

**HB**

**141**



Official Business

**COMMITTEE:**

HOUSE RESOURCES COMMITTEE

**DATE:** March 27, 1997

**SIGN-IN**

**Subject of meeting:**

HB 141 - SCALLOP FISHERY/VESSEL MORATORIUM

PLEASE PRINT!

NAME	ADDRESS (MAILING) & (ZIP)	PHONE	REPRESENTING	DO YOU WANT TO TESTIFY?
Earl Krygier	ADFG / CFMID	6112	ADFG	Yes
Susan Shirlley	CFEC	789-6116		No
DALE ANDERSON	CFEC	789-6160		yes.
Mark Kardianis	326 Center Ave F/u Provider, STE 205 KODIAK AK	486-3309	F/u Provider	yes.
Steve White	P.O. Box 110300 Duneau 99811	465-6724	Law	<del>Yes</del> No
<p>MARK KARDIANIS, KODIAK SCALLOPER IS ALSO HERE TO TESTIFY</p>				

# FISCAL NOTE

STATE OF ALASKA  
1997 LEGISLATIVE SESSION

BILL NO. HB141

Revision Date: \_\_\_\_\_ Dept. Affected: Fish and Game  
 Title: An Act relating to a vessel permit moratorium for the Alaska weathervane scallop fishery; relating to management of scallop fishery BRU: Commercial Fisheries (Limited) Entry Commission  
 Component: Limited Entry Program Administration  
 Sponsor: Rep. Austerman  
 Requester: Rep. Austerman COMPONENT SERIAL NO. 0471

(Thousands of Dollars)

Expenditures/Revenues	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
<b>OPERATING EXPENDITURES</b>						
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	0.0	0.0	0.0	0.0	0.0	0.0

<b>CAPITAL EXPENDITURES</b>						
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<b>CHANGE IN REVENUES ( )</b>						
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(Thousands of Dollars)

FUND SOURCE	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1006 GF/MHTIA						
Other						
<b>TOTAL</b>	0.0	0.0	0.0	0.0	0.0	0.0

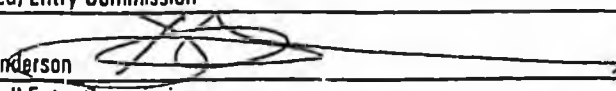
Estimate of any current year (FY97) cost: \$ 0.0

**POSITIONS**

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary.)

No fiscal impact.

Prepared By: Roger Kolden Phone: 789-6160  
 Agency: Commercial Fisheries (Limited) Entry Commission Date: 2/24/97  
 Approved by Commissioner: Dale Anderson   
 Agency: Commercial Fisheries (Limited) Entry Commission Date: 2/24/97  
 PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE


**REPRESENTATIVE ALAN AUSTERMAN** Alaska State Legislature

P.O. Box 2368, Kodiak, Alaska 99615 (907) 486-5930 • Session: State Capitol, Juneau, Alaska 99801 465-2487

FEB 27 1997

Memorandum

TO: Representative Bill Hudson, Co-Chairman  
Representative Scott Ogan, Co-Chairman  
House Resources Committee

FROM: Representative Alan Austerman 

DATE: February 27, 1997

RE: HB 141 Relating to a vessel permit moratorium for Alaska  
weathervane scallop fishery; and management of the scallop fisheries

---

I respectfully request that a hearing for my bill, HB 141, be scheduled before the House Resources Committee at your earliest possible convenience.

Please contact us if you have any questions concerning HB 141. My staff will provide appropriate backup for your information, including a zero fiscal note by the Department of Fish and Game. Your assistance will be greatly appreciated.



**REPRESENTATIVE ALAN AUSTERMAN** Alaska State Legislature

P.O. Box 2368, Kodiak, Alaska 99615 (907) 486-5930 • Session: State Capitol, Juneau, Alaska 99801 465-2487

*SPONSOR STATEMENT*

**HB 141**

*A VESSEL PERMIT MORATORIUM  
FOR THE ALASKA WEATHERVANE SCALLOP FISHERY*

I have introduced HB 141 to implement a moratorium within the state waters off Alaska similar to the moratorium being implemented by the North Pacific Fisheries Management Council affecting the federal waters off Alaska. Without a moratorium implemented in state waters, it is probable that there would be an increase in effort on our state water scallop stocks, as well as on the associated marine habitat, and create an unmanageable fishery.

World wide scallops have proven to be susceptible to overfishing and boom/bust cycles. Scallops are long lived shellfish. The large scallop meats which bring premium prices come from scallops eight years or older.

The Alaska scallop fishery started in 1968. Nineteen east coast scallop vessels came to Alaska and took 1.7 million pounds of scallop meats. The fishery continued at a harvest level of 1.3 million pounds of meats annually until 1973. Catches dropped off sharply after 1973 and fishing ceased in 1978 when scallop beds were depleted. This boom and bust cycle was repeated in the 1980's and appeared to be repeating for a third time in the 1990's until the state developed a fishery management plan for scallops in 1993. All scallop fishing was stopped in February 1995 in order to prevent an east coast scalloper, Mr. Big, from fishing in unregulated federal waters. The fishery reopened in late 1996 under a federal management plan.

At present weathervane scallops are managed jointly by the federal government and the State of Alaska. There is a federal fishery management plan to delegate management authority of scallops to the state "in process" which has not been finalized. The management plan includes mandatory 100% observer coverage, caps on the amount of crab bycatch which can be taken and area specific quotas. Under new language in the Magnuson-Stevens Fisheries Conservation and Management Act, the State of Alaska could exercise management authority out to 200 miles under delegated authority.

It is also in the State of Alaska's best interest that both the State and federal water scallop fisheries have a similar management plans and be managed by the State of Alaska. My goal is delegation of management authority by the U.S. Department of Commerce to the State of Alaska with a more restricted moratorium base. It should be noted that the North Pacific Fishery Management Council's Environmental Assessment and Regulatory Impact Review found that four vessels could efficiently harvest the Alaska scallop quotas.

Within this legislation, I have separated out the weathervane scallop fishery conducted in Area H, in Cook Inlet. The Area H scallop fishery is unique in that it is managed as an entirely separate fishery, has different gear specifications, and has more recently been developed.

HB 141 is needed to ensure careful conservation of the scallop stocks, as well as the marine habitat in which the scallops live, and to ensure that the bycatch of other marine animals, such as crabs, are properly controlled and managed. It is imperative to implement a moratorium on new entrants into the weathervane scallop fishery now.

AMENDMENT # 1

OFFERED IN THE HOUSE

TO: CSHB 141(FSH)

*JK*

- 1 Page 5, line 1:
- 2 Delete "Alaska"
- 3 Insert "the state and the adjacent United States exclusive economic zone"

A M E N D M E N T #2

OFFERED IN THE HOUSE

TO: CSHB 141(FSH)

1 Page 3, line 24:

2 Following "registration area":

3 Insert "(1)"

4 Delete "1995"

5 Insert "1994"

6 Following "1996":

7 Insert "; and

8 (2) during each of at least three calendar years between 1984 and  
9 1996, inclusive"

10 Page 3, following line 24:

11 Insert a new subsection to read:

12 "(f) Notwithstanding (d) and (e) of this section, a vessel owner who does not  
13 own a commercial fishing vessel that qualifies for a vessel permit for a scallop fishery  
14 registration area may receive a vessel permit for that registration area if the vessel  
15 owner owned and fished two or more commercial fishing vessels whose combined  
16 participation in the scallop fishery for that registration area would satisfy the  
17 requirements for a vessel permit for that registration area under this section. The  
18 commission shall issue a vessel permit under this subsection to the last commercial  
19 fishing vessel that the vessel owner owned to satisfy the requirements for the vessel  
20 permit for the registration area if the vessel owner still owned that commercial fishing  
21 vessel on July 1, 1997."

22 Reletter the following subsections accordingly.

A 3

AMENDMENT #3 TO CSHB 141 (FSH)

page 3, line 14:

change "July 1" to "June 30"

- 1 Page 3, line 28:
- 2       Delete "(d) - (f)"
- 3       Insert "(d) - (g)"

**Ernest E. Beile, Jr.**

PO Box 36 ◀ Homer AK 99803  
Home Phone (907) 235-7821

March 18, 1997

Rep. Gail Phillips  
House of Representatives  
State Capitol  
Juneau AK 99801-1182  
FAX 465-3472

Dear Rep. Phillips,

I hate to write a letter of this context to anyone but a truly grave injustice is about to happen again. I am a Scallop fisherman from Homer, 25 years of paying taxes and building a life of five children all born and raised here. Fourteen years ago a Scallop fisherman from New Bedford, MA named Mark Candianice rolled around here from the East in a vessel called the F/V Pursuit. I don't usually bring up personal names, but since I called to speak with Rep. Austerman from Kodiak who introduced House Bill No. 141(FSH) my reply back was a call from Mr. Candianice who is obviously a constituent.

In his pursuit to structure how this fishery will continue he has participated in several strange practices such as darting in and out of Cook Inlet as other Kodiak fisherman did for years hitting Kamashak Bay, Cook Inlet during the month of December when the fishery was closed. In 1986 the state totally closed the Scallop fishery in Cook Inlet due to these infractions. Who paid? We did in Homer.

Only because name of them fished open waters to qualify for statewide district.

◀ According to Bill 141, Cook Inlet Scallop fisherman are to be locked into area H. (See Sec. 16.43.9006 (e) and definition (i) #1). We who of all Scallopers have demonstrated very clean dredging practices, and by the way are not even required to have observers. Check out our record with AK State Fish and Game. We are given no credit for clean fishing, why keep us out of the Exclusive Economic Zone (EEZ) when others show no effort on their own part to police themselves.

However, competitors are also locked out of area H!

