. Further, this proposal would place unnecessary restrictions on successful business models currently in place.

190

OPPOSE

Allow crew members to retain fish when clients are onboard

This is a way around bag limits restrictions, would reverse the state's position, and be in violation of Federal regulations on halibut.

191

OPPOSE

Define official time for sport fisheries

We are not aware of any enforcement issues so see no need to establish a regulation where no problem exists.

**Mr. Vince Webster, Chairman
Alaska Board of Fisheries
P.O. 25526
Juneau, Alaska 99802-5526
Fax number 1-907-465-6094**

**RECEIVED
MAR 01 2010
BOARDS**

Re: support repeal of the 58ft salmon seine vessel limit, Proposal #168.

Dear Chairman Webster and Board Members:

I recently sold my 58ft wooden Alaska salmon seiner (F/V "New York") and would like to purchase a replacement and go fishing. I have enclosed the recent sales sheets from Dock Street Brokers which shows seine vessels for sale and prices. Some vessels over 58ft are available but I cannot consider those because of the 58ft rule limiting the length of vessel in Alaska salmon seine fisheries.

Some are saying there will be a loss in value of boats less then 58ft if the restriction were taken off salmon seine vessels. Looking at the vessel list I see no correlation between prices and length. Price depends on design, construction materials, engine type, electronics, capacity, use, upkeep, etc. not length.

Others are fishing wide body 58ft vessels. But, I cannot purchase a vessel longer then 58ft, that's smaller in capacity (because it's not as wide.) and go fishing. This makes no sense.

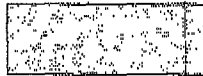
Regards,

Arnold Burke

1541 Madison Ave.

Blaine, WA. 98230





Dock Street Brokers



Member Email: _____ REGISTER ?
Password: _____ Login ?

206.789.5101 / 800.683.0297 / info@dockstreetbrokers.com

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1 - 23 of 23

Seiners

Vessels for Sale:



SE10-001 Seiners \$100,000
 Year: 1920 Length: 58 Hull: wood Builder: Babare Bros. Location: Washington
 58'x16'x7' seiner built in 1920 by Babare Bros. GM 8V71 rated at 300 hp. Isuzu G240 auxiliary dedicated to hydraulically run the RSW and circulation. (2) 7.5 ton compressors and a new 15 ton titanium chiller. 50,000 # capacity, 26" Vitek power block, deck winch, Tulsa #12 and a PL4 boom winches. ComNav 1001 autopilot, new 26 mile radar, color sounder, (3) VHF, 3000 watt inverter. Great starter boat for seining. Asking \$100,000



SE9-019 Seiners FEATURED LISTING! \$310,000
 Year: 1988 Length: 53 Hull: Fiberglass Builder: Beck Location: Alaska
 53'x15'x4' fiberglass seiner built by Beck in 1988. Luger 6125A 440 hp main with 200 hours, Twin Disk 509 gear, John Deere 20kw aux. Packs 45,000 lbs in RSW, 15 ton IMS system. Fully rigged for seine with twin picking booms and slider on main boom. 1200 gallons fuel and 300 gallons water capacities. Electronics include VHF, SSB, CB, GPS, plotter, radar, sounder, (2) sounders, and auto pilot. Asking \$310,000.



SE9-017 Seiners \$50,000
 Year: 1971 Length: 41 Hull: Fiberglass Builder: Rawson Location: Alaska
 41'x13.5'x3' fiberglass seiner built by Rawson in 1971. GMC 6V-53 200 hp main with 2000 hrs. Borg Warner 2:1 gear. Packs 28,000#. Rigged for seine with dual picking booms. Electronics include GPS, VHF, SSB, radar, sounder, and plotter. Asking \$50,000.



SE9-016 Seiners \$190,000
 Year: 1945 Length: 58 Hull: Wood Builder: Sterling Location: Alaska
 58'x15.5'x6' wood seiner built by Sterling in 1945. Cummins NT335 235 hp main with 700 hours on rebuild. Twin Disc 514 Gear, Packs 50,000# in RSW. Heavy duty Pilkington purse winch and 28" power block. Electronics include (3) VHF, (2) SSB, (2) radar, sounder, and plotter. Seller will deliver vessel. Asking \$190,000.



SE9-015 Seiners FEATURED LISTING! \$150,000
 Year: 1977 Length: 42 Hull: Fiberglass Builder: Delta/LeClercq Location: Alaska
 42'x14' fiberglass top house seiner built by Delta/LeClercq in 1977. Detroit 6-71 220hp main with Twin Disc 509 gear. Northern Lights 8kw aux. Aluminum rigging with crows nest, topping, vang, picking, and main boom winches. Electronics include SSB, (2)VHF, TRAC phone, radar, GPS, Nobelsch, and (2) sounders. Asking \$150,000.



SE9-014 Seiners \$68,000
 Year: 1974 Length: 38 Hull: Fiberglass Builder: Delta/Ray Wadsworth Location: Alaska
 38'x12.9' fiberglass Delta top house seiner finished by Wadsworth in 1974. John Deere 6068 200 hp main with 4,000 hours since new, Twin Disc 507 gear. Completely rigged for seining with vang, topping, slider, picking boom winches, and capstan. Electronics include GPS, (2)VHF, radar, sounder, plotter, and auto pilot. Asking \$68,000.



SE9-011 Seiners FEATURED LISTING! \$180,000
 Year: 1971 Length: 56 Hull: Steel Builder: Thomas Millicheap Location: Washington
 56'x17.5'x8.5' combination seiner/crabber built in 1971 by Thomas Millicheap. Cummins 300 hp main. Twin Disc 511 reduction gear. Cummins 4 BD1 auxiliary dedicated to hydraulics. Extensive refit in the last year with a long list of upgrades including all new aluminum rigging, top house, new hydraulic hoses, new safety equipment and new steering system including hoses and pump. Spousing was done in 1990 with 2 feet added on each side. Bow thruster. Electronics include Furuno GP 35 GPS, Dell computer, Furuno 24 mile daylight radar, Furuno color sounder and a ComNav autopilot. Price reduced to \$180,000.



SE9-007 Seiners \$450,000
 Year: 1989 Length: 48 Hull: Fiberglass Builder: Le Clercq Location: Alaska
 48'x15' fiberglass seiner built by Le Clercq in 1989. Luger 6140 600 hp main with 19,500 hours. ZF 195 3:1 gear. Isuzu 20 KW aux. Packs 44,000 lbs with 36,000 lbs in RSW. Fully rigged for seine with trolley, gripper power block, vang, self pursuing, and dual picking booms. Electronics include: SSB, 2-meter,

(2) VHF, Trac Phone, radar, (2) sounders, GPS, Nobeltec, Micro Commander controls, and Comnav autopilot. Current survey with documented upgrades since 1997. Asking \$450,000.



SE9-006 Seiners
 Year: 1979 Length: 48 Hull: Fiberglass Builder: Delta Marine
 Location: Alaska

FEATURED LISTING \$630,000

48'x15'x8' enclosed tophouse Delta, built in 1979. Rigged for seining, longlining, and pot fishing. Cat 3406 main installed new in 2006. Twin Disc 514 gear. 40 kw Isuzu generator installed new in 2006. Integrated Marine 18 ton RSW system installed new in 2006. Aluminum wave wall, Kolstrand deck winch. Electronics include a ComNav auto pilot, Furuno FCV-292 color sounder, Furuno radar, Furuno GP-30 GPS and laptop with Nobeltec navigation program. Package includes Area M seine permit, seine and skiff. Asking \$630,000.



SE8-014 Seiners
 Year: 1990 Length: 52 Hull: Fiberglass Builder: Hansen Location: Alaska

\$785,000

52'x17'x7' fiberglass seine/crab/longline vessel built by Hansen in 1990. Lugger 6140 main, 550 hp with 5,100 hours. New Twin Disk 5114 gear. Bow thruster. 45/35 hydraulics. New Yanmar 98T 40 kw gen set. Packs 75,000# in two holds with 20 ton RSW with electric soft start. Flush deck equipped for seine and pot fishing with davits, deck winch, vanging, pot launcher, and Yaquina block. Electronics include GPS, VHF, SSB, computer, radar, (2) sounders, plotter, (2) sonars, sat phone, sat compass, and auto pilot. Asking \$785,000.



SE9-005 Seiners
 Year: 1989 Length: 54 Hull: Fiberglass Builder: LeClercq Location: Washington

FEATURED LISTING \$695,000

54'x15.5'x7' whaleback shallow draft seiner built by LeClercq Marine in 1989. Vessel was converted to tuna trolling in 2007. New twin 330 hp QSL 9 Cummins mains and ZF gearboxes with only 750 hours. Isuzu 20 kw genset. Deck winch, Kolstrand power block, picking booms, tuna pullers, tuna poles and a new spare set of propellers. 10 ton Cold Sea RSW system. 40,000 # capacity. Aluminum grab rail around the bulworks. 1,500 gallons fuel capacity. Full compliment of electronics including Furuno sonar, Dell laptop with ECC globe navigation system and Mitsubishi satellite phone. Also included is a Brown skiff with a 250 hp Yamaha outboard. First class vessel with many recent upgrades. Asking \$695,000.



SE9-003 Seiners
 Year: 1978 Length: 50 Hull: Steel Builder: John Manly Shipyard Location: British Columbia

\$380,000

50'x17'x10' steel seiner built in 1978 by John Manly Shipyard in Canada. Cat 3406 main rated at 350 hp. Twin Disc 514 gear. 5" shaft new in 2004. Isuzu auxiliary dedicated for hydraulics. 25 ton capacity in two tanks. Bow thruster. 3.2 kw inverter. Galvanized steel rigging. Electronics include ComNav auto pilot, Furuno radar, sounder, (3) VHF's and a SSB. Asking \$380,000 Canadian.



SE8-005 Seiners
 Year: 1989 Length: 58 Hull: Steel Builder: CandL Boat Works Location: California

\$1,100,000

58'x22'x9' steel whaleback Jensen design seiner, built by C and L Boat Works in 1989. Cummins main rated @ 500 hp, Twin Disk 5:1 gear w/ 5" shaft. Cummins 100 kw (rebuilt in 2006) and Isuzu 20 kw gen sets. Pullmaster boom winches. No deck gear. Packs #120,000 in two holds with RSW. 9.5 knot cruise. Redundant electronics. Super clean, well-maintained vessel. Asking \$1,100,000.



SE8-021 Seiners
 Year: 1972 Length: 58 Hull: Steel Builder: Marine Power Location: Washington

\$495,000

58'x17.5'x10' steel combination seiner/longliner, built in 1974 by Marine Power. Cummins KTA19-M3 rated @500hp. Isuzu 55kw generator, Northern Lights 20kw generator. 25 ton IMS RSW system with a titanium chiller. New stainless plumbing for hydraulics on the back deck. Packs 100,000 pounds in three tanks. Redundant electronics. Bulbous bow. Excellent set up for seining, beamy house makes the boat a good candidate for sponsoning. Price reduced to \$495,000.



SE8-020 Seiners
 Year: 1981 Length: 42 Hull: Fiberglass Builder: Delta Location: Alaska

\$125,000

42'x14' Delta/LeClercq seiner built 1981. GMC 8V71. 325 hp, rebuilt 1999. Good electronics including VHF, SSB, 48 mi. Furuno, sonar, plotter, watch alarm, and more. Aluminum rigging w/crows nest. Price reduced to \$125,000.



SE8-019 Seiners
 Year: 1976 Length: 62 Hull: Aluminum Builder: Matsumoto Location: British Columbia

\$450,000

62'x18'x9.2' aluminum Canadian seiner, easily modified to 58', built in 1974 by Masumoto. 365 hp 343 Cat w/ 8,000 hours. Twin Disk 514 gear. Twin Disc PTO. Nissan auxiliary dedicated to hydraulics w/3,000 hours with PTO. Kohler 12.5 kw generator. Seine drum, self-pursing deck winch and Pullmaster boom winches. Full electronics package including (2) sonars. (3) fish holds with 55 ton capacity. 15 ton RSW system completely rebuilt in 2006. 26" bow thruster. Salmon seine and too much to list, included. Asking \$450,000. All offers considered!



SE8-012 Seiners
 Year: 1979 Length: 69 Hull: Aluminum Builder: Shore Boat Builders Location: British Columbia

\$850,000

69'x20.1'x7.6' aluminum drum seiner built by Shore Boat Builders in 1979. Cat 3406 main, Twin Disc 514C gear. 10-knots at 13 gph, Isuzu 6 cyl aux with PTO and double hydraulic pump. Kubota 13kw aux

for ship power. Packs 75 ton in (4) fish holds. Stainless plumbing. Currently rigged for drum seine. 26' bow thruster. Complete electronics package including sonar. Very well maintained and in great condition. Asking \$850,000.



SE8-015 Seiners \$510,000
 Year: 1979 Length: 58 Hull: Aluminum Builder: Shore Boat Builders Location: British Columbia
 58'x18'x9' aluminum seiner built in 1979 by Shore Boat Builders. 3408 Cat main rated at 365 hp. Twin Disc 514 gearbox. Isuzu auxiliary dedicated for hydraulics. 80,000# capacity in 4 insulated fiberglass tanks. Pilkington self pursuing deck winch. 14 piston drum with tilt stern ramp. Electronics include Furuno GP 32 GPS, (4) VHF's including Icom 601, Kenwood GSB, LG 52X computer with Nobeltec charting software, Sitex and Furuno radars and Furuno CH 250 sonar. Power skiff available. Asking \$510,000.



SE8-001 Seiners \$925,000
 Year: 1979 Length: 58 Hull: Fiberglass Builder: Delta
 58'x20'x9' fiberglass seiner built by Delta in 1979, 3408 CAT main majored in 2000, 12,000 hours, Twin Disk 514 gear, Isuzu 20 kw and 65 kw gensets. Packs 120,000# in fish hold with new 30 ton RSW system. Drum, ramp, and replaceable stern section. New electronics, including Furuno 270 sonar. Very clean and extremely well maintained. Vessel is in top condition. Asking \$925,000



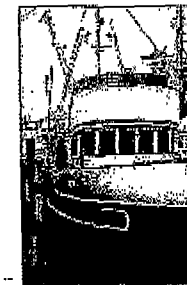
SE6-017 Seiners \$100,000
 Year: 1980 Length: 37 Hull: Aluminum Builder: Leslie G. Christensen Location: Alaska
 37'x13'x5' aluminum seiner built in 1980, GM 8V53 main with Twin Disk gear. Includes seine, seine block, skiff, and 40 skate LL reel with levelwind. Electronics include Furuno radar and sounder. Kodiak seine permit included. Asking \$100,000.



SE6-016 Seiners \$799,000
 Year: 1982 Length: 58 Hull: Fiberglass Builder: Delta Location: California
 58'x19.5'x10' Delta seiner built in 1982. Cat 3408 main with Twin Disc 514 gear, John Deere 4038TA aux. Rigged for California squid/sardine fisheries with skiff, nat drum, power block, self pursuing winch, and squid seine. Electronics include GPS, VHF, GSB, (2) radar, sounder, auto pilot, and sonar. Call for survey. Price reduced to \$799,000.



SE5-012 Seiners \$150,000
 Year: 1917 Length: 56 Hull: Wood Builder: Unknown Location: Washington
 56' x 14' x 5.6' wood seiner built in 1917. Rigged for seine, longline and tuna. GMC 8-71 main w/ Twin Disc 514, 3600 hours on rebuild. Packs 38,000 pounds in RSW/spray brine. 18 ton IMS chiller. Full electronics including Comnav AP. Major hull work completed in 1989. Aluminum bullwarks new in 2003. Well maintained boat. Lots of gear. Asking \$150,000 for boat, skiff and gear. SE seine permit available at market price.



SE7-015 Seiners \$150,000
 Year: 1924 Length: 62 Hull: Wood Builder: Anderson Location: Washington
 62'x16.2'x7.1' wood drum seiner, built 1924 by Anderson, new enclosed tophouse, 300 hp GMC 8V71, Nice drum setup, new main boom. Complete rewire 1998. Topping lift, 4 boom winches. 2 radars, sounder, vhf. Lots of recent woodwork incl. all new planking above waterline, all new ribs, new deck on bow in 2001. Nice boat. Includes 19 ft. Alfab seine skiff w/6V53 GMC with 600 hrs. on rebuild and rewire, and Puget Sound seine. \$150,000 takes all. Bring offers.



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Dennis M. Zadra
PO Box 2348
Cordova, Alaska 99574

March 1, 2010

Alaska Department of Fish and Game
Boards Support Section
PO Box 115526
Juneau, AK 99811-5526

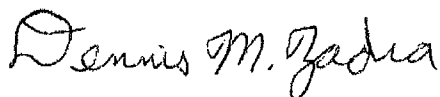
Dear Board of Fish Members:

I have been a commercial fisherman in almost all areas of the State for the last 21 years, and have gillnetted on the Copper River for the last 18 years. I have built a good business direct marketing my Copper River Salmon, and my ability to support my family depends on these fish. I have seen a great deal of mis-information and judgment placed on commercial fishermen on the internet (chitnadipnetters.com), and other places. We are not a bunch of overpaid people taking advantage of Alaska's resources. I live in a trailer and work hard 12 months of the year to pay the bills. These fish do not just feed my family, they keep the lights on and put fuel in the pickup. They are vital to the economy of the entire town of Cordova.

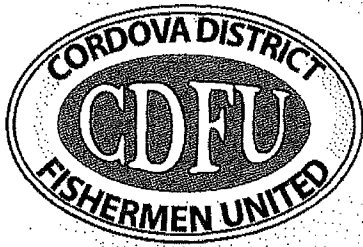
Reclassifying the Chitna Personal Use Fishery as a Subsistence Fishery would be a huge disservice to the true subsistence users of the State. It is also wrong for the commercial charter operators to use this venue to increase the financial gain of their own businesses, transporting dipnetters. The sustainability of this resource should be the responsibility of all users which will not happen if Chitna Subdistrict is reclassified as subsistence. This will do nothing to help the sustainability and long term health of the resource, but will greatly hurt the commercial fishing families and the town of Cordova.

Thank you for your time.

Sincerely,



Dennis M. Zadra



Cordova District Fishermen United
PO Box 939 | 509 First Street | Cordova, AK 99574
phone. (907) 424 3447 | fax. (907) 424 3430
web. www.cdfu.org | email. cdfu@ak.net

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MAR 01 2010
BOARDS

March 1, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526

To the Board of Fisheries,

Re: OPPOSE PROPOSAL 164 - Unlawful Possession of Subsistence Finfish

I am writing on behalf of the Cordova District Fishermen United drift gillnet membership.

The commercial fishery has the most stringent reporting requirements in place to accurately record catch data. Finfish harvested by commercial fishermen and retained for a person's own use must be documented on ADF&G fish tickets. These fish tickets must include the date and location of when and where the fish were retained, along with the type species of finfish and the number finfish per species retained for "Home Pack". It does not make sense that a fisherman would elect to record fish as Home Pack and then sell those same fish commercially. If this were the case, wouldn't it make more sense for fishermen to simply record those fish as commercially caught finfish in the first place, then sell to a processor?

In addition to the overlying misconceptions documented in the proposal and the fact that it simply does not make sense, the following areas were identified as problematic:

Section 3: *Only one Home Pack shall be authorized per family of two or more.* This section discriminates against Alaska residents who do not meet the State's definition of family.

Section 6: *Home Packs shall be limited to a total of 40 salmon of which only two can be Chinook Salmon.* This section places limitations on 5 AAC 39.010. RETENTION OF FISH TAKEN IN A COMMERCIAL FISHERY, which states "A person engaged in commercial fishing may retain finfish from lawfully taken commercial catch for that person's own use, including for the use as bait in a commercial fishery. Finfish retained under this section may not be sold or bartered." The limitation on the amount of fish that can be retained is unreasonable and unduly restrictive. It makes no difference whether a commercial fisherman chooses to keep or sell fish caught. One way or another, those fish have left the system and if not recorded as "Home Pack" will be sold to a processor.

Section 7: *Commercially caught salmon and salmon caught for subsistence shall not occupy*



Cordova District Fishermen United

PO Box 939 | 509 First Street | Cordova, AK 99574
phone. (907) 424.3447 | fax. (907) 424 3430
web. www.cdfu.org | email. cdfu@ak.net

the same storage or processing areas. Again, this section is unduly restrictive. Fishing vessels are not set up with multiple storage and processing options. Additionally, this section poses an enforcement issue - how will enforcement officers identify whether a fish storage area has been used commercially or for subsistence fish stock?

This proposal does not make sense, and CDFU strongly opposes it's intent.

Sincerely yours,

Eric Lian
CDFU Gillnet Co-Chair

February 21, 2010

Mr. Vince Webster, Chairman
Alaska Board of Fisheries
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526

RECEIVED
MAR 01 2010
BOARDS

Re: Support Proposal #168 repeal of the 58ft regulation.

Dear Chairman Webster and Board Members:

I own a vessel that has less capacity than today's newly built 58ft limit seiners and I cannot fish it in Alaska salmon seine fisheries. The rule came before statehood and today it has no use. Please repeal the rule.

I have a vessel longer than 58ft but its smaller than some 58ft vessels now seining salmon in Alaska. Length of vessel does not mean a "larger" vessel. When the Staff references the term "larger-sized vessels" being vessels longer than 58ft it's misleading. Their statements of "effects" that may take place if "larger vessels" were allowed are also misleading. These large vessels are in the fishery now so the effects of "larger" vessels, staff references, are already taking place.

Please take a closer look at what the definition of "larger" is. The following is how vessels are measured by the Coast Guard and why the length of a vessel is not the determining factor of "large":

Code of Federal Regulations

Title 46: Shipping

PART 69—MEASUREMENT OF VESSELS Subpart E—Simplified Measurement System

§ 69.201 Purpose.

This subpart prescribes the procedures for measuring a vessel under the Simplified Measurement System described in 46 U.S.C.

46: Shipping

PART 69—MEASUREMENT OF VESSELS

Subpart E—Simplified Measurement System

§ 69.209 Calculation of tonnages.

(a) Gross tonnage. (1) Except as in paragraphs (a)(2) through (a)(5) of this section, the gross tonnage of a vessel designed for sailing is one-half of the product of its overall length, overall breadth, and overall

depth (LBD) divided by one hundred (i.e., 0.50 LBD/100), and the gross tonnage of a vessel not designed for sailing is 0.67 LBD/100.

Chapter 145, subchapter III.

§ 69.203 Definitions.

As used in this subpart and in Coast Guard Form CG-5397 under §69.205— Overall breadth means the horizontal distance taken at the widest part of the hull, excluding rub rails, from the outboard side of the skin (outside planking or plating) on one side of the hull to the outboard side of the skin on the other side of the hull. Overall depth means the vertical distance taken at or near amidships from a line drawn horizontally through the uppermost edges of the skin (outside planking or plating) at the sides of the hull (excluding the cap rail, trunks, cabins, and deckhouses) to the outboard face of the bottom skin of the hull, excluding the keel. For a vessel that is designed for sailing and has a keel faired to the hull, the keel is included in “overall depth” if the distance to the bottom skin of the hull cannot be determined reasonably.

Overall length means the horizontal distance between the outboard side of the foremost part of the stem and the outboard side of the aftermost part of the stern, excluding rudders, outboard motor brackets, and other similar fittings and attachments.

The Simplified Measurement System comparing two vessels.



Vessel #1: $(58 \text{ (Length)} \times 25 \text{ (Width)} \times 11.7 \text{ (Depth)} \times 0.0067) = 113$ Gross Tonnage. This vessel was recently built and entered into the Alaska salmon fishery in 2009



Vessel #2: $(65 \text{ (length)} \times 22 \text{ (Width)} \times 10.5 \text{ (Depth)} \times .0067) = 100.6$ Gross Tonnage. This is my Alaska based fishing vessel that is smaller than some vessels now in the Alaska salmon seine fishery and I cannot participate because of the 58ft length limit.

Because the longer vessel is actually “smaller” is it fair to allow a “larger” 58ft vessel to purse seine Alaska salmon just because it’s shorter and not allow a smaller vessel because it’s longer? This rule is a hardship on Alaska residents who have vessels longer then 58ft and cannot use them in Alaska salmon seine fisheries. Please adopt proposal #168, repeal the 58ft salmon seine vessel limit.

Respectfully yours,

Norval Nelson

F/V “STAR OF THE SEA”

1625 Fritz Cove Rd.

Juneau, Alaska, 99802

Ryan D. Kapp
955 Colony Ct. Bellingham, WA 98229
(360)714-0882 (360)671-0209fax

February 27, 2010

To: Alaska Board of Fisheries
Mr. Vince Webster, Chair
PO Box 25526
Juneau, AK 99802-5526

RECEIVED
MAR 01 2010

Re: Support of Proposal 168
5 AAC 33.xxx. Maximum Length of Salmon Seine Vessel.

BOARDS

Dear Mr. Chairman and Board Members,

I have fished salmon and herring all over the State of Alaska and have fished many other species up and down the West Coast for the last 23 years. I would like to encourage the Board to support proposal 168 which would eliminate the 58 foot length limit on salmon seine vessels in Alaska.

The Salmon Industry Restructuring Panel submitted a report and recommendations to both the Alaska Board of Fisheries and the Alaska State Legislature (Jan. 2006). The "Goal Statement" (sec. 3.1) contains the following text:

"Within various salmon fisheries, the cost of doing business is not always supported by the market value of the production using current management approaches to harvesting. As a result, the status quo may provide an inadequate return on investments and may not provide enough capital to renew the equipment, vessels, and processing facilities needed for the commercial enterprise. In some fisheries the current management approaches to harvesting salmon may not provide the desired level of management flexibility and effectiveness. Therefore, new processes and procedures may be needed to entertain restructuring options for Alaska's commercial salmon fisheries."

Currently, the status quo salmon seine fishery in Alaska is not providing an adequate return on investment. This is evidenced by the aging of the current fleet and equipment presently used in the fishery. The salmon business is nowhere near maximizing its potential. This industry stagnation is evident in a lot of ways:

- There has been little to no innovation for product quality since RSW.
- There have been few rule changes in prosecution of the fishery.
- Average gross vessel revenue is down while expenses are up and increasing.
- It is harder to find good experienced crew members for the salmon fishery.
- Many long time participants have left the fishery.

- There have been no vessels built solely for seining for over a decade. New construction costs have increased so much that the salmon fishery alone does not produce enough revenue to encourage investment. Other fisheries such as longlining and emerging pot cod fisheries are now the economic driver of new vessel construction.

In the interest of improving profitability and economics of the salmon fishery the limitation on seine vessel length must be removed. Doing so would improve the pool of vessels available to the fishery as now there are extremely limited options available for upgrade. Additionally, it would allow for vessels to be modified by adding length to improve the vessels efficiency and safety. Allowing longer vessels allows for new ideas and exploring areas of marketing that are not possible with the current length limit.

One of the biggest obstacles to repealing this regulation is individual perceptions of what will happen if “big boats” are allowed into the fishery. The “big boats” are already there, just by different dimensions. Some are fearful of change in fisheries that have stayed the same for decades. They fear change will affect them in a negative way instead of seeing the positives. Some don’t want to take part and would hold others to their level instead of realizing what the change would open up for them.

Another obstacle is today’s regulatory environment which is surrounded by so much negativity that it is becoming harder to recognize and embrace the positive opportunities when they come along. So much attention is directed toward reducing negative effects as opposed to supporting the positive aspects of a proposal. A proposal that is supported by a multitude of excellent reasons could be defeated by a few unsubstantiated opinions.

In discussing an issue of this nature, education is essential. The following documents will show Proposal 168 is necessary by: explaining the history of the rule, looking at the evolution of seine vessel construction and modification, demonstrating the decrease and stagnation in the salmon seine fishery participation and value, pointing out the many economic and safety benefits of longer vessels, examining the negative views and fear of this proposal, and presenting an option for eliminating the 58 foot rule which most fishermen should find beneficial in the future.

The 58 foot limit on seine vessels is unnecessary in today’s Alaskan salmon fishery. Thank you for your time in consideration of this important matter.

Regards,

Ryan Kapp

Alaska's "58 foot limit"

I. A Brief History

Alaska fisheries, before statehood, were controlled and regulated by the federal government through the Department of Interior, Fish and Wildlife Office. The regulations were promulgated from Washington DC, released in brief form, and issued in March or May for that year's fishery. Reviewing the years from 1923 through 1960, a year after Statehood, several references to limiting salmon fishing vessels to length were located. The Department of Interior established a length limit of 50 feet for salmon seine boats in Alaska. This may have began in 1939 because older generation fishermen remember boats were cut down in length (10ft off the bow or stern and/or rudders slanted forward) in 1939. The following paragraph was taken from the regulations of March 9, 1959, Department of The Interior, Office of the Secretary:

"The regulations retain the "status quo" in regard to several issues debated at length by the various segments of the industry. No change is provided in the 50-foot limit on salmon purse seine vessels long in effect in most areas of Alaska."

The regulation was a 50 ft length limit because a standard measurement was needed. Federal measurement of vessels was not overall length. The 50 feet was measured by the distance on the tonnage deck, from the forward part of the rudder post, intersecting with the deck tonnage line to the rabbit line of the planking at the stem.

Before statehood salmon fish traps were prevalent in most areas of Alaska (traps were not north of the Alaska Peninsula). These traps, although said to be owned individually at first, were controlled by Seattle, WA companies. Two companies, Alaska Packers Association (APA) and Pacific American Fisheries (PAF), were the largest trap owners. These companies were a major influence to the fishery regulations proposed each year in Washington DC and used regulation to protect their trap operations. Washington State had two very powerful Senators, Warren G. Magnusson and Henry M. Jackson, who looked out for their constituents.

Salmon seiners produced fish during this time but were not as efficient as traps. In reality the companies did not want seine boats to be successful and diminish the production of the fish traps they controlled. Keeping a length limit on the seine vessel kept the traps importance.

Alaska, upon statehood in 1959, adopted the 50 foot measurement from the Department of Interior, Fish and Wildlife Office. The 58 foot overall measurement was added later and then further clarified by excluding the anchor roller in the length calculation. The State Legislature in 2005 gave power to the Board of Fish to regulate length limits. In November of 2007 the Board modified the vessel length definition to exclude bulbous bows from the vessel length specifications.

The original intent of the length limit was to keep the power of salmon production in the hands of the Seattle companies who controlled the traps in Alaska. The rule served its intended purpose but the purpose faded through time and ended when salmon traps were abolished at Statehood in 1959.