Mr. Austerman's bill states we should stay in area H, basically super exclusion. One problem in being locked into Cook Inlet it does not allow for oil spill-related problems shutting us down. We would have nowhere to fish. At the same time I have never been one to protest oil development in Cook Inlet. Another unfair situation is the fact that there is a vessel from Petersburg which has only fished the Yakutat district. It will under Mr. Austerman's bill be allowed to range everywhere. There is a lot of new frontier in the Western Aleutians that no one has explored. Why should that area be just for a select few fisherman from Kodiak and the Eastern Seaboard.

This boat has always fished open waters, and therefore, will qualify for all open waters.

I might point out that my argument was well received with our State Fishery Advisory Panel. When passed on to the North Pacific Fisheries Council it fell to deaf ears. Please represent some true Alaskan people in this issue. Throw out Sec. 16.43.9006 (e) of this bill and let all Alaskan scallop fisherman (only 6 registered in 1996) fish anywhere in coastal Alaska, respecting the gear size regulations that have been in place for 16 years.

This boat has fished 12 years in Yakutat - the chance of it being very slim & hypothetical.

⇓  
18 months ago, BOF denied a proposal to combine management and gear types.

Ernest E. Beile, Jr.  
Captain F/V Northern Explorer

*Ernest E. Beile*

The result to the long time fishers were lost homes, broken families and near insolvency for the resident fleet. But all but one of the recently arrived east coast vessels returned to fish back east during the federal closure as they had permits to do so. On their way, this fleet stopped to fish off Washington and Oregon. They depleted those beds with gear that is illegal in both Alaska and on the east coast. The resident Alaskan fleet does not have the licenses to fish in the east coast's limited entry scallop fishery. Neither did our single purpose vessels qualify for any of the other Alaskan fisheries.

These events happened, I honestly feel, due to the lengthy three and a half years the NPFMC took to develop a management plan and federal moratorium for the Alaskan scallop fishery. This allowed the fleet, along with greed from the then newly arrived east coast fleet, to double in size and increase capacity way beyond the boundaries the resource can support in the long run.

It is sad that regulators do not react to curtail overcapitalization in fisheries until it is too late. It is then left to managers and what fishers remain to pick up the pieces to try to make a viable fishery. In this case, the cost and harm done to the resident fleet was, without question, immense.

In closing, I must again state that, in my estimation, this fishery can only support a handful of dedicated full time vessels. Anything more than this will result in attrition due to insolvency. The long term fishers here can not move to other fisheries as they have no other fisheries to move to.

\* I can not speak to issues concerning the Cook Inlet scallop fishery as this is not an area that we fish.

Thanks for your attention to these issues. Please call for any additional information.

Sincerely,

*Mark P. Kandianis*

MARK P. KANDIANIS  
FV Provider

Bill - There are two districts

1) Cook Inlet

a) smaller boats

b) smaller nets

c) state funded ADF+G observer

2) Statewide Coastal

a) larger boats

b) larger nets

c) \$6000<sup>00</sup>/mo fee for state-certified  
contact observer

Post-it Fax Note	7671	Date	1-31-97	# of pages	6
To	Clara Dougherty		From	Mark Kandianis	
Co./Dept.			Co.		
Phone #			Phone #		
Fax #	907-465-4956		Fax #		

Mark Kandianis  
 Fish Company  
 326 Center Avenue  
 Suite 205  
 Kodiak, AK 99615

January 30, 1997

Mr. Dale Anderson  
 Commercial Fisheries Entry Commission  
 State of Alaska

VIA FAX: 907-784-6170

Dear Dale:

My name is Mark Kandianis. I'm a commercial scallop fisherman from Kodiak. I have fished scallops commercially in Alaska since 1980 as mate and captain aboard the F/V Pursuit and later owner and captain aboard the F/V Provider.

In 1993, the North Pacific Fishery Management Council did an analysis which stated that the Alaskan scallop fishery could support nine vessels at break-even with a GHL of approximately 1.0 - 1.3 million lbs. of shucked scallops. This overstates the abundance of Alaska's scallop resource as GHL's are actually all set at 0 to the upper range of harvest. Since 1993, several management areas have had GHL's reduced or were closed early due to low CPUE, with signs that other areas may also be in decline. Additionally, many of the areas for which a GHL is established do not support any commercial weathervane scallop beds while other areas are closed due to crab bycatch long before the GHL is reached. Many commercially viable scallop beds are not available to harvest due to their location within closed areas such as sea lion rookeries and crab savings areas.

I have witnessed localized stock depletions often in the past. The Bering Sea started with no set quota in 1993 - later a GHL was set at 0-600,000 lbs. I fully expect to see reductions in this area in the near future. In Kodiak, the long term mainstay of our fishery, the GHL was set at 400,000 lbs. In the recent past, this production came almost exclusively from the Shelikof District as beds on the east side of Kodiak are depleted. Last year, the CPUE in Shelikof dropped quickly, and as I recall, the harvest was 210,000 lbs. when it was closed. The Prince William Sound quota was set at 50,000 lbs in 1994 and was reduced this year to 22,000 lbs. even after a lengthy closure.

I believe that many of the western area stocks are comprised of sporadic year classes with little or no sign of recruitment. In light of this, I believe in the near future that the statewide GHL's will be diminishing. I believe the Alaskan scallop resource to be classified as being spasmodic which shows irregular pulses of high abundance followed by periods of scarcity or collapse. Most scallop stocks fit this type. Environmental conditions

underlie spasmodic pulses in at least two well documented and dramatic cases. Another factor to consider is crab bycatch which can and has limited catch in most districts in the westward region.

However, conservative management measures can allow this fishery to stabilize. The weathervane is a longlived animal so good year classes can be spread out to accomodate a small fleet over time until the next successful recruitment event occurs.

As small a number as it might seem, it has been my experience over time that this resource has never supported more than four to five full time vessels on a year round basis and in some years fewer than that.

I own one vessel in the fishery and have many times in the past been asked if I would be interested in expanding to other vessels in the fishery. I have declined knowing from nearly two decades of experience the limits of the resource and the abundance fluctuations.

In 1992 with the arrival of two unusually large, high capacity vessels and with very little in the way of management, it became evident that the resource was about to be overexploited with no consideration for the future health of the fishery.

As word of large landings reached the east coast, gold fever seemed to prevail as owners sent vessels through the Panama Canal two at a time. In 1992, a Federal moratorium was sought when it became evident that the State of Alaska had no mechanism to limit the number of permits by vessel. (We also found that the Federal groundfish moratorium would not cover scallops as they were not covered under the federal groundfish management plan. Though the resource is located primarily in the EEZ, the scallop fishery had been managed by the State for over twenty years.)

As the newly arrived fleet steadily increased, their assertions were that though the fishery had been prosecuted for twenty years, neither the State nor the long-term fishers really knew the extent of the resource. Also, the North Pacific Fishery Management Council had only limited interest in this fishery as they had bigger fish to fry. State management concerns grew, along with many restrictive measures - which we supported.

At this time, with the inclusion of the newly arrived east coast vessels there were approximately 9-10 full time vessels participating. The historic participants found themselves operating at break even or less. In January 1995, one of the new high capacity vessels (Mr. Big) turned in its Alaskan scallop permit and fished exclusively in federal waters in order to avoid Alaska's regulations. Without an FMP, operators in the EEZ without any Alaskan permits could fish without adhering to any regulations. This resulted in the fishery being shut down completely by the NPFMC for over eighteen months. Only a limited fishery in state waters occurred during that time.

HB0141  
CSHB 141(FSH)

CS FOR HOUSE BILL NO. 141(FSH)  
IN THE LEGISLATURE OF THE STATE OF ALASKA  
TWENTIETH LEGISLATURE - FIRST SESSION

**BY THE HOUSE SPECIAL COMMITTEE ON FISHERIES**

**Offered: 2/27/97**  
**Referred: Resources**

**Sponsor(s): REPRESENTATIVE AUSTERMAN**

A BILL

FOR AN ACT ENTITLED

"An Act relating to a vessel permit moratorium for the Alaska weathervane scallop fishery; relating to management of the scallop fisheries; and providing for an effective date."

BE IT ENACTED BY THE STATE OF ALASKA:

- \* **Section 1. LEGISLATIVE FINDINGS AND INTENT.** (a) The legislature finds that
- (1) the scallop fishing fleet in Alaska is overcapitalized;
  - (2) fishing effort in the Alaska weathervane scallop fishery has reached levels that may threaten the sustained yield management of the fishery;
  - (3) weathervane scallops are long-lived animals with few natural predators; these attributes are common to species that are the most susceptible to overfishing;
  - (4) the status of many Alaska weathervane scallop stocks is largely unknown, and the stocks are susceptible to localized depletion and general overfishing;
  - (5) scallop fisheries around the world have collapsed after relatively short periods of intense fishing;
  - (6) scallop dredges may adversely affect important bottom-dwelling species, such as king crab and Tanner crab, and without careful management may threaten the conservation of these other fishery resources;
  - (7) the conventional limited entry and moratorium system under AS 16.43 cannot adequately protect the economic health and stability of the Alaska weathervane scallop fishery or adequately promote the sustained yield management of the Alaska weathervane scallop fishery;
  - (8) the United States Department of Commerce has taken action to restrict access to the Alaska weathervane scallop fishery in the waters of the United States exclusive economic zone adjacent to Alaska;
  - (9) state management of the entire Alaska weathervane scallop fishery will provide a uniform and comprehensive management regime for the fishery, protect the economic health and stability of the fishery, and promote sustained yield management of the fishery;
  - (10) establishment of a moratorium on the issuance of vessel permits to new vessels seeking to enter the Alaska weathervane scallop fishery promotes the purposes of art. VIII, sec. 15, Constitution of the State of Alaska, and AS 16.43 while providing an opportunity to study and evaluate the feasibility of a permanent vessel permit limited entry system for the Alaska weathervane scallop fishery.
- (b) It is the intent of the legislature that the Board of Fisheries maintain 100 percent observer coverage for all vessels engaged in the Alaska weathervane scallop fishery.

*oil in other scallop areas  
have no oil clean*

\* **Sec. 2.** AS 16.05 is amended by adding a new section to article 5 to read:

**Sec. 16.05.735. Management of offshore fisheries.** The state may assume management of the scallop fisheries in offshore water adjacent to the state in the absence of a federal fishery management plan for scallops or in the event that a federal fishery management plan for scallops delegates authority to the state to manage scallop fisheries in the United States exclusive economic zone.

\* **Sec. 3.** AS 16.43 is amended by adding a new section to read:

**Sec. 16.43.906. Vessel permits for weathervane scallop fishery.** (a) The commission shall issue annual vessel permits for commercial fishing vessels used in the weathervane scallop fishery. The commission shall issue vessel permits to the vessel upon application by the vessel owner. The commission shall issue separate vessel permits for each registration area. The weathervane scallop fishery registration areas are the statewide Alaska weathervane scallop fishery registration area and the area H weathervane scallop fishery registration area.

(b) A vessel permit is a use privilege authorizing the vessel to take weathervane scallops in the registration area for which the vessel permit is issued. The use privilege conveyed by a vessel permit may be modified or revoked by the legislature without compensation.

(c) On or after July 1, 1997, a commercial fishing vessel may not be used to take weathervane scallops in a registration area unless a vessel permit for that registration area has been issued under this section for the vessel.

(d) The commission may not issue a vessel permit under this section to a commercial fishing vessel for the statewide Alaska weathervane scallop fishery registration area for the period from July 1, 1997, through June 30, 2001, inclusive, unless the vessel has landed at least 1,000 pounds of weathervane scallops that were legally taken in the statewide Alaska weathervane scallop fishery registration area.

(1) during calendar year 1995 or 1996; and

(2) during each of at least four calendar years between 1984 and 1996, inclusive.

(e) The commission may not issue a vessel permit under this section to a commercial fishing vessel for the area H weathervane scallop fishery registration area for the period from July 1, 1997, through June 30, 2001, inclusive, unless the vessel has landed at least 1,000 pounds of weathervane scallops that were legally taken in the area H weathervane scallop fishery registration area during calendar year 1995 or 1996. (f) Use of a vessel in a weathervane scallop fishery on or after July 1, 1997, may not be used to establish eligibility for a vessel permit for a weathervane scallop fishery that may be issued after June 30, 2001.

(g) Subsections (d) - (f) of this section may be superseded by regulations adopted by the commission under subsequent legislation enacted by the legislature authorizing

(1) a permanent vessel permit limited entry system for the weathervane scallop fishery; or

(2) termination of the temporary moratorium on issuance of new vessel permits established by this subsection.

(h) An application for a vessel permit under this section must contain the name of each permit holder authorized to operate the vessel in the weathervane scallop fishery and other information the commission may require to implement this section. The owner of a vessel for which a vessel permit is issued shall notify the commission in writing of a change in the permit holders who are authorized to operate the vessel in the weathervane scallop fishery. In this subsection, "permit holder" means a person who holds an entry permit or interim-use permit issued under this chapter for the weathervane scallop fishery.

(i) If a commercial fishing vessel that qualifies for a vessel permit under this section is sunk, destroyed, or damaged to the extent that the vessel is inoperable for a weathervane scallop fishing season, the commission may, upon the request of the owner of the vessel, reissue the vessel permit for that fishing season to another commercial fishing vessel with an overall

*wants to be able to go ahead where (oil spill C.I.)*

*Supports oil in C.I. but if spill need to go elsewhere*

*Shut down by F&G couldn't fish some years*

length and horsepower rating that does not exceed the overall length and horsepower rating of the vessel that was sunk, destroyed, or damaged.

(j) The fee for the annual vessel permit is \$1,000. A vessel permit is valid for the calendar year that is inscribed on the license.

(k) The commission may adopt regulations that the commission considers necessary to implement this section.

(l) In this section,

(1) "area H weathervane scallop fishery registration area" means the marine waters of Cook Inlet north of the latitude of Cape Douglas (58 degrees 52 minutes North latitude) and west of the longitude of Cape Fairfield (148 degrees 50 minutes West longitude);

(2) "landed" includes catching or catching and processing of weathervane scallops taken in state waters or the adjacent United States exclusive economic zone for sale as evidenced by a Department of Fish and Game fish ticket;

(3) "statewide Alaska weathervane scallop fishery registration area" means the marine waters of Alaska, outside of the area H weathervane scallop fishery registration area.

\* **Sec. 4.** AS 16.43.911(c) is amended to read:

(c) Notwithstanding AS 16.05.815 and AS 16.43.975, the commission may release to the owner of a vessel information on the vessel's history of harvests in a [THE KOREAN HAIR CRAB] fishery that is necessary to apply for a vessel permit

under AS 16.43.901 - 16.43.906.

\* **Sec. 5.** Section 5, ch. 126, SLA 1996, is amended to read:

Sec. 5. AS 16.43.901 [AND 16.43.911], added by sec. 3 of this Act, is [ARE] repealed July 1, 2000.

\* **Sec. 6.** AS 16.43.906, added by sec. 3 of this Act, and AS 16.43.911 are repealed July 1, 2001.


\* **Sec. 7.** This Act takes effect immediately under AS 01.10.070(c).

March 22, 1997

To: Rep. Alan Austerman  
Chairman, House Fisheries Committee

From: Rep. Gail Phillips  
SPEAKER OF THE HOUSE

Re: HB141 - Moritorium for Scallop Industry



---

Alan, please review the attached letter from Ernest E. Beile, a 25-year Cook Inlet scallop fishermen, during your committee meeting pertaining to the above proposed legislation.

His concern is for limiting the fishing area to just area A, when new areas may open which would then exclude Cook Inlet scallopers, but not the few fishermen from Kodiak. (Section 16.43.906(e)).

Additionally, Section 16.43.906 (d) of the bill calls for qualifying years of 1984 - 96; however, apparently during this time Cook Inlet was shut down due to overfishing from boats outside the district. This timeframe limits Cook Inlet fishermen, who could not fish due to regulation, not because they did not want to fish during those years.

Please get back to me with your committee's response after your meeting. Thank you.

GP:ps

encl.

*Manette - here's draft of what's coming  
to Austerman - I should have his other  
letter today - tomorrow. Pat*

108

**Ernest E. Beile, Jr.**

PO Box 36 Homer AK 99603  
Home Phone (907) 235-7821

March 18, 1997

Sen. John Torgerson  
Senate  
State Capitol  
Juneau AK 99801-1182  
FAX 465-4779

Dear Sen. Torgerson,

I hate to write a letter of this context to anyone but a truly grave injustice is about to happen again. I am a Scallop fisherman from Homer, 25 years of paying taxes and building a life of five children all born and raised here. Fourteen years ago a Scallop fisherman from New Bedford, MA named Mark Candianice rolled around here from the East in a vessel called the F/V Pursuit. I don't usually bring up personal names, but since I called to speak with Rep. Austerman from Kodiak who introduced House Bill No. 141(FSH) my reply back was a call from Mr. Candianice who is obviously a constituent.

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According to Bill 141, Cook Inlet Scallop fisherman are to be locked into area H (See Sec. 16.43.9006 (e) and definition (l) #1). We who of all Scallopers have demonstrated very clean dredging practices, and by the way are not even required to have observers. Check out our record with AK State Fish and Game. We are given no credit for clean fishing, why keep us out of the Exclusive Economic Zone (EEZ) when others show no effort on their own part to police themselves.

Mr. Austerman's bill states we should stay in area H, basically super exclusion. One problem in being locked into Cook Inlet it does not allow for oil spill-related problems shutting us down. We would have nowhere to fish. At the same time I have never been one to protest oil development in Cook Inlet. Another unfair situation is the fact that there is a vessel from Petersburg which has only fished the Yakutat district. It will under Mr. Austerman's bill be allowed to range everywhere. There is a lot of new frontier in the Western Aleutians that no one has explored. Why should that area be just for a select few fisherman from Kodiak and the Eastern Seaboard.

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Sincerely,  
Ernest E. Beile, Jr.  
Captain F/V Northern Explorer

Melinda,  
This is the guest letter  
that Mary was talking  
to you about at the  
dks.

Reference to House Bill 141

March 25, 1997

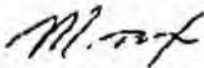
Please let the following clause for an amendment to HB 141 supercede my suggestion for an amendment which I sent Monday, March 24, 1997, - - - the part which referred to a reciprocal clause.

The amendment should be: Each vessel owner who qualifies for a permit to fish scallops during the moratorium in the Cook Inlet, Area H, Alaska registration area will also qualify for a permit in the statewide Alaska weathervane scallop fishery.

Note: The four vessel owners who would qualify with the above amendment are all Alaskan. They live here in Alaska, and sell their product in Alaska, (one from Cordova, two from Homer, and one from Eagle River).

**This is a fair and simple way for the legislature to assure deserving Alaskan fishermen their rights.**

Thank you.