II. Relevance Today

Understanding the history of the regulation is necessary when evaluating if the limit is helpful in the present day salmon seine fishery. Today “outside” fish companies no longer control traps and influence Interior Department regulations. Is this restriction on the length of a salmon seine vessel still needed 50 years after statehood? Are the tools used in present day management (gear, area, and time restrictions) sufficient enough to deal with salmon harvest by seine boats with a length over 58 feet?

The present day 58 foot regulation is the out-growth and leftovers of past regulation. It ultimately didn't work as a constriction or limitation of fishery capacity. If it truly intended to limit production the regulation would have applied to the width and depth of the vessel as well. Over time the salmon seine vessel has been held to 58 feet but they grew considerably in both width and depth. When the limit was enacted the authors obviously had no idea this trend was coming. Today's vessels are being constructed with widths of 25-27 feet and depths of 11-13 feet. This is a far cry from the vessels of fifty years ago. Another thing the authors probably did not foresee was how much the restriction on length in the salmon seine fishery would influence regulation in other fisheries and cause other problems.

III. Outgrowth of the Regulation and Other Issues

A. Alaska's sablefish and halibut fisheries

An outgrowth of the 58 foot restriction is the Federal 35, 60, and 125foot rules. (Vessel categories) National Marine Fisheries Service wanted a way to determine when observers needed to be aboard in Federal fisheries and to forestall a full scale reorganization of the fleet which might result from NMFS actions of rationalizing the sablefish and halibut fisheries. The 58 foot limit influenced this and thus began a 60 and 125 foot limit for regulation of observer coverage. Again, this was not a capacity issue because if it were there would be restrictions on width and depth of the vessel. It's an observer issue. But observer coverage is currently changing to electronic. Electronic observer coverage eliminates the need for a physical observer to be on board the vessel. With electronic coverage if the hydraulics turn on the cameras turn on and the fishing is observed. Electronic fishery observation is coming and the cost will be one time equipment expense with monthly fees to the designated service provider. It's less expensive and gives 24-7 full time coverage. Once electronic observer coverage is required the 60ft regulation is no longer needed.

B. Fuel conservation and costs

Hull efficiency is important. Fuel prices are soaring and a boat 58ft x 26ft, even with a bulbous bow is not efficient. The following are facts from the Navy concerning hull efficiencies and length to width ratios.

2.1 Displacement Ships

2.1.1 Hydrostatic Displacement: Ships

2.1.1.1 Historical Origin

It is impossible and unnecessary to present here a history of the development of the displacement hull form. Let it suffice to point out that this hull concept dates to prehistoric times.

2.1.1.2 Dominant Physics

The lift/drag performance of displacement ships at high speeds is dominated by wave making drag. A displacement form moving through the water pushes the water aside as it moves. This disturbance of the water requires energy, specifically propulsive energy from the ship.

Two major parameters affect the wavemaking resistance of the ship: Speed and Slenderness. Ship wavemaking drag increases rapidly with increasing speed. It is not possible to state a specific law for this increase - a law that holds true for all ships - but it is common to refer to a cubic increase in drag with speed. Specifically, it is commonly understood that ship propulsive power will increase as the cube of ship speed. Thus a doubling of ship speed will require an octupling ($2^3=8$) of installed power.

¹Transport Factor is a measure of merit developed by Dr. Colen G. Kennell of the David Taylor Model basin. Dr. Kennell's paper "Design Trends in High Speed Transport" was distributed to workshop attendees. Transport Factor is defined as:

$$TF = 1.6878 / 550 * 2240 * (\text{Full Load Displ. in Long Tons}) * (\text{Speed in knots}) / (\text{Total Installed SHP})$$

This cubic relationship is close to true for "normal" speeds. But at very high displacement speeds the curve becomes even more steep. It is common for naval architects to limit their investigation of displacement ships to a speed length ratio of about 1.30. (Speed length ratio is the ratio of ship speed in knots divided by the square root of the ship's length in feet. This is also known as the Taylor quotient Tq, after ADM David W. Taylor.) Above a speed-length ratio of 1.3 the increase in drag with increasing speed becomes greater-than-cubic.

Speeds greater than 1.3 are present in some displacement hull designs. The dominant question is "how important is wavemaking?" for the particular design. If one can make the wavemaking problem of lesser importance overall, then one may more readily consider speeds higher than $Tq=1.3$. The tool (or "one tool") for this is ship slenderness. A slender ship disturbs the water less, and thus has less wavemaking drag. It also has more surface area and thus more frictional drag, but this does not suffer the same steep growth with speed as does the wavemaking drag.

Slenderness is measured as the Length over Displacement ratio ($L/\nabla^{1/3}$).

Present regulation contributes to inefficient boats and increases the amount of fuel needed to push the vessel through the water.

C. At Sea processing of Alaska Salmon on an Alaska seine boat

Processing aboard a salmon seiner is almost impossible today because of the physical area needed and the footprint of the equipment for a safe and efficient operation. Innovative ideas are hard to explore because small does not lend itself to the space needs of at sea processing. The State of Alaska Department of Commerce Office of Fisheries Development website says fishermen processing fish is the fastest growing segment of the processing sector. However, the website goes on to say that processing is limited on salmon seiners because of the 58 foot restriction.

IV. Conclusion

Alaska inherited from the Department of Interior a length limit on salmon seine vessels. This regulation is no longer needed. It does not assist in conservation of the resource; it promotes inefficiency in hull design, and stifles innovation in the market place. The length limit was instigated in the 1930's and 80 years later Alaska still has it. Why is this restriction still here? The Joint Legislative Salmon Industry Task Force proposed and helped pass HB 409 in 2004 which gave the Board of Fish the power to eliminate 58 foot limit on salmon seine vessels. The bill passed the House 33 – 0 and the Senate 19 – 1 so it seems that the Legislators thought something needed to be done to aid Alaska's salmon seine fisheries. The Alaska Board of Fisheries has the ability to repeal the 58 foot limit on salmon seine vessels and should do so now.

EVOLUTION OF SEINE VESSEL CONSTRUCTION AND DESIGN



Old Seiner Built 1914

In the early years most seiners were of wooden construction and built to a length of 58 feet because a rule put in place many years ago said they had to be. There were a few longer boats “grandfathered” in but not really that many. As time went on the boats changed.



Seiners built with a “traditional” house.

58 foot boats made of wood that were originally built to be 14 or 15 feet wide in time became 16 or 17 feet wide. Fiberglass and steel construction with widths of 19- 22 feet came next and most recently 24 to 26 feet. All the while there were lots of boats built less than the 58 foot limit.



Seiners smaller than 58 feet

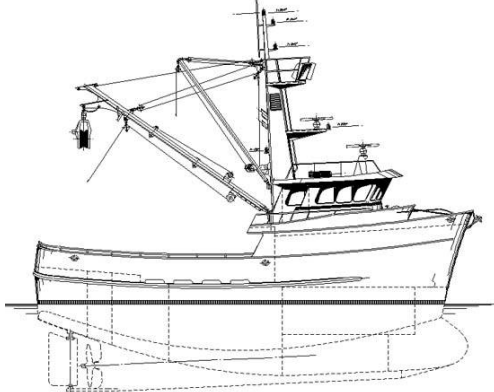
Boat designers began to use a “raised fo’c’sle” design. This increased length to the deck space without sacrificing accommodation space. More recently, as an alternative to the large expense of new construction, vessels that were built at, for example,



“Raised Fo’c’sle” seiners

18 feet of width are now being widened.

Why, after all of this transition and change took place, is a limit on vessel length still necessary? Clearly the limit was never about vessel capacity because nothing kept boats from becoming wider and deeper. The limit on length should have been done away with long ago. When the law was first written did the authors realize what these vessels would morph into?



- The new wide designs are a more inefficient than longer boats which is why most add a bulbous bow. Why not build longer?
- If a “raised fo’c’sle” design was created due to a need for additional deck space. Why not build longer?
- Boats were allowed without limitation to be wider and deeper. Why not build longer?

Economic and Fishery Participation in Alaska Salmon Seine Fisheries

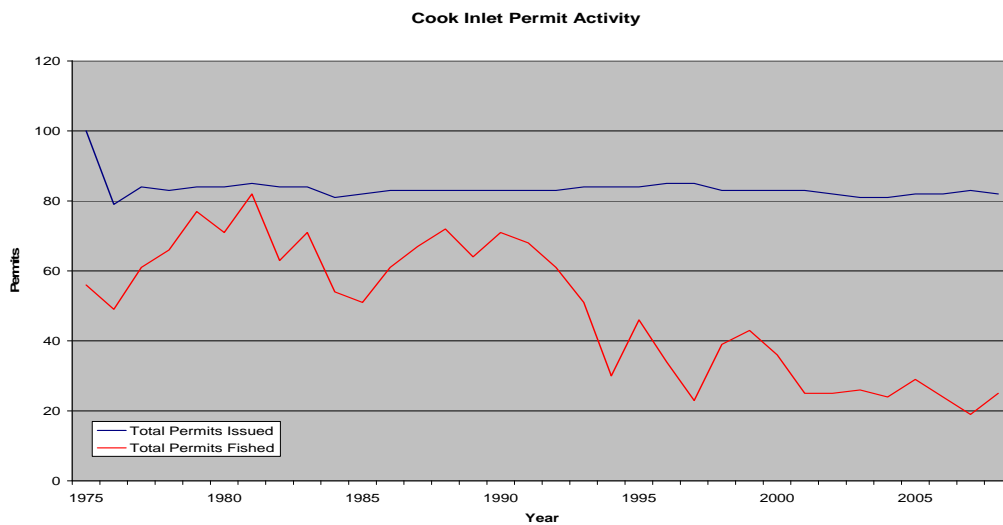
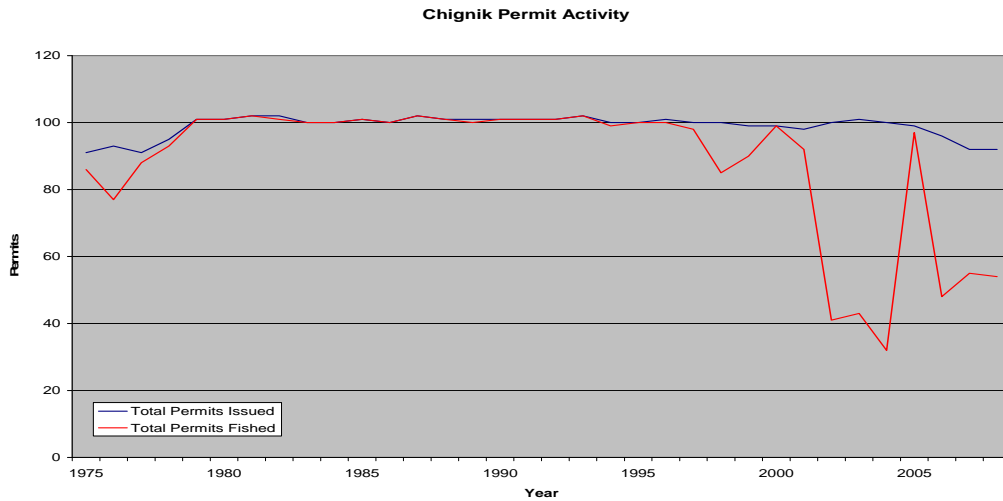
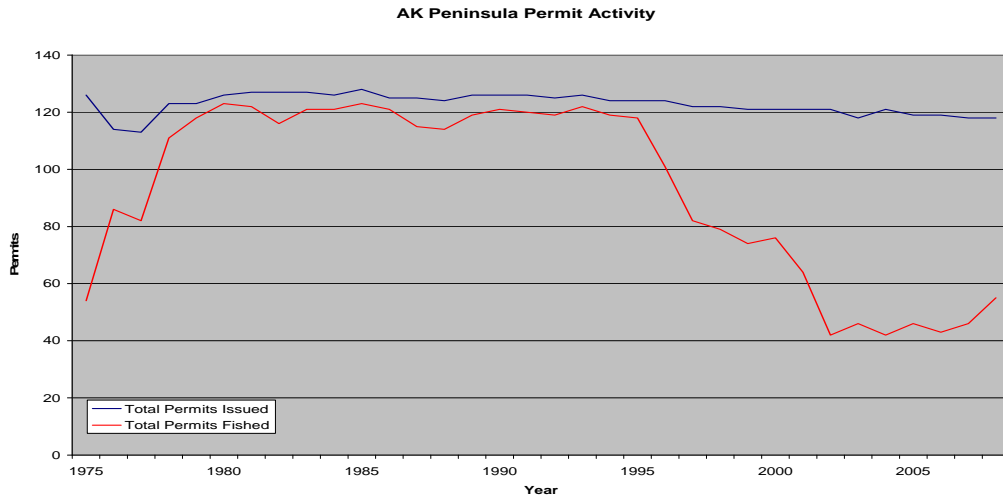
There are six Limited Entry seine fisheries for salmon in Alaska. They take place in the following management areas: Alaska Peninsula, Chignik, Cook Inlet, Kodiak, Prince William Sound, and Southeast Alaska. Each of these areas are different in many ways with regard to the number of permits available, season timing, market availability and price, species variability, gear limitations, and sizes of vessels used in the fishery. There are, however, some similarities between these fisheries that should be addressed because all the fisheries have declined.

First, participation levels should be looked at. CFEC has kept records since 1975 on participation levels in all Alaskan seine fisheries showing the amount of permits issued and the amount of permits actually used and fished with. The data is current through 2008 and is available on their website. For all salmon seine fisheries approximately 80-92% of the permits issued from 1976 to 1995 were fished. The exception was 64% in 1989 due to the Exxon Valdez oil spill in Prince William Sound. Peak years, 1990 and 1991 92% of the permits issued were used. From 1996 to 2001 permit use declined to 60-70% used and from 2002 until 2008 participation levels have been below 50% of the permits issued. Looking at the six fisheries individually the trend is the same:

Alaska Peninsula:	Peak: 1978 – 1995 Permits used >90% Low: 2002 – 2007 Permits used <40% Currently: 47%
Chignik:	Peak: 1978 – 2001 Permits used >90% Low: 2002 – 2004 Permits used 32% - 43% Currently: 54%
Cook Inlet:	Peak: 1981 96% Low: 2001 – 2008 Permits used 30% avg. Currently: 30%
Kodiak:	Peak: 1976 – 1995 Permits used >80% avg. Low: 2002 – 2008 Permits used <40% Currently: 34%
Prince William: Sound	Peak: 1976 – 1991 Permits used >90% Low: 1996 – 2007 Permits used 50% avg. Currently: 53%
Southeast Alaska:	Peak: 1978 – 2001 Permits used 80%-90% Low: 2003 – 2008 Permits used <60% Currently: 56%

Clearly, participation has declined greatly from its peak levels in the 1980's and 90's.

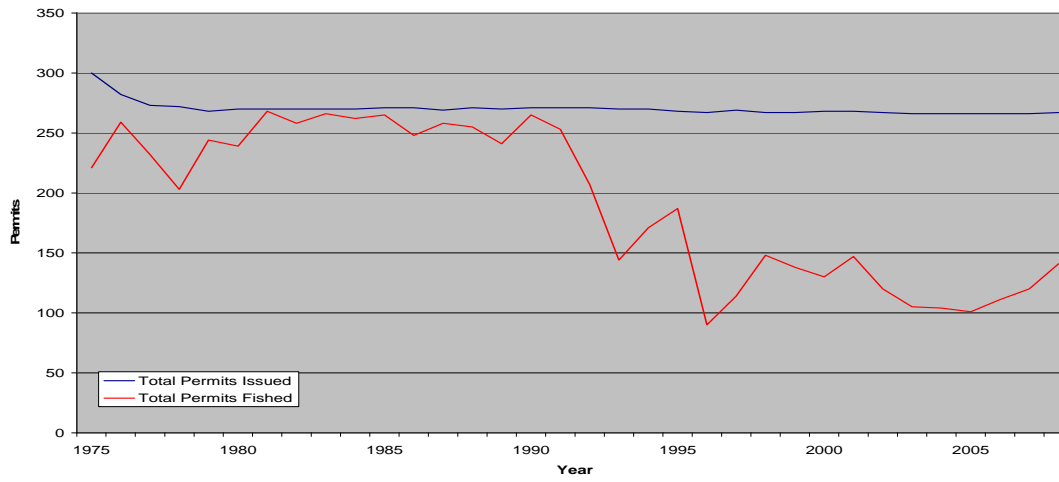
The following are charts represent participation levels in each area from 1975 to 2008:



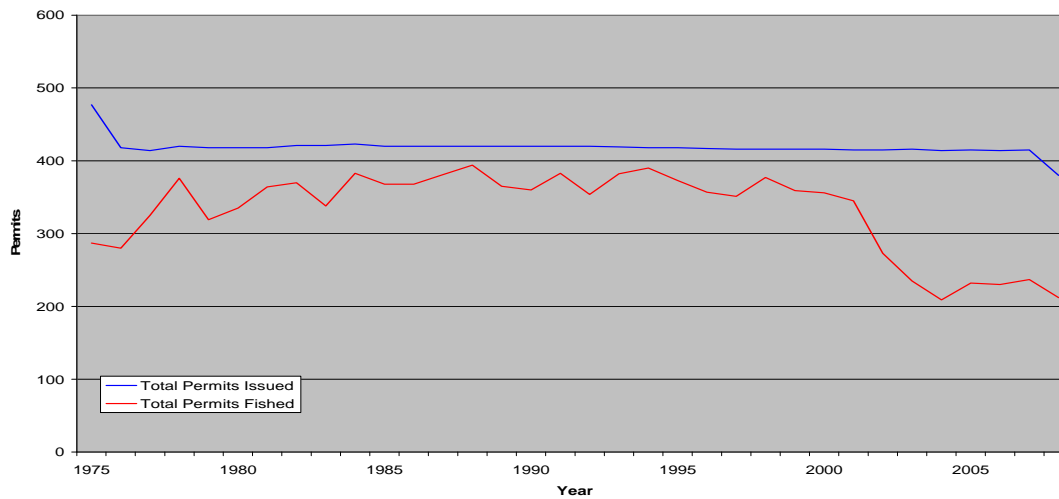
Kodiak Permit Activity



PWS Permit Activity



Southeast Permit Activity



Next, fishery values can be looked at for both overall value and average vessel earnings. Participation levels and the overall price of fish play an important part in this too:

The all time highest seine fishery value was in 1988 with a value of nearly 250 million dollars. 1988 also had the highest average price of \$1.08 per pound across all species and a participation level of 91% of the available permits fished.

The greatest period for total value was the period between 1987 and 1990 with an average value of 175 million dollars. Average price during this period was about \$0.70 per pound and participation levels averaged around 84% of the available permits fished. Average participation would have been higher but was only 64% in 1989 due to the effects of the Exxon Valdez spill which virtually eliminated participation in the Kodiak salmon fishery.

The lowest value year was in 2002 with a value of around 45 million dollars. 2002 also coincided with the lowest price of \$0.14 and roughly half of the permits issued that year were actually fished.

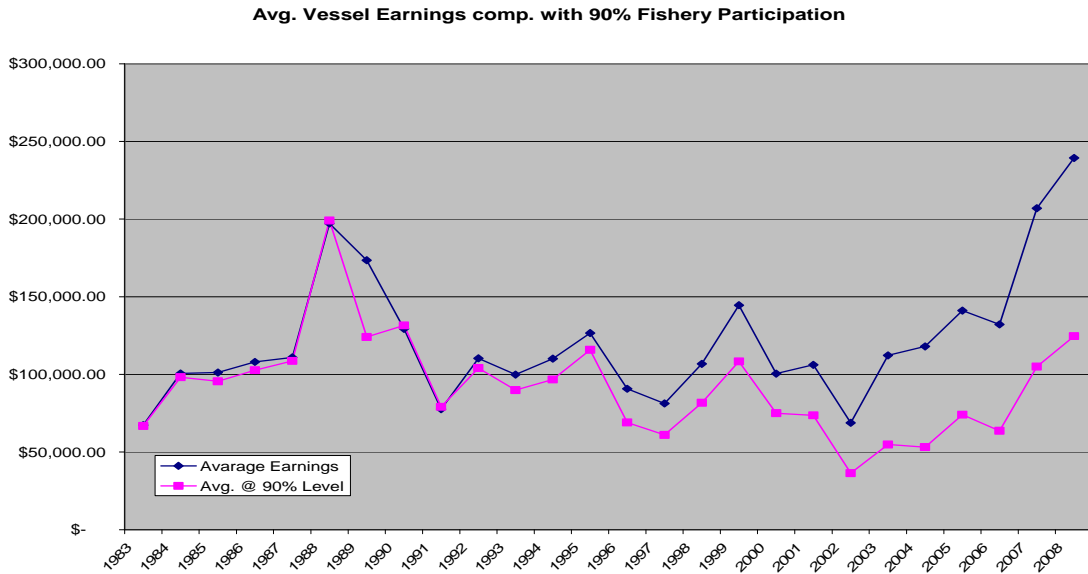
The lowest period for total value appears to be from about 2000 to 2006 with the period of 2002 to 2004 being the lowest valued seasons in the last 25 years. Average values for the 2000 to 2006 seasons are just over 75 million. Price levels during this period averaged \$0.19 while participation levels averaged 50% of the available permits fished.

The two most recent years of data, 2007 and 2008, show a bit of improvement but this can also be very misleading. In 2007 recorded landings of 515 million pounds ranked as the 3rd highest in the last 25 years with an average price of \$.25 and a participation level of 46%. In 2008 landings were 325 million pounds but the corresponding price was \$0.45 or more than a 60% increase in price compared to 2007. Fishery participation in 2008 was only 47% of the permits used.

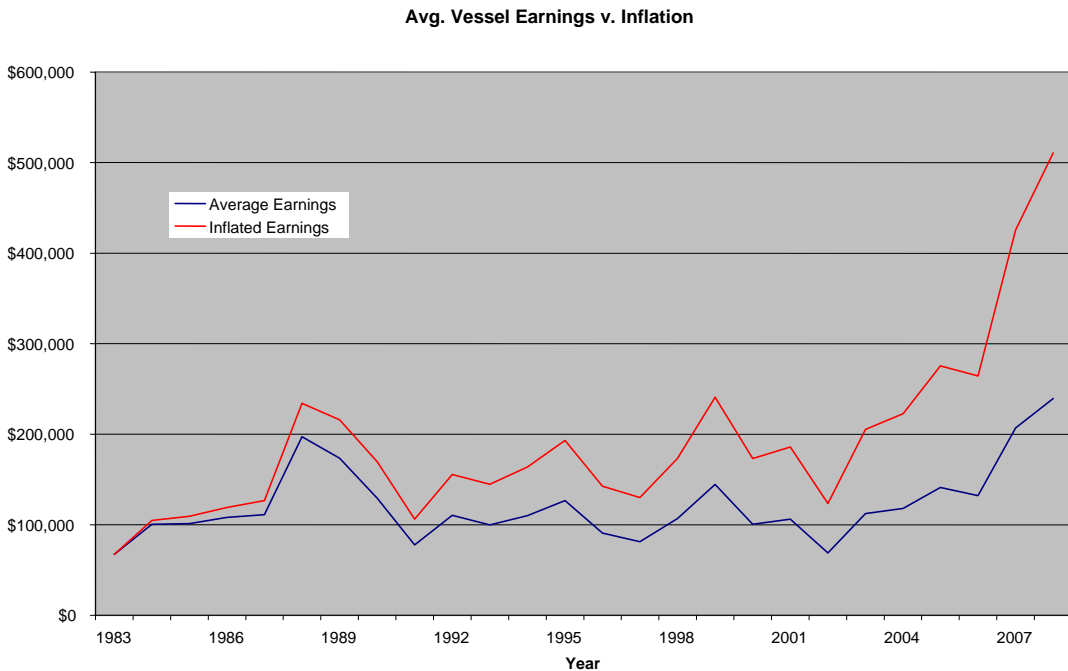
From the above data it is fairly clear that earnings in salmon seine fisheries were greater in the late 80's and early 90's and there was a decline up until the last two years when either landings increased substantially or there was an increase in price.

The clearer picture of the economic state of Alaska's salmon seine fisheries comes when average vessel earnings are looked into while also incorporating fishery participation levels, the increased cost of doing business over time, and finally, inflation and changes in the purchasing power of the dollar in the last 25 years. With this information it can clearly be seen that some changes need to be made in the salmon seine fishery. Why is this type of data so important? When average vessel revenue is looked at by itself and compared to years when participation was higher it can make it look like the fishery is in better shape than it is in reality. The following takes a closer look at this data comparing average vessel earnings compared with what those earnings would average to if participation levels were equal to what they were in the late 80's and early 90's:

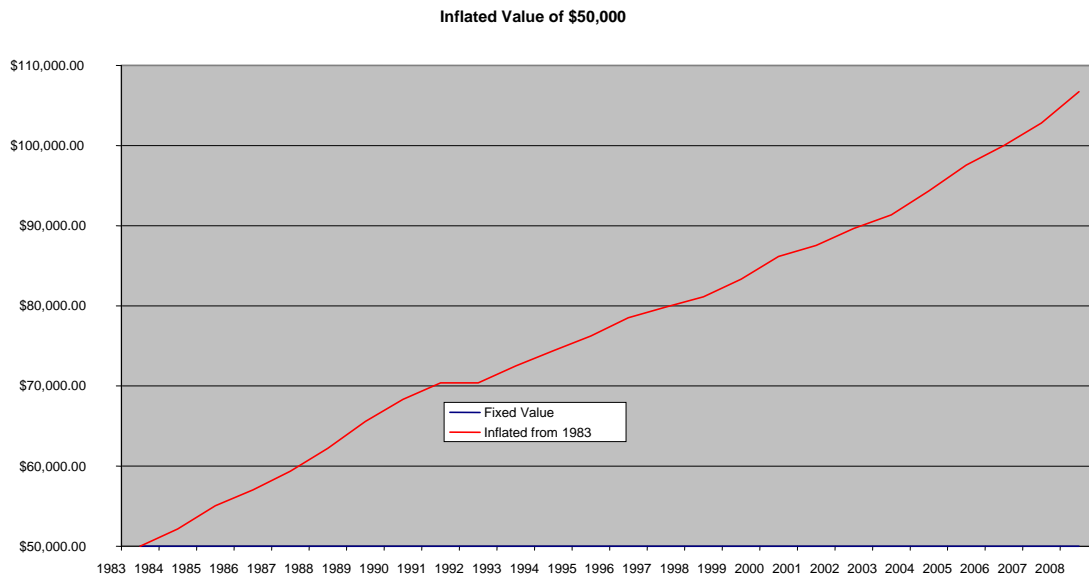
The following chart shows the average vessel earnings for the last 25 years and the average vessel earnings if participation was 90% of the available permits fished as it was in the peak earning years of 1987 through 1990:



Clearly the increase in average earnings to the vessel is due to a decline in fishery participation. If the size of the active fleet had not decreased, average vessel earnings would be substantially less. Reduced participation has had a positive impact on overall earnings but when related to the true purchasing power of the dollar it shows even with fewer participants the fishery is still falling behind. The next chart represents average vessel earnings related to inflation since 1983:



It is more difficult to see the inflation effect on fluctuating fishery values so the chart below shows the relation to a fixed number of \$50,000 dollars:



The above chart is important to note because it also shows the amount the expenses of running a seine vessel have gone up. Fuel, insurance, moorage, gear, and maintenance costs have all gone up just as the above chart represents while some costs have increased even more than that. Nothing is getting cheaper! Comparing the above chart with the lower chart on the previous page it is obvious that the income received from seining is falling way behind with comparison to ever increasing expenses of operation. Something obviously needs to be done to allow fishermen to better align themselves with methods of increasing production values along with decreasing operating costs or the industry will continue declining in the future.

At the October work session some members of the Board of Fish wanted economic data detailing possible outcomes of this rule change. It is difficult, at best, to predict with any accuracy the overall economic benefits if the 58 foot limit was repealed. There is no crystal ball to correctly predict what choices individuals may make if the limit is removed and any assumptions and predictions that could be made would be largely arbitrary. What can be done is to realize the seine business is in pretty tough shape and something needs to be done to help remedy the situation and build some value and greater economic efficiencies back into the fishery. The other documents in this package clearly show the increased economic efficiency, safety, and value adding opportunities that longer vessels could provide. In addition please read page 18 titled “An Option to Increase Future Benefits for Everyone”. This paper presents a concept which could be added to Proposal 168 to assist in maintaining current levels of participation while increasing value to the salmon seine fishery as a whole.

Positives of Eliminating the 58' Rule for Existing Vessels

Most think the elimination of the 58 foot rule would only lead to new vessels entering the fishery. They fail to realize the existing fleet could easily modify their boats to take advantage of the better economies and increased safety that would be attained.

Adding length to a boat is less expensive than widening and far less expensive than acquiring a new or used boat of greater size. To build a new vessel could cost in the millions of dollars. Upgrading to a used vessel could cost hundreds of thousands of dollars. A shipyard owner indicated the following: Widening an existing vessel could cost around \$250,000 – \$300,000. However, just adding 6 feet of length to the stern could cost around \$50,000 or \$60,000 or even cheaper depending on how it was done and the benefits could be seen without huge financial burden. The following are some of the benefits additional length would provide:

Extending the stern helps the vessel float better when loaded. It allows safer packing of fish in the aft holds of many boats that would otherwise not be safely utilized better optimizing the economic efficiency of the boat. Loaded or overloaded boats typically “squat” or sit lower in the stern compared to their trim when empty. Adding length and thus buoyancy to the stern of the vessel improves this condition. Some vessels in the fleet are currently “overtanked” and adding length may make it so they are able to safely use all the available space for packing fish.

Additional length to the stern would create more working deck space. The net could be stacked further back from the house allowing more room to walk around open hatch covers so nobody falls in. There would be more room to repair rips and fouls in the net in a much less time consuming and cumbersome manner. Added length reduces crew standing on the stern rail or side rail to stack the net, spread and clear the bunt, or hook up the skiff for the next set. There is more room for the skiffman to get in and out of the skiff.

Adding length would provide more pot storage if the vessel is involved in any fisheries where hauling more gear may improve efficiency. Also, pots could be stacked further back on deck creating more working space forward for baiting, hauling, sorting, etc.