Max Hulse  
FV La Brisa  
P O Box 770881  
Eagle River, AK 99577  
907-694-2413  
FAX 907-694-2413

## OCEANIC RESEARCH SERVICES, INC.

P.O. BOX 192  
ESTER, AK. 99725

PHONE: 907/479-5426  
FAX: 907/479-5425

TO: HOUSE RESOURCE COMMITTEE

ATTN: REP. BILL HUDSON/ AIDE HANS

FROM: WILLIAM KOPPLIN

DATE: 26 March, 1997

NO. OF PAGES:

Rep. Hudson,

I would like to comment on HB 141 that your committee is having a teleconference on 27 March. I plan on being present and plan to testify during the teleconference. I own a small fishing vessel that I use to scallop. We also fish in other fisheries. I have scalloped in the Yakutat, Kodiak, and Cook Inlet areas. If this bill is passed without any revisions, I will only be able to fish in Cook Inlet. I have been an Alaskan resident for 22 years and I intend to stay here for a long time. I hire Alaskan residents for crew and I spend the proceeds from the scallop harvest in the State. My comments and concerns are:

Page 1:

Line 6: The scallop fishing fleet has not been shown to be overcapitalized. The North Pacific Fisheries Management Council (NPFMC) in 1994 could not and did not determine that the fleet was over capitalized. At that time there were only 18 boats in the fleet. I am not aware of any analysis that has been done since that time and the scallop fleet has decreased in size from 18 to 11. Under the NPFMC moratorium, only 11 vessels qualified for a permit. The same amount of fishable area on the East Coast is presently supporting approximately 350 vessels. This is decreased from over 500 vessels four years ago. HB 141 would further reduce the number of qualified vessels to fish in Alaska to 4. The 1996 scallop quota was approximately 1.5 million lbs. The ex-vessel price was \$7.00 per lb. That makes the harvest worth \$10.5 million or \$2.6 million per vessel for four vessels. I am hard pressed to believe that any vessel is not financially viable that can gross \$2.6 million. It should also be noted that all four of the qualifying vessel are owned by people that do not live in the State of Alaska and that the majority of the crews are not Alaskan residents. Neither the jobs or the money will stay in the State.

Line 7: The Catch Per Unit Effort (CPUE) for the scallop industry is low in some areas that have been heavily fished for many years. The largest scallop areas, Yakutat, Kayak Island, and the Bering Sea have not shown any drop in the CPUE that would indicate that the stocks are threatened. In most of the areas the CPUE has remained high until the quota is reached. This indicates that the stocks are healthy and over fishing is not occurring.

Page 2:

Line 4-7: The NPFMC has spent four years working on a scallop moratorium plan and it is

currently ready to implement. Why is the State inventing another plan? This appears to me to be overlap of resources, time, and money. What is the reasoning behind the statement that the current plan can not "adequately promote the sustained yield management of the Alaska Weathervane scallop?" ADF&G has recently increased the quota in both the Yakutat and Cook Inlet areas. This appears to indicate that the management plan is working well and does not require change.

Page 3:

Line 15: The Alaska Department of Fish and Game (ADF&G) has a current practice of using the term "landing" to prove of a vessel's participation in a fishery instead of a certain amount of poundage to show proof that a vessel has participated in a fishery. The NPFMC also uses this definition as proof of participation in the scallop fishery. The use of a set number of pounds is not required and will cause increased time and money to verify each boat. Small boat owners such as myself, can often be disqualified if due to mechanical breakdown or bad weather we can not make large landings. Putting a certain amount of poundage in order to qualify discriminates against small boat owners.

Lines: 17-19: The qualifying years for a vessel. Can you explain the logic for the proposed dates, especially since the scallop season was closed in 1995 due to the "Mister Big" situation. The requirement for a vessel to qualify in both stipulations is not practical and as I stated earlier, this will exclude most of the vessels that qualify for the NPFMC moratorium. This will also reduce the total number of vessels that qualify to only 4 and all of these vessels are owned by non-Alaskans. These requirements will also exclude all Alaskan vessels from fishing our State resource.

Lines 20-24: There is no reason to spend the time and money to set up a separate regulations and permitting for area H. This area presently has a separate quota and gear restrictions. This area should not be separated from the rest of the State and should be open to any vessel that wants to fish in those waters and follow the regulations that are in place. This clause is creating a "super exclusive" area and past history has shown that these types of areas are costly and difficult to manage. Again by setting up this region separately, small boat owner is being excluded from fishing in the remainder of the State.

Page 4:

Line 19: The annual fee of \$1,000 will be a great hardship for small boat owners. The current scallop license fee for Ak. residents is \$250. This is the highest fee for all the fishery licenses. I can not understand the reasoning for quadrupling the fee.

Page 5:

Lines 4-12: I do not have the resources to look up the stated statutes. Can you explain them to me and what is meant in lines 4-7?

I would like to add the following Amendments:

1) Page 3, Line 15, Delete "at least 1,000 pounds of weathervane scallops" and replace with "the vessel must have at least one landing of weathervane scallops".

2) Page 3, Lines 17-19, delete the lines and insert "use the same qualifying criteria as specified in the NPFMC Scallop Moratorium for vessel qualification. There would be no exceptions."

3) Page 3, Lines 20-24, delete the entire clause and add "any vessel legally registered, can fish

any area as long as the vessel follows the ADF&G regulations for that area."

4) Page 4, Line 10, delete "\$1,000" and add, "use the current fee for State residents and increase non-resident fee to \$2,000.

My closing remarks on HB 141; this Bill was written to give the scallop fishery to out of State residents. HB 141 will disqualify all the small boat owners in the State from fishing scallops. This is a resource that belongs to the residents of the State of Alaska. The NPFMC has spent over four years working on this moratorium project and they have reduced the scallop fleet from approximately 22 down to 11 vessels. At the current harvest level, current price, and 11 vessels fishing, this allows for more than \$1 million per vessel. I find it difficult to understand that the industry is overcapitalized with that amount of money. I also know that our boat did not come close to grossing \$1 million last year from scallop fishing. Our boat qualifies under the NPFMC moratorium but not with this Bill. I urge you to rewrite HB 141 to be more equitable to small boat owners and residents of Alaska, or accept the NPFMC Moratorium and save your time and money enacting a similar bill.

Thank you for your time.

Sincerely,



William Kopplin  
resident

### COST DATA FOR ALASKAN SCALLOP FLEET

AVERAGE BREAKEVEN COST FOR SCALLOP FLEET IS \$ 824,234.00, NPFMC  
RANGE 1.1 MIL-7 MIL

NUMBER OF VESSELS THAT WILL BREAK EVEN AT PROJECTED PRICE LEVELS  
 AND AVAILABLE HARVEST LEVELS

<u>PRICE /LB</u>		<u>6.00/LB</u>	<u>5.50/LB</u>	<u>5.00/LB</u>	<u>4.50/LB</u>
IF QUOTA =	900,000 LBS	6.5	6	5.4	4.9
IF QUOTA=	800,000 LBS	5.8	5.3	4.8	4.3
"96 HARVEST" aprox	704,000 LBS	5	4.6	4.2	3.8
IF QUOTA=	600,000 LBS	4.3	4	3.6	3.2
IF QUOTA=	500,000 LBS	3.7	3.3	3	2.7

\* VESSELS WITH ABOVE THE AVERAGE BREAKEVEN COSTS WILL HAVE TROUBLE WITH  
 THIS SCENARIO

**ALASKAN SCALLOP FISHERY (BERING SEA AND GULF OF ALASKA)****AREA PRODUCTION FORECASTS 97-98**

1. BERING SEA -- SEASON STARTS JULY '97. EXPECT DROP IN CPUE MID SEASON AND BYCATCH PROBLEMS. VIRGIN GROUNDS STARTED '92" (NO QUOTAS, NO OBSERVERS). '93" 100% OBSERVERS AND QUOTAS, HEAVY FISHING EFFORT AND HIGH BYCATCH RATES.
2. SHUMAGINS -- CRAB BYCATCH HAS BEEN MAJOR PROBLEM, TWO VESSELS HAVE CLOSED AREA EARLY WITH HEAVY BYCATCH RATES LAST TWO SEASONS. LOW SCALLOP HARVEST.
3. KODIAK (SHELIKOF) -- EXPECT DROP IN CPUE EARLY ON. HAS BEEN MAINSTAY OF KODIAK SINCE MID 80'S. HAS HAD HEAVY FISHING PRESURE SINCE 92, BYCATCH MED.
4. KODIAK (EAST SIDE) -- FISHED HEAVLY SINCE EARLY 80'S, NOW DEPLETED. NEEDS RECRUITMENT.
5. PRINCE WILLIAM SOUND -- KAYAK ISLAND - DOWN, VESSEL MR. BIG OVEREXPLOITED RESOURCE BY OVER 100% IN '95". QUOTA HAS BEEN CUT FROM 50K TO 17K
6. YAKUTAT -- STABLE. NO BYCATCH PROBLEMS, FISHING SEASON CHANGED FROM JAN 10<sup>TH</sup> TO JULY 1<sup>ST</sup>. NEEDS TO BE WATCHED, MAY BE SOURCE OF LARVAL RECRUITMENT FOR WESTERN AREAS DUE TO THE CURRENT FLOW PATTERNS IN THE GULF OF ALASKA
7. SOUTHEAST (AREA 16) -- CPUE DROPE FEB '97", EXPECT RESRICTIVE ACTION FOR '98"

SCALLOP HARVEST SHOULD LEVEL OUT AT BETWEEN 600K TO 800K IN THE NEXT FEW YEARS

<i>Number of vessels fished during the eligibility periods for the federal scallop vessel moratorium</i>	
<b>Time Period</b>	<b>Number of Vessels with Landings</b>
1991	7
1992	7
1993	15
Fished in 4 years during Jan. 1, 1980-Jan. 20, 1993	7
<b>Total Unique Vessels</b>	<b>18</b>

Prepared by:  
 Commercial Fisheries Entry Commission  
 8800 Glacier Highway, #109  
 Juneau, AK 99801  
 (907) 789-6160

October 4, 1996

## DEVELOPMENT OF THE FISHERY FOR WEATHERVANE SCALLOPS, *PATINOPECTEN CAURINUS* (GOULD, 1850), IN ALASKA

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**ABSTRACT** The Alaska scallop fishery harvests weathervane scallops, *Patinopecten caurinus* (Gould 1850), in the Gulf of Alaska and Bering Sea, although small quantities of *Chlamys* spp. were harvested in recent years. The fishery began in 1967 and evolved from a sporadic, low-intensity fishery to one characterized by a highly specialized fleet by 1993. An influx of larger, more efficient vessels from 1990 through 1993 increased harvests and altered the character of the fishery. Vessel length increased 85% from a mean ( $\pm 1$  standard error) of  $18.5 \pm 2.9$  m in 1983 to  $34.3 \pm 4.5$  m in 1991, and crew sizes doubled. The number of scallop landings increased significantly from  $65.9 \pm 8.3$  y<sup>-1</sup> during 1980 through 1989 to  $140.7 \pm 3.3$  y<sup>-1</sup> during 1990 through 1993, although the mean number of vessels did not change significantly between the two periods. Scallop harvests averaged  $667.1 \pm 54.8$  mt of shucked meats from 1990 through 1993, three times the average harvest of  $216.7 \pm 30.3$  mt from 1983 through 1989. The percentage of the fleet's total Alaskan fishing income derived from the scallop fishery increased from 57.7% in 1983 to 100% by 1990. The decreased diversification of scallop vessels into other fisheries represented a shift from a part-time fleet to a dedicated, full-time scallop fleet with greater harvesting efficiency. New management measures were adopted to address the changing nature of the fishery and included altered fishing seasons, observer coverage, area harvest limits, ceilings on catch of incidental species, restrictions on crew size and a moratorium on vessels fishing in the exclusive economic zone.

**KEY WORDS:** Scallops, fishery, *Patinopecten caurinus*, Alaska

### INTRODUCTION

The commercial fishery in Alaska for weathervane scallops, *Patinopecten caurinus* (Gould 1850), is a relatively small fishery occurring primarily in the Gulf of Alaska and the Bering Sea in the northeastern Pacific Ocean. Although other scallop species (*Chlamys pseudoislandica* and *C. rubida*) were harvested in 1991 and 1992 in small directed fisheries in the Aleutian Islands or caught incidentally in the fishery for weathervane scallops, their contributions to the total harvest were minimal.

Interest in the Alaskan fishery developed in the late 1960s at the time catch-per-unit-effort (CPUE) was declining in the U.S. and Canadian scallop fisheries on Georges Bank (Orensanz 1986). The decreasing supply of Georges Bank scallops to U.S. markets and increased prices encouraged development of new fisheries and expansion of existing fisheries worldwide to meet the demand for scallops (Caddy and Lord 1971).

The contribution of the Alaskan fishery to the total U.S. harvest of scallops is small, but has grown in recent years. Landings for Alaska and U.S. are commonly reported as shucked meat weight (e.g., U.S. Dept. Commerce 1993). The Alaskan percentage of the U.S. harvest increased from an average of 1.7% from 1980 through 1985, to 2% from 1986 through 1990, to 4% in 1991 through 1992 (U.S. Dept. Commerce 1982-1993). The larger percentage resulted from declining harvest in other U.S. fisheries and increased harvest in the Alaskan fishery. Worldwide scallop landings are commonly reported as live whole weight (e.g., Anonymous 1991). Shucked weight of weathervane scallops averages 11.5% of whole weight (Haynes and Powell 1968). Thus, in 1991 the Alaskan harvest of 536 mt shucked weight was approximately 4,661 mt (0.57%) of the world scallop harvest of 816,000 mt whole weight (Anonymous 1991).

Because the Alaskan scallop fishery was relatively minor until recently, it was passively managed and data collection was minimal. Without a time series of routine abundance and catch sampling data, historical description of stock dynamics is not possible. Standardized CPUE data are unavailable. In any case, CPUE data may not be indicative of relative abundance due to the spatial distribution of scallop beds and the pattern of vessel movement among beds to sustain high CPUE (Orensanz et al. 1991). On the other hand, good records on landings, vessels, and participants have been maintained since the inception of the fishery.

In this paper, we review the geographic distribution of weathervane scallops in Alaska and chronicle the development and management of the commercial fishery, with particular emphasis on the evolution of the scallop fleet from a part-time, diversified, small-vessel fleet to a full-time, large-vessel fleet fishing almost exclusively for scallops.

### MATERIALS AND METHODS

We analyzed databases of commercial vessel license applications, commercial fishing permit applications, and fish tickets which are maintained by the Alaska Department of Fish and Game (ADF&G) and Commercial Fisheries Entry Commission. Vessel license applications contain data on fishing vessels such as length, whereas fishing permit applications include information on permit holders such as residency, age, fishery and type of fishing gear.

Fish tickets are sales receipts which include information such as the date of landing, species, number and weight of fish caught, and area of harvest. In Alaska, scallop landings data are generally considered to be accurate, because there have been fewer than 20 vessels to monitor and overall compliance with fish ticket requirements is excellent. The scallop harvests reported herein include all

species, and represent weights of shucked meats without roe. Alaska state statutes protect the confidentiality of individual fishers' harvests and earnings. To maintain the confidentiality of this information, we omitted scallop harvest and earnings data when the number of persons or number of vessels participating in the fishery was less than four. For this reason, data were considered confidential in 1976, 1977 and 1979.

### The Weathervane Scallop

The weathervane scallop, *P. caurinus*, is a large, long-lived species. The largest specimen recorded in Alaska was 250 mm shell height (SH), and had an adductor meat weight of 340 g (Hennick 1973). Bourne (1991) reported weathervane scallops over 20 years of age from the Strait of Georgia, British Columbia, and scallops up to age 28 have been found in Alaska (Hennick 1973).

Weathervane scallops are distributed along the western coast of North America from California northward to the Bering Sea and westward as far as the Aleutian Islands in depths to 300 m (Grau 1959, Bernard 1983). Commercial quantities of weathervane scallops in Alaska are located primarily in the relatively shallow waters of the submerged continental shelf (Kaiser 1986, Fig. 1). From 1973 through 1976, 68 to 100% of the calculated scallop biomass in Alaska was reported at depths of 0 to 100 m, and commercially harvestable quantities were identified at depths of 46 to 128 m (Ronholt et al. 1977). *P. caurinus* in the northeastern Gulf of Alaska comprised 31% to 37% of the benthic biomass, at depths of 100 m or less (Feder et al. 1981). Unfortunately, scallop assessment surveys were conducted in only a few years and their geographic coverage was limited.

Locations of commercially important beds of *Placopecten magellanicus* on the Atlantic coast were characterized in areas with oceanographic features, including persistent tidal gyres, which contribute to retention of pelagic larvae in the area during the larval period (Sinclair et al. 1985, Caddy 1989). The dominant oceanographic feature of the Gulf of Alaska is a permanent, counterclockwise gyre of the Alaska Current which generally parallels the continental slope at velocities of 30 to 100 cm s<sup>-1</sup>. The velocities are relatively slow, but as the current narrows into the Alaskan Stream from Kodiak Island westward, velocities increase to a maximum of 100 cm s<sup>-1</sup> (Hood 1986). Shoreward of the shelf break, the Alaska Coastal Current borders the Gulf of Alaska from the southeastern panhandle to beyond Kodiak Island and into the Bering Sea. The Alaska Coastal Current flows counterclockwise and is driven by wind and freshwater discharge (Royer 1983).

The largest commercial scallop harvests in Alaska were produced from the coastal margin of the Gulf of Alaska near Kodiak and Yakutat (Fig. 1). Smaller harvests occurred in Southeast Alaska, Prince William Sound, Cook Inlet, Dutch Harbor and the Bering Sea. Analyses have not been completed to determine if scallops in these areas are genetically distinct populations, although larvae could conceivably be transported by currents between some of the closer areas.

Weathervane scallops are found in aggregations which tend to form elongated beds, oriented along the direction of current flow as described for other scallop species (Orensanz 1986, Caddy 1989), on substrates of sand, mud, clay and gravel (Hennick 1973). Growth and size at maturity of weathervane scallops may vary spatially within beds in the same area or between beds in geographically different areas (Haynes and Hitz 1971, Orensanz

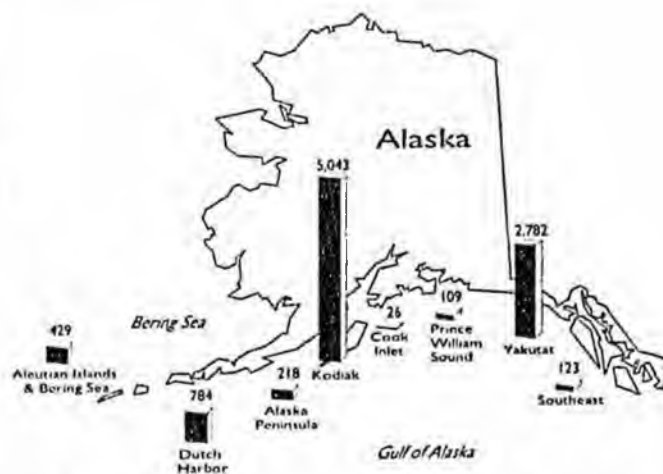


Figure 1. Distribution of total commercial scallop harvest in the Gulf of Alaska and Bering Sea from 1967 through 1993. Cumulative harvests in metric tons of shucked meats are indicated above the bar for each area; bar height is proportional to the area harvest.

1986, MacDonald and Bourne 1987, Caddy 1989). Based on von Bertalanffy growth estimates, weathervane scallops sampled in 1975 from Marmot Flats off the northeast side of Kodiak Island grew faster (131 mm SH at age 4) and achieved larger asymptotic sizes ( $L_{\infty} = 190$  mm SH) than those sampled in 1980 from Cape St. Elias to Cape Fairweather in the eastern Gulf of Alaska (91 mm SH at age 4;  $L_{\infty} = 144$  mm SH) (Kaiser 1986). Growth and mortality rates may be density dependent (Orensanz 1986) or may vary with spatial differences in temperature or feeding conditions (MacDonald and Thompson 1985).

Annual survival of long-lived species, such as the weathervane scallop, tends to be high. Kruse (1994) estimated the instantaneous natural mortality ( $M$ ) of *P. caurinus* between 0.04 and 0.25, corresponding to annual mortality rates of 4 to 22%. A median estimate of  $M = 0.16$ , corresponding to 15% annual mortality, was obtained using Hoening's (1983) method based on a Hennick's (1973) maximum scallop age of 28 (Kruse 1994).