The stern extension, depending on the design, would decrease fuel consumption if it was designed to reduce drag. Longer boats move through the water more efficiently. (See page 4 sec.III part B) It improves the boats ride in a following sea or bucking into the swell. The extension piece could also be used as additional ballast depending on its configuration. Vessels could pack additional fuel for long voyages taking better advantage of buying more fuel when it is cheaper or receive quantity discounts. Adding additional length even benefits shallow draft hulls because there is more “lift” to get the vessel on a plane in a shorter period of time. Also, at day’s end, the skiff could be put on deck instead of towing it without overloading or trim concerns.

Fishermen who choose to could use the new space created to explore various means of pre-processing or value adding their products. There would be more room available forward of the net to sort, bleed, cut, or whatever the chosen method might be to improve quality. There are many benefits that could be had by just adding more space to the stern of a vessel.

Differing Opinions on the Effect of Removing the 58' Limit

The length limit on salmon seine vessels has been in place for over 50 years now. Some salmon fishermen react negatively and express feelings of fear when it comes to removing the limit. They believe the change will affect them and their business in a negative way. Instead of seeing the positives of such a change they attempt to cast those who want to improve their business in a negative light. They do not want to take part and wish to hold others to their level instead of exploring the possibilities that such a change could create. Although these opinions cannot be entirely substantiated it would be a disservice not to address them.

The following papers examine some contrary opinions to Proposal 168 which seeks to repeal the 58 foot limit on salmon seine vessels in Alaska. The following ideas and opinions will be addressed:

- “Allowing larger vessels to seine might reduce the value of existing vessels that are 58 feet and shorter.”
- “Large vessels would be more efficient in harvesting salmon in some areas.”
- “Longer boats with greater capacity may result in processors using fewer boats in their fleets to catch and tender the same amount of fish.”

A couple of these comments were also recognized as cons toward the proposal by ADF&G. Additionally, ADF&G lists a con referring to adding new regulations to ensure the Department gets accurate and timely harvest reports for Chinook and sockeye. This should not be a problem at all so I have not included it in these documents. The processing on board aspect will likely take place over a sufficient period of time for the Department, Processors, and Fisherman to work together and form any additional regulations that may be required.

The following three papers attempt to show how the above issues are not as real or problematic as they may seem.

How is Vessel Value Determined?



Seiners all have different characteristics that give them different values.

Boats will not lose value if the 58 foot limit is lifted.

Before assuming repeal of the 58' limit will make your boat lose value first determine what dictates a boat's value and why that value makes sense.

Fishing vessels are all unique.

In order to determine accurate vessel value some questions have to be answered: What material is the boat constructed of? How old is the boat? How has the boat been maintained in recent years? Has anything been upgraded on the boat to add more value? What condition is the engine in? What does the boat pack? Is the electronics package modern or basic? What kind of accommodations does the boat have? Is there anything extra included with the vessel to add value such as a skiff, net, gear, or permit? Where does the boat rank among others of similar, more, or less age and function?

These are the questions which determine value not the prospect of bigger boats entering a fishery. Allowing vessels greater than 58 feet into the salmon seine fishery has no bearing or influence over values of currently participating vessels. Listings from any vessel brokerage firm offer no direct correlation between a vessel's length and its asking price.

Having the ability to use a vessel over 58 feet does not mean vessels over the length will be better than status quo.

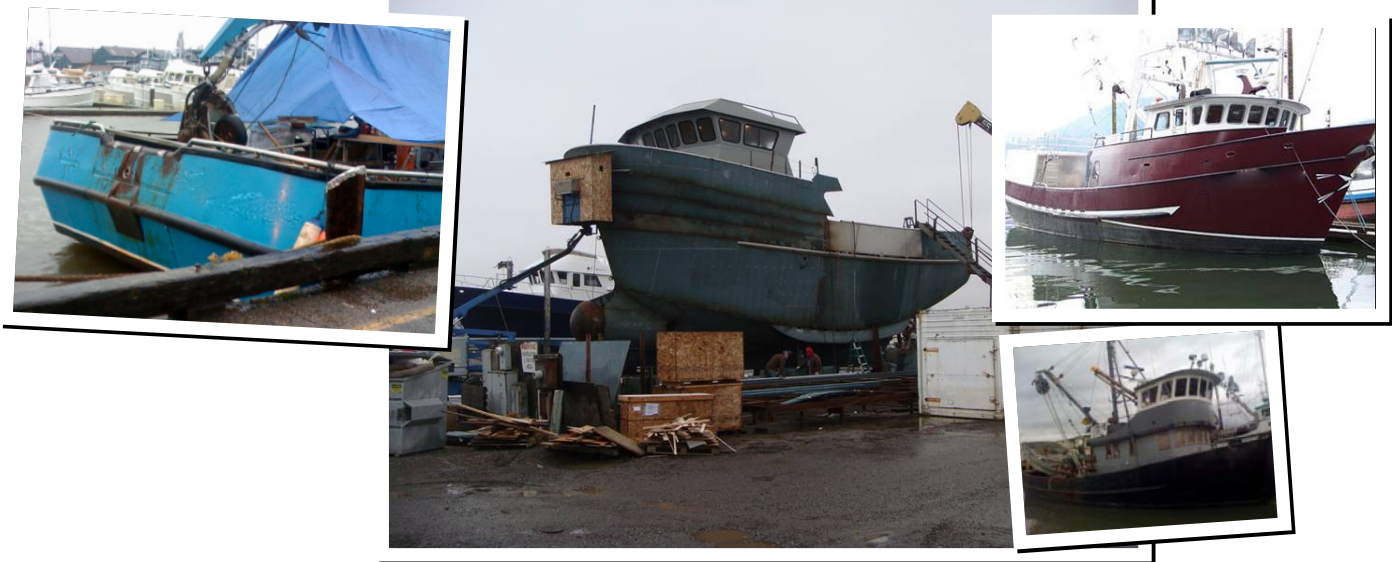
Many Alaska fishermen use boats that are less than 58 feet. Every salmon seine fishery in the state contains vessels that are different sizes. Fishermen will continue buy and sell boats based on what their current needs and wants are and vessels will have different values to them based on those needs and wants.

Boats are simply a tool that is used to do a job.

Fishing, like any business, has individuals that require certain tools to do the job each wants to do. Some fish shorelines which require boats of shallower draft. Some want more maneuverable boats to fish in tight areas. Others want more horsepower and speed to beat their competition and get the best set when the fishery opens.

The restriction on vessel length alone does not determine value. Other criteria are much more significant.

If it were the case that allowing larger length vessels into the salmon seine fishery would drive down values on the smaller 58 foot and less length boats, it would have already been seen with the widening and construction of bigger capacity boats that has already been taking place.



Harvest Efficiency

There is more to efficiency than only the length of a vessel.

“Large vessels would be more efficient in harvesting salmon than smaller vessels in some areas.” (ADF&G comments on Proposal 168 February 2010)

Harvesting Efficiency = Vessel Capacity

Capacity was never part of the 58 foot limitation on length.

The 58 foot limit was never a constriction on capacity. If it were, the regulation would have also applied to the width and depth of the vessel. Salmon vessels have been held to 58 feet overall but have since grown in both width and depth (See page ---“Evolution of Seine Vessel Construction and Design”). If length of a vessel equals harvesting efficiency then the shorter vessels now fishing would have a history of lesser catch. They don’t. As a matter of fact there are many areas where it is advantageous to fish a smaller, shallower vessel that can get net closer to the beach or inside rocky areas where salmon are migrating. Remember that “large” vessels are already in the fishery, just with different dimensions.

Everyone has the same net in the same area for the same amount of time.

ADF&G manages the fishery with restrictions on net, area, and time. This will not change regardless of what sizes of boats are fishing. Every fisherman, regardless of vessel length, is still required to operate within the same set of rules. The Department has noted in past meetings they could still effectively manage the fishery if the limit was repealed.

Larger vessels do not have advantage over smaller vessels fishing in rough weather.

There has been repeated concern that a larger vessel has potential to fish in more inclement weather. This is not true. **The net catches the fish, not the boat.** Larger boats may be safer traveling in rough elements but they still have the same pitfalls operating a seine when weather is not cooperative. Seining requires some finesse in how the net is hauled. Increased wind causes the boat to drift faster making the purse lines “fly” which greatly reduces a net’s ability to hold fish. A bigger boat catches more wind and would have more difficulty. Whether the boat is 58 or 68 feet bad weather is still bad weather. Accidents that happen while fishing in rough weather are not entirely dependant on the size of the vessel. All seine vessels have the same nets, tow lines, and rigging which all share the same propensity to fail and cause injury. The operator of the vessel bears this responsibility regardless of the size of the boat. Additionally, in seine fishing everyone has a skiff. A bigger boat catches more wind and is heavier making it more difficult for it to be towed by the skiff. Usually the first thing that goes wrong in rough weather is something bad happening to the skiff which affects everyone equally.

Processors need boats



“Longer boats with greater capacity may result in processors using fewer boats to catch and tender the same amount of fish.” (ADF&G Comments 2008)

If the 58 foot limit is removed there will not be an immediate change in the fleet make up.

Processors can only handle so much volume regardless of the amount of vessels they employ.

Tenders will still have importance and remain in salmon fisheries.

The current regulation has remained for half a century. It is irrational to think that the fishery will be “overrun” with large vessels taking fish from the small vessels. The intent of removing the limit is not to drive people out but to offer increased opportunity. Utilizing the benefit of a longer boat will require an investment that some may not be willing to undertake. The change will certainly not happen instantly. Once a few have changed then others will see the benefits and will then possibly choose to change their operations as well. There will always be a need for many vessels, regardless of size, well into the future.

Processors typically want more fleet capacity than what they are able to process. In years of low runs processors need to get as much fish as possible to process. If they decrease fleet size they would then be reducing their chances of getting enough fish to run their processing operations at an optimum level. When the run comes strong the fleet is typically put on limits to match the daily ability of the company. The size of boat bringing fish to them is irrelevant as the limits are generally set the same for each vessel. Processors will always have a need for boats just as boats will always have a need for processors.

There are fewer tenders today. Rationalization and buy back programs took a lot of tenders out. Sinkings and age are slowly taking the rest. Buyers are still competing aggressively for tenders every year. In the last decade tender coverage has noticeably decreased and with fuel costs on the rise tenders are getting more expensive to use. Be that as it may they will always be a necessary part of the fishery. Tenders allow the processor to receive product in a much more efficient manner than unloading their entire seine fleet at one location. Though their costs are rising they still present efficiencies that can't be overlooked.

An Option to Increase Future Benefits for Everyone

There are some fishermen who may not be in favor of eliminating the 58 foot limit because they cannot, due to size restrictions in other fisheries they participate in, take full advantage of the opportunity to use a longer vessel. They feel like there would be no benefit for them and therefore do not want the change to happen. Clearly, after looking at the participation data in the seine fishery, most if not all of the increases lately in average earnings are largely due to the reduced participation in salmon seine fisheries. If latent permits were to reenter the fishery it could potentially decrease the average value that fishermen are seeing now. Concern has been expressed by some fishermen about the repeal of the 58 foot rule leading to an influx of new participants. Something easily done to rectify this situation is to require the purchase of a second permit that would be extinguished and removed from the fishery to reduce the potential of latent permits reentering the fishery. The following is an example of how it could work:

If a fisherman intends to use a vessel longer than 58 feet they would be required to hold two permits for the area they intend to fish and then report their intentions to CFEC. CFEC would then permanently remove one of the permits from the fishery and issue a document or some other clarification noting permission to use a longer vessel in the fishery so enforcement officials could be aware the vessel was legal to fish. I have contacted CFEC and was informed that if this was something the Board wanted to do they could find a way to make it happen.

Fishermen would see some benefit from this idea in a couple of ways: First, buying the additional permit would be a cost bared only by the fishermen intending to fish a boat that was over the 58' length limit. This would decrease the latent capacity available to reenter the fishery at no cost to the fleet and the fleet gets some benefit. It seems that the current level of latent capacity is an important issue. In Southeast Alaska there is an effort currently underway with NMFS and the Southeast Revitalization Association to initiate a permit buyback that would be financed by the active seine fleet for a 3% assessment on the value of salmon landed. By requiring a second permit to seine with a vessel longer than 58 feet the fleet will see a benefit that they don't have to pay for. Permit values may even increase a little. This would be good for everyone. Secondly, requiring purchase of a second permit adds an additional cost to the fishermen intending to fish a bigger boat. The addition of new boats should be very gradual even without this idea because the fishermen will still have to decide if the investment is right for them but the additional cost of acquiring a second permit may work to slow the rate of new vessels entering the fishery if that is a concern.

What about fishermen who already own vessels within the current 58 foot limit?

Some of these pages have shown how adding length to the stern of existing 58 vessels is a cost effective way for many fishermen to realize the benefits of a longer vessel. If purchasing a second permit is required to add length to an existing 58' or less vessel it makes doing this less affordable. This problem could be remedied quite simply by doing the following:

If an existing vessel of 58 feet or less that is already permitted to fish salmon in any area is made longer then it would be exempted from the requirement of purchasing an additional permit. If a vessel does not meet these requirements than the purchase of a second permit would be required.

The language above makes it possible for fishermen who already operate existing vessels of 58' feet or shorter to upgrade their vessel without the burden of an additional cost. The additional cost of buying a second permit would only be for new vessels entering the fishery.

The intent of Proposal 168, by itself, is to provide opportunity for those who choose to have more options to upgrade their existing vessels or invest in a new pool of equipment that has been unavailable to them which would provide increased economic benefit and value to the fishery. Using the above ideas in conjunction with Proposal 168 would further enhance the benefit to the fishery as well as alleviate some of the concern for the existing participants' economic interests.

Conclusion

Below is the mission statement of the Joint Legislative Salmon Industry Task Force:

“The goal of the Legislative Salmon Industry Task Force is to evaluate the State of Alaska’s statutory framework for Alaska’s wild salmon industry as well as current industry practices and to make recommendations for statutory, regulatory and structural changes that will improve the industry while recognizing Alaska’s coastal economy.”(Final Report, 1-31-03)

One regulatory change the Task Force recommended was: “An Act relating to the maximum length of salmon seine vessels; and providing for an effective date.” This act was supported by the Task Force and was introduced to the Legislature by Senator Bill Williams on January 28, 2004. This Legislation intended to remove the 58 foot length limit on salmon seine vessels from statute and give control of the regulation to the Board of Fish. The effective date of this action was January 1, 2005.

The Task Force recommended and supported this legislation because it fit within the goals outlined in its mission statement. The Task Force recognized that this change is an important step toward improving the salmon industry. They expressed confidence in the Board’s ability to oversee that change.

The 58 foot limit is a regulation that has been in existence for well over fifty years and it should now be re-evaluated by asking the following questions:

- What was the intention when this regulation was enacted?
- Did the regulation accomplish the intended purpose?
- Is the rule still serving the needs of the salmon seine fishery in Alaska?
- If the rule no longer serves a purpose, why is it still part of Alaska's regulation?

The information contained in these documents does a remarkable job helping to answer these questions.

Clearly the industry needs to move away from status quo. Economic data shows the last two decades have seen a decline in earnings while expenses have been increasing. The participation in salmon seine fisheries has declined to almost half of what it was 20 years ago. A substantial amount of fishermen have left the fishery! This reason alone should be justification enough to start making changes. If a business is healthy people don't leave. There are a number of problems facing the salmon seine industry today and there is no single cure all. After reading this material the Board of Fish should support the idea that combining the purchase of an additional permit with removing the 58 foot limit on salmon seine vessels is an important step to restoring economic vitality in Alaska's salmon seine fisheries so the remaining fishing businesses can be allowed and encouraged to thrive.

Please support the repeal the 58 foot length limit on salmon seine vessels in Alaska.

Personal Comment: Tad Fujioka

Proposals 180 & 181: Oppose

Proposals 182 & 183: Support

Note: I am the chairman of the Sitka AC, but these comments are my own, not official AC positions.

Modern electric reels are surprisingly powerful for their size. Even a small reel can be more powerful than an electric downrigger. Such reels may have legitimate applications in commercial, subsistence or personal use fisheries, but using powerful mechanized reels when sportfishing takes the "Sport" out of the game. The fish is no longer fighting the fisherman, but is matched against an unrelenting and never-tiring electric motor. Alaska's superb reputation as an ultimate sportfishing destination will be sullied if the Alaskan sport fishing experience becomes one of maximizing harvest through the efficiency and effectiveness of mechanical power.

For many years it was understood that sportfishing reels were to be hand-operated. Downriggers could be powered, but not the reel holding the line that was actually connected to the fish. Few fishermen would have considered an electric downrigger with the leader tied directly to the cannonball and used as a powered troll gurdy to be legitimate sporting tackle. This wasn't because the downrigger was mounted to the gunwale, but because it was grossly over-powered. This would have been considered commercial troll tackle, not sportfishing gear. Mounting the downrigger motor to a sport rod would still not make it sporting tackle. Many of the electric reels on the market today are even more powerful than electric downriggers.

This table (from <http://www.queenscreek.com/electricperformance.html>) shows that many popular brands of electric downriggers are unable to lift a 20 pound weight.

SPEED OF RETRIEVE FPM				
	7lb	10lb	17lb	20lb
Scotty all models	221	194	152	136
Cannon Mag 20 & Digi-Troll	200	194	101	*
Cannon Mag 10 & Mini-Mag	79	74	59	50
Walker all models	91	78	*	*
Penn all models	152	126	*	*
Big Jon Captains Pac	81	78	*	*

* Downrigger could not lift weight

DOWNRIGGERS TESTED

Scotty: Electric #1100.(same power train on all other models).

Cannon: Mag 20 (same power train on Digi-Troll), Mag 10 and Mini-Mag.

Walker: EDRB 25 (same power train on all other models).

Penn: Fathom Master #800 Electric. (same power train on #825).

Big Jon: Captains Pac Electric

Note that most of the electric downriggers on the market are limited to a pulling force of about 20 pounds and that the fastest models barely top 200 feet per minute under light loads.

As a comparison, here is some information from a specification sheet for a Shimano Brand electric reel. (from <http://www.knkfishing.com/pd-shimano-dendoumaru-4000hp-electric-power-assist-fishing-reel.cfm>).



Shimano Dendoumaru 4000HP
Electric Power Assist Fishing Reel

Description

- Weight - 43oz/1220g (2.68 lbs).
- Speed - 525ft/160m per minute.
- Line - 550 yards 80lb braid.
- Max winding power (97lbs).
- Level Wind with Auto-Stop.
- Line Counter - Digital readout.
- Washable design.
- Speed adjustable accelerator lever.
- Electric (12V) or Manual Retrieve.
- 9ft Power Cord with Alligator Clips.

The Dendoumaru HP has been introduced for anglers whose specialty is deepwater bottom bashing. This electric reel is ideal for fishing really deep waters whereby it is too tiring and time consuming for anglers to repeatedly crank up their rigs for bait checking or fighting deep large stubborn fish.

Note that this reel which weighs less than 3 pounds, pulls several times harder (up to 97 pounds) and faster (up to 525 feet per minute) than an electric downrigger. Proposal 180 would allow electric reels weighing more than 5 times as much as this one. Proposal 181 would not even provide this minimal degree of restriction on capability. Even if Proposal 180's weight limit were to be greatly reduced so as to exclude this reel, a weight limit does not provide meaningful restrictions on capability in the future since mechanical technology will continue to improve with time. Only specific limitations on performance (for instance no more than 15 pounds of pulling power and maximum retrieval rate of 100 feet per minute) can provide the consistent & meaningful restrictions necessary to assure that the future of Alaskan sportfishing does not lie with increasingly unsporting tackle. As these specifications are time-consuming for enforcement to measure in the field, I suggest that the Board require that any electric reel be pre-approved in a manner similar to that described in Proposal 183.

If in the end, the Board chooses to permit the use of such powerful electric reels, I urge the board to pass Proposal 182 and limit the use of these reels to those anglers who are not able to use a conventional reel.

While the several members of the Sitka AC were drafting proposal 182, I was independently working on proposal 183. I too struggled with the issue of how to define an angler with a legitimate need for using an electric reel. I finally realized that what I found unreasonable about using powered reels in a sport fishery was the overwhelming physical advantage that this potentially gave to the angler. This advantage would be eliminated if the reel's motor was limited to the power of an angler with a conventional reel. By eliminating the advantage of using an electric reel, there was no longer any need to restrict which anglers could use one. This is a critical point of proposal 183 that the department staff member(s) that provided the department's official position failed to grasp. *Please disregard the department opposition to this proposal since it appears to be based on the erroneous interpretation that it would restrict the use of electric reels to disabled anglers.*

The further advantage of capping the capabilities of allowable electric reels to match those of an angler using conventional tackle is that unlike any other limitation, this is based on a real limit of nature. Any other specific quantifiable limit would be entirely arbitrary and subject to endless argument from those who wanted it to be adjusted.

Precise performance specifications of a reel are necessarily difficult and impractical to measure in the field. This problem is probably the reason that the department-sponsored proposal 180 limits only the weight of the reel (which as explained above is a crude and rather ineffective means of measuring/limiting performance). Even weighing a reel in the field would take time to remove it from the rod and be difficult to accomplish if the boat was subject to ocean swells. I struggled with this issue for quite some time before realizing that the reel could be pre-approved by department office staff so that a field enforcement officer would only have to confirm that the reel was properly licensed (just as the same officer would check for the angler's sportfishing license). This would be a much more efficient use of the officer's field time than attempting to measure any physical aspect of the reel. The other advantage that pre-certification would have is that it would give the department an easy way to quantify the number of electric reels being used and identify those anglers using them. The department's comments on these proposals indicate that currently staff is unable to identify which anglers are using electric reels and thus unable to differentiate between their catch rates and the catch rates of anglers using conventional tackle. If proposal 183 was adopted, at some point in the future, a comparison of the catch rates of anglers using conventional reels to those using electric reels could be used to verify that the limitations established by the department for electric reels are in fact providing a level playing field.

While for the reasons above, I strongly support limiting the capabilities of electric reels to that of a typical angler using a conventional reel, regardless of the actual limitations that the Board chooses to place on electric reels, I strongly suggest that pre-certification be required so that in the future, the department staff will be able to easily collect data on electric reel users.

Tad Fujioka

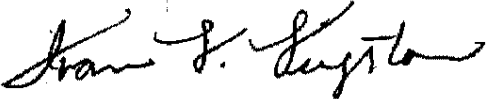
Board of Fish
March 1, 2010
Alaska Department of Fish & Game
PO Box 115526
Juneau, Alaska 99811-5526
Fax 907-465-6094
Attn: Board of Fish Comments

Re: Proposal 166.

I am writing to support proposal 166. Aquatic plants (seaweed) I eat this food but don't have the time to go gather it, so I either buy or trade with someone that gathers seaweed.

If you need to have a sport fish license to gather seaweed, then it would be against the law to sell, trade, or barter it, as Native Alaskans have traditionally done. Seaweed has been a Native Indian food for thousands of years, eaten by all the Tribes of Alaska, even today, and its very good. So please do not commercialize this without talking with the Tribes of Alaska.

Thank you for your time,



Ivan L. Leighton
PO Box 5175
Ketchikan, Alaska 99901

SUBJECT: PROPOSAL 200 #201
2010 STATEWIDE FINFISH MEETING

Stephen R Barnes
P.O. Box 332 1403 Power Creek ROAD
Cordova, AK 99574

February 27th 2010

ALASKA Department of Fish & Game
BOARDS Support Section
P.O. Box 115526
Juneau, AK 99811-5526

I have fished AREA E (Copper river
FLATS - P.W.S) for 45 years, FIRST Fishing
with my father, then on to fishing my
own SKIFF AS a 12 year old. I was
issued a limited Entry Permit in the early
1970's due to my PAST participation in
the fisheries. I have fished Every Season
from 1964 thru the 2009 Season
and hope I will be able to fish another
45 years in Area E. My father raised
a family as a fisherman in Area E
& I also have raised a family by
fishing only in this Area.

The Copper River Delta & The Entire Copper River Basin is very DEAR TO my heart & SOLE AND even more so since The Exxon Valdez Oil Spill. The Spill & All The Harm it CAUSED TO The Environment AND TO This Community is STILL 20 YEARS LATER very much ALIVE here. The Copper River Fisheries has been our Lifeline AND This Community will NOT survive with out This Fisheries.

I believe All user groups of This resource (Copper River Fish) should share The burden of TAKING CARE of The fish To insure That There is A BRIGHT future ahead for All user groups AND plenty of fish reaching There Spawning Beds SAFE AND in good Shape To Lay There Eggs AND produce fish for All who Truly need AND respect This resource.

Thank you ALL for The opportunity To Comment on These Proposals.

Respectfully
Stephen R Barnes



SEAFOOD PRODUCERS COOPERATIVE

PRODUCERS, PROCESSORS & MARKETERS OF PREMIUM QUALITY SEAFOODS

March 1, 2010

Attn: Board of Fish Comments
Alaska Dept of Fish and Game – Board Support
PO Box 115526
Juneau, AK 99811-5526

RE: Statewide Board of Fish Board proposals

Dear Chairman Webster and Members of the Alaska Board of Fish,

The 520 fishermen owner/members of Seafood Producers Cooperative (SPC), the largest and oldest vertically integrated, fishermen's harvesting, processing and marketing association in North America ask you to give credence to our comments on 3 very important, (vital considering the implications) statewide Board of Fish proposals.

Proposal #182: Electric Reels – OPPOSE

SPC supported the Sitka Fish and Game Advisory Committees statewide proposal #182, which seeks to prohibit the use of power assisted fishing reels. The great majority of our predominately Alaska fishermen purchase a recreational sport fishing license, and are active participants in Alaska's recreational fisheries.

From our diverse but acutely Alaskan perspective the recreational harvest of groundfish should not be pursued by power assisted gear, save for handicapped persons.

Proposal #175: Sablefish Bag Limits - SUPPORT

SPC supports passage and application of the conservative statewide sablefish bag limit as detailed in statewide Board of Fish proposal #175. Long prior to the recent emergence of the increasing recreational/charter groundfish harvests, all harvestable sablefish in both state and federal waters were fully allocated.

We strongly encourage the Alaska Board of Fish to fully consider the implications of the excessive existing sablefish bag and possession limits. Although sablefish


harvests outside of commercial venues directly reduce commercially available quantities, currently with the absence of a recreational groundfish management plan, a 2 fish bag limit and a four fish annual limit only makes good sense to the 500 SPC fishermen, our families, and workforce.

Proposal #177: Thornyhead Bag Limits – SUPPORT

The 500 SPC fishermen, families, crew, and associated workers respectfully remind ADF&G and the Alaska Board of Fish that until the recent deepwater expansion of the charter industry into groundfish, virtually no recreational thornyhead harvest occurred. Outside of the intensely regulated, tightly monitored commercial groundfish fisheries there has been no harvest of thornyhead rockfish.

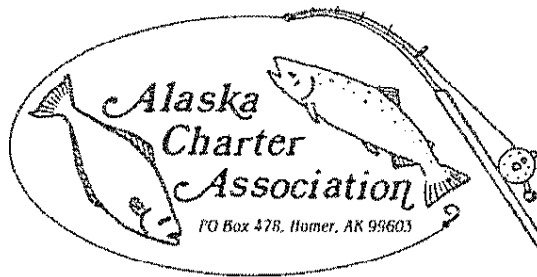
Please adopt proposal #177 and place a one fish bag/possession limit on these unique and valuable groundfish.

Sincerely,



Craig Shoemaker
Seafood Producers Cooperative
507 Katlian St.
Sitka, Alaska
907-747-5811

brand fax transmittal memo 7671	# of pages ▶ 2
From <i>Craig Shoemaker</i>	
Co. <i>SPC</i>	
Phone #	
Fax # <i>907-747-3206</i>	



"To preserve and protect the rights and resources of Alaska's Sport Fishermen."

President
Greg Sutter
Homer

March 2, 2010

Vice President
Richard Yamada
Juneau

Alaska Dept. of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526
Fax: 907-465-6094

Treasurer
Bryan Bondioli
Homer

Attn: BOF COMMENTS

Secretary
Chris Fiala
Kodiak

Dear Alaska Board of Fisheries,

The Alaska Charter Association is a statewide organization representing over 100 members and associate members. Our mission- "To preserve and protect the rights and resources of Alaska's Sport Fishermen." We would like to thank the Alaska Board of Fisheries for this opportunity to comment on the Statewide General Finfish Proposals.

Following are proposals we wish to comment on:

Board Members

Jeff Wedekind
Ketchikan

Proposal 175

Sponsor: Sitka AC

Theresa Weiser
Sitka

Purpose: Establish bag limit for sablefish as follows: For resident anglers: sablefish may be taken from January 1 through December 31: daily bag limit of 2, 4 in possession, and no annual limit; for nonresident anglers: sablefish may be taken from January 1 through December 31: daily bag limit of 2, 4 in possession and an annual limit of 4 fish.

James Stegall
Valdez

Response: OPPOSE

Kent Hall
Sitka

We recommend no daily bag, possession, or annual limits be adopted until verifiable harvest data over a minimum of three years is collected. The 2009 Saltwater Sportfishing Log books were not printed with a column for sablefish and thus errors could have been made by having species other than sablefish, recorded under the "Other" column in log books. Because of this, the harvest data for sablefish landed may have been over reported in 2009.

Hill Norvell
Seward

Given the above, preliminary results from logbook data as of January 2010 show 3,844 sablefish were landed in Southeast Alaska. This was 1.3% of the Southeast Alaska commercial sablefish AHO (annual harvest objective) for 2009 using a round weight of 6 pounds per fish. This removal is within the 3% the Division of Commercial Fisheries allows for other removals in the fishery. There is no evidence of a biological threat to the sablefish population from the recreational angler.

Alaska Charter Association P.O. Box 478, Homer AK 99603

Proposal 177

Sponsor: Alaska Department of Fish and Game

Purpose: Establish bag limit for thornyhead rockfish as follows: Shortspined and longspined thornyhead rockfish may be taken from January 1 – December 31, bag and possession limit of one fish.

Response: OPPOSE

There are few recreational fishermen that fish the depths where thornyhead rockfish are found, usually 100 fathoms or deeper. The commercial sablefishery is allowed 15% by-catch of this species with no obvious concern for this species biological sustainability. The numbers caught in the recreational fishery are small and if a bag limit was imposed, excess fish would be released dead as in the commercial fishery, as they do not survive once brought to the surface from these depths. If anything, we should have a regulation requiring 100% retention and recording on log books of every fish caught for improving harvest records of this species.