The level of fishing mortality for weathervane scallops in Alaska is unknown. For other species of commercially important scallops, direct and indirect mortalities have been identified in association with fishing activities. Direct mortality includes damage or crushing within scallop dredges, and handling and exposure of undersized scallops that are later returned to the sea (Naidu 1988, Medcof and Bourne 1964). Indirect mortality results when scallops in the path of a dredge are not caught but are lethally damaged or exposed to increased predation as predators are attracted to dredge tracks (Caddy 1968, Elner and Jamieson 1979, Caddy 1973). Indirect fishing mortality of Iceland scallops, *Chlamys islandica*, was estimated to range up to 17% or 31%, depending on the type of dredge used (Naidu 1988).

The vulnerability of scallops to fishing mortality may be increased by commensal or parasitic organisms. Scallops in the Cape Yakutat/Cape Yakutat region of Alaska were reported to be infested by the burrowing, spionid polychaetes *Pygospio elegans* and *Polydora ciliata* in the mid- and late-1970s (Feder et al. 1981). The polychaetes weakened the valves and increased the susceptibility of scallops to breakage in trawls or dredges.

### The Fishery

The commercial scallop fishery progressed through several developmental phases along the Alaskan coast. In the initial phase

from 1967 through 1977, previously unexploited scallop beds were explored and harvested. Scallop landings were greatest in the years 1968 and 1969 (Fig. 2). Harvest effort decreased from 1970 to 1978, and a smaller, more stable fishery followed from 1979 through 1989. Beginning in 1990, the fishery for weathervane scallops in Alaska expanded with an influx of new, more efficient vessels. New state and federal management regimes were implemented in 1993 and 1994 to address concerns in the growing fishery.

The first commercial landings of weathervane scallops in the Alaskan fishery were made in 1967 in the western Gulf of Alaska near Kodiak Island. The fishery consisted of two vessels which delivered scallops alive and in the shell to processors on shore for an ex-vessel price of \$0.15 kg<sup>-1</sup> (Kaiser 1986). The fishery expanded rapidly in 1968 and 1969 when 19 vessels entered the fishery in the Kodiak area and the eastern Gulf of Alaska near Yakutat. A record harvest for the Alaskan fishery of 839.2 mt was produced in 1969. The costly process of shucking scallops by shore-based processors was soon abandoned, and scallopers began delivering shucked meats to processors for freezing and packaging (Kaiser 1986). The weighted average ex-vessel price for shucked meats in 1969 was \$1.89 kg<sup>-1</sup>. Unsuccessful attempts were made to extract scallop mantles and gonads for sale as frozen food (ADF&G 1968). To this date, a market for "roe-on" scallops has not developed, and shucked meats continue to be the only product of the Alaskan scallop industry.

During the years 1970 through 1978, the scallop fishery entered a phase of declining effort and harvest. Harvest levels of 1968 and 1969 were not sustained. More restrictive management measures, such as closed areas to limit bycatch, may have contributed to a reduction in the fishery. A catch sampling program conducted during 1968–1972 showed that the largest scallops were fished from previously unexploited populations. Hennick (1973) estimated catch age composition by enumerating annuli on the left valves of scallops. In the early years of the fishery the majority of scallops sampled from commercial harvests were at least 7 years old, but by the early 1970s, the percentage of scallops 2 to 6 years old had increased (Hennick 1973, Fig. 3). Scallopers continued to explore for new beds in attempts to boost their harvests in response to the decreasing abundance of large scallops.

The number of vessels in the fishery dropped from 19 in 1969 to 7 in 1970, but because the most efficient scallop vessels remained in the fishery (Kaiser 1986), the relatively high harvests continued from 1970 through 1973 and mean ( $\pm 1$  standard error

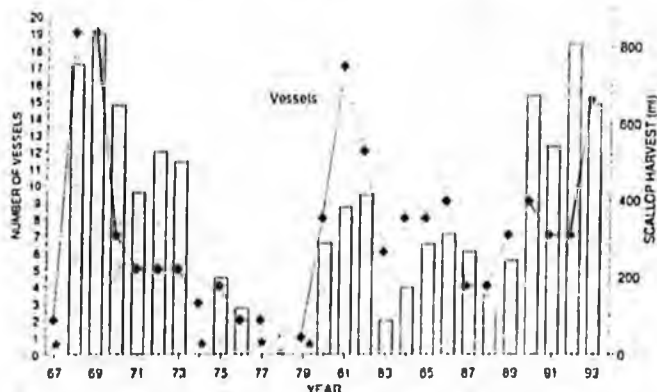


Figure 2. Annual scallop harvest (metric tons of shucked meats) and number of vessels fished in the Alaskan scallop fishery. Confidential harvests are indicated by an asterisk (\*).

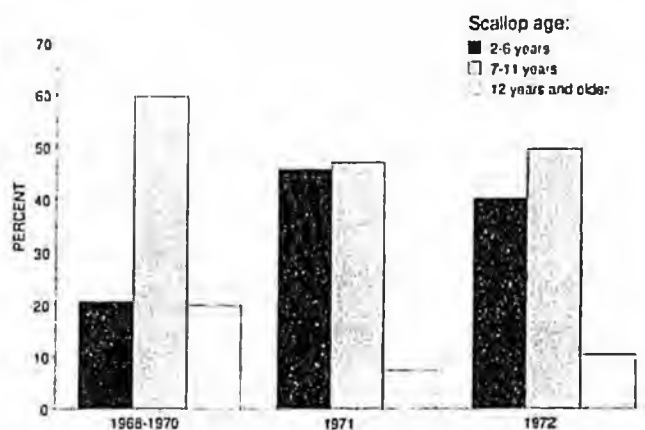


Figure 3. Age composition of scallops sampled from 1968 through 1972 commercial harvests from the Kodiak and Yakutat areas combined (Hennick 1973).

landings were  $522.9 \pm 94.9$  mt y<sup>-1</sup>. By 1977, the number of vessels had dwindled to two. The fishery was opened in 1978, but no vessels participated and commercial harvest of scallops ceased.

The scallop fishery emerged again in 1979 with one vessel fishing off Kodiak Island. Marked increases in ex-vessel prices from an average of \$3.49 kg<sup>-1</sup> in 1976 and 1977 to \$6.11 kg<sup>-1</sup> in 1979 to \$9.23 kg<sup>-1</sup> in 1981 stimulated more interest in the fishery, and the number of vessels increased to 17 by 1981. Kaiser (1986) attributed much of the growth in the Alaskan fishery to an influx of vessels from the east coast of the U.S. A five-fold increase in the number of vessels in the Atlantic sea scallop fishery from 1975 through 1979 and a 22% decrease in the sea scallop harvest from 1978 through 1981 (NEFMC 1982) caused scallopers to move to the west coast in search of more productive scallop fisheries. This search led to an intense fishery for weathervane scallops off the Oregon coast in 1981 in which 532 mt (shucked weight) was harvested by 118 vessels (Starr and McCrae 1983). Subsequent landings in Oregon have been small (Bourne 1991).

Vessels began harvesting scallops from new areas of Alaska in the 1980s. Whereas previous fisheries occurred entirely in the Kodiak and Yakutat regions of the Gulf of Alaska, an increasing percentage of the harvest in the 1980s was from less traditional areas. Scallops were harvested from Southeast Alaska along the Alexander Archipelago south of Yakutat, for the first time in 1980. The first scallop harvest from the Alaska Peninsula in the western Gulf of Alaska south of Kodiak was recorded in 1982. Harvests were reported from the Dutch Harbor area of the Aleutian Islands beginning in 1982, and the first harvest from Cook Inlet was produced in 1983. Expansion of the scallop fishery continued into the Bering Sea in 1986. From 1983 through 1989, effort in the Alaskan fishery varied from 4 to 9 vessels. The harvest level fluctuated during that period, and averaged  $216.7 \pm 30.3$  mt y<sup>-1</sup>.

Expansion of the fishery continued as scallopers explored and exploited new scallop grounds further west along the Aleutian Islands chain to Adak in 1991. In 1992, scallops were harvested from Prince William Sound in the north central Gulf of Alaska for the first time.

The period from 1990 through 1993 represented the most recent growth phase in the fishery. The average harvest more than tripled from an average of  $216.7 \pm 30.3$  mt y<sup>-1</sup> during 1983 through 1989 to  $667.1 \pm 54.8$  mt y<sup>-1</sup> from 1990 through 1993. The 1992 harvest of 806.9 mt, with an ex-vessel value of \$6.9

million, was the second largest recorded in the Alaskan scallop fishery. Although scallop harvests were much larger, effort was similar to that of recent years. Nine vessels fished in 1990 and 7 vessels in 1991 and 1992.

The number of vessels in the scallop fishery doubled to 15 in 1993. As in the early years of the fishery, many of the new vessels entering the fishery from 1990 through 1993 were east coast scallopers. A proposed moratorium in the Atlantic sea scallop fishery (NEFMC 1993) caused some vessels, which would be excluded from the east coast fishery by the moratorium, to move into west coast scallop fisheries.

In 1993, the North Pacific Fishery Management Council (NPFMC) considered a vessel moratorium for the Alaska fishery within the exclusive economic zone (3–200 miles) and gave notice to scallopers that new participants in the fishery after January 20, 1993 may not qualify to fish during a moratorium (NPFMC 1993). Effort escalated in anticipation of a moratorium in the Alaska scallop fishery as vessel owners established their eligibility by harvesting scallops in Alaska prior to January 20, 1993. State management agencies also considered a moratorium on new entrants within territorial (0–3 miles) waters (Kruse et al. 1992).

#### Vessel Length

Vessel size in the Alaskan scallop fishery increased substantially from the onset of the fishery in 1967. During the developmental period of the Alaskan fishery, scallop vessels consisted of a variety of converted crab, halibut and shrimp vessels, as well as scallop vessels from the east coast of the U.S. The east coast vessels averaged 24 to 28 m keel length and were capable of fishing two scallop dredges 3 to 5 m wide. These were the most efficient harvesters in the fleet (Kaiser 1986). Other vessels were fishing modified beam and otter trawls and an assortment of scallop dredges of various sizes.

Kaiser (1986) summarized vessel lengths in the scallop fishery from ADF&G data for 1967 through 1981. Vessels that fished in the Kodiak area were reported separately from vessels in Yakutat, although some vessels fished in both areas. Vessels that fished near Yakutat varied in length from 12 to 16 m to 24 to 28 m from 1967 through 1977. The largest number of vessels each year is 24 to 28 m in length. Similarly, most scallop vessels that fished in the Kodiak area were 24 to 28 m, although the size range for Kodiak vessels was greater than the range for Yakutat vessels in the early years of the fishery. Kodiak vessels varied from a 6 to 10 m length class to 48 to 52 m in length.

Vessel lengths after 1977 are shown in Figure 4 for all fishing areas combined. The largest component of the fleet in most years was the 18 to 31 m vessel class (Fig. 4A). Registered vessel length averaged  $25.1 \pm 0.8$  m from 1980 through 1982 (Fig. 4B). An influx of vessels smaller than 18 m was evident beginning in 1982 and was associated with initiation of a scallop fishery in the Cook Inlet area where vessels tended to be smaller than vessels fishing in other areas. The mean vessel length reached a minimum of  $18.5 \pm 2.9$  m in 1983 as a result of the increase in small vessels.

By 1988 all scallop vessels in the Alaskan fleet were larger than 18 m. Mean vessel length increased as the number of vessels over 31 m began to rise. Vessel size was largest during the years 1990 through 1992, when the percentage of vessels over 31 m varied from 30 to 57% of the fleet (Fig. 5). Mean length in 1991,  $34.3 \pm 4.5$  m, was 85% larger than the mean length of  $18.5 \pm 2.9$  m in 1983. The mean vessel length dropped to  $26.8 \pm 1.7$  m as more vessels under 31 m in length entered the fishery.

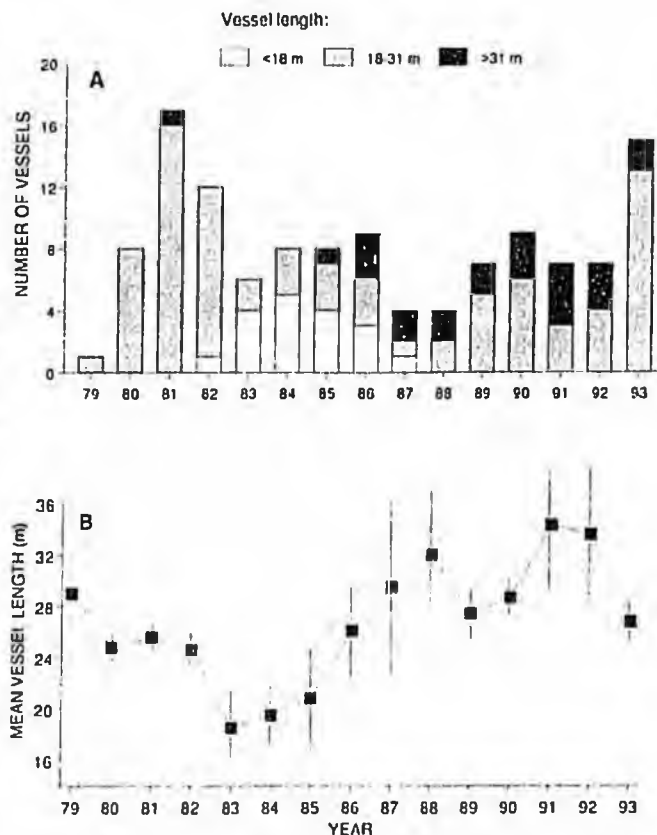


Figure 4. (A) Annual number of vessels in the Alaska scallop fishery from 1979 through 1993, by vessel length class. (B) Annual mean vessel lengths  $\pm 1$  standard error.

#### Fishing Capacity

One of the more important changes in the scallop fishery was the change in fishing capacity of the fleet. Fishing capacity was measured as the mean number of scallop landings (deliveries) per year and the mean size of landings.

In a previous study, we reported an escalation in the number of landings in the Alaskan scallop fishery in recent years (Kruse and Shirley 1994). A Student's *t*-test (SAS 1989) revealed that the mean number of landings of  $140.7 \pm 3.3$  in 1990 through 1993 was significantly larger ( $p \leq 0.01$ ) than the mean of  $65.9 \pm 8.3$  landings in 1980 through 1989. The number of landings increased although the mean number of vessels fished per year from 1990 through 1993,  $7.7 \pm 0.7$ , was not significantly different from the number of vessels fished in the earlier period,  $8.3 \pm 1.2$ . The mean landing size (in mt) was not significantly different between the two time periods.

#### Diversification of Fishing Income

The proportion of Alaska fishing income derived from the scallop fishery was used as an indicator of the economic dependence of vessels on the scallop fishery and the extent of effort exerted in the fishery by these vessels. All ex-vessel earnings (gross receipts paid to fishers) from Alaskan fisheries were compiled annually for vessels that made scallop landings each year. Scallop earnings were calculated as a percentage of the scallop fleet's total earnings to estimate the degree of diversification from 1975 through 1992. The fleet was considered to be more diversified in years when the percentage of fishing income derived from scallops was low and

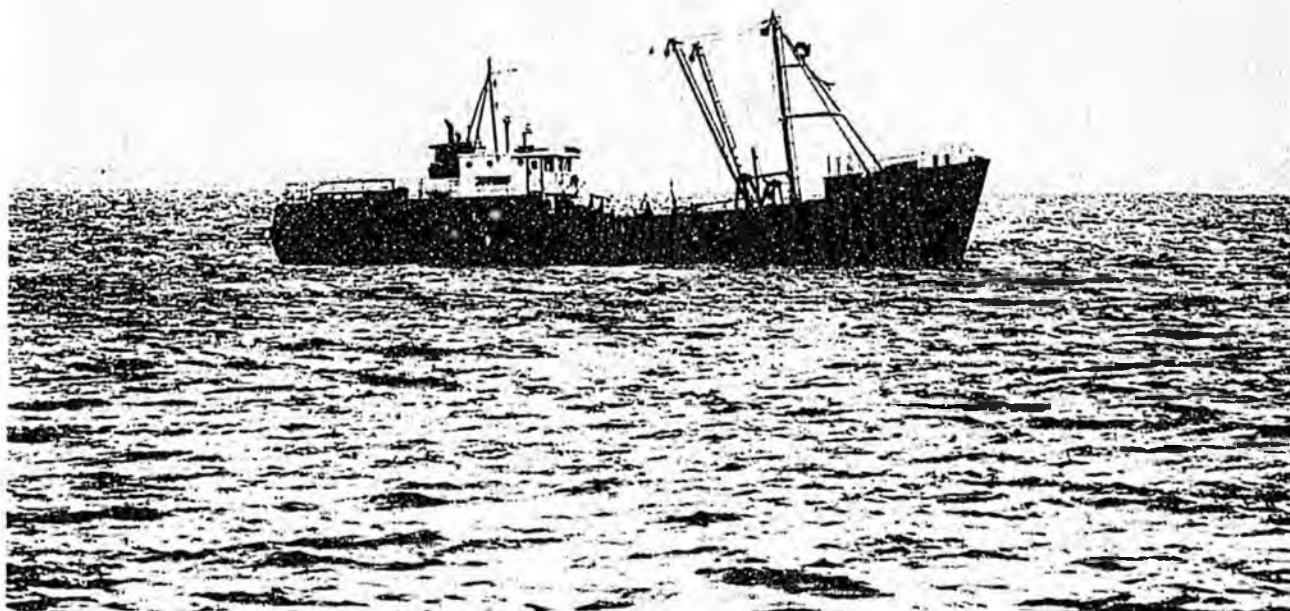


Figure 5. The commercial scallop vessel F/V PROVIDER which is an example of the type of vessel which has been used in the Alaskan scallop fishery since 1990. (Photo by Augustine Delahay)

less diversified in years when scallops contributed larger percentages to the fishing income.

The percentage of fishing income derived from the scallop fishery varied over time from a low of 57.7% in 1983 to 100% in 1979, 1990 and 1991 (Fig. 6). In 1975 through 1979, effort and harvests were reduced, and almost all fishing income for the few vessels during that period was generated from the scallop fishery.

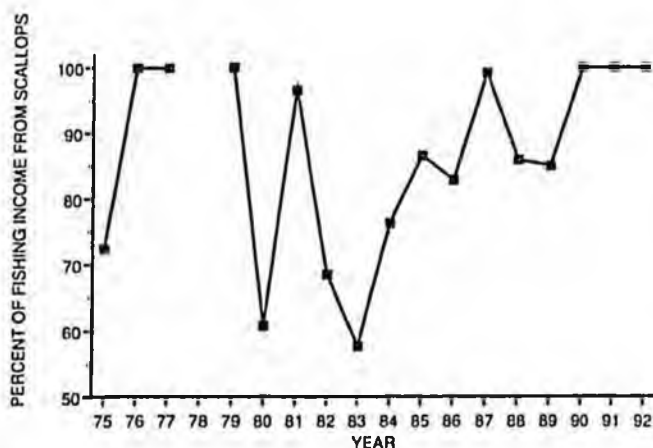


Figure 6. Percent of total ex-vessel fishing income derived from the scallop fishery for vessels participating in the fishery from 1975 through 1992. Total fishing income does not include any income generated from fisheries outside of Alaska.

Small percentages of non-scallop income were produced from king crab, halibut and salmon fisheries.

The contribution of scallops to total fishing income generally decreased after 1979 to the lowest level in 1983, suggesting an increased diversification of the fleet into fisheries other than scallops. Scallop vessels were also used in king crab, Tanner crab, shrimp, salmon, halibut and herring fisheries during that period.