Proposal 180

Sponsor: Alaska Department of Fish and Game

Purpose: Define Electric Fishing Reel

Response: SUPPORT with additional language

(1)(B) the power assisted fishing reel assembly, motor, gearbox, fishing line, attached power cord, and any other reel attachments weigh no more than 15 pounds total when detached from the fishing rod *and power source*.

There would be confusion as to whether or not the weight of the battery or the boat for that matter should be included in the total weight.

Proposal 181

Sponsor: Mike Bethers

Purpose: Clarify definition of fishing rod and electric reel.

Response: SUPPORT

Proposal 182

Sponsor: Sitka AC

Purpose: Prohibit the use of electric reels

Response: OPPOSE

Able bodied people fishing in deep waters for bottom fish benefit from the use of electric reels. The "conventional" fishing reel, used by recreational anglers today, evolved to make fishing more efficient. Two speed reels were invented to do the same thing. Modern electric reels made by major tackle manufacturers aim to do the same thing, make fishing more enjoyable by not having to manually crank yards of empty line. This saves time and makes fishing more efficient and more enjoyable, a reasonable goal for any angler.

Alaska Charter Association P.O. Box 478, Homer AK 99603

Bag limits are already in place to serve as conservation tools. Gear restrictions did not work in limiting catch as was the case of banning downriggers in the king salmon sport fishery years ago. There are no conservation reasons for this proposal.

Proposal 183

Sponsor: Tad Fujioka

Purpose: Prohibit use of electric reels

Response: OPPOSE

See also response to Proposal 182.

Bag, possession, and annual limits are the best means to control harvest rates. The use of gear restrictions only leads to chasing new creative methods and means with more and more regulations and definitions which will not put a stop to the creative "go around".

Catch per unit effort (CPUE) has never been used in the sport fishery to predict future harvest levels. Should we have adjusted future catch limits just because we started using "spectra" line in sport bottom fishing?

Proposal 189

Sponsor: Mel Erickson

Purpose: Require a client-guide agreement for each client on a sport fishing charter trip.

Response: OPPOSE

In the case of businesses that employ several guides such as lodges, current sportfishing guide regulations do not allow guides to book directly with clients, only to businesses that employ these guides. This proposal is in violation of Department of Fish and Game regulations.

We remind you that the purpose of the Board of Fisheries is to conserve and develop the fishery resources of Alaska and in making regulations, given direction by AS 16.05.251 (17) Promoting fishing and preserving the heritage of fishing in the state and (d) Regulations adopted under (a) of this section must, consistent with sustained yield and the provisions of AS 16.05.258, provide a fair and reasonable opportunity for the taking of fishery resources by personal use, sport, and commercial fishermen. We argue that the above proposals, which we have indicated opposition to, go against your directives and purpose as stated above.

Thank you for allowing us to comment and we look forward to further discussions at the upcoming Board of Fisheries meeting in Anchorage.

Regards,

p.p. 

Greg Sutter
President

ANATOLIE LISOV

407 E. Shore Rd.
Nine Mile Falls WA. 99026
Phone (1 509 466 2976)
Fax (1509 466 2976)
Alisov@yahoo.com

RECEIVED
MAR 02 2010
BOARDS

March 1, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau AK 99811-5526

SUBJECT: Proposal 200 & 201-2010 Statewide Finfish meeting

To the Board of Fisheries,

Hi my name is Anatolie Lisov. I have been a fisherman in Cordova for 20 years. I have a family of 6 including myself. Me and my wife have been coming to Cordova ever since we got married and we still do with our four boys. The fishing income that we make in the summer pays our bills and rent in Cordova and the bills that we pay when we get back to Spokane. It is our livelihood. If we did not have this fishery, I do not know how we would get by. This fishery is the only income that saves us. The one thing that we look forward to in spring after a long winter is knowing that finally we will be able go fish and pay bills that have accumulated during the winter because there is no work. The economy got hurt really bad here in Spokane. The construction/housing industry came to a halt. Our return runs in Cordova are really small in comparison to some other locations in Alaska and we try to make the best of what we get. But now Chitina Dip Netters Association wants more fish for themselves and leave less for us fisherman that have to make a living from it. I believe that they need to be as conservative as the sport fisherman or the commercial fisherman that risk their lives to go out and fish to support their families. I think that any decisions to be made should be thought through very thoroughly.

Respectfully,

Anatolie Lisov



March 1, 2010

ATTN: BOF COMMENTS
Boards Support Section
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, AK 99811-5526

Re: Support of Proposal #195 with amended language to include closure of **all** of Districts **1** and 2 in Southeast Area A to Summer Commercial Crabbing.

Dear Board Members:

My name is Larry Painter and I have fished year around, from the Columbia River to Kodiak Island, for fifty-Nine years. Most of you know me as I have helped develop almost all of the commercial Dungeness crab fishing regulations. This includes the seasons, pot regulations, escapement, and pretty much everything else. For all the years I fished Dungeness I was always concerned more about the resource than I was my wallet. I don't fish Dungeness anymore, but I can feel confident, that I did everything in my power to leave the fishery in as good a condition as when I first started. You all know, I worked just as hard to protect the resource as I did to fish it.

The above is why I now feel so bad about what is currently happening to the Dungeness fishery. For years we managed to keep the summer fishery closed here in Districts one and two because of the waste it causes.

Nothing has changed - - This summer a crabber fished District 1 of area A from Helm Bay around to the backside of our island into the Misty Fjord area. He recorded on his first trip, which began on June 15th 2010, a total of six thousand nine hundred and twenty six live crab (6, 926) and one thousand one hundred and forty five dead crab (1,145). He made another trip later with about the same results. There is no way to tell you how depressed so many of us are over this kind of waste. This single fisherman from district One (1) threw away over Two Thousand Crab at the dock before he quit fishing. How many more were threw away before he got there, or died during handling?

Please consider that since 2002/2003, even with this year additionally fishing Districts 1 and 2, the catch has been reduced by more than fifty per cent. Simply put - In all of Southeast Area A there are less than half the crab there used to be. This is a warning to all of us. Are we getting the message?

If the Dungeness crab population is reduced to its natural predation level it will collapse.

It has happened before in other areas and it will happen here if we don't stop the summer fishing of Dungeness crab. A good comparison was stopping a fishery on a biomass of 6,000 ton that had dropped 10,000 ton due to natural predation 2 years prior. We have to start using our state mandated sustained yield harvest methods or we will continue to lose all our fisheries.

Please find enclosed information I have given you before that for years was used to keep our Dungeness fishery closed here in Districts one and two. Everyone including the State of Alaska is familiar with this information. The title of these documents are "**Handling Increases Mortality of Softshell Dungeness Crabs Returned to the Sea**" and "**Fishing Mortality to soft shelled Dungeness Crab-Review of Existing Literature & Evaluation of Current Fishing Practices**". The titles alone give you almost all the information you need. Please take the time to read the documents. Like the Laws of Gravity, the information in both documents still applies. In those documents, from the late 1980s, they tell you short-term mortality was elevated to 57% for softshell crabs dropped onto the deck of a vessel. It also talks about the weight of meat recovered from softshell crabs picked in the summer as to compared to the weight of crabs picked in December. It also clearly states that when a commercial fisherman handles a soft shelled Dungeness crab more than four or five times it will probably die.

Some have said there needs to be newer information, Please see the attached document I sent to you on June 1st of last year titled "**An Educated and Experienced Description of the Life cycle of a Dungeness crab or why they should not be fished in the summer.**" In 2002, 2003, 2004, and 2005, I fished a summer season in Central Southeast Alaska. Half or fifty percent of the Crab I caught during that summer season were softshell. Like the biologists in the above-mentioned study, we used a Durometer so we had an objective measure of carapace or shell hardness. This allowed us to be as productive as possible and not waste any more crab than was necessary. Again, we had nearly fifty percent softshell to throw back. This fishery was extremely difficult for us, as we knew by that time, how many of those Dungeness that we threw back were dying. Please consider the above as recent or new information.

This is all very tough for me, as I have worked so hard, for so long, to keep the summer Dungeness fishery closed in Districts one and two. And the one time I couldn't make it up to a BOF meeting because of medical reasons, the BOF opened the fishery up. This was so disheartening, especially when you have witnessed first hand the waste. In the above referenced document I appealed to your desire to protect and sustain the Dungeness and your public oath to honor the tenets of our Alaska Constitution. "Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the state, shall be utilized, developed, and maintained, on the sustained yield principle....."

On February 5, 2006 I sent you my opposition to proposals 278 and 280. Both of those proposals were seeking to open Districts one and two in registration area A for a summer fishery. Please see the enclosed copy of that document. I addressed the biology, the habit, the market issues, and allocation issues. The BOF accepted all the information, some of which was about the fishery in districts one and two, from the Northern fisherman (Wrangell and Petersburg) themselves. They came down here, fished, and then said how disappointed they were at the lack of crab. They said their first picks were fair; the second picks produced half the amount; and the third picks were very poor. There just isn't the abundance of crab in district one to support a large aggressive fleet. For sure this area is not under harvested.

The above information was again supported last year by a local Ketchikan Commercial Crab fisherman who is getting out of the fishery because of the recent summer fishery in District one. He couldn't fish the summer fishery because of his commercial cleaning and painting business. When he went to do the fall fishery, he found 50 percent less crab and witnessed first hand what he called dramatic harm to the resource. He only made one trip and the picture was so bleak he quit fishing. He has both his boat and permit up for sale and is looking at leaving Ketchikan as his winter-time opportunity for income is gone. Is this what the BOF envisioned for the local commercial crab fisherman?

The above-mentioned fisherman is not the only local Ketchikan crab fisherman to lose an opportunity in district one during 2009. One young man who has other summer work, bought a permit and found a winter market that would provide a price of well over three dollars a pound for Dungeness crab. This is after freight and handling the crab to the buyer. Imagine his disappointment when he found out there was no winter fishery, and only two months for a fall fishery. He never got off the dock. It just wasn't economically viable for him.

Regarding the above information about local (Ketchikan area) fisherman, **please see the attached minutes of the May 13, 2009 Ketchikan Advisory Committee.** In this meeting Scott Kelly of the ADF & G states the board of fisheries has the wherewithal to factor in other socioeconomic issues, which are beyond the scope of what the department of fish and game is charged with. Never could anyone at that meeting in 2009, imagined how that statement would have such a significant meaning at this time. Ask Eric Lunde, Mike Bellanich and their families, who experienced personally the loss from the 2009 fishery, about the socio-economic affect. They had to endure the hardship.

Please see the attached minutes from the May 4, 2009 Ketchikan Advisory Committee. The Ketchikan Advisory Committee adopted a motion to ask for an emergency closure of the summer Dungeness fishery. Obviously the motion would carry no weight unless a majority of all the Committees in registration area A concurred. There was no time to get all the committees to address the issue. However the committee went on record because of all current data on soft-

shelled mortality. Also, a lot of the information during that meeting focused on the socio-economic impacts on the communities in Districts one and two of area A. After having the summer fishery we have now seen first hand the kind of personal damage that has been done. It's no wonder the Ketchikan Gateway Borough and the City of Ketchikan along with many other organizations have developed resolutions against the summer Dungeness fishery.

Please refer to the enclosed letter I sent to the BOF on January 20, 2003.

Again in that document I was opposing proposals to the opening of Districts one and two of Registration Area A, to a summer commercial Dungeness crab fishery that had been opened. In this letter please note, that at that time I had acquired affidavits from the three local processors telling of the thousands of dead and dying soft shelled crab dumped in the harbor and stating they were not interested in seeing that happen again. At that time the summer closure was reinstated. Like I said back in 2003 and like I'm saying again now in 2010, nothing has changed. In 2009 one fisherman from district one threw over two thousand dead crab away. How many times does this have to happen?

Please note in the attached e-mail from Chuck Slagle to Amanda Painter fish and game statistics indicate the dead loss for the 2009 summer commercial Dungeness crab season increased by as much as 10 times over 2002-03 and as much as 24 times over 2006-07. It also refers to the affect of the fishery on the Village of Kasaan. How much more information do we have to keep providing?

I strongly feel when a fisherman looks to expand his area it's because the fishery is collapsing in his area. It appears that is what is happening in Registration Area A. In 2002/2003 the catch without districts one and two was 7,332,665 lbs - and now for 2009/10 with districts one and two, the fleet was hard pressed to catch 3,569,697 lbs. Have we passed the point of sustainability? Has it already collapsed?

To re-iterate and summarize, I support Proposal 195, but again, with all of District one included and reverting back to the previous management scheme. You are, or may already have received Minutes from both the Ketchikan Advisory Committee and the Saxman Advisory Committee providing their support for 195, but also with amended language including all of District one. Please review all that I have attached carefully. As you know I have years of involvement protecting the resource for everyone.

Please note, at this time, I am also asking to be on the committee that discusses this proposal at the meeting in Anchorage.

Respectfully yours,

Larry Painter
P.O. Box 6181
Ketchikan, Alaska 99901
907-225-5279

Attachments: (In the order referred to)

“Handling Increases Mortality of Soft shell Dungeness Crabs Returned to the Sea”

“Fishing Mortality to soft shelled Dungeness Crab-Review of Existing Literature & Evaluation of Current Fishing Practices.

An Educated and Experienced Description of the Life cycle of a Dungeness crab or why they should not be fished in the summer.

On February 5, 2006 my opposition to proposals 278 and 280.

The attached minutes of the May 13, 2009 Ketchikan Advisory Committee.

The attached minutes of the May 4, 2009 Ketchikan Advisory Committee.

Letter sent to the BOF on January 20, 2003.

E-mail from Chuck Slagle to Amanda Painter.

cc: Jim Marcotte, BOF Executive Director

~~Abstract~~ Mailed out June 4, 2009

state of Alaska on the mortality of soft shell crab

Handling Increases Mortality of Softshell Dungeness Crabs Returned to the Sea

Gordon H. Kruse, David Hicks, and Margaret C. Murphy

ABSTRACT: Effects of carapace hardness and air exposure duration on mortality were studied on Dungeness crabs *Cancer magister* off Kodiak Island, Alaska. We captured 516 legal male crabs and marked them with spaghetti tags. Carapace condition was recorded, and crabs were randomly selected for exposure to air for 5, 15, 30, and 60 min. Crabs were then returned to the sea. Subsequent recoveries from commercial catches included 11% of the tagged softshell crabs and 30% tagged hardshell crabs; these differences were statistically different. No statistical difference was found among exposure periods for hardshell crabs; low statistical power due to small sample size precluded similar tests for differences among exposure periods for softshell crabs. Low recovery rates of softshell crabs in Alaska is consistent with previous mark-recapture studies of Dungeness crabs conducted off Oregon and Washington. Previously published results from controlled experiments support our conclusion that differential recovery rates were primarily due to elevated handling mortality of softshell crabs. Our data suggest that softshell crabs experienced 45% higher mortality than hardshell crabs. However, this rate may not be representative of handling mortalities experienced during commercial fisheries because (1) during molting periods fisheries catch crabs much softer than those we encountered, (2) we handled crabs much more carefully than would normally occur during commercial operations, and (3) we were unable to derive separate estimates of differential natural and handling mortalities among softshell and hardshell crabs. Findings of handling mortalities of softshell crabs, coupled to considerations of cannibalism in crab pots, indicate that Dungeness crab fishing seasons in Alaska should be structured to avoid major molting periods as is the general practice along the coasts of California, Oregon, Washington and British Columbia. Such regulations will reduce mortality and commensurately increase the abundance of harvestable males and spawning biomass. Extended fishery closures until several months after molting will result in some economic benefits, as well. Meat yield and wholesale value are lowest during molting and increase until peaking several months later. These factors, plus other socioeconomic tradeoffs, should be weighed to determine net benefits to changes in fishing seasons for Dungeness crabs.

INTRODUCTION

This paper examines experimental effects of carapace hardness and air exposure duration on rates of recovery of tagged Dungeness crabs *Cancer magister* in the commercial fishery off Kodiak Island, Alaska, and discusses the associated management implications. The field investigations for this study were conducted, initially analyzed, and reported by Hicks and Murphy (1989). Further analysis of their data led to a different conclusion about statistically significant differences in tag recovery rates among hardshell and softshell crabs due to handling mortality. These revised findings are presented here.

In Alaska, Dungeness crab fisheries are managed primarily by size, sex, and season (S-S) regulations (ADF&G 1993). Typically, fishing seasons extend from June 15 through December 31, but significant variation in season dates occur among management areas. Only male crabs 6.5 in carapace width may be retained. Width is measured by the straight line distance across the carapace immediately anterior to the tenth anterolateral spine, not including the spines.

Significant quantities of softshell Dungeness crabs may be handled during commercial fisheries in Alaska because seasons are protracted (ADF&G 1993) and crabs molt virtually year-round (Koeneman 1985). Further, with exceptions of Prince William Sound (Donaldson 1990) and Cook Inlet (Kimker

Authors: GORDON KRUSE is the marine fishery scientist and MARGARET MURPHY is the statewide shellfish biometrician for the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, P.O. Box 25526, Juneau, AK 99802-5526. DAVE HICKS was formerly a fishery biologist for the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, 211 Mission Road, Kodiak, AK 99615; his current address is 4414 North Camino Gacela, Tucson, AZ 85718.

Acknowledgments: Dave Jackson — field assistance. Al Kimker & Bill Donaldson — manuscript reviews. Hal Geiger — statistical advice.

1991), fishing seasons do not necessarily avoid periods of heaviest molting that appear to occur from April (Koeneman 1985) through August (Kimker 1991). If handling lowers survival of softshell crabs returned to the sea, fishery productivity could be reduced by direct mortality of discarded males: legal softshell males are discarded because of low product quality and both hardshell and softshell sublegal males are discarded due to size limits. Excessive handling mortality of softshell females could reduce population egg production and subsequent recruitment strength.

Although we are unaware of studies on effects of air exposure on Dungeness crabs, several investigators have studied effects of carapace hardness on handling mortality. In these studies crabs were classified based on subjective measures of carapace hardness. Some investigators (e.g., Cleaver 1949) used terms such as *new hard*, *new slightly soft*, *new soft*, and *old shell*. Many others (e.g., Waldron 1958; Tegelberg 1972; Barry 1984) classified crabs as *grade 1* or *hardshell*, those having little or no flexibility in carapace; *grade 2* or *medium hardshell*, those having a somewhat flexible carapace; and *grade 3* or *softshell*, those with a very flexible carapace.

Two of these studies examined mortality directly through controlled experiments designed to mimic commercial fishing operations. In one study in Willapa Bay, Washington, Tegelberg (1972) captured and handled crabs, sorted them by grade, tagged them with Petersen disc tags, and placed 25 crabs for each hardness grade into separate Dungeness crab pots that had tunnels and escape rings wired shut. Pots were submerged in 5–13 m of water. Four-day mortality was approximately 9% for grade-1 crabs, 17% for grade-2 crabs, and 23% for grade-3 crabs. In the other study, Barry (1984) captured, handled, and placed crabs into holding pots in 16–20 m of water in Grays Harbor, Washington. In one set of trials, grade-1 crabs experienced 1% mortality, grade-2 crabs 7%, and grade-3 crabs 11% after 4 d. In another trial conducted during a major molting period, grade-1 and -2 crabs were not collected, but 30% of grade-3 crabs died and an additional 9% were moribund after 5 d.

Two other studies examined recovery rates of Dungeness crabs that had been marked with Petersen disc tags and were subsequently sampled from commercial catches. In the first study conducted off Washington (Cleaver 1949), the recovery rate of tagged new, slightly soft crabs was 7% lower than new, hard crabs, whereas new soft crabs were recovered at a rate 68% lower than that of new, hard crabs. However, rather than resulting from differences in handling mor-

tality, Cleaver attributed different return rates to higher tag loss among softshell crabs than hardshell crabs. In the second study off Oregon (Waldron 1958), the tag recovery rate for grade-2 crabs (20%) was half that for grade-1 crabs (40%); differences in recovery rates were statistically significant, but Waldron did not attribute these differences to specific cause.

METHODS

Field Methods

Dungeness crabs were captured with commercial pots in Alitak Bay (approximately 56° 50' N, 154° 10' W) at the southern end of Kodiak Island during June 6–15, 1987, using the Alaska Department of Fish and Game vessel *R/V Coho*. Females and sublegal males were not studied and were returned quickly to the sea. Captured legal male crabs were measured for carapace width, and objective estimates of carapace hardness were obtained with a model 307LCRB¹ durometer using methods described by Hicks and Johnson (1991). The durometer measures the relative units (0–100 durometers) of pressure that must be applied to result in an indentation of the carapace. For frame of reference, using nonlinear regression of carapace hardness on time since molting for laboratory animals, Hicks and Johnson (1991) predicted that legal males average 19 durometers one month after molting, 46 durometers at 3 months, and 66 durometers at 5 months.

Legal male crabs were tagged with spaghetti tags using methods of Snow and Wagner (1965) and randomly assigned, regardless of carapace hardness, to treatment groups of 5, 15, 30, or 60 min of air exposure. After the prescribed period of air exposure, crabs were returned to the sea. During these procedures, all crabs were handled with great care; handling was not intended to simulate treatment experienced during the commercial fishery. Due to good cooperation by fishermen, tagged crabs were recovered by ADF&G biologists from dockside catch samples from the commercial fishery that opened on June 15 and closed on December 31, 1987. See Hicks and Murphy (1989) for more detail on field methods.

Our study is similar to the field studies conducted by Cleaver (1949) and Waldron (1958), but we believe that we made some notable advances. Unlike these earlier studies in which carapace hardness was subjectively classified, our study employed a durometer (Foyle et al. 1989; Hicks and Johnson 1991) to obtain

objective measures of carapace hardness. A spaghetti tag, applied to the epimeral suture line of the crab, was chosen rather than the Petersen disc tag used by Cleaver and Waldron. Spaghetti tags are superior to Petersen disc tags for study of differential mortality among softshell and hardshell crabs because (1) during molting spaghetti tags are retained (Snow and Wagner 1965), but disc tags are shed (Waldron 1958); (2) Petersen disc tags are lost at greater rates from softshell than hardshell crabs (Tegelberg 1972); (3) crabs marked with Petersen disc tags experienced higher short-term (6 d) mortalities than untagged crabs receiving identical handling treatments (Tegelberg 1972); and (4) there is no evidence of significant tag loss nor differential mortality among Dungeness crabs* marked and unmarked with suture line tags (Tegelberg 1972; Smith and Jamieson 1989). Unlike earlier studies with Petersen disc tags, we dismissed the importance of differential tag loss and tag-induced mortality in our investigation for these reasons. Last, we studied tag return rates for effects of air exposure — a factor not investigated previously for Dungeness crabs.

Analytical Methods

Tag recovery data were aggregated into two carapace-hardness categories (<70 and ≥70 durometers) and four exposure durations (5, 15, 30, and 60 min). Hicks and Johnson (1991) reported that 92% of the crabs with carapace hardness <70 durometers are "new soft shells." For notational shorthand, we refer to crabs with carapace hardness <70 durometers as *softshell* and those with hardness ≥70 durometers as *hardshell* hereafter.

Confidence intervals (CI) for recovery rates expressed as proportion recovered were estimated using two methods. For cases with sufficient recoveries (in this case, hardshell crabs), 95% confidence intervals were calculated as

95% CI for $p_{hd} =$

$$\hat{p}_{hd} \pm \left[1.96 \sqrt{\frac{\hat{p}_{hd} \hat{q}_{hd}}{N_{hd}} + \frac{1}{2N_{hd}}} \right]; \quad (1)$$

where:

$$\hat{q}_{hd} = 1 - \hat{p}_{hd};$$

N_{hd} = number of tagged hardshell crabs (\hat{z}) that were exposed to air for d min;

\hat{p}_{hd} = proportion of hardshell crabs exposed to air for d min that were subsequently recovered; and

$(2N_{hd})^{-1}$ = correction for continuity (Snedecor and Cochran 1967).

Because this approximation may be poor in data-limited situations where $N\hat{p} < 5$ (Sokal and Rohlf 1981), statistical tables calculated by Mainland et al. (1956) and reproduced by Rohlf and Sokal (1969) were used to estimate 95% C.I. of \hat{p}_{hd} , or the proportion of softshell crabs exposed to air for d min.

We subjected results to 2×2 and 4×2 tests of independence for tag recovery rates among carapace hardness and air exposure treatments. Results of these tests were evaluated with respect to statistical power ($1-\beta$). A 2×2 G-test with Williams' correction (G_{adj}; Sokal and Rohlf 1981) was used to test for independence of tag recovery rates on carapace hardness alone and was compared to tabled values of $(1-\beta)$ for differences between two proportions with unequal samples sizes (Cohen 1988).

To test for independence of tag recovery rates on exposure treatment, 4×2 tests were conducted on hardshell and softshell crabs separately. Hardshell crabs were subjected to a 4×2 G-test with Williams' correction. Because of the low number of treatments and small expected frequencies, we followed Cornahan's (1970) advice and applied a 4×2 Fisher's exact test for softshell crabs. Because of difficulty in extending power analyses to more than two classes (Sokal and Rohlf 1981), we constructed Monte Carlo simulations of these two 4×2 tests of independence to examine statistical power. These Monte Carlo simulations were used to estimate the sample size in each exposure group that would have been needed to detect biologically meaningful differences in tag recovery rates.

We proposed that biologically meaningful differences in tag recovery rates would occur if the rate from at least one treatment (shortest exposure) was double the rates associated with other treatments. If reduced exposure times resulted in smaller improvements in tag recovery rates than this and presumably smaller reductions in handling mortality, we would not have bothered adjusting field estimates of handling mortality for exposure time, and we would have been disin-

clined to advocate changes in onboard handling procedures during surveys or commercial operations.

For each hardness category, we tested H_0 at $p_5 = p_{15} = p_{30} = p_{60}$ against H_a at $0.5p_5 = p_{15} = p_{30} = p_{60}$. For the simulations, sample sizes were set equal in each of the four exposure groups. Initial test sample sizes for each treatment were set equal to the average observed sample size for the hardness category. Next, we randomly sampled 1000 times from each of four binomial distributions, three with equal probabilities of tag recapture in the neighborhood of those observed and the fourth with a probability double the others. Then, sample size was systematically changed until statistical power of the test was approximated by the proportion of simulated occurrences in which significant ($\alpha = 0.05$) differences in tag recovery rates occurred. Given this α , we followed Cohen's (1988) suggestion and chose the desired statistical power ($1 - \beta_5$) to be 0.80. We were satisfied that there were no biologically meaningful effects of exposure on observed tag recovery rates, if H_0 was not rejected at $\alpha = 0.05$ and if $(1 - \beta) \geq (1 - \beta_5)$.

RESULTS

During tagging operations, 516 legal Dungeness crabs with carapace hardness ranging from 26 to 98 durometers were captured and tagged. Of these, 116 crabs, all with carapace hardness >52 durometers, were recovered in the fishery. Recovery rates ranged from 9–13% for softshell crabs and 16–25% for hardshell crabs (Table 1). The 95% CI for \hat{p}_{sl} and \hat{p}_{hd} are shown in Figure 1; wider CI for \hat{p}_{sl} reflect lower sample size for softshell ($N_s = 114$) compared to hardshell crabs ($N_h = 516$).

The G -statistic from the 4×2 test for independence of the four exposure treatments on the number of hardshell crabs recovered and unrecovered (Table 1) was $G_{adj} = 3.381$. Because $G_{adj} < \chi_{0.05,3}^2 = 7.815$, we did not reject the null hypothesis that recovery rate of hardshell crabs was independent of exposure period for the exposure periods tested (≤ 1 h). However, simulated binomial observations of these true hardshell crab recovery rates and numbers of crab released in each exposure group resulted in low statistical power (0.31) for detecting differences among treatments.

To increase power of the test we averaged the observed recovery rates (20%), doubled the recovery

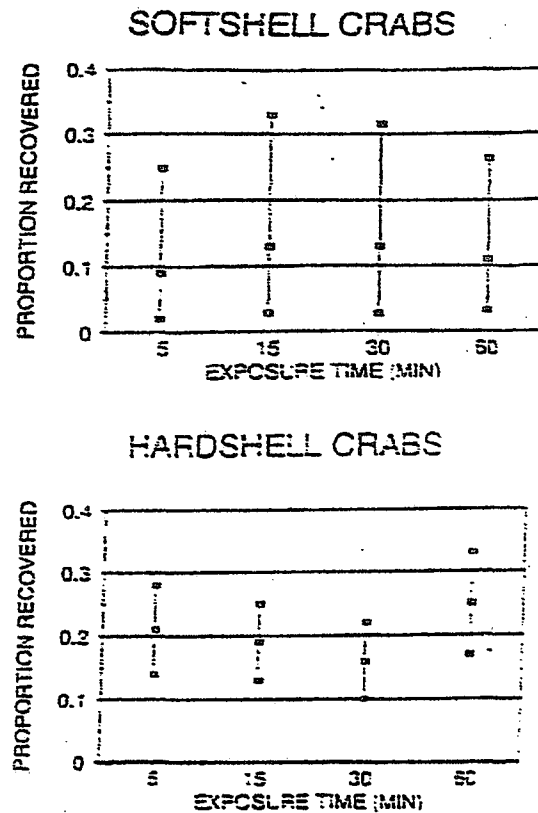


FIGURE 1. Proportion and 95% confidence intervals of tagged softshell (upper panel) and hardshell (lower panel) Dungeness crabs that were exposed to one of four air exposure treatments and subsequently recovered in the commercial fishery by dockside samplers. Methods for calculation of 95% confidence intervals are described in the text.

rate (40%) for the lowest exposure group (5 min) and set the number of crabs released in each exposure group to the average (129) of all groups. This increased power to 0.97. Additional simulations indicated that sample size for hardshell crabs could be decreased to 75 crabs per exposure group; this sample size would allow us to detect a halving of recovery rates as exposure duration increased while retaining statistical power of 0.80. These results imply that there were no biologically meaningful differences in tag recovery rates among exposure treatments for hardshell crabs.

Fisher's exact test of independence of the number of softshell crabs recovered on the four exposure treatments yielded $P = 0.978$: the null hypothesis that recovery rate of soft shell crabs was independent of exposure period was not rejected at $P = 0.978$. Monte Carlo simulation of binomial observations of the number of softshell crabs released and their recovery rates

Table 1. The number and percentage of recaptured Dungeness crabs for each of four exposure durations and two carapace hardness categories. The four exposure categories and two outcomes (recovered and unrecovered) for hardshell crabs formed the basis of the 4 x 2 G-test of independence.

Exposure Time (min)	Softshell Crabs			Recovery Rate (%)	Hardshell Crabs			Recovery Rate (%)
	Number Recovered	Number Unrecovered	Total		Number Recovered	Number Unrecovered	Total	
5	3	29	32	9.4	26	99	125	20.8
15	3	20	23	13.0	27	115	142	19.0
30	3	21	24	12.5	21	112	133	15.8
60	4	31	35	11.4	29	87	116	25.0
Grand Total	13	101	114	11.4	105	413	516	20.9

yielded low power (0.078) for detecting differences among treatments.

Statistical power was examined further by (1) setting recovery rates of softshell crabs exposed for 15, 30, and 60 min equal to the average rate (11.6%), (2) setting the recovery rate for the 5-min exposure group to double this level (23.2%), and (3) assuming equal numbers of released crabs for each treatment group. We estimated that a sample size of 155 crabs for each treatment would have been required to detect such differences in recovery rates with a power of 0.8. Thus, small sample sizes prevented conclusions about the existence of biologically meaningful differences in tag recovery rates among exposure treatments for softshell crabs.

Because the effects of exposure period on recovery rates were not evident for hardshell crabs and were unresolved for softshell crabs, we aggregated the tag recapture data into two hardness categories independent of exposure period (Table 2). This permitted a 2 x 2 G-test for independence of recovery rate on carapace hardness. For this test we estimated $(1-\beta) = 0.90$, given $\alpha = 0.05$, $N_s = 114$, $N_h = 516$, $\hat{p}_s = 0.11$, and $\hat{p}_h = 0.20$. The test statistic for independence of tag recovery rates on carapace hardness was $G_{adj} = 4.955$. Because G_{adj} was greater than the critical χ^2_{adj} value ($\chi^2_{0.05,3} = 3.841$; $0.01 < P < 0.05$), we rejected the null hypothesis of independence. That is, the mean recovery rate for softshell crabs (11%) was 45% lower

than the mean recovery rate for hardshell crabs (20%), and this difference was statistically significant. If the recovery rate of tagged softshell crabs had been equal to the recovery rate of tagged hardshell crabs, then we would have expected 25 recoveries of tagged softshells rather than the 13 actually recovered.

DISCUSSION

In their analysis of the same data reported here, Hicks and Murphy (1989) found no significant differences in tag recovery rates of Dungeness crabs grouped into four exposure periods and six carapace hardness categories. Given total sample size and the number of exposure-hardness treatments considered, they were unable to distinguish handling effects due to low statistical power. We subsequently found that, when data were aggregated into two carapace hardness categories and four exposure treatments, sample size was sufficient to conclude that hardshell crabs showed no statistical evidence of detrimental impact due to air exposure at the four durations (≤ 1 h) tested. We also found that the number of hardshell crabs tagged in each treatment group was more than adequate to detect a biologically meaningful difference in recovery rates among exposure treatments, had such differences existed.

Sample sizes of tagged softshell crabs were too small to draw meaningful conclusions about effects of air exposure on recovery rates. When pooled across all exposure periods, however, we found that the recovery rate of tagged softshell crabs was lower than that of tagged hardshell crabs. This difference was statistically significant and biologically meaningful, and the power of this test was high. Hicks and Murphy (1989) did not reach this conclusion because they considered the exposure periods as different treatments and did not pool across them. Here, we did not consider the four exposure periods as different treatments for hard-

Table 2. The 2 x 2 table used to test for independence of tag recovery rates among softshell and hardshell Dungeness crabs.

Carapace Condition	Number of Tagged Crabs		
	Recovered	Unrecovered	Total
Softshell	13	101	114
Hardshell	103	413	516
Total	116	514	630

shell crabs because no biologically meaningful effects from air exposure were noted. Although statistical power was too low to fully discount exposure effects on recovery rates of softshells, these data were pooled to permit a test for the separate effect of carapace hardness — which we considered to be a primary question. We suspect that if exposures ≤ 1 have any effects on recovery, these effects would be secondary and would be manifested in crabs with very soft carapaces. Because we had dismissed the importance of differential tag loss and tag-induced mortality, we assumed that differential mortality was responsible for observed differences in tag recovery rates.

Carapace Hardness

Although we were unable to derive separate estimates of differential natural and handling mortalities among softshell and hardshell crabs, we concluded, as did Tegelberg (1972), that handling was largely responsible for the low recovery rates of tagged softshell crabs. Likewise, Smith and Jamieson (1989) surmised that handling of softshells contributed to higher mortality estimates for sublegal males that molted compared to crabs that did not molt. These conclusions are supported by controlled short-term experiments by Tegelberg (1972) and Barry (1984), who found that handling mortality was inversely related to carapace hardness. Even if differential "natural mortality" accounted for a significant portion of observed differences in tag recovery rates among softshell and hardshell crabs, handling may still be implicated. For example, Brown and Caputi (1983) and Gooding (1985) found that handled and released lobsters (*Panulirus*) experienced increased predation due to displacement from home range, lack of shelter at site of release, impairment of activity level, and reduced aptitude for defense against predators.

Unfortunately, our results cannot be used to infer the level of handling mortality of Dungeness crabs during commercial fisheries because (1) fisheries prosecuted during molting periods catch crabs much softer than we encountered, and (2) we handled crabs much more carefully than under commercial operations. For these reasons, estimates of handling mortality may be less than true mortality in commercial fisheries prosecuted on newly molted crabs.

Severity of Handling

Barry (1984) found that, if handled in a manner similar to conditions aboard commercial fishing ves-

sels, crabs experienced higher short-term (4–5 d) mortality than control crabs of the same carapace hardness that were captured and handled very gently. Softshell crabs that were handled three times in 6 d experienced 41% mortality compared to 23% for those that were handled once in 2 d, although sample size prevented tests for significance (Tegelberg 1972).

Impacts of crabs on the deck of a fishing vessel or on the surface of the sea could affect survival rate. In one study, short-term mortality was elevated to 57% for softshell crabs dropped onto the deck of a vessel (Tegelberg 1972). In another study (T. Shirley, University of Alaska Fairbanks, Juneau, personal communication), the commercial catching, sorting, and discarding processes were simulated in the laboratory. Mortality was found to be directly correlated to the number of times per month that Dungeness crabs were captured, handled, and dropped back into the water.

Appendage Loss

Dungeness crabs are vulnerable to appendage injury. Between 18–62% of captured Dungeness crabs were found to be injured along the coasts of Southeast Alaska (Shirley and Shirley 1988) and the Pacific northwest (Cleaver 1949; Waldron 1958; Durkin et al. 1984). Time of year and the level of fishing effort affect injury rates. Shirley and Shirley (1988) found the incidence of appendage injury of Dungeness crabs in Southeast Alaska to increase significantly with the prosecution of the commercial fishery and with the onset of mating and molting.

Dungeness crabs have the ability to survive amputation and regenerate lost limbs (MacKay 1942; Cleaver 1949). However, these crabs may suffer lower survival rates than crabs with all appendages intact. In our study, only three crabs had missing appendages (Hicks and Murphy 1989), so we were unable to analyze the possible effects of this factor. However, in a 2-year study Cleaver (1949) found that tagged crabs missing one appendage were recaptured at 73–93% of the recovery rates of tagged crabs without missing appendages; this fell to 50–65% for crabs missing two appendages. Similarly, data presented by Waldron (1958) reveal that crabs with some lost appendages were recovered at a lower rate (83%) than crabs with all appendages intact, but this difference was not statistically significant.

Air Exposure

Under field conditions — generally cool and overcast or rainy — that we encountered off Kodiak Island during tagging in June 1987 hardshell Dungeness crabs seemed to survive air exposures for up to 1 h. Because of lack of statistical power associated with small sample size, we could not discount possible effects of exposure on softshell crabs. Nonetheless, our finding of no effect for hardshell crabs is consistent with anecdotal observations by Cleaver (1949) that air exposure causes crabs no harm if they are kept cool and moist. However, it seems to us that desiccation could adversely affect survival at longer exposure periods or higher air temperatures especially for softshell crabs.

Management Implications

Handling mortality has significant implications for fishery management. Commercial fisheries prosecuted during molting periods reduce survival of Dungeness crabs returned to the sea. It follows that handling of molting prerecruit crabs reduces the size of the legal population available several months later when crabs are harvestable size. Handling mortality on females reduces population egg production. Unfortunately, it is very difficult to quantify in situ handling mortality and its affect on population dynamics and the commercial fishery for Dungeness crabs.

Fisheries may lead to other sources of mortality aside from handling. Cannibalism, particularly on softshells, occurs when crabs are contained in pots and aquaria (Cleaver 1949; Waldron 1958). Also, deaths occur due to starvation from confinement in pots for periods ≥ 30 d (Paul et al. 1993b). These mortalities may be problematic in fisheries in which pots are fished with lengthy soak times or in fisheries with significant pot loss. Based on experiments (Kimker 1990; Paul et al. 1993a) and analyses of alternatives (Kruse and Kimker 1993), in February 1993 the Alaska Board of Fisheries adopted new fishing regulations (ADF&G 1993) that require all shellfish and groundfish pots to be installed with a degradable mechanism made of cotton twine or a galvanic timed release device. These provide for escape from lost pots.

Economic considerations are important, as well. Tegelberg (1972) showed that mean percentage picked weight increased from 15% of live weight during peak molting period to 26% three months later for Washington coastal crabs and to 30% seven months after molting for Willapa Bay crabs. Also, he

documented a relationship between carapace hardness and product quality. The weight of meat recovered from softshell crabs was lower than that of hardshell crabs of the same size regardless of month of year. For example, in December the picked weight of hardshell crabs (grade 1) was 25% of live weight as compared to only 15% for softshell crabs (grade 3). Additionally, there is a negative linear relationship between percentage of meat yield and percentage of softshell crabs in the catch (PMFC 1978).

Meat yield affects economic rent. Even if wholesale price was fixed, lower product recovery rates reduce gross receipts paid to processors for a given number of crabs (PMFC 1978). Yet, carapace condition may have no effect on unprocessed weight because softshell crabs with low meat yields have high water content (Taylor and Warren 1991). These conditions provide incentives for processors either to refuse purchase of landings dominated by softshell crabs or to offer lower exvessel prices for these catches. Regardless, increased quantities of softshell crabs in landed catches reduce gross earnings of harvesting and processing segments of the crab industry.

Given all of these considerations, we believe that Dungeness crab fisheries in Alaska should avoid major molting periods, as is the general practice off California (Warner 1985), Oregon (Demory 1985), Washington (Barry 1985), and British Columbia (Jamieson 1985). If fixed openings and closures are used, then seasons should be selected that acknowledge extensive interannual variability in molting periods typical of Dungeness crabs (Tegelberg 1972; Snow 1963).

Alternatively, as recommended by Jamieson (1985), fishing seasons could be flexed to avoid major molting periods based on inseason monitoring of carapace hardness. Waldron (1958) reported on a management plan developed in Oregon in the late 1940s in which the fishery was open only when <10% of legal size male crabs were softshell. A similar strategy is employed currently in Washington, Prince William Sound (Donaldson 1990), and lower Cook Inlet (Kimker 1991). The primary advantage over a fixed season is that handling mortality is reduced in years when crabs molt so late that softshells would have occurred in commercial catches despite planned seasonal closures. On the other hand, increased fishing opportunities could be provided in years when the molting cycle is advanced.

CONCLUSIONS

(1) We believe that handling mortality caused the statistically different (0.01) tag recovery rate noted between softshell crabs (11%) and hardshell crabs (20%) in the 1987 commercial fishery off Kodiak Island, Alaska.

(2) The 45% lower recovery rate for softshell crabs than for hardshell crabs may have been partially influenced by tag loss or tag-induced mortality, but these influences were believed to be relatively minor. Furthermore, our conclusions about handling mortality for softshell crabs are quite consistent with other Dungeness crab studies.

(3) Hardshell crab survival does not appear to be affected by exposure to air up to 60 min during the cool and overcast or rainy conditions that we encountered off Kodiak Island while tagging. Sample size was too small to test the effects of different exposures on softshell crabs, and no conclusions were possible.

(4) In commercial fisheries severe handling and multiple recaptures will increase handling stress and associated mortality of softshell crabs beyond that indicated by our study, in which crabs were handled only once and with great care.

RECOMMENDATIONS

(1) We recommend a statewide study of Dungeness crabs to estimate molting timing and its interannual variability by area. At present, molting timing is poorly known in most areas of the state.

(2) Dungeness crab fisheries in Alaska should be closed during major molting events. This may be achieved by two methods. Fixed closure periods that account for interannual variability in molting timing may be established for each regulatory area. Alternatively, variable season opening dates could be set based on annual pre-season sampling programs as currently practiced in Prince William Sound and lower Cook Inlet.

(3) A bioeconomic simulation study is recommended to guide considerations of optimal fishing seasons for Dungeness crabs. Relevant factors include results of the proposed molting timing study, handling mortality related to carapace condition, mean percentage picked weight as a function of shell hardness, and seasonal effects of U.S. supply of Dungeness crabs on price paid per pound.

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Mailed out June 4, 2009

State

of Washington on the mortality of soft shell crab
Page 1 of 6

Fishing Mortality to Soft Shelled Dungeness Crab - Review of Existing Literature & Evaluation of Current Fishing Practices

Note: Most of the studies included in this summary utilize a standard shell condition ranking system (included below) which classifies crab as Stage 1, 2 or 3 with intermediate grades within stages. Stage 3 crab are very soft and Stage 2 crab are somewhat soft. Late Stage 2 (2-1) crab meet minimum legal requirements for retention and sale and Stage 1 crab have hard shells and optimal meat yield.

Introduction:

Results from the studies summarized below indicate that soft shelled crab are subject to significant mortality from capture and handling. This mortality was observed during experiments in which crab were handled more carefully than during typical fishing. Handling mortality rates for stage 2 and/or stage 3 crab ranged from 8 to 45 percent, with most estimates from 18% to 30%, often from just one handling.

Experiments simulating the normal occurrence of soft crab hitting the deck (57% mortality) or the water (8.9% mortality) shows how easily and quickly soft crab can be killed by mechanical shock injury during typical fishing operations. The experiments also simulated typical injuries to soft shell crab by breaking legs and claws (42.2%), and by pinching shells (6.7% mortality). The impacts of leg and claw loss (up to 38% mortality) were also evaluated. The studies show that soft shell crab are fragile and can be killed by a variety of injury types. These injuries occur when crab interact with each other within pots on the bottom and during normal fishing operations when crab are sorted. The studies document impacts to legal size male crab, but similar types of impacts are expected to sub-legal and female crab.

The cannibalism study (6.8% mortality) and all the observations of cannibalism and broken pieces of carapace within pots indicate that cannibalism of soft shell crab does occur.

Review of available literature on soft shell Dungeness crab mortality:

Fred C. Cleaver - 1947

Cleaver conducted a tagging study in coastal Washington waters which indicated crab are killed by relatively minor injuries. Loss of a single leg lowered survival 6.5%; a single claw, 19%; two legs, 35.3%; one leg and one claw, 37.8%.

Fred C. Cleaver - 1949

Cleaver tagged over 9,000 crab in coastal Washington waters between December, 1946 and April, 1948. The commercial fishery was sampled intensively and 4,865 tags were recovered. Tag return data indicated that survival of "new soft shell" and "new slightly soft" crab was reduced by 68.5% and 8.1%, respectively, compared to "new hard shell" crab.

Kenneth D. Waldron - 1958

Sampling was conducted from November 1947 through January 1950 using commercial crab gear and methods, 6,249 crab were graded, tagged, and released. Tags were returned by fishers and buyers.

Waldron tagged 3,275 stage 1 crab and 817 stage 2 crab in coastal Oregon waters. Tags from 40% (1,318) of the stage 1 crab, and 20.4% of the (167) of stage two crab were recovered. The overall difference in recovery was 19.8%. A chi square test indicated that the reduced survival of stage 2 crab was significant for all seasons and areas tested.

Waldron also tagged 1,097 stage 1 crab and 1,060 stage 2 crab from four Oregon bays. Tags from 38% (414) of the stage 1 crab and 25% (265) of the stage 2 crab were recovered, indicating a 13% reduction in stage 2 survival. Chi square tests were not conducted for these data.

Waldron also noted observations of cannibalism within pots and in holding tanks, particularly when crab were molting.

Herb Tegelberg- 1970

Sampling was conducted in coastal Washington waters using commercial fishers and gear. Crab were graded into stages 1, 2, and 3, tagged with Peterson disks, and separated by stage into tanks.

Crab were then placed in replicate pots (separated by stage) and carefully lowered to the bottom in 3 to 7 fathoms of water in the same location where they had been caught. Experiments were conducted to test the effects of time and successive handling on mortality. Escape rings and entrance tunnels were wired shut in all pots. The first experiment was designed to test mortality effects related to the number of crab placed in holding pots, so that appropriate sample size could be determined. Crab were divided into hardshell and "soft shell" treatments: the soft shells were a mixture of stage 2 and 3 crab. About 10% of the soft shell crab died after two days, 15% died after four days, and 25% were dead after seven days. Hardshell mortality was less than 2% after two to four days. There was no indication that mortality was related to density and a sample size of 25 crab per pot was chosen for subsequent experiments.

The second experiment tested whether mortality was a function of time, additional handling, or both. Triplicate lots of 25 soft shells (again including some stage 2 crab) were held 2 days (handled once), 4 days (handled 1 vs. 2 times), and 6 days (handled 1 vs. 2 vs. 3 times). In all cases, for comparable holding periods, additional handling caused higher mortality. Total mortality was higher than in the first experiment. Mortality of untagged crab ranged from 15% (2 days, handled once) to 33% (6 days, handled 3 times), and from 23% (2 days, handled once) to 41% (6 days, handled 3 times) for tagged crab.

The third experiment compared mortality of tagged and untagged stage 1, 2, and 3 crab after 4 days of holding in pots. "Stage 3" crab were a mixture of stage 2 and stage 3. Mortality of "stage 3" untagged crab averaged 16% compared to 4% for the untagged stage 1 and 2 crab after four days. Mortality of tagged crab was about 9% for stage 1 crab, 18% for stage 2, and 23% for "stage 3". Four lots of untagged "stage 3" crab suffered 57% mortality after being individually dropped to the deck of the vessel.

Some Peterson disk tag loss among stage 3 crab was observed and the probable bias of differential tag loss in previous studies was noted. However, Tegelberg used approximately 2,100 crab in experiments to study mortality from handling that would be nearly typical of commercial fishing. He concluded that discard (removed from pots and thrown overboard) mortality is significant and causes direct loss of Dungeness crab resource production if fishing is permitted during molting periods. He also noted evidence of cannibalism within the wired shut pots from soft crab preying on each other soft crab. Often only pieces of carapace were all that remained of cannibalized crab.

Herb Tegelberg- 1972

Additional experiments were conducted to estimate mortality from specific injuries and treatments. A mixture of hard and soft (stage 3) crab were placed in pots to test cannibalism effects. Mortality was 6.8% for soft crab and 0.0% for hard crab. Soft crab were thrown into a 30 gallon box of water on deck to simulate being thrown from the boat during normal fishing operations. Mortality of these crab was 8.9%. Another group of stage 2 and stage 3 crab were subjected to a variety of injuries. The forward ventral edge of the carapace was crushed with needle nose pliers to simulate being pinched by another crab; mortality was just 6.7%. One claw or one of the first walking legs was broken to simulate typical injuries caused when crab are removed from traps; mortality was 42.2%. Tegelberg again notes that stage 3 crab were difficult to obtain for this experiment and a number of the "stage 3" crab were actually stage 2 crab.

Steve Barry, 1983

Crab from Gray's Harbor, Washington were graded, placed in holding pots and checked at one, two, or three day intervals in 1980. "Soft shell" crab were primarily stage 2 crab with some stage 3 crab. The soft shell crab experienced a mortality of 25.8% compared to 2.8 percent for stage 1 crab. The study was repeated in 1981 with a similar mixture of crab and similar results. Mortality of stage 2 and 3 crab was 22.9% compared to 9.6% for stage 1 crab. Three samples of stage 1 crab suffered higher mortality than stage 2 and 3 crab and Barry speculated that warm water and/or low dissolved oxygen values could have affected the results. Despite this anomaly Barry concluded that handling mortality of stage 2 and 3 crab can result in a significant loss to the fishery.

Steve Barry, 1984

Extremely careful and "normal" handling impacts to stage 1, 2, and 3 crab were compared. Results showed that regardless of handling practices, stage 2 and 3 crab suffer substantially higher mortality rates than stage 1 crab. Mortality of treatment (normally handled) stage 3 crab ranged from 26.7 to 40.0%, and was 20.0 to 40.0% for stage 3 control (handled with extreme care) crab. In most cases, large pieces of carapace were found within pots. Another experiment indicated handling mortality of 11.3, 7.6, and 1.4% for stage 3, 2, and 1 crab, respectively. Barry noted that the handling treatment used in this experiment was less severe than during typical commercial operations which would likely result in mortality rates 10 to 20% higher than observed in his study.

Kruse et. al, 1994

Legal size male crab caught near Kodiak, Alaska were graded with a durometer, tagged, exposed to a variety of air exposure treatments, and returned to sea. Based on tag returns from the commercial fishery, softshell crab experienced 45% higher mortality than hard shell crab. The authors concluded that mortality rates caused by fishing during molting periods would be higher because the crab used in the study were not very soft and because crab were handled more carefully than during normal commercial operations.

Discussion:

The intensive nature of the Puget Sound fishery leads to many legal and sub-legal crab being caught, handled, and released several times before they grow hard or large enough to be legally retained. The cumulative impacts of trapping, handling and discard may far exceed the low end of the mortality estimates derived from experimental fishing. Fisheries operating during the molt may kill 25% to 35% of the crab they catch that are subjected to careful handling. Rough handling, including dropping crab on deck, throwing crab into the water, and loss of several appendages, will increase the mortality rate.

The State and Tribes currently close their pot fisheries during primary molt periods to avoid these impacts. The impact of harvesting crab during soft shell periods using non-pot gear has traditionally been considered "acceptable". The popular recreational non-pot fishery includes harvest using ring nets or star traps fished from boats or docks, using dip nets from boats or while wading, and using SCUBA gear. A recent summary of data collected by enforcement staff during a portion of the spring 2000 crab molt period in north and central Puget Sound found that nearly half (137 of 284) the crab retained by recreational fishers were soft shelled and illegal to possess. The majority of these crab were caught using ring nets or star traps, and some were harvested by waders and SCUBA divers. The high rate of recreational non-compliance and associated resource impacts raises serious concerns. Additionally, some tribal crab fishery managers have recently suggested that they will initiate a new commercial ring net fishery if the State continues to allow harvest by non-pot gear during molt periods.

The legal definition of a soft shelled crab ("...shell flexes with digital pressure") is subjective, difficult to enforce, and controversial within the court system. The combination of the subjective rule and the opportunity to fish during major crab molt periods leads to unintended violations and erodes relations between WDFW and stakeholders. Enforcement staff are increasingly uncomfortable with their responsibility to enforce a regulation that often is not upheld in court.

Crab harvest using either ring net/star traps or pots involves trapping of crab on the sea bottom, lifting traps, catch sorting, and discard of crab which are too small, too soft, or female. Crab trapped within the confines of pot gear may be more likely to injure or cannibalize each other before they are handled. However, the research suggests that most fishing mortality impacts are the result of handling rather than cannibalism. Fishers using ring nets catch and handle far more crab per trap check and use shorter intervals (15 minutes to an hour or two) between checks. Most ring nets are constructed of soft mesh material which frequently entangles crab, and

entangled crab are more likely to be injured when removed from the gear. State and tribal crab managers believe that fishing with ring nets or star traps during soft shell periods is likely to kill more crab than fishing with pots.

Fishing induced mortality of soft shell crab, and retention of soft shell crab is a form of wastage that has allocation consequences. It is clear that soft shell harvest negatively affects resource yield, and impacts to the reproductive capacity of crab populations are likely. The amount of wastage by fisheries operating during soft shell periods cannot be estimated without fairly elaborate and expensive studies, but responsible management demands a good faith effort by all parties to minimize it. Initial discussions with representatives of Puget Sound treaty tribes indicate a willingness to eliminate tribal ring net fishing during molt periods.

Recreational crab fishery harvest shares have declined in most areas, primarily due to increased summer time tribal fishing pursuant to the Rafeedie decision. New cooperative state/tribal work to better define regional molt timing differences has determined that crab in central Puget Sound crab molt during the winter. This new information has been used to establish new opportunity to harvest hard shell crab during formerly closed spring months. The impact of closing ring net fishing during winter months would be these areas will be relatively small. In areas like north Puget Sound, where crab molt during the spring the impact would be greater. The molt cycle in Hood Canal, the Strait of Juan de Fuca, and other areas is poorly understood but is currently being studied.

Current recreational catch statistics do not include a separate estimate of ring net catch during molt closure periods but it may be significant in some areas. The recently initiated crab catch record card program is designed to produce estimates for all months, areas, and gear types but results are not yet available. It is incumbent upon managers to work with stakeholders to identify new management provisions that could help to replace the potential loss of the non-pot fishery during molt periods. It should also be noted that eliminating mortality caused by allowing harvest during soft shell periods will increase resource abundance and opportunity for all recreational, commercial, and tribal fishers.

In summary:

- Discussions will be held with the Puget Sound Crab Advisory Group and other stakeholders to discuss the concerns outlined above.
- Additional discussions will be held as needed with treaty tribe managers to develop State/Tribal agreements to close all fisheries during primary molt periods.
- A regulation proposal based on the outcome of these discussions will be advanced for broader public and WDFW Commission review.

Appendix: **Dungeness Crab Shell Condition Stages**

Stage Shell Condition Description

- 3-2 Newly molted - The exoskeleton feels like parchment, is very pliable and can be easily deformed without breaking. Endocuticle mineralization has begun.
- 3-1 Recently molted - The entire exoskeleton has begun to harden but can still be easily deformed. The dorsal side of the carapace will bend or crush under light pressure.
-
- 2-2 Early intermediate phase - This is the main period of tissue growth. The dorsal surface of the carapace continues to harden and is now only flexible at the posterior, left and right margins. The anterior ventral edge of the carapace and upper segment of the first walking leg are very flexible but will readily spring back into shape after pressure has been applied.
- 2-1 Late intermediate phase - Tissue growth continues. The dorsal side of the carapace is now hard. There is little to no flex left in the posterior dorsal edge of the carapace. The anterior ventral edge of the carapace and upper segment of the first walking leg are not yet firm. Additional tissue growth and endocuticle mineralization are needed to firm the exoskeleton at these points.
-
- 1-3 New hard shell stage - The entire exoskeleton is now rigid and tissue growth, for the most part, is complete. The carapace is light gray to tan and supports little or no epifaunal growth.
- 1-2 Late hard shell stage - The anterior ventral edge of the carapace and upper segment of the first walking leg are now firm when moderate pressure is applied. The color of the entire exoskeleton is beginning to darken and the crab is in prime quality for market.
- 1-1 Pre-molt stage - The color of the ventral surface of the exoskeleton is now dark yellow or brown. The crab may show signs of age; i.e. the exoskeleton may be damaged and may support sessile epifauna and may be starting to separate at the epimeral suture.

**An Educated and Experienced Description of the Life cycle of a Dungeness Crab* or
Why They Should Not Be Fished in the Summer**

When I first came to S. E. Alaska in the late 60's we pot fished Dungeness Crab and Spot Prawns all year 'round. There was no closed season for either like there was for Salmon that I seined only in the summer and fall with openings regulated by Fish and Game. As I gained experience I noticed that Dungeness Crab started showing soft shells around late February. Through the summer they all go through a soft shell stage. Around September to October they are hard shelled and full of meat. At this time they are in prime condition! That's the time to start fishing!

I went before the Board of Fish in the early 80's and asked for a regulated Dungeness Crab fishery with an open season from Oct. 1 – Feb. 28th and a closed season from March 1 – Sept. 30. Petersburg fishermen at that meeting jumped up and said they didn't have a soft shell problem in their area. The Board gave us a winter fishery in Southern S. E. Areas 1 and 2 and gave the Petersburg fishermen a split summer – winter fishery in Northern S. E. I tried fishing crab in Northern S. E. one summer and found that the Petersburg fisherman who swore they had no soft shell problem, were not telling the truth. Half or 50% of the crab are soft shell. My wife chased down leads, made phone calls and wrote letters till she came up with the results of documented tests performed by the State of Washington Fish and Game and Kodiak Fish and Game on the mortality rate of handling soft shell Dungeness Crab. What it all boiled down to was if you handled a soft shell Dungeness Crab 5 times, no matter how carefully, he would die. The State of Washington Department of Fish could open the lucrative Dungeness fishery on their coast December 1 but typically the crab are not filled out enough until mid or late December, sometimes mid January. Why can't our S.E. Crab get that kind of protection? On the whole Pacific Coast of the North American continent including the Bering Sea, Northern S.E. is the only area fishing Dungeness Crab at the wrong time of the year. Granted the weather wouldn't be as nice, but we're supposed to be taking care of the resource not providing for the comfort of the fisherman. The fisherman can and should pick his weather. You take care of the resource, and it'll be around to take care of you into the future. Northern S.E. has a lot of habitat and a lot of crab, and I guess they can afford to kill a bunch. We don't have near the habitat in Areas 1 and 2, and not near the crab. We have deeper fjords and fewer estuaries. I know if the Northern district waited until October to fish it would be not just a biologically healthy decision but an economically sound decision. Every crab would be sellable and at full weight. When crab are soft shell they have very little meat since they starve themselves so their shells are nearly empty. They grow a soft, papery shell underneath their hard outer shell and start pumping their hard shell full of water until finally they hydraulically split the shell across the carapace, back out with their new soft shell and scurry off to hide out. When their new shell is strong enough to support them, they can start foraging for food and start building their weight back up. Their new shell is 1/2" to 1" bigger than the old, so it is also the male's growth time. The males have to be a regulation size of at least 6 1/2" in order to keep. Meanwhile when the female goes through the soft shell molt, the cluster of eggs clinging to her belly hatch and swim off as Dungeness Crab larvae. While she is in her new soft shell the male crab fertilizes her, so she is set carrying the next summers hatch. The summer is the most important time in the life cycle of a Dungeness Crab. They moult, mate, hatch, grow and start next years brood.