Diversification of the scallop fleet began to change in 1983. The percentage of fishing income produced from the scallop fishery increased from 1983 to 1990. By 1990, scallops contributed 100% of the fishing income for the first time since 1979. All of the fishing income for the scallop vessels from 1990 through 1992 was produced from the scallop fishery. The change in fishing income represented a shift from a diversified fleet in the 1980s to a fleet concentrating almost entirely on scallops. The number of landings and the total harvest increased concurrently.

The contribution of the scallop fishery to total fishing income was not directly related to ex-vessel price of scallops or to the total scallop harvest. Ex-vessel prices remained relatively stable from 1982 through 1992, although when corrected for inflation, the price of scallops decreased over time (Kruse and Shirley 1994).

#### Harvesting Efficiency

The harvesting efficiency of the scallop fleet improved during the 1980s and 1990s. As vessels became larger and more specialized, crew sizes expanded and mechanical shuckers came into use. The average crew size for scallop vessels during 1980 through

1984 was estimated to be 5 persons per-vessel in the Yakutat area, 6 per-vessel in Prince William Sound, 6.3 per-vessel in Cook Inlet, the Alaska Peninsula, Aleutian Islands and Bristol Bay, and 8 per-vessel in Kodiak (Alaska Department of Labor, unpublished). By 1993, all vessels except the smallest in the fleet carried 12-person crews (NPFMC 1993). The Alaska Board of Fisheries limited the crew size on scallop vessels to 12 persons in 1993.

The use of mechanical shucking devices in Alaskan scallop fisheries was first reported in the 1991 fishery (Griffin and Ward 1992). Automatic shucking machines were employed to make harvest of smaller scallops more economical (Kruse and Shirley, in press). Although shucking machines were used primarily on vessels exploiting *Chlamys* spp., their use in processing weathervane scallops was banned in Alaska in 1993.

### DISCUSSION

Alaska's commercial fishery for scallops evolved from a sporadic, low-intensity fishery to a fishery characterized by a highly specialized fleet capable of harvesting with greater efficiency. This growth and specialization within the fishery created conservation concerns for the scallop resource. Recent anecdotal reports indicated that the proportion of smaller scallops harvested in the commercial fishery may be increasing (NPFMC 1993). Additional concern has arisen over the increased threat to species caught incidentally in non-selective scallop dredges. Particularly vulnerable are benthic migratory species, such as crab, which move into shallower depths during their molting and mating periods (Haynes and Powell 1968, Hennick 1973, Stone et al. 1992). Protection of non-targeted species is especially critical in some areas of Alaska where depressed populations of commercially valuable king and Tanner crabs are rebuilding.

The rapid growth, specialization and over-capitalization of the scallop fishery may have jeopardized the economic viability of the fishery. Larger vessels and crews and mandatory observer coverage have increased operating costs for scallop vessels. Shorter fishing seasons and harvest limits have constrained the earning potential in the scallop fishery.

With increased competition, over-capitalization and decreased ex-vessel value, the tendency for some fisheries in Alaska has been for vessels to become more diversified by participating in more fisheries in order to maintain the level of income necessary to support their operations (Shirley 1993). More restrictive measures (e.g., harvest limits, seasons, crab bycatch caps) recently adopted by state and federal management agencies may also cause some scallop vessels to diversify their fishing activities.

Management changes have been made to address some of these problems in the fishery and to provide more scientific data to analyze the impact of the fishery on Alaskan scallop populations. For many years, the small scallop fishery prompted few conservation or management concerns, and was managed using gear restrictions, fishing seasons and closed areas (Kruse and Shirley, in press). The Alaska scallop fishery recently shifted from a passive management mode to more active management and monitoring of the fishery in response to expanded effort and increased harvest levels in the 1990s.

A management plan adopted in 1994 established a more comprehensive management regime for the scallop fishery (Kruse 1994). Scallop gear in Alaska was restricted to two New England-style dredges (Bourne 1964) per vessel, with a maximum dredge

width of 4.57 m and a minimum ring size of 10.16 cm. Dredges used in Cook Inlet cannot exceed 1.83 m in width. Alaskan waters were divided into 9 registration areas, and vessels are now required to register with ADF&G before harvesting scallops in an area. Annual harvest limits were established for each registration area. All scallop vessels are required to have, and pay for, observers on board to monitor incidental catch of crab and collect biological data on scallops. Restrictions on scallop crew size and prohibition of automatic shucking machines on vessels fishing for weathervane scallops were implemented to control harvesting efficiency. Fishing seasons were amended in the new plan to protect molting and mating crabs from incidental harvest by scallop dredges. The regulatory season extends from July 1 in most areas (August 15 in Cook Inlet) through February 15. In the Yakutat and Prince William Sound areas, the season opens on January 10. The fishing season ends when the harvest limit has been met, when the incidental catch limit has been met, or on the regulatory closing date, whichever comes first.

The NPFMC adopted a federal management plan for scallops in 1994 which included a moratorium on vessels fishing in the exclusive economic zone (NPFMC 1993). Vessels fishing scallops outside of territorial waters were previously managed by ADF&G in the absence of a federal management plan. Management changes provided by the new ADF&G and NPFMC management plans should help to curtail rapid expansion of the scallop fishery.

Because the weathervane scallop is a long-lived, slow-growing species with low natural mortality, it may be vulnerable to overfishing (Adams 1980). Historically, an overall depletion of scallop populations may have been avoided because of the widespread distribution of scallops in the Gulf of Alaska and the Bering Sea and the small fleet's motivation to move to new areas to maintain catch rates or to other fisheries. However, some local populations may have been overfished. As a fishery begins on virgin stocks it is normal for age composition to shift toward younger ages. However, the magnitude of the age shift during the early years of the fishery, coupled to subsequent fishery performance, suggests to us that high harvests during the early years of the fishery off Kodiak and Yakutat may not have been sustainable over the long term. Unfortunately, fishery-independent data are unavailable to verify whether overfishing occurred.

Oceanographic features similar to those described by Sinclair et al. (1985) and Caddy (1989) for self-sustaining scallop populations also may have contributed to the apparent resiliency of weathervane scallop populations in Alaska. Nonetheless, recent expansion of fishing capacity by the fleet concerned fishery managers who sought to conserve and sustain natural populations, and thereby avoid stock collapses that have often occurred in many other scallop fisheries after periods of intense fishing (Orensanz 1986, Bourne 1991, Gwyther et al. 1991, Orensanz et al. 1991, Piquimil et al. 1991). As biological data are collected from the new observer program, our knowledge of the sustainability of exploited weathervane scallop populations in Alaska should improve markedly with the estimation of recruitment, growth and mortality parameters.

### ACKNOWLEDGMENTS

We thank Don Huntsman for producing the income diversification data, Thomas C. Shirley and anonymous reviewers for their helpful comments on the manuscript.

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ALASKA DEPARTMENT OF FISH AND GAME



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Phone: (907)267-2158 Fax: (907)267-2462



FAX TRANSMITTAL SHEET

To: Amy Dougherty

Date: 2-26-97

Pages: 5  
(Includes Cover Sheet)

From: James Brady  
267-2125

Original is being mailed: No

Message: Information on Kamishuk Bay scallop  
fishery from the 1995-96 Cook Inlet  
Area Annual Shellfish Mgmt. Report.  
RIR # 2A96-30 - Aug. 96

Effective January 1, 1996, all commercial pots were required to be partly covered by rigid mesh, which must have 7/8ths inch minimum diameter openings. This regulation was designed to reduce handling of small non-marketable shrimp thereby decreasing avoidable fishing mortality. Similar regulations are utilized in the Prince William Sound Management Area, Southeast Region, and State of Washington.

## SCALLOP FISHERY

### Introduction

The commercial scallop fishery in the Cook Inlet Management Area (H) began in 1983. The target species for the fishery is the Pacific weathervane scallop (Patinopecten caurinus). In 1983 and 1984 the Alaska Board of Fisheries responded to a public proposal by directing the department to allow restricted exploratory fisheries for scallops. These initial fisheries were characterized by low effort due to severe permit restrictions when compared with traditional scallop fisheries both inside and outside Alaska. The most important restrictions were:

- 1) Legal gear limited to a 6 foot wide dredge with minimum ring size of 4 inches inside diameter.
- 2) Only 1 unit of gear allowed on board at any one time.
- 3) Mandatory log book completion.
- 4) Contact with the Homer office prior to and at the completion of each trip.
- 5) An agreement to carry department observers on board if requested.

Except for some brief exploratory fishing elsewhere in the Kamishak District in 1984 and in the Outer District in 1987, a single bed of scallops near Augustine Island in the Kamishak District has sustained almost the entire harvest since the fishery began in 1983 (Figure 1). Using the state research vessel Pandalus, the department conducted an assessment survey in August, 1984 to define the extent of this particular bed and to aid in establishing appropriate harvest levels.

Based on information from the 1984 survey as well as data from the initial fisheries, the 1985 Board of Fisheries adopted regulations for scallops in Cook Inlet. These regulations included a season in the Kamishak District from August 15 through October 31, a guideline harvest level of 10,000 to 20,000 lb (changed to 0 to 20,000 lb in 1994) of shucked meats, and the restrictions mentioned previously (except for the single unit of gear provision). Commercial fishery performance has been used inseason to adjust guideline harvest levels. Historic harvest and effort peaked fishery during 1994 when 4 vessels took 20,431 lb of shucked meats (Figure 12 and Appendix K).

By regulation the Southern District was not open to scallop fishing in order to protect crab stocks, while the Outer and Eastern Districts were opened year round to encourage exploratory fishing.

In 1987 review of inseason fishery performance data clearly demonstrated that the Kamishak District stock had taken an unexpected decline. Substantial undocumented information indicated that the Kamishak scallop bed had been fished illegally between the 1986 and 1987 seasons. Regardless of the reason for the sharp decline in abundance