S.E. Department of Fish and Game agrees with me. They would prefer a fall and winter fishery. But now Petersburg is trying to regulate Southern S. E. Areas 1 and 2 in the same unhealthy manner used in Northern S.E. The crab in Areas 1 and 2 can't stand that pressure. There's not that much crab down here. They tried a summer fishery here one time since I closed it. I went before the Board of Fish the next year with affidavits from the three local processors who asked that this area not be opened again. They claimed Tongass Narrows was full of dead and dying soft shell crab floating away from the plants. The proposal to open the fishery in Areas 1 and 2 in summer was voted down. It failed and Areas 1 and 2 were protected and safe again! We went back to a winter fishery.

The Board of Fish and Petersburg Fishermen claim our information is out of date. That's like saying the law of gravity is out of date. The Department of Fish and Game has done no recent testing and the Board of Fish has obtained no new information to verify the sustainability of a fishery in Areas 1 and 2. How can the Board ignore Ketchikan Advisory Board's 'NO' vote on a summer fishery here, Fish and Game's preference for a fall-winter fishery, and precedent set by all the crab fisheries up and down the Pacific Coast clear into the Bering Sea that allow no fishing during soft shell season based on scientific proof that if a soft shell crab is handled 5 times, he's dead. How can they ignore all that?

I wasn't at this January's meetings. I was recuperating from a new knee operation. I was told by people who were there that towards the end of the meeting that most of the interested people had headed out. John Jensen, Chairman of the Board called a recess. John is a Dungeness fisherman, so couldn't vote. But he can talk and he has been a big backer of opening Areas 1 and 2 to a summer fishery. After a vote of 3 to 3 to keep Areas 1 and 2 closed, they came back from a lengthy recess, reconsidered the proposal and voted to open Areas 1 and 2 to a summer fishery with a vote of 5 to 1. Sounds unethical to me!

Larry Painter
40 year Ketchikan Resident

*I fished year round from the Columbia River to Kodiak Island for 59 years.

June 1, 2009

Re: 2009 Area 1 and Area 2 Summer Dungeness Crab Fishery

To whom it may concern:

I am sending this enclosed information regarding the Board of Fisheries recent decision to open the Dungeness Crab Fishery in Southern SE Alaska this summer. I feel this area should not be opened to commercial crab fishing during the summer months and when the crab are at their most vulnerable – when they are molting, mating, growing and hatching larvae for the next season.

I appeal to your desire to protect and sustain this species and your public oath to honor the tenets of our Alaska Constitution, to wit:

“Fish, forests, wildlife, grasslands and all other replenishable resources belonging to the state shall be utilized, developed and maintained on the *sustained yield principle*.....”

Thank you for your consideration.

Larry Painter
PO Box 6181
Ketchikan, Alaska 99901
907-225-5279

February 5, 2006

Alaska Department of Fish and Game
Alaska Board of Fisheries
Juneau, Alaska 99802

Larry Painter
F/V Wendy Anne
P.O. Box 6181
Ketchikan, Alaska 99901

Re: **Opposition to Proposals #278 and #280** Southeast and Yakutat Meeting
February 20-26, 2006, Ketchikan, Alaska

To all Members:

I am sending you my written testimony opposing both these proposals submitted under the title 'Dungeness Fishing Season in Registration Area A.' Each seeks to open the Areas 1 and 2 in Southern SE from July 15 to August 15; areas that are now closed until October 1.

The basis for my opinion is summarized here and expounded upon in the following pages.

▪ Biology

We need to avoid fishing crab at the wrong time of the year, in the summer: a time when they are molting, mating and growing; the time of year when they are soft, and subject to high rates of mortality due to handling. (Please see enclosed abstract of scientific studies re: mortality of soft shell crab.)

▪ Habitat

We need to understand that the population of crab is smaller here and there is a major difference between habitats in northern SE and southern SE. Here in Areas 1 & 2, we have deep fjords and crab is scattered in small pockets, at mouths of creeks and rivers, not on wide flats like Stikine and Duncan.

▪ Market

The fishery should be conducted in the fall and the winter when the crab is hard, full and heavy, unlike during the summer, when they are soft and light. This would make for a better, more consistent and more desirable product.

▪ Allocation

Currently there are no gear conflicts in Area 1 and 2. All groups(sports, subsistence and commercial fishermen) cohabitate symbiotically with no effort to set aside areas for the exclusive use by one faction. (a situation that is becoming more and more predominate in other areas of SE.

▪ *Amendment to #280:*

Open all areas at same time, but in the winter - Oct1 to Feb 28.

I feel compelled to present my testimony initially in a written format, as there is no way that I can address the serious nature of these proposals in the 5-minutes I am allowed for an oral presentation. I have been before the Board several times defending the fall and winter season in Areas 1 and 2. Always my argument has been based mainly on biological reasons and the importance of maintaining a healthy resource. This year I will again pound on that drum for the sake of those who have not heard my reasons. But this year, I also have a few more irons to throw in the fire to support the winter fishery and summer closure. I hope that you will give this issue some serious thought as it addresses the health and longevity of the Dungeness fishery in S. E. Alaska.

Proposal 278 comes from the Wrangle Advisory Committee. They state that Area 1 and 2 are under harvested. Area's 1 and 2 are not and never have been under harvested. The harvest here is fairly constant and the stock healthy. It is not proportionately as large an area as northern S.E. because we don't have the same kinds of and range of grounds. We are dealing with deep water fjords and the crab populations are scattered at various creek mouths and some river entrances, nothing like the vast flats and miles of habitat in northern SE. Two years ago, before the price of fuel discouraged the influx of many boats from Wrangell and Petersburg, the story I heard from many of the northern guys was that they were really disappointed at the lack of crab. Their first picks were fair; the second picks produced half the amount; and the third picks were very poor. There just isn't the abundance of crab here to accommodate a large aggressive fleet. I repeat, Area 1 and 2 are definitely not under harvested!

Proposal 280 from Albi Morin states that there is no biological reason for a summer closure in Area 1 and 2. Back in the days when we didn't have seasons and fished year-round, I fished Area 1 by myself. It took me about 6 months of taking the cream off the top and leap-frogging on to cover all of the area from the border of Area 2 to the Canadian border. By the end of 6 months, I was out of grounds and the crab was starting to get soft at the end of February. So it was time to give to them a rest and let them go through **their molting, hatching, mating and growing season**, which I point out, **happens during the spring and summer months**. By late September, the crab were looking good again, and by October we were again able to fish on crab that had a hard shell and were heavy with meat. I took these facts before the Board of Fish originally and got the summer closure to protect the crab during this critical time of their annual cycle. When we established this season for Areas 1 and 2, the Dungeness fishermen from northern SE said that they didn't have a soft shell problem, so the Board let the northern area have a split season, June 15 thru August 15 and again from October 1 thru November 30. Four years ago I traveled to northern SE to participate in the summer crab fishery- for the first time. I fished that season for the next three years and I learned one thing for sure. When I put the summer closure on Areas 1 and 2, I had been right and the northern fishermen, who stated they had no soft shell problem, were telling a blatant lie. The crab stock in northern SE does have a tremendous percentage of soft shell at that time of the year. The first couple of picks you can pick out a reasonable amount of hard crab. After that, your pots come up looking good (i.e., full of crab) but when you can only keep 2 or 3 out of a pot of 15 to 25, that's not so good. Studies done in Washington indicate that if you handle a soft shell crab 4 times, no matter how carefully, he's history. Cracked shells, damaged appendages and trauma insure a dead crab. Most of the crab gets sorted

out and thrown back on the grounds but they are still dead after a certain amount of handling. And there is always the inexperienced or greedy crew that brings soft shell into the processor in hopes they'll slip by. These get sorted out and dumped back on the boat; and it's a pretty awful site to see this dead, dying and mangled crab taken out to be dumped. I remember one boat that pulled away from the processor about 3 years ago with, if I remember correctly, 43,000 pounds of soft shells. Washington State postpones their fishery until the crab is hard. Some years they start on time, December 15, and some years a month or more late. **Northern SE is the only Dungeness fishery on the west coast of North America that is fished during the wrong time of the year.**

One board of fish cycle many years ago, I wasn't around to defend the summer closure down here and the fishermen from northern SE got it opened. Silver Lining, now Trident, and the two other local processors bought the crab, and it was a disaster. I went before the Board the next year with affidavits from all three processors asking to please leave this area closed in the summer. They claimed that boat loads of soft-shelled dead and dying dungies, were dumped and they didn't want to be involved in that again. Thankfully, the Board re-instated our summer closure.

And now to throw those other irons on the fire that I think would support the summer closure in Areas 1 and 2.

First, we currently have very little trouble with the locals wanting areas set aside for their exclusive use, mainly because we don't have the gear conflicts here. The sportsman, charter boat operators and subsistence fishermen don't have to deal with a mess of commercial pots every place there are a few crab; and we commercial fishermen don't have to deal with our gear being fooled with in the fall and winter except for the occasional hungry hunter. We have avoided this gear conflict that has become endemic around other towns in SE Alaska.

Second, the tourist industry is very extensively developed in this area, with excursions and tours of all sorts. There is a lodge in George Inlet that has one of the more popular tours in Ketchikan. They take boatloads of cruise ship passengers to a bay up the Inlet and pick several crab pots. They remove the crab and carefully return these to the water, but during that effort they inform and instruct their guests about the lifecycle of the Dungeness and commercial procedures for harvesting the crab. They return to the lodge where they have a crab feed of frozen Dungeness purchased from elsewhere. This venture and others, kayak concerns, lund skiff tours etc. would have a difficult time conducting business if these waters were inundated with crab boats and crab buoys. I suspect also, that before long, there would be a hue and cry to close George Inlet, Carroll Inlet, Thorne Arm and to the west of Ketchikan, Helm Bay and Traitors Cove, by not only the tour and charter boat operators, but by the local residents. At this point in time, we all symbiotically coexist here with very little dissension; and there is very little demand to allocate areas to one group or another exclusive, because we operate at different seasons of the year.

And finally, we have Misty Fjords National Park to consider. If you start dumping a bunch of dungie pots back in Behm Canal, which is heavily advertised as a traveler's destination, we'll create another situation akin to Glacier Bay. If we fish this area in the summer, at the height of the tourist season, we will compete and ultimately conflict. We lost a hell of a fishing area to Glacier Bay National Park and displaced a lot of boats. It would be foolish to invite problems here where none exist now.

I strongly recommend: Fish in the fall and winter; out of sight and out of mind; when the crab are hard and full. Keep Areas 1 and 2 closed in the summer.

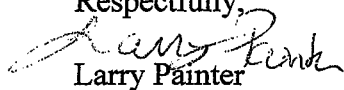
And now that I have your attention, I recommend we close all other areas in SE in the summer also.

Proposal 280 also states that Areas 1 and 2 should have the same opening and closing dates as northern SE. When those northern boats move in on Areas 1 and 2, it does cause a hardship on the crab and fishermen. If all of SE had the same season, it would give everyone room to spread out and would relieve the pressure on some heavily fished areas. I agree with the concept but not the dates. And so, I would like to make an amendment to proposal 280 and agree to have all of SE fish on the same opening and closing dates, but make those dates October 1 thru February 28, when the crab are in their prime marketable state- hard and full. The northern fishermen will squeal about this but I am sure, after one season, they would be smiling. The price wouldn't drop until the crab fishery begins in Washington State. We catch the bulk of our crab in the first 4 to 6 weeks and that would be before the lower 48 opens. Plus, we wouldn't be killing crab of the future by handling soft shell crab. **Ask any of the biologists, from Tim Koeneman on, and I'm sure the will all agree – we're opening northern SE to crab fishing at exactly the wrong time of the year.**

I'm sorry this took so much of your time. I'm tired of having to defend my position and protect this resource. I'm sure you're tired of hearing from me. But there is a right way to resolve these issues and have a healthier fishery. I hope you see it that way too.

Thank you for your time and consideration.

Respectfully,


Larry Painter

KTN AC
KETCHIKAN ADVISORY COMMITTEE TO ADF&G
REGULAR MEETING

Wednesday May 13, 2009 – 6PM

AGENDA

TELECONFERENCE NUBMER 1-800-504-8071 CODE 4654046

Call to Order and establish quorum (8)
Introductions/roll call/sign in page...
Amendments to Agenda (for discussion only) (to be placed on next agenda)
Approve meeting agenda
Approve past meeting minutes – March 4, 2009 and May 4, 2009.

Reports:

Chairman's report-

ADF&G -

Others -

Public comment:

Unfinished business items –

- a) AC Emergency Closure process for Dungeness in District 1 & 2
- b) HATS???
- c) State Meeting 2010, electric reels
- d) Game issues. Meeting will be in KTN fall 2010
- e) Sport fish punch card system for next SE 2011 board cycle
- f) Dogfish fishery on the books for next SE 2011 board cycle

New business-

- a)
- b)
- c)

Set next meeting date

Adjourn

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KTN AC MEETING 6PM 05.13.09

	NAME	PHONE NUMBER
KTN AC	John M. Scoblic	247-0729
KASSAN	RON LEIGHTON	TELECON.
ADFE#	SCOTT CRASS	TELECON.
AC	LARRY McQuarrie	TELECON.
AC	Jeff Weiland	225-9079
AC	Larry Painter	225-5279
AC	ART MAIORIELLO	242-1710 / 617-3303
AC	MIKE MOYER	247-0455
AC	Donald Westlund	225 9319
AC	RUDY FRANKOVICH	617-5252
AC	Clay Berenick	617-4785
PUBLIC	RK RICE	225-9222
AC	Woody Anderson	225-8063
ADFE#	Scott Kelley	465-4250
ADFE#	Scott Walker	225-5195
ADFE#	Bo Meredith	225-5195
ADFE#	Anne Reynolds	225-9677
ADFE#	Brandi Gossou	320-491-6767
ADFE#	Malika Brunette	225-9677
PUBLIC	NOYD GOSSMAN	225-2585
PRESS	Scott Bowen	225-3157
PUBLIC	Scott Kemp	247-5681
PUBLIC	John Beez	607-0659 3/21
PUBLIC	Ron Porter	225-4382 2/25

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Ketchikan Advisory Committee Meeting – 5-13-09

	Member Name	Roll Call	Vote 1	Vote 2	Vote 3	Vote 4	Vote 5
1	Anderson, W		YES	YES			
2	Bezenek, Clay		NO	NO			
3	Castle, Dan		---	---			
4	Denny, Charles		---	---			
5	Franulovich, R		NO	NO			
6	Lacroix, Steve		---	---			
7	Maoriello, Art		YES	YES			
8	McQuarrie, Mac		YES	YES			
9	Painter, Larry		YES	YES			
10 Chair	Scoblic, John		NO	NO			
11 Vice.	Stanaker, Clay		---	---			
12 Sec.	Sullivan, Kate		---	---			
13	Wedekind, Jeff		---	---			
14	Welk, Darell		---	---			
15	Westlund, Don		YES	YES			
ALT.	Moyer, Mike		YES	YES			
ALT.	Collins, Rick		---	---			
ALT.	Ranniger, Todd		---	---			

6-3 6-3

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**Ketchikan Regional Advisory Committee to ADF&G
Meeting Minutes for May 13, 2009**

Roll Call: John Scoblic, Woody Anderson (5 min late), Clay Benzenek, Rudy Franulovich, Art Maioriello, Mac McQuarrie (online), Larry Painter, Jeff Wedekind, Donald Westlund, Mike Moyer

Meeting called to order at 6:05pm and quorum was established with 9 members present
Meeting agenda, motion to accept Agenda is moved and seconded. Motion passes 10-0.

Past meeting minutes, March 4, 2009 and May 4, 2009 approved. Motion passes 10-0.

Reports:

Chairman- Looking for new information applying to the Crab Fishery.

ADF&G- no formal report but Scott Kelley is there to answer management questions about Dungeness crab.

Public comment:

Ronald Leighton (representing Oranized Village of Kassan, chair for customary & traditional use committee)- comments- Prior to the Board of Fish meeting they were unaware that the summer fishery was going to take place. Mentions statute AS 16.05.258 and comments on past fisheries that were ignored before closure in districts 1 & 2 in . Mentions that customary & traditional use cannot compete with commercial fleet and will not have enough time to reach the level they want because they do not participate in gathering during commercial harvest due to lost and damaged goods. Believes a fishery would damage customary & traditional gathering of crab and damage the fishery of crab for all users/consumers including the commercial industry as it did in the past.

Franulovich- ? to Scott Kelley- Is there a record of what has been caught in OVK?

Kelley- Board of Fisheries has addressed customary & traditional use in Southeast, and there are two specifically nonsubsistence areas in Southeast, around Ketchikan and Juneau. Commercial division does not track subsistence or personal use harvest in any detailed fashion. They are monitored by household surveys.

Leighton- Mentioned that he had no knowledge of any recent surveys in OVK of customary & traditional usage of shellfish or salmon. Talked to Joe Stratmen who also had no knowledge of recent surveys and mentioned that Kassan Bay/area would probably be targeted by commercial fleet. They are sending a resolution to the appropriate party to be reviewed.

Painter- ? to Scott Kelley- How can a new fishery be declared in an area that was declared not a good summer fishery because of soft shell without data and tests? The reason he has fought to keep it closed is because he knows they're all soft shells here then. He comments on the difference in habitat from the vast flats up north, to the lack

of habitat here and the mortality of the crab. Doesn't understand how it can be turned around with out data.

Scott Kelley- During the board of fish process anyone can submit proposals. This particular proposal has been before the board numerous times in the past 20 years. The department of Commercial fisheries division has come out in opposition to the summer fishery and the general basis for that is the soft-shell handling. The board of fisheries has the wherewithal to factor in other socioeconomic issues which is beyond the scope of what the department of fish and game is charged with. Commercial Fish division provides biological information which was throughly discussed. The board chose to take a management approach, seasons, which they did. Just because the Department of Fish and Game comes out in opposition to various proposals, doesn't mean that the board is bound make a decision accordingly.

Conversation continued between Painter and Kelley - about the issue of soft-shells in the summer season

Kelley- mentions all time record harvest of 7.3 mil pounds in '02-'03 season, and a second highest of 5.4 mil pounds last season in these districts. Despite fishing during a summer season when there are soft-shell crabs being handled, the yields from the northern stocks have been very good. That information gives some comfort knowing we can have summer fisheries in other areas, and they are sustainable.

Conversation between Gossman and Leighton (who had talked with Joe Stratmen)- They discussed whether or not anyone know just how many pots would be dropped in OVK area during the summer fishery. No one was sure, but the permit that are held in SE, if everyone was to fish those beds, it would be near 50 thousand pots.

Gossman- Mentions that they're looking for something new, and that what Leighton mentioned about the Customary & Traditional use hasn't had their opportunity this time to address the issue. When the board expands a fishery they need to address the issue with those of customary & traditional use. Comments that during the last board meeting the issue of minimal habitat in SE was not addressed, and proceedings assumed SE has the same kind of numbers of crab that are up north. The number of crabs in this area is not known, and for anyone to open a fishery without numbers is not a sustained yield. He questions the authority of the board, knowing that they are mandated by state law to do sustained yield. Basically the board is managing by doing fisheries. He mentions that letting the fishermen determine wether the fish are there and count them as they catch them has been going on way too long. For the board to put out unfunded mandates and start a fishery when there are no biologists, no money, and no time is not right. He believes the whole process needs to be reassessed an that our limited habitat is going to take a severe hit by the efficient commercial fleet and no body knows what that hit will be. The challenge that we face right now is that nobody can tell us how many crab there are.

in the water along with the commercial fishermen he would vote for it. But mentions that the only groups that legally have a foot in the issue are the customary & traditional use harvesters. Believes we cannot have a double standard if they are using the mortality issue, then nobody should have a pot in the water.

Maioriello- Comments that the crab have been disappearing, that there are no studies done in SE, and there are limited habitats here. His take on new data is that over the years the fishing license have increased in sales, there has been more people fishing, there's been eco-fisheries popping up left and right and if anything there has been more pressure in the area of people fishing crab than less pressure. If the Board is making the decision by determining that there is no new data to overturn the old data he sees opening the fisheries to be reckless, dangerous, and irresponsible. Around Ketchikan there are only a few areas to crab now.

Wedekind- Mentions that there are other socioeconomic issues that need to be addressed, included in decreased numbers of crab near Ketchikan. There is no way to compete with commercial crabbers, there's no place to put a pot and sometimes it goes missing. Comments that personal use crabbers ought to have areas accessible for locals that commercial fleet is not allowed.

Moyer- Comment on Benzenek's comment- Mentions differences between commercial and personal use and that one must take into account that the commercial fisher is looking for the most he can possibly get and killing 50% of the soft-shells and messing up the females is a big difference between a small pot and different handling of a personal user.

Westlund - Comments that it is unfair that the Board took advantage of Ketchikan not being present to make comments for the 149 being brought back up. Sport users only take 1% or less of crab, commercial fleet take the rest. Sport use would not be a detriment to the resource, but commercial use would be.

Leighton- Mentions that residents of the West side of POW are going to the East side of POW to get crab in increasing numbers, because the sea offers on the west coast has depleted their crab numbers and ought to be taken into consideration that customary & traditional use consumers have increased quite heavily.

John Beck (personal use)- Mentions lack of habitat and population of crab. Comments on what is common up north is not necessarily common in SE, some things just don't translate. Also personal use is not monitored, so how can Fish & Game say that personal use will not be affected? Personal users often invest a lot of money as well.

Scott Kemp (owner of Saltery Lodge)- Mentions that he thinks the Board of Fisheries is dealing from both sides of the deck by lowering the sport catch from 5 to 3 crabs and allowing commercial fishing. One would think that the resources are low when seeing a reduction in catch from 5 to 3.

Painter- Comments on how important the summer season is to crab: molting, growing, mating and hatching. That's why the Deadliest Catch happens in the winter. We're supposed to look out for the critters so they'll always be around.

Gossman- Mentions various socioeconomic changes that have taken place since the closure of the fishery, like the pulp mill closing, and Saxman used to be absorbed into Ketchikan. Comments on increased fishing, minimal habitat that hasn't been addressed and is not the same as up north. Personal use is limited and commercial fishing is not, they're taking as much as they can. There are a lot of changes and new information that needs to be addressed.

Jeff Wedekind left the meeting at 7:00pm - still a quorum (9 members present)

Unfinished Business:

AC Emergency closure process for district 1&2

-in previous minutes motion made, moved and seconded to request a closure under the authority in 5 AAC97.010, based on soft-shell mortality rates that would occur in the commercial fishery that would occur from June 15-Aug15. The closed areas would be all of ADF&G districts 1 & 2. This closure would be based on ADF&G data and other scientific data that would be presented.

-that motion carried 6 to 3

Scoblic- Comments that the committee has essentially three options: instigate an AC emergency closure in the agenda, petitioning the board and petitioning the joint board.

Westlund- Moves to continue with the emergency closure.

Bezenek- Seconded

Scoblic- Comments that it has been made clear to him that they must have new information and there is a very detailed process that must be followed. The first step is happening now, the posted meeting to address this specific issue. Then petition the commissioner to hear the request based on the decision, other ACs would be asked to adopt the motion, 12 of 22 SE AC vote in favor of an emergency closure.

Discussion between Bezenek and Kelley determines that liberal boundaries to protect certain local areas cannot be put into affect by ADF&G because that's an issue of allocation. Closure would be due to conservation but that would not close customary & traditional use.

Beaenek- Comments that sport numbers are not accurate, and the cumulative effort is far greater then anyone realizes. If commercial fishing is bad for the crab, personal use is bad as well.

Discussion between Painter and Scoblic determines that the ACs in our area of juristicion is defined as Yakatat and Southeast by the state of Alaska. Specifically there

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are 4 ACs in our area - districts 1 & 2(Haider, Ketchikan, Saxman and East POW). There are 22 ACs and it was found 18 are active.

Westlund- Comments that an amendment to close personal use as well is unrealistic. To be able to invest time and money into monitoring all the vessels to make sure they're not dropping pots is unrealistic, especially if sport and personal use are taking less than 1%. If summer fishery is open, the crabs won't be coming to the processors in Ketchikan, so our resources will be going to another community.

Maioriello- Mentions that he disagrees with a closure for all. It is a monumental task to get all the ACs to side with us. We just have to go on record saying that we're trying to fight for our little area in SE, and when the damage is done we can say that we tried to stop it. Comments that they ought to concentrate on trying to carry out the emergency closure, and if new information is wanted that would be the increase of public comment in opposition to the fishery, the increased amount of Fish&Game licenses that have been sold, the increase in people fishing. The fishery is now being opened based on information from 1985 that said it needed to be shut down. The fact that no other scientific data has been brought forth to the Board of Fish to change the old data that has been in place since 1985, is new information.

Discussion between Ron Porter and Scoblic determines that the closure request closes commercial fishing in district 1&2 leaving sport, personal use and customary & traditional use intact.

Discussion between Painter and Scoblic determines that the information the Board had in January from the staff report from ADF&G to the Board was based on the report by Gordon Cruz et.al in 1989. So that part is not new information.

Discussion between Painter, Benzenkek, and Kelley - The soft-shell information was discussed at length at the last Board meeting. Fish & Game would close the districts if there was a concern with conservation.

Kelley- Commented on the management plan of Dungeness crab in SE Alaska. The Board of 2000 adopted a plan specific to commercial fisheries. The department projects, based on the first week fish tickets (June 15-21), and by the 14th day of the fishery the total season's harvest is projected. If the total is less than 1.5 million there is a 21 day season. If total is between 1.5-2.25 million there is a 28 day season and a 30 day fall season. If above 2.25 million, the season progresses as normal, two month summer and two month fall season. Subsistence is a priority and would not be closed unless there was some catastrophic happening. If there was a region wide harvest of less than 1.5 million in a 21 day season, an evaluation would be done to see what led to the low harvest, given that the recent 5 year average is about 5.7 million. What would then be done is an evaluation of the conservation sustainability of the rest of the fisheries and make management decisions at that time. Whether personal use would be allowed some of the time length or twice the time length of the commercial season, has not had to have been addressed. It is not within the management plan, but it is within our time

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and area authority. If we feel there is a significant conservation concern and we're fishing unsustainably we do retain the authority to close all the region to all fisheries, or some portion for some amount of time. This would be taken on a case by case basis and see what led to it.

Discussion between Kelley and Gossman determined that the harvest projection and management is based on numbers up north. So if the projection is above 2.25 million there is an unimpeded commercial season that applies region wide.

Franulovich- Comments that since the summer closure in 1985, the amount of fishing has declined so he doesn't see how conservation would be affected especially with a 6.5 in size limit in place.

Discussion between Franulovich and Kelley- Mentioned that about 107 taken in district 1 and about 70 in district 2 in the winter season, roughly 175 thousand pounds. The summer season projection cannot be made because it is not known how many will fish and what the effort distribution will be. And there is limited information prior to '85.

Franulovich- Mentions that a summer commercial fishery would give people in town the opportunity to purchase crab at the docks. Believes this decision should be left to the Board of Fish. The issue will be revisited in 3 years, and data can be gathered from the sport, lodges and personal use where not much data is being collected at this point.

Westlund- The Board of Fish meeting in Petersburg did not take into account the customary & traditional findings from OVK, thus new information. Believes the reason we have a somewhat robust fishery in the fall and winter is due to the fact we do not have a summer fishery. By opening up the summer fishery the monetary base of the community will be moved to another community.

Maioriello- Comments that people are saying that the fishing has declined year after year, and opening up a commercial summer fishery will only accelerate that decline.

Discussion between Maioriello and Kelley clarify that the fishery will be managed along with everything else under the existing Dungeness management plan. The regional harvest projection would have to be substantially less for management measures to take place anywhere in the region.

Moyer- Commented on research where commercial fisheries caused a significant impact on declining fisheries. When some of the fisheries were about to decline they were at points of great harvest. Indications weren't there for the decline. Managing for sustained yield you wait for the decline to be able to have closure, it's almost as if you've gone past the point of no return. New information would be the lack of data to show the population can handle the impact of commercial fishing.

Kelley- Mentions that one of the main reasons that the department back in 2000 wanted some level of protection for the Dungeness was to avoid reaching a high harvest where there is no indication of the coming decline.

Moyer- Commented that managing an area that is so vast that includes large harvest area up north as well as small areas down south doesn't seem very wise, and seems to be new information.

Scoblic- Commented that there was a sentiment at the Board of Fish meeting in January, some of the board members felt as though there was limited information available, and they considered the information that they had to be old. He is not sure if the lack of new data is considered new information. It's really up to the committee to decide what is new information in our request to the commissioner.

Crass- Points out that this motion, the emergency closure, is delegation of authority from the commissioner. Any allocative action couldn't be enacted through this process, so that is one of the issues with using this tool in the tool belt.

Scoblic- Comments that part of the request for emergency closure under the authority and the statute, it can only be done under the sustained yield principle and it can't take socioeconomic or other issues into account. We also have to have new information that was not presented at the meeting where this decision was made.

Crass- Agrees that that is a fair statement. Getting the majority of the ACs at this time of year will be difficult considering only 13 AC commented on the last fin fish meeting and 8 ACs that weighed in with on time comments at the last shellfish meeting. That is region wide.

Scoblic- To follow Crass's comment, in this particular issue the record that was explained to him is that Ketchian, and East POW were opposed to 149 and made timely written comments to that. Petersburg and Wrangell were for it and made written on time comments to the Board about that. So when it comes to this micro issue, there were 4 ACs within our region that made comments on time to the Board that made the decision that we're facing at the summer crab fishery coming down.

Painter- Comments that for the Board to say that the information is old information, is like saying that the law of gravity doesn't apply.

Maoriello- Questions why we can't take the stance that there is no overriding to negate the old data and make it moot. What new data was presented at the Board of Fish to make them override and change their mind? He didn't see any new data from 1985, and would like the Board to tell him what changed their mind.

Scoblic- Mentioned that there is a motion on the floor that has been moved and seconded and has been debated extensively.

Maioriello- Offers a friendly motion that there was no overriding evidence to negate the old data to make it moot, and if there was we would like it in writing.

Moyer- Accepted the friendly motion

Bezenek- Would not accept the friendly motion

Scoblic- The friendly amendment will not be added to the original motion.

Westlund- Withdraws the original motion.

Maioriello- Moves to make a motion that they base their wording on, no new overriding evidence to negate the old data therefore making it moot. Still going forth with the closure of the commercial fishery.

Westlund- Seconds the motion

Break at 7:50pm to clarify and write out the motion

Resumes at 8:05pm

The Motion:

To ask for an emergency AC closure under authority in (5 AAC 97.010) The closure request is based on soft shell mortality rates in the commercial fishery that would occur June 15 - August 15. The closure would be only in districts 1 & 2 to commercial crabbing based on the fact that there is no new data to negate the "old data" that was presented to the Board of Fish in January 2009 in Petersburg that resulted in the decision for a summer crab season SE Region wide.

-as read by Scoblic, motioned by Mairoriello, seconded by Westlund

The question was called and the roll call vote is as follows:

Anderson-YES

Bezenek- YES

Franulovich- NO

Maioriello- YES

McQuarrie- YES

Painter- YES

Scoblic- NO

Westlund- YES

Moyer- YES

Motion carries 6 to 3.

Scoblic- May be calling on members to help get the the motion written and forwarded to the commissioners office.

Bezenek- Moves to deal with items B,C,D,E and F of unfinished business at the following meeting.

Westlund- Seconded the motion.

All in favor of tabling the rest of the unfinished business until the following meeting.

New Business:

none

Crass- Mentioned the possibility of agenda change request and an emergency petition letter to the board. They have an emergency petition policy, and the Board of Fisheries has a specific policy that they adopted in 2000. (5AAC 96.625)

Westlund- Moves to send off an emergency petition to the Board of Fisheries with basically the same wording as the motion.

Moyer- Seconded

The question has been called and the roll call vote is as follows:

Moyer- YES

Westlund- YES

Scoblic- NO

Painter- YES

McQuarrie- YES

Maioriello- YES

Franulovich- YES

Bezenek- NO

Anderson- YES

Motion carries 6-3.

Adjourn: 8:24 pm

Next meeting date: TBD

**Ketchikan Advisory Committee to ADF&G
Meeting Minutes for May 4, 2009**

Roll Call: John Scoblic, Jeff Wedekind, Don Westlund, Clay Slanaker, Art Maioriello, Rudy Franulovich, Larry Painter, Steve Lacriox (telecon.), Clay Bezenek (10 mins late).

Meeting called to order at 6:12 pm and quorum was established (8)

Meeting agenda, motion to accept Agenda is moved and seconded. Motion passes 8-0.
Accepting the past minutes from March 4, 2009 is tabled until next meeting.

Reports:

Chairman report –

Thanks for sticking with it and keeping the KTN AC committee active. I appreciate all the hard work and efforts and the time sacrifices made by the committee members.

No ADFG or other reports.

Public Comment: Lloyd Gosman spoke against the summer Dungeness crab fishery. He is working with Ron Leighton of Kassan and KIC leaders as well as the folks in Saxman, to protest the impending crab fishery opening. He has written on Sitnew, to the Governor, and the BOF. The BOF has made this into an unfunded mandate. There is no money in the ADF&G budget to study this fishery. If there is a commercial fishery due to the deep water fjords and other common habitat in our area the Commercial crabbers will wipe it out. This is a loss to the local guys who want to fish Oct – Feb. Finally everyone I have spoke to about this don't like it.

Brian Reno- I am against this and all the people I talked to about this are against it too. I don't think this is sustainable, I have biological concerns, and this is not going to boost our local economy rather other towns and areas in the region. We will come out the losers in this deal.

Unfinished business:

-Todd Raniger did file the paperwork with the state. (done)

-KTN AC HATS? Do we want to ever do this? (no action)

-ACR, Prop 149, Lloyd Gosman letter:

An AC member suggest we try to implement and Emergency AC Closure under 5 AAC 97. 010. We would need data to support our claim, "Is the AC ready to take this on?"

A second AC member is against the ACR or Emergency closure concept unless we close all crab fishing Commercial, sport, super exclusive guided sport essentially all crabbing.

A third member is against the ACR or Emergency closure and thinks they should be allowed to fish in Dist 1 & 2 for three years just as the BOF decided then go back and change things if the new information indicates we should change.

up the logbook information and collect the other information form the non guided sport sector. This issue is tabled for future meetings.

The second order of new business was a request from an AC member to get a Dogfish fishery on the books. There was a short discussion about a "cull fishery", the member did not want to see a directed fishery, the suggestor wanted to liberalize bag limits in the sport sector and full retention in the commercial fishery. This issue was also tabled until future meetings.

The final order of new business was to keep an eye on the GAME meeting that will be held in Ketchikan in the fall of 2010.

Next meeting date: May 13, 2009 6 PM

Adjourn: 9:00 pm

January 20, 2003

Alaska Department of Fish and Game
Board of Fisheries
Juneau, Alaska 99802

Larry Painter
F/V Wendy Anne
P.O.Box 6181
Ketchikan, Alaska 99901

RE: PROPOSALS #213 & #214

To all members:

I have been a commercial fisherman for 55 years and have fished throughout Southeast Alaska for the past 35 years (since January, 1968). I go on record here to vehemently oppose these two proposals.

I was responsible for most of the regulations imposed on the Dungeness crab and Spot shrimp fisheries, including those establishing seasons and regulating pot limits, mesh sizes, etc. As such, let me give you some historical perspective. We used to fish crab and prawns year round. I noticed in area 1 and 2, that soft shell crab and shrimp started showing up around the end of February, with rapidly increasing numbers on into March, to where they were nearly all soft and light during the summer. By September, the crabs were hard again and filled with meat. To handle soft shell crab is to kill them. Controlled studies indicate that the handling mortality rate "averages 18% to 30%" but may be as high as 47%. Please see the enclosed abstract and literature review on the topic. Add to that the nearly 100% mortality rate of those soft shells retained onboard in fishholds, where vulnerable, are subjected to cannibalism, then brought to the dock, sorted and dumped back into the water, dead. This is a blatant and avoidable case of wanton waste. This stage is the most sensitive in a crab's life cycle. The summer in Southeast is when the crab molt, mate and grow. They should be left alone at this time and harvested only when they are hard, full and prime. To this end, I requested a season on Dungeness with a closure from February 28 to October 1. Some of my peers that fish areas 3 thru 15 said that they did not have a problem with softshell so were given a split season, June 15-August 15 and then again, October 1-December 31. I fished this northern district the past two summers and discovered that they do indeed have a softshell problem. I believe in the summer of 2002 the incidence of softshell ran upwards of 60% there. And the rate of softshell in the summer in area 1 runs even higher. Over the years, I have been accused of establishing my own private reserve by setting these seasons in the southern area so that I could seine all summer and crab all winter. While I admit, the arrangement worked well, I maintain that any decision I have ever made was for the resource first--- for protecting and sustaining it.

Then, a few years later, there was a proposal submitted and adopted to open areas 1 & 2 simultaneous with the summer season in the northern areas. It slipped by me, as I didn't attend the board meeting that year. The result was catastrophic. I went before the board the next session with affidavits from the 3 processors in Ketchikan telling of the thousands of dead and dying soft shell crab dumped in the harbor and stating that they were not interested in seeing that happen again. The summer closure was reinstated by a concerned board. *Now the issue is being raised again.*

It is illegal in California, Oregon, Washington and Canada to have a soft shell on board or on the dock. **It is a crime everywhere but here.** In Washington state, the Department of Fish and Wildlife begin testing for softshell two months prior to the opening. If the incidence is too high, they repeat the procedure until they meet their threshold, sometimes postponing the fishery for days. The whole western coast of North America commercially harvests Dungeness crab in the winter, except for Southeast Alaska. We are the only ones to fish at the peak of the mating and growing cycle. Now, there are those who want to include areas 1 & 2 in that irrational wrongdoing. Two wrongs don't make a right!

I'm really getting a little impatient with constantly trying to defend the right thing to do. Also, let me point out that areas 1 & 2 don't have nearly the crab population that the northern areas do. We have an entirely different habitat, with deep fiords rather than extensive flats. There are micro-populations in creek beds and bays scattered over a wide geographic area and they are more fragile and definitely soft in the summer. I agree that it would be nice to open all of Southeast at the same time and stop the fleet from jumping on new areas as they open. But the way to do this would be to open all areas in September or October, when the crab are prime, rather than opening all areas in the summer, when they are the weakest and the least desirable in terms of marketable quality. The arguments for a summer fishery are based on good weather and a better price. I'll agree that it would be nice to fish on long summer days rather than short, nasty winter days. But that kind of reasoning doesn't prevail along the west coast of North America or the Bering Sea, for that matter. Those seasons are based on knowledge of the biology and intent to insure the longevity of the resource. As for the price, there is no real competition until Washington and Oregon open in December, and most of our crab would be caught and marketed by then. Also, If we waited to fish when every crab was hard and full, the season would even be more profitable, besides being sustainable.

I guess I'll have to return to the next meeting of the board regarding the management of shellfish with a proposal to do the sensible and prudent thing... to open all of Southeast to a Dungeness season beginning September or October.

Thank you all for your time and consideration.

Sincerely,

Amanda Painter

From: Chuck Slagle [ChuckS@baranof.net]
Sent: Wednesday, February 17, 2010 10:16 AM
To: Amanda Painter
Subject: Larry was right

Board of Fish to hear summer dungeness crab season in SE damaged fall and subsistence fisheries

SEAFOOD.COM NEWS [Juneau Empire] By Ronald Leighton Feb 17, 2010 - The village of Kasaan was successful in getting an out-of-cycle agenda change to the Alaska Board of Fisheries. This agenda change will address the impact and additional concerns inflicted by the 2009 summer commercial Dungeness crab fishery.

Keeping this Dungeness crab fishery opened is detrimental to the sustainability of the fishery. This fishery was opened last year for the first time since it shut down in the mid-1980s. It was closed back then because of sustainability reasons.

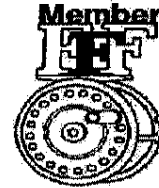
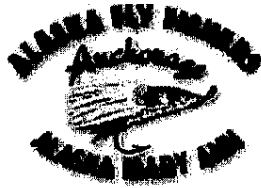
The 2009 summer commercial Dungeness crab fishery reduced Kasaans Dungeness crab harvest by 97 percent, which left the Kasaan residents only catching about 3 percent for their customary and traditional catch levels. The summer commercial Dungeness crab fishery in districts No. 1 and 2 opened June 15 and closed Aug. 15. Most of the legal non-soft shelled crabs were caught in the first two to three weeks and the fleet that stayed longer was just scratching for any legal hard-shelled crab.

The summer commercial Dungeness crab fishery in districts No. 1 and 2 also had a drastic affect on the fall commercial fishery in these two districts, as that catch in this fishery fell by 50 percent, according to Fish and Game statistics.

Fish and Game statistics also indicated the dead loss for the 2009 season increased by as much as 10 times over 2002-03 and as much as 24 times over 2006-07. This is from information gathered at the processing facilities when crabs were delivered. There is no dead loss information gathered on the fishing grounds in districts 1 and 2, but studies conducted in Kodiak indicate that there is a 40- to 50-percent mortality rate on caught and released soft-shelled crab. And the more times the same undersized or soft-shelled crab is handled, its chance of surviving drops drastically.

Studies show that a Dungeness crab that is handled four times does not survive. These figures from this commercial fishery are astronomical; the total Dungeness crab caught by sport, personal use and subsistence users is only 1 percent of the total caught commercially. The Southeast Alaska summer commercial Dungeness crab fishery is the only summer commercial crab fishery opened on the West coast.

The residents of Kasaan only got 3 percent of their normal customary and traditional catch levels. The statistics indicate that the fall commercial Dungeness crab fishery only caught about 50 percent of its normal catch. This is evidence enough to show that this summer commercial crab fishery is nonsustainable and must be stopped. State law provides that a fishery may only continue if it is sustainable yield. Proposal 195, generated by Kasaan's agenda-change request, is scheduled to be heard during the Board of Fisheries meeting March 16-20 in Anchorage.



ALASKA FLY FISHERS

Winners of the 1994 McKenzie Cup

March 1, 2010

Board of Fisheries Comments
Sherry Wright
333 Raspberry Road
Anchorage, AK 99518-1599

RECEIVED
MAR - 2 2010
BOARDS
ANCHORAGE

Re: Proposal 184 - Prohibiting the use of felt sole wading boots.

Dear Board of Fisheries Members:

The Alaska Fly Fishers (AFF) represents approximately 350 members residing in all regions of Alaska. AFF works to promote and educate the public on the sport of fly fishing and to preserve fish habitat through conservation projects. One of our larger conservation efforts is the Kenai River Cleanup held each September.

AFF supports Proposal 184 prohibiting the use of felt sole wading boots in Alaska. A similar ban on felt sole wading boots has already passed for Southeast Alaska and will be effective in 2011.

Felt sole wading boots are known to facilitate the transfer of aquatic invasive species such as Didymo, mud snails, whirling disease and other species which have devastated fisheries around the world. With thousands of visitors traveling from distant locations to fish Alaska each year, we are particularly susceptible to invasive species.

The fly fishing industry is proactively moving away from felt soles due to the risk of invasive species transfers.

The Board of Fisheries should follow the lead of Southeast Alaska, New Zealand, the Federation of Fly Fishers (FFF), and the fly fishing industry in adopting proposal 184 banning felt sole wading boots in all of Alaska.

Thank you for your consideration of Proposal 184.

Very truly yours,

Alaska Fly Fishers

Mark G. Huber
President
907-244-2779

Attn: Shannon
Public Comment
BOF SW

Randy Easterly
P.O. Box 1524
Wrangell, AK.
99929-1524

3-2-10

From: Randy Easterly
F/V Miracle

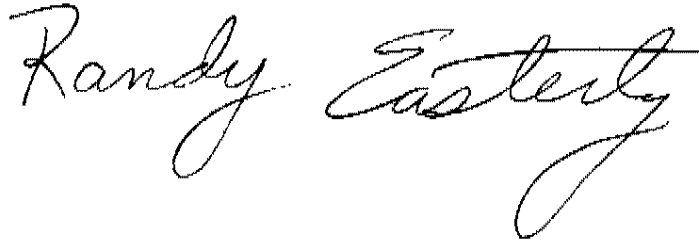
Proposal # 195

I am in opposition to this proposal.

I am a commercial fisherman and a sport fisherman. I was on the Wrangell advisory committee for 12 years. I commercially fished in area 2 during the summer Crab season 2009*. I would like to address some issues that some people of Kassan have with the summer season.

1. I fished for 45 days with 225 pots. On July 30, 2009 my last delivery with only 180 pots I had 2922 #'s. When I quit, there was still plenty of crab for residents of Kassan to catch. So the fact that we caught all the crab in 2 weeks simply is not true. There were no commercial pots within 1 mile of Kassan.
2. We also did not catch any soft shell crab. That statement simply is not true. And if there was lots of soft crab in the summer months then really nobody should be fishing them, commercially, sport or subsistence.
3. I saw very few sport pots in the water while I was there, and during that time I saw only one sport boat in Kina Cove pull pots, just a few miles from Kassan. I am in favor of closing that bay from commercial fishing, for the community of Kassan, for Dungeness crab. Kina Cove has more than enough crab to meet the needs of community of Kassan. Commercial fisherman gave up 1 month of fishing in area 2, (from 5 months to 4 months) Kassan has a population of 37. Average income is \$43,000.00. There is just no way that I can justify as a commercial fisherman or sport user closing all of area 2. The board opened area 1 and 2 to get data on crab for a three year period and I hope they will keep it open. As a commercial fisherman we need this area to help spread the fleet, as our area in southeast has been greatly diminished by sea otters. Gear in the last decade has been getting increasingly more concentrated, due to sea otter completely wiping out areas closer to the coast. Area 2 also is not accessible to much of the fleet due to winter weather, as most of the fleet is made up of small boats. I ask the board to close Kina Cove from commercial fishing, but leave the remainder of area 2 to commercial fishing. The subsistence, sport fisherman, cannot possibly harvest 92,000 #'s of crab caught by 5 commercial fishermen, in the summer season.

Sincerely, Randy Easterly



3-2-10

From: Bruce Ward
F/V Deli

Proposal # 195

I do not agree to this proposal.

I've been a commercial fisherman for 25 years, and I'm also a subsistence and sport fisherman during the off season. Number 1, is that no buyer will take any soft shell during any season so I very much doubt their claims on this subject. I personally saw the crab that came out of this area and they were hardshell. I believe the residents of Kassan have ample months to get there crab, as our seasons very short. The idea to open these south areas was to spread the Southeast fleet out. Plus study the Crab.

Thank you , Bruce Ward

Bruce Ward

*P.O. Box 1501
Wrangell, AK.
99929-1501*

March 2, 2010

ATTN: BOF Comments
Boards Support Section
Alaska Department of Fish and Game
P.O. Box 115526
Juneau, Alaska 99811-5526
Fax: 907-465-6094

Re: Support for proposal 195 with an amendment closing all of Districts 1 and 2 of registration Area A to Summer commercial Dungeness crab fishing. Also reverting back to the previous management schemes of having a fall and winter fishery.

Dear Board of Fish members:

I was discouraged my ACR regarding a summer Dungeness crab season closure, was given "No Action" at the October work session, with the reason being, it was to be addressed with the Kasaan ACR. Knowing the Kasaan ACR was only for a district 2 closure, and not for a District 1 and 2 closure, really disappointed everyone in the affected areas.

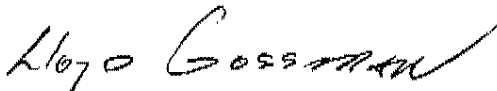
You are all probably aware of how hard I have worked getting everyone informed about what I considered the wrongful opening of the summer Dungeness season down here in Districts one and two. I did everything I could to get the fishery stopped. I started with our local governments, moved on to the tribes, (Kasaan really got active) informed our local and state legislators, sport fish associations, local crab fisherman, advisory committees, local Chamber of Commerce, State officials, and anyone else who would listen. I want to assure you, we all still feel the same. In fact the Ketchikan Gateway Borough assembly is drafting another resolution to be presented to the Board.

Now that the summer Dungeness crab fishery has taken place, along with the fall fishery, we have seen the devastation and loss of opportunity for our local crab fisherman. You always spoke about needing new information for a closure. The information is now available. It includes loss of income and opportunity for our local crabbers, severe dead loss, low numbers of crab, low quality crab, interference with just about everybody who operated during the summer, and worst of it all, our Dungeness population is at the point in some places, where it may not recover.

I would like to work with you in finding a solution to what has happened. If there are any opportunities in committee or working one on one in meetings to talk about a sustainable fishery management scheme, I hereby ask to be included.

Again, I support Proposal 195 with amended language to include closure of all of Districts 1 and 2 in Southeast Area A to summer commercial Dungeness Crabbing. I will be in Anchorage on March 15th and am looking forward to attending the meeting.

Sincerely,



Lloyd Gossman
P.O. Box 9238
Ketchikan, Alaska 99901

cc: James Marcotte, Board Executive Director

Petersburg Vessel Owners Association

P.O. Box 232
Petersburg, Alaska 99833
Phone (907) 772-9323 Email: pvoa@gci.net
www.pvoaonline.org

March 2, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526
Via Fax: (907) 465-6094

RE: BOARD OF FISHERIES STATEWIDE PROPOSALS

Dear Chairman Webster and Board Members,

Petersburg Vessel Owners Association (PVOA) appreciates the opportunity to comment on the 2010 Statewide Board of Fish proposals. PVOA is a diverse group of 100 commercial fishermen and businesses operating primarily in Southeast Alaska. Our members provide millions of meals to the public annually by participating in a variety of fisheries statewide including *salmon, herring, halibut, cod, crab, and shrimp*. Many PVOA members are also active sport, personal use, and subsistence fishermen who depend on sustainable and conservative management of Alaska's fishing resources to ensure healthy fisheries for the future.

PVOA OPPOSES proposal #166 eliminating a license for personal use fisheries.

Alaska's fisheries depend on accurate and timely data collection to properly manage our fish stocks. We are opposed to any action that would make collecting data more difficult or less accurate.

PVOA SUPPORTS proposal #175 which establishes a statewide bag limit and annual limit for blackcod. PVOA would also support an adjustable bag limit that fluctuates based on abundance (abundance-based management). Setting bag limits for sport and personal use harvest is extremely important to help ensure that reasonable expectations are created in regards to harvest and commercial opportunity is maintained to continue to feed the Alaskan and American public. Sustaining the commercial black cod fishery is critical to preserving public access to this species as commercial harvesters supply millions of meals to the public each year that otherwise do not have the means or resources to come to Alaska to sport fish.

PVOA appreciates the work done at the Board of Fisheries to ensure that reasonable expectations are created for sport harvesters and realistic bag limits are established. Both the State and Federal sablefish fisheries are on a severe decline throughout the State.

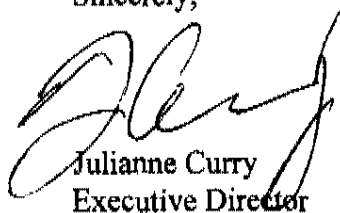
The commercial fishery is conservatively managed by the State of Alaska and NMFS, and harvesters are held accountable for each pound of fish through State fish tickets and severe fines for illegal actions. Most sport black cod harvest appears to be done with commercial downriggers (jigging machines) at remote lodges with no State creel sampler to verify data collected in logbooks.

PVOA supports proposal #182 to define sport fishing gear. PVOA maintains that sport fishing is considered an opportunity to catch fish and defining sport fishing gear is IMPERATIVE TO MAINTAINING sustainable and reasonable fisheries. Sport *finfish* gear should not include electric or power assisted devices such as downriggers and electric reels that encourage meat hunting and discourage the 'sport' in sport fishing. Southeast has seen an alarming growth in guided clients who target blackcod using power assisted gear. The increased use of downriggers provides guided anglers with an unfair advantage over the individual Alaskan personal use fishermen.

With guided and unguided recreational harvest on the rise, increased pressure on fully-utilized resources is occurring. The use of power-assisted gear is becoming more common, and allows operators to reach new depths and harvest at an improved speed that discourages a quality recreational fishing experience. Power-assisted gear now allows the targeting of fish at depths previously unattainable, allowing for the increased harvest of fully utilized resources. Sport fishing should be conducted with sport fishing gear that encourages the opportunity to catch fish.

PVOA OPPOSES proposal #190 to remove E.O. Authority on charter crew retention. It is imperative that the Department continue to exercise the authority on an emergency basis to allow or limit harvest by charter crewmembers while paying clients are onboard. Although it is frustrating to not be allowed to retain fish while paying clients are onboard, this is a necessary component of separating business activities from individual guides filling their freezer. Alaska is dependent on the Department providing sustainable and conservative management of Alaska's fishing resources to ensure healthy fisheries for the future through Emergency Order.

Sincerely,

 via fax
Julianne Curry
Executive Director

Petersburg Vessel Owners Association

P.O. Box 232
Petersburg, Alaska 99833
Phone (907) 772-9323 Email: pvoa@gci.net
www.pvoaonline.org

March 2, 2010

Alaska Department of Fish and Game
Boards Support Section
P.O. Box 115526
Juneau, AK 99811-5526
Via Fax: (907) 465-6094

RE: BOARD OF FISHERIES 2010 STATEWIDE ACR PROPOSAL 5

Dear Chairman Webster and Board Members,

Petersburg Vessel Owners Association (PVOA) appreciates the opportunity to comment on the 2010 Statewide Board of Fish ACR 5 proposal. PVOA is a diverse group of 100 commercial fishermen and businesses operating primarily in Southeast Alaska. Our members provide millions of meals to the public annually by participating in a variety of fisheries statewide including *salmon, herring, halibut, cod, crab, and shrimp*. Many PVOA members are also active sport, personal use, and subsistence fishermen who depend on sustainable and conservative management of Alaska's fishing resources to ensure healthy fisheries for the future.

PVOA is OPPOSED to ACR 5, CLOSE DISTRICTS 1 & 2 TO COMMERCIAL DUNGENESS FISHING IN THE SUMMER SEASON. PVOA is supportive of the Board properly addressing subsistence in regards to this issue but cannot support closing District 1 & 2 to the summer Dungeness crab season without proper and validated justification. Reports from fishermen in the area indicate that the crab populations in Districts 1 & 2 are healthy with a high instance of hard shell crab, and any conflicts with subsistence pots were quickly remedied by fishermen moving their gear to allow local access to traditional grounds. Department numbers show effort and participation in these areas was low in the 2009 season which indicates that reports of competing harvest are unfounded. Leaving districts 1 and 2 open for the summer season helped spread the distribution of the crab fleet, and created less crowding and competition on the grounds.

We are opposed to action that restricts commercial fishing and allows the continuance of sport fishing which in some cases matches or exceeds commercial harvest. We support providing opportunity in this productive area that was traditionally commercially fished. The Dungeness crab fisheries are extremely important to the economy of Southeast Alaska. The Dungeness fishery has also proved to be an imperative entry-level fishery for Southeast's young harvesters who are struggling to make a living along side increased fuel prices, crippling halibut and sablefish reductions, and low salmon returns.

Thank you very much for consideration of our comments on these proposals. If we can answer any questions or provide any additional information please feel free to contact us.

Sincerely,



via fax

Julianne Curry
Executive Director

Southeast Alaska Fishermen's Alliance

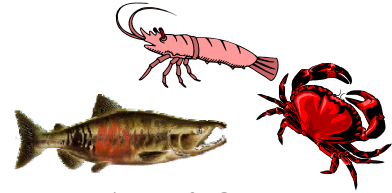
9369 North Douglas Highway

Juneau, AK 99801

Phone 907-586-6652

Fax 907-523-1168

Website: <http://www.seafa.org>



E-mail: seafa@gci.net

March 1, 2010

Attn: Board of Fish Comments
Alaska Dept of Fish and Game - Board Support
PO Box 115526
Juneau, AK 99811-5526

RE: Statewide Board of Fish Board Proposals

Southeast Alaska Fishermen's Alliance (SEAFA) is a multi-gear/multi-species non-profit membership based organization representing our members involved in the salmon, crab, shrimp and longline fisheries of Southeast Alaska. Most commercial fishermen also hold sport fishing licenses and enjoy opportunities to personal use fish, subsistence fish, or recreationally sport fish.

Proposal #175: Sablefish Bag Limits

SEAFA supports the Sitka advisory committee's proposal to establish statewide bag limits for non-residents of a daily bag limit of 2 and an annual limit of 4 fish. The sablefish resource has been declining over the last few years and the assessment surveys are showing low juvenile recruits entering the fishery indicating additional future declines. A similar proposal in Southeast Alaska was very controversial but we ask that you look at the stock conditions carefully, request ADFG to explain what they were telling the Chatham sablefish holders, go through the allocation criteria and look at the 100 year old history of the commercial fishery, and the value to the state of the commercial sablefish fisheries (both state & federal). The total commercial ex-vessel value of sablefish is over \$12 Million dollars and the federal value is over \$85 million. The value to the coastal communities from the raw fish tax shared with the communities in an important part of many of the community's income.

The federal sablefish IFQ fishery will be impacted by this regulation as the regulations for state waters for sport fishing will also extend into the federal waters and to date the federal managers have assumed no sport harvest occurring.

Sablefish is a long-lived deep water species. Sablefish from Alaskan waters has been aged at 95 years old.

SEAFAs asks that you consider the combined effect of allowing the legal use of electric reels and the bag and annual limits set for sablefish. Our recommendation is that you do not allow the use of electric reels other than for handicapped and to set a restrictive bag and annual limit for sablefish that still allows for reasonable opportunity as stated in proposal #177 that is reflective of the stock status (significantly declining according to ADFG comments) and the biology of the stock with a non-resident daily bag limit of 2, 4 in possession and annual limit of 4 fish as submitted in this proposal by unanimous consent from the Sitka advisory committee with diverse viewpoints.

Proposals 180-182: Electric Reels

SUPPORT PROPOSAL #182 / OPPOSE PROPOSAL #180 & 181

SEAFAs supports proposal #182 which prohibits the use of power for sportfishing for finfish & groundfish species except for handicapped individuals. We support the use of power for pulling shellfish pots. Recreational fishing is meant to be a sport, not the easiest, most economical way to catch a fish. As our fishery resources are over-utilized and not completely accounted for in the recreational sector it is appropriate to use methods that slow down the harvest along with the use of bag and annual limits so that the experience can be enjoyed by more fishermen. The following is a summary of fishing regulations along the west coast regarding the use of power assisted reels.

West Coast Regulations on Electric Reels

- **Mexico - The use of electric reels is restricted to disabled fishermen only, after written authorization for the Ministry before use**
- **California - You can not use weights over four pounds unless the weight is attached to a downrigger and the fishing line releases automatically from the downrigger when a fish is hooked**
- **Oregon - The following activities are unlawful: use of gurdies, winches or reels affixed to a boat to land fish (rod or line must be held in hand) except when used for retrieving crab rings or pots.**
- **Washington - All fishing gear must be kept in immediate control, and gear may not be left unattended while fishing; Downriggers may be used with a line if the line releases from the downrigger while playing and landing the fish; Rodholders may be used; the rod must be easily removed without delay; rod may be left in the holder while playing the fish; and **Electric reels** may be used if designed for sport fishing and attached to a fishing rod.**

- Canada - fish with a fixed weight (sinker) greater than 1 kg except on a downrigger line, in which case the fishing line must be attached to the downrigger by means of an automatic release clip.

Proposal #177: Bag limit & Possession Limit for thornyhead rockfish - SUPPORT
SEAFAs support this proposal to protect a long-lived, deep-water species with a "reasonable opportunity" while still protecting the resource.

Proposal #195: Close PORTIONS of District 2 to Dungeness Commercial crabbing -
OPPOSE

SEAFAs opposes large scale closures of District 2 to commercial Dungeness crabbing. Our current management of a summer and fall season has maintained a healthy fishery for a long time. Communities throughout the southeast region are able to continue to successfully harvest crab for subsistence, personal use and sport with a summer and fall season in place. The proposal speaks to soft-shell crab, but commercial crab fishermen who fished in the district have told our organization that they did not see any soft shell crab during the summer season, the lawsuit filed by the Village of Kasaan that is stayed dependent upon this BOF action admitted that the crab hardened up mid-June which is when the commercial fishery opens. If handling of soft crab in the fishery harms the resource in mid-June then there should not be a Subsistence, personal use, sport or commercial fishery occurring.

In our review of ADFG comments on this proposal it appears that the overall harvest of crab out of district 2 is overall within the total harvest amount that has occurred in previous years with the different season timing.

At the Jan '09 meeting ADFG answered questions directed to them by BOF members that the summer and fall season currently conducted for the commercial fishery does not appear to harm the resource although the Dept would prefer a fall only fishery.

One of the motivating issues for this proposal is the complaint that the process used failed when the proposal was reconsidered at the end of the meeting in Jan of '09. But many proposals are reconsidered, for example at the Feb '09 meeting sablefish bag limits was reconsidered at the meeting and then reconsidered again at a teleconference. If you are concerned about an issue then you stay until the end of the meeting and that has always been the way it works.

The Board of Fish realized that the different crab seasons for district 1 & 2 were based on very old data that they didn't even really have access to the information that was used then that allowing the fishery to occur on a three year basis would

provide the data for an informed decision in 2012 on whether to switch the seasons back or continue to manage districts 1 & 2 as a summer and fall season fishery.

If the Board of Fish wishes to implement a closure to provide for a subsistence Dungeness crab fishery in the vicinity of Kasaan we believe that Kina Cove be closed to commercial and sport fishing to provide this area for subsistence use only.

Proposal #166: Personal Use Sport Fishing License requirement - Oppose
SEAFAs opposes the elimination of a sport fishing license for personal use fisheries. This license helps enforcement determine that only Alaskan residents are participating in the fishery and provides for some harvest estimation through the Statewide Harvest Survey (SWHS).

Proposal #188: Possession of sport caught halibut - SUPPORT
SEAFAs supports this housekeeping proposal that clarifies the difference regarding possession limits of halibut which is managed by the federal government under different regulations.

Proposal #190: Allow crew members to retain fish with Clients onboard - OPPOSE
SEAFAs opposes the ability to retain fish when clients are onboard. The Dept needs to retain the flexibility to issue emergency orders to restrict charter captains and crew from retaining fish when clients are onboard. This is a tool that has been used to lower the catch of ling cod in southeast to keep the harvest within the recreational allocation, halibut in South Central Gulf and many other examples

Proposal #164: Home Packs - OPPOSE
SEAFAs opposes this proposal to limit "homepacks" from commercial fishing vessels. Fish taken from commercial fishing harvests are recorded on fish tickets - if the commercial fisherman wishes to take home more than 2 kings and lose the income; that should be there individual choice. In many fisheries the taking home of kings shortens the season because it is on a quota such as in Southeast the Pacific Salmon Treaty caps the amount of kings that may be harvested.

Sincerely,

A handwritten signature in black ink that reads "Kathy Hansen" followed by a long horizontal line extending to the right.

Kathy Hansen
Executive Director

2008 Alaska Commercial Groundfish Harvests & Exvessel Values in State - Managed Fisheries ^a

Source: ADF&G, October 6, 2009

<http://www.cf.adfg.state.ak.us>

Area	Species	Total Lb. (Round)	Total Lb. (Landed)	Average \$/Lb. ^b	Exvessel Value
SOUTHEAST	Lingcod	397,810	289,240	\$1.02	\$406,758
	Pacific Cod	676,113	650,532	\$0.62	\$422,298
	Black Rockfish	2,503	2,497	\$0.32	\$800
	Sablefish	2,280,611	2,248,374	\$3.14	\$7,149,801
	Demersal Shelf Rockfish ^c	433,348	431,664	\$1.22	\$526,970
	Other Rockfish	250,997	249,618	\$0.61	\$152,502
	Misc. Groundfish	25,191	25,171	\$0.39	\$9,920
	totals	4,066,574	3,897,097		\$8,669,048
PRINCE WILLIAM SOUND	Lingcod	40,601	35,564	\$0.87	\$35,323
	Pacific Cod	9,430	9,094	\$0.49	\$4,620
	Sablefish	206,806	192,408	\$3.00	\$620,419
	Walleye Pollock	1,395,933	1,395,933	\$0.15	\$209,390
	Rockfish	104,143	101,116	\$0.44	\$45,823
	totals	1,756,913	1,734,115		\$915,576
COOK INLET	Lingcod	44,032	38,722	\$0.79	\$34,785
	Pacific Cod	2,394,149	2,346,331	\$0.60	\$1,436,489
	Sablefish	68,852	68,009	\$2.87	\$197,607
	Rockfish	29,589	29,049	\$0.58	\$17,162
	totals	2,536,622	2,482,111		\$1,686,043
KODIAK	Lingcod	513,346	500,771	\$0.62	\$318,274
	Pacific Cod	10,549,141	10,339,440	\$0.57	\$6,013,010
	Black Rockfish	137,200	135,937	\$0.26	\$35,672
	totals	11,199,686	10,976,147		\$6,366,957
BERING SEA/ALEUTIANS	Sablefish	145,475	98,218	\$4.38	\$637,180
	Pacific Cod	11,737,687	10,550,050	\$0.58	\$6,807,859
	totals	11,883,162	10,648,268		\$7,445,039
AK PENINSULA	Pacific Cod	13,290,173	13,024,620	\$0.39	\$5,183,168
	totals	13,290,173	13,024,620		\$5,183,168
CHIGNIK	Pacific Cod	6,842,472	6,705,623	\$0.39	\$2,668,564
	totals	6,842,472	6,705,623		\$2,668,564
ALASKA TOTALS	Lingcod	1,865,937	1,554,813	\$0.95	\$1,470,734
	Pacific Cod	45,555,116	43,679,690	\$0.49	\$21,547,410
	Walleye Pollock	1,395,938	1,395,938	\$0.20	\$279,188
	Black Rockfish	243,748	242,478	\$0.26	\$63,125
	Rockfish	936,876	929,395	\$0.95	\$885,857
	Sablefish	2,737,690	2,642,798	\$4.67	\$12,336,552
	Misc. Groundfish	45,604	45,585	\$0.17	\$7,552
	totals	52,780,910	50,490,697		\$36,590,418

^a State-managed harvests include directed fishery catch and bycatch recorded on fish tickets. The state manages some groundfish species both in state waters within 3 miles from shore and in the exclusive economic zone out to 200 miles. These species include black rockfish off of SEAK, PWS, Kodiak, Chignik, and the Alaska Peninsula; demersal shelf rockfish in the Eastern Gulf of Alaska Area; and lingcod in all areas.

Harvests may include catch from test fisheries or confiscated catch that may not be considered part of the fishery quota or guideline harvest for purposes of managing the fishery. Harvests in state waters during parallel seasons (when adjacent waters of the EEZ are open for groundfish fishing for the same species, under similar management regulations) are not included. Halibut and bycatch of halibut are not included.

^b The price/pound is based on a combination of exvessel prices from the 2008 Commercial Operators Annual Report and Area Staff Calculations.

DATA NOT FOR LEGAL INTERPRETATIONS.

RECEIVED
MAR 02 2010

My name is Larry Edfelt and I'm representing myself, the Territorial Sportsmen and the Juneau, Petersburg and Sitka Charterboat Assns. I want to comment on some proposals which would restrict or shut down sport fishing for sablefish in Alaska, a public resource with a commercial catch of over 40 million pounds.

The first is proposal 175 which would impose a statewide daily bag limit of 2 sablefish. According to the department's estimate of the statewide sport catch, the sport catch is far less than one percent of the statewide commercial catch.

Sablefish comprise a single stock from British Columbia through the Gulf of Alaska all the way to Japan, and that stock has declined somewhat in recent years but not enough to preclude a healthy commercial fishery. If sablefish stocks become depleted, the first management action should be to clamp down the commercial fishery long before it should be necessary to restrict the inconsequential sector taking sablefish for personal food. You won't achieve any measurable conservation by eliminating the fishery catching less than one percent of the fish.

This proposal and the electric reel ban proposals are based on irrational fear, not science or even common sense.

Banning electric reels as requested in proposals 182 and 183 is a sport sablefish closure. Sablefish in Northern Southeast are caught in 2000 feet of water. It takes 5-8 minutes just to drop the bait. Pulling it all back up requires power assistance. No electric reels - no sablefish catch.

If sablefish stocks are so impaired that the taking of these fish by the sport sector is detrimental to the resource, then no

commercial or sport fishery should be prosecuted. I'm not suggesting you do that. I'm just pointing out the absurdity of regulating the sport catch. Since the commercial fishery is actually relatively healthy and extremely valuable, there is no reason to restrict the miniscule sport take. There isn't even a segment of the stock that can possibly be depleted by a sport catch.

The third issue is thornyhead rockfish - proposal 177. Placing a bag limit on thornyhead rockfish in Alaska is like placing a bag limit on lobsters in Alaska. They are caught with pretty much the same frequency. This proposal is yet another fear-based action, the need for which is contraindicated by the facts.

The Sportfish Division creel survey has not seen a thornyhead in Southeast for 5 years, and not ever in Southcentral. On top of that, the commercial blackcod fishery in northern Southeast Alaska, the very area where a sport fisherman might opportunisticly encounter a thornyhead, is allowed a bycatch of 15 % rockfish and thornyheads. Since the commercial fishery is allowed a large bycatch, there is no reason for adopting a restrictive sport bag limit on thornyheads, except to be irrationally vindictive.

The last issue is proposal 189 requiring a client/guide written agreement. To do what the proposer suggests would require an enormous daily paperwork burden for all guides, captains, fishermen, lodges, hotels, cruise ships, travel agents, air taxis, visitors bureaus and anyone else who books a trip for a tourist, with zero tangible benefit to resource management or the economy of Alaska's coastal communities. Please reject this unreasonable proposal.

Thank you for your time.

See page 3
for
thornyhead
bycatch

**ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES
NEWS RELEASE**



*Denby S. Lloyd, Commissioner
John Hilsinger, Director*



Contact:
Cleo Brylinsky

Sitka Area Office
304 Lake St. Room 103
Sitka, AK 99835

Phone: (907) 747-6688

Date: June 22, 2009

Fax: (907) 747-6239

Time: 11:45 a.m.

2009 NSEI (Chatham Strait) SABLEFISH QUOTA ANNOUNCEMENT

Sitka... The Alaska Department of Fish and Game announced today that the 2009 sablefish annual harvest objective (AHO) for the Northern Southeast Inside (NSEI) sablefish fishery will be 1,071,000 round pounds. This is a 29% drop from the 2008 AHO (1,508,000). There are currently 88 permits for this fishery, eight less than in 2008; therefore the individual quota share (EQS) will be 12,170 round pounds (22% less than last year's EQS of 15,710 round pounds). The fishery opens by regulation at 8:00 am on August 15, 2009 and will close at 12:00 noon on November 15, 2009. Permit holders should have received a certified letter detailing any legal overage or underage (up to 5% of the 2008 EQS) incurred during 2008. Their 2009 Personal Quota Share (PQS) will be adjusted accordingly. Permit holders who did not receive that certified letter should contact Kamala Carroll directly (747-6688).

The abundance of sablefish in Chatham Strait was estimated using mark-recapture methods and the Petersen estimator. From this estimate a forecast of biomass was developed by decrementing for natural mortality, adding for recruitment, and converting to biomass. A harvest rate is then applied to the forecasted biomass to obtain the allowable biological catch (ABC). For 2009 a harvest rate of $F_{45\%}$ (0.104) was applied to the point estimate of the 2009 forecasted biomass. For comparison, in 2007 and 2008 an $F_{40\%}$ (0.116) harvest rate was applied to the lower 90% confidence limit of the forecasted biomass to obtain the ABC. For 2009 the ABC was then decremented to account for updated estimates of bycatch in the halibut fishery and 3% of the ABC was deducted to account for sablefish caught in sport, subsistence and personal use fisheries and for deadloss in non halibut fisheries. These decrements are made every year. For 2009 an additional decrement was made to account for sablefish harvested in the NSEI sablefish longline survey. The decrease in the AHO for 2009 is a result of two things: a decrease in biomass and the use of a more conservative harvest rate. Two things mitigate the resultant decrease to the EQS; the application of the harvest rate to the less conservative biomass estimate (the point estimate rather than the lower 90% confidence limit) and the reduction in permits to the fishery.

General Considerations

The department continues to evaluate the best way to account for harvest in subsistence and personal use fisheries and deadloss of sablefish in non halibut fisheries. Sport catches of sablefish will be accounted for on charter logbooks and in the creel and call out surveys for 2009 and could better inform the department about sport harvest for the future. The Department will again in 2010 attempt to integrate the NSEI survey with fishermen harvest of their PQS thereby reducing the amount of fish decremented for harvest in the longline survey.

Again this year the Department has taken into consideration that there has been no definitive evidence of strong recruitment into Chatham Strait, that there has been a reduction in the TAC for the federal fishery, and that Canadian sablefish fishermen are seeing declines in abundance as well.

The department continues to work toward the publication of two reports detailing sablefish stock assessment activities in NSEI. It is anticipated that these reports will be available no sooner than November 2009.

Registration and Logbook Requirements

Fishermen are reminded that they must register prior to fishing and they are required to keep a logbook during the fishery. Registration forms and logbooks are available at Fish and Game offices in Southeast Alaska. Completed logbook pages for each trip must be attached to the ADF&G copy of the fish ticket at the time of delivery. Confidential ADF&G envelopes for logbook pages may be requested when registering.

When registering for the fishery, fishermen will be given a PQS tracking form declaring their 2009 personal quota share. This form is to be used to record the total round landed weight of each delivery. Each permit holder, upon request, must provide the buyer with the total round weight of NSEI sablefish the permit has landed to date. A copy of the completed PQS tracking form must be returned to the department along with the final fish ticket of the season for that permit.

Logbooks for longline gear must include, **by set**, the time and date gear is set and retrieved, the specific location of harvest by latitude and longitude for the start and ending positions, hook spacing, the amount of gear (number of skates and hooks) used, the depth of each set, the estimated weight of sablefish (both retained and discarded at sea), and an estimated weight of the bycatch by species. Indicate for each set if the target was sablefish or halibut and if there was any lost gear.

Tags

Fishermen are requested to watch for tagged sablefish. Please record the tag number(s) and attach tag(s) directly to the logbook in the comments section of the corresponding set. All ADF&G tags returned will receive a reward. Tag rewards this year include a hat and entry into an annual drawing for one \$1000, two \$500, and three \$250 cash rewards. To qualify for entry in the annual drawing, the department requires the following information: the tag, set location (latitude and longitude), the date of capture, and the name and address of the person recovering the tag. Additional useful information includes the length of the fish (fork length) and the depth where the fish was caught.

A permit holder must retain all visibly injured or dead sablefish. Sablefish that are not visibly injured or dead may be released unharmed, and the permit holder must record in the logbook, by set, the number of live sablefish released. Please record if you are releasing the fish because they are small or due to reaching your PQS.

Fish Ticket Requirements

Landed weights must be recorded on the fish ticket at the time of delivery and prior to continued fishing. This includes deliveries made to tenders. A permit holder's harvest will be based on the weight as delivered. If a fisherman delivers fish in the round, the round weight must be recorded on the fish ticket. If a fisherman delivers dressed fish, the fish ticket must include the total landed dressed weight, as well as a converted round weight using the standard 0.63 conversion rate. A two percent allowance for ice and slime is permitted. Each permit holder must have onboard copies of all NSEI sablefish fish tickets from the current season as well as their updated PQS tracking form. A copy of the completed PQS tracking form must be submitted to the department with the final fish ticket of the season.

Out of State Deliveries

Fishermen are reminded that a completed fish ticket must be submitted to the department before fish are transported out of state. This requires that a valid Alaska processor code be assigned to the ticket. If fishermen are not already licensed as catcher/exporters, they must either work in conjunction with a licensed Alaskan processor or they must obtain an Alaskan Fisheries Business License and pre-pay the estimated raw fish tax. For further information, contact Shellene Hutter at (907) 465-6131.

Sablefish Possession and Landing Requirements

In the Northern Southeast Inside Subdistrict (NSEI), the holder of a CFEC permit or interim use permit for sablefish may not retain more sablefish from the directed fishery than the annual amount of sablefish EQS specified by the department [5 AAC 28.170 (f)]. However if a permit holder's harvest exceeds the permit holder's EQS for that year, by not more than five percent, the department shall reduce the permit holder's EQS for the following year by the amount of the overage. If a permit holder's harvest exceeds the permit holder's equal quota share by more than five percent, the proceeds from the sale of the overage in excess of five percent shall be surrendered to the state and the permit holder may be prosecuted under AS 16.05.723. **Transfer of fish between permits is no longer allowed.**

For the 2009 fishery, five percent of the annual EQS is 609 round pounds. If a permit holder's harvest is less than the permit holder's EQS established for the year, the department shall increase the permit holder's EQS only for the following year by the amount of the underage that does not exceed five percent of the EQS [5 AAC 28.170 (k)].

Bycatch

The allowable bycatch that can be legally landed on the NSEI sablefish permit card is as follows:

Bycatch Species	NSEI Sablefish Longline Fishery
Demersal Shelf Rockfish (DSR)	1%
Shorthead and Rougheye rockfish	7% in aggregate
Other rockfish & thornyheads	15% in aggregate
Lingcod	0%
Pacific Cod	20%
Spiny dogfish	35%
Other groundfish	20%

← 15%

Bycatch limits are based on the round weight of the bycatch species to the round weight of the target species, (i.e. sablefish).
Full retention of all rockfish is required excluding thornyheads.

Pacific cod in excess of bycatch limits may be landed on a miscellaneous finfish (M) card except in statistical areas 355801 and 355802 (Icy Strait and Port Frederick) where directed fishing for Pacific cod has closed for 2009. Fishermen with halibut IFQs remaining in regulatory area 2C and a state halibut permit card may retain all halibut, greater than 32 inches in length, up to their IFQ.

Prohibitions

A vessel or a person onboard a vessel from which longline gear was used to take fish in the NSEI area during the 72-hour period immediately before, or from which that gear will be used during the 24-hour period immediately after, an open sablefish fishing period, may not participate in the taking of sablefish in NSEI during that open fishing period [5AAC 28.180(a)]. The operator of a fishing vessel may not take sablefish in the NSEI area with sablefish from another area on board. Also, the operator of a vessel taking sablefish in the NSEI area shall unload before taking sablefish in another area (5AAC 28.170).

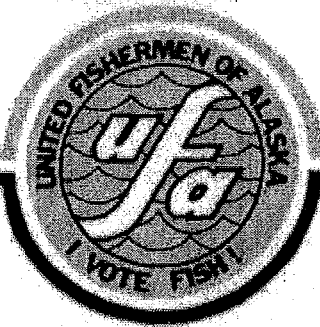
Harvest of Bait

The holder of a valid CFEC interim use or limited entry permit may take groundfish in the waters of Alaska in the Eastern Gulf of Alaska Area for use as bait in the commercial fishery for which the permit is held as follows: Except for sablefish, lingcod, yelloweye, shortraker, rougheye, and thornyheads, groundfish may be taken at any time; **sablefish may not be taken for bait or used for bait**. To view the entire bait regulation see 5 AAC 28.190 in the Groundfish Fishing Regulation book.

Additional information on Southeast Regional Groundfish Fisheries can be found on our web site at: <http://www.cf.adfg.state.ak.us/region1/finfish/grndfish/grndhom1.php>

News releases web site: <http://documents.cf1.adfg.state.ak.us/TopicContents.po>.

<i>Office</i>	<i>Ketchikan</i>	<i>Petersburg</i>	<i>Wrangell</i>	<i>Sitka</i>	<i>Juneau</i>	<i>Haines</i>	<i>Hoonah</i>	<i>Yakutat</i>
<i>ADFG</i>	<i>225-5195</i>	<i>772-3801</i>	<i>874-3822</i>	<i>747-6688</i>	<i>465-4250</i>	<i>766-2830</i>		<i>784-3255</i>
<i>AWT</i>	<i>225-5111</i>	<i>772-3983</i>		<i>747-3254</i>	<i>465-4000</i>		<i>945-3620</i>	
<i>Groundfish Hotline</i>				<i>747-4882</i>				



UNITED FISHERMEN OF ALASKA

211 Fourth Street, Suite 110
Juneau, Alaska 99801-1172
(907) 586-2820
(907) 469-2545 Fax
E-Mail: ufa@ufa-fish.org
www.ufa-fish.org

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MAR 02 2010

March 2, 2010

Attn: BOF Comments
ADFG - Board Support Section
PO Box 115526
Juneau, AK 99811-5526

RE - Opposition to Board of Fish Proposal #166 - License for Personal Use Fisheries

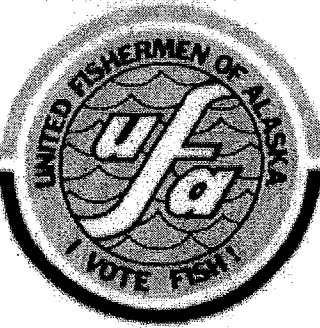
Dear Chairman Webster and members of the Board,

United Fishermen of Alaska (UFA) opposes proposal #166 which would delete the regulation requiring a sport fishing license to fish in personal use fisheries. Personal use fishing is a fishery reserved for state residents and the sport fish license is an important way to verify and enforce that state residents only are participating. This requirement also is an important for the ability to gather harvest information.

UFA is a statewide organization representing 37 Alaska Commercial fishing associations from fisheries throughout the state and its offshore waters. Thank you for your consideration of our comments.

Sincerely,

Mark Vinsel
Executive Director



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March 2, 2010

Attn: BOF Comments
ADFG - Board Support Section
PO Box 115526
Juneau, AK 99811-5526

RECEIVED
MAR 02 2010
BOARDS

RE: Support for Proposal #175 – Sablefish statewide bag limit and annual limit

Dear Chairman Webster and members of the Board,

United Fishermen of Alaska (UFA) supports proposal #175 which establishes a statewide bag limit and annual limit for sablefish (blackcod). Both federal and state waters' sablefish biomass has been declining over the past several years and is projected to continue to decline for several more years. The surveys for both the state and federal are seeing signs of poor recruit of juvenile fish.

Sablefish is a fully utilized, economically important species with very little harvest information from the personal use, subsistence and sport harvest. At the Southeast meetings in 2009, ADFG was reluctant to estimate sport or personal use harvest and would only say that 7 were seen in the creel sampling in 2008 and later testimony from an owner of two lodges admitting that they had harvested an average of 800 fish (each lodge) over the past five years. Preliminary harvest from charter logbooks in 2009 showed a harvest in Southeast of 3,844 fish and in Southcentral of 1,763 fish without considering the harvest of the individual recreational fishermen or the personal use fishermen.

This action would be consistent with Board of Fish actions taken in other fisheries, for example the Board generated proposal #177 to provide a reasonable opportunity for sport fishing with limited bag limits for Thornyhead rockfish. Sablefish is also a long-lived species having been aged up to 94 years in Alaskan waters. The addition of an annual limit is appropriate based on the assessments and health of the resource.

Please support this proposal that was generated through a public process in an advisory committee process with a varied makeup of commercial, sport, charter and personal use fishermen. This proposal when supported provides for a *“reasonable level of angling opportunity and harvest while at the same time providing for protection against high levels of harvest that could be harmful for the stock”* just as the Board of Fish commented about their board generated proposal #177.

UFA is a statewide organization representing 37 Alaska Commercial fishing associations from fisheries throughout the state and its offshore waters. Thank you for your consideration of our comments.

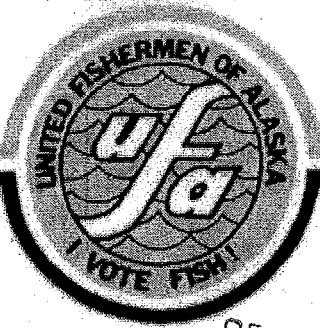
Sincerely,



Mark Vinsel
Executive Director

MEMBER ORGANIZATIONS

Alaska Crab Coalition • Alaska Independent Fishermen's Marketing Association • Alaska Independent Tendermen's Association
Alaska Longline Fishermen's Association • Alaska Scallop Association • Alaska Trollers Association • Alaska Whitefish Trawlers Association
Aleutian Pribilof Islands Community Development Association • Armstrong Keta • At-sea Processors Association • Bristol Bay Reserve
Bristol Bay Regional Seafood Development Association • Cape Barnabas Inc. • Concerned Area "M" Fishermen • Cook Inlet Aquaculture Association
Cordova District Fishermen United • Crab Group of Independent Harvesters • Douglas Island Pink and Chum • Fishing Vessel Owners Association
Groundfish Forum • Kenai Peninsula Fishermen's Association • Kodiak Regional Aquaculture Association • North Pacific Fisheries Association
Northern Southeast Regional Aquaculture Association • Petersburg Vessel Owners Association • Prince William Sound Aquaculture Corporation
Purse Seine Vessel Owner Association • Seafood Producers Cooperative • Sitka Herring Association • Southeast Alaska Fisherman's Alliance
Southeast Alaska Regional Dive Fisheries Association • Southeast Alaska Seiners • Southern Southeast Regional Aquaculture Association
United Catcher Boats • United Cook Inlet Drift Association • United Southeast Alaska Gillnetters • Valdez Fisheries Development Association



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RE: REEL
MAR 02 2010

March 2, 2010

Attn: BOF Comments
ADFG - Board Support Section
PO Box 115526
Juneau, AK 99811-5526

RE: Board of Fish Proposals #180-183 regarding Electric Reels and definitions of sport fish gear

Dear Chairman Webster and members of the Board,

UFA **supports proposal #182** the proposal to define sport fishing gear to prohibit sport fishing line/fish being pulled by power for finfish, but we accept the use of power for shellfish pots. We believe this is a very important proposal. There has been much discussion about the suggested language appropriate to meet the intended goal. The reasons UFA supports the proposal to prohibit the use of power in pulling in the fish is that UFA believes:

- 5 AAC 75.038 already provides the necessary exemption for handicapped individuals that would need the use of power or power assisted reels.
- The use of power or deep drop reels allows the sport fishermen to access depths that were never envisioned by the Board of Fisheries as a sport fish opportunity and the impact on many species and fully utilized resources is not being considered in the management of the fisheries (i.e. sablefish, idiots, shorttrakers, etc) as these are not considered a sport fish.
- We are also concerned about the conservation of many of the deeper species that are impacted by this type of gear. Many of these species are long-lived, and slow growing.
- Another way to think about this issue is to compare it to an individual out duck hunting. You are required to have a plug in your shotgun that prevents the use of more than three shells. With duck hunting you have a bag and possession limit the same as you do with sportfishing, but the requirement of the plug was to **extend and enhance the hunting experience, and provide for a fairer opportunity between users.**
- The cost of many of these types of units provides the charter client fishing from a charter boat with one of these deep drop reels an unfair advantage especially over the individual Alaskan personal use fishermen in their skiff.
- On a testimonial page for deep drop reels it states "*We took the Deep Drop Pro to Sitka to demonstrate the reel. His fish of choice were halibut in 400-500 ft, rockfish in 900-1100 and Black Cod in 1200-2000 ft of water. After three days of fishing we had caught all of his targeted fish in the depths he wanted to fish. Our captain was SOLD after the very first 50 lb halibut I caught in 516 ft, and he wanted to catch the*

next one! The DDP was just as impressive on the shortraker rockfish in 1050 ft of water. We used 7 lbs of lead on all the drops over 900 ft. Our biggest challenge was the Black Cod in 2000. The first drop was in 1500 ft where we caught a double that weighed 18 and 14 lbs.” The captain went on to say “I will never hand crank another halibut for the rest of my dying days”.

Proposal #180: Oppose

UFA opposes Proposal 180 as we do not believe that weight of the fishing gear is a good method for determining a definition of sport fishing gear and what is not. Gear is being manufactured smaller and lighter every year. We also oppose this proposal based on the rationale provided in our comments on proposal #182.

Proposal #181: Oppose

UFA opposes Proposal 181 based on the rationale provided in proposal #181.

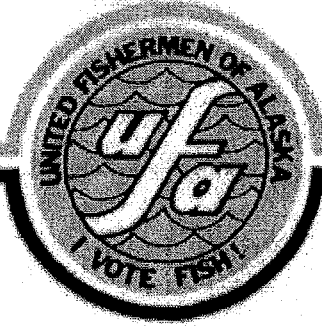
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Mark Vinsel
Executive Director

MEMBER ORGANIZATIONS

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Alaska Longline Fishermen's Association • Alaska Scallop Association • Alaska Trollers Association • Alaska Whitefish Trawlers Association
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March 2, 2010

Attn: BOF Comments
ADFG - Board Support Section
PO Box 115526
Juneau, AK 99811-5526

RECEIVED
MAR 2 2010
BOARDS

RE: Opposition to Proposal #190 – E.O. Authority on charter crew retention

Dear Chairman Webster and members of the Board,

United Fishermen of Alaska (UFA) opposes the elimination of emergency order (EO) authority by the commissioner regarding charter crew members retaining fish when clients are onboard. This EO authority has been used mainly to help maintain allocation and or GHF for sport harvests. Without this tool which provides for flexibility, the Department would have had difficulty in maintaining some allocations on sensitive species that are fully utilized. Where possible the Department does try to allow opportunities for harvest such as in Southcentral area where they allowed the retention of groundfish species by charter captains and crew in the shoulder seasons. But on the flip side last year the Department needed to further restrict the ling cod harvest in Southeast Alaska and the restriction of charter captains and crew was implemented to help maintain the sport harvest within the allocation for that sector.

Please oppose this proposal and maintain the flexibility the Department has used over the years to meet the needs of resource.

UFA is a statewide organization representing 37 Alaska Commercial fishing associations from fisheries throughout the state and its offshore waters. Thank you for your consideration of our comments.

Sincerely,

Mark Vinsel
Executive Director

March 2, 2010

To: Alaska Board of Fisheries
FAX 465-6094

From: Jake Jabusch
P.O. Box 1691
Wrangell, AK 99929

Re: Proposal #195

To whom it may concern:

I am writing to you as a commercial and sports fisherman and am opposed to Proposal #195.

I dungeoness crab fished in area 2 during the 2009 summer season from around June 17th to July 10th. During this time I did not come across any soft shelled crab and I did not see any sport or subsistence activity around me. When I left the area there was still plenty of crab to provide for the 37 people that live in Kasaan.

I have been dungeoness crab fishing for 14 years and the fishing grounds have been shrinking due to the sea otter population and closing more areas would further minimize the crab grounds for the crabbing fleet.

Please take this information into consideration as you review the situation and hope you will keep both areas #1 and #2 open.

Sincerely,



Jake Jabusch

Please submit this comment to the Board of Fisheries prior to the upcoming board meetings.

Board of fisheries members please maintain historic abundances of salmon species returning to streams in the Mat-Su Valley and Anchorage area by adopting the emergency petition before you Concerning the Management of Yentna River Sockeye Salmon.

Thank you,

**Greg Acord
907-376-0692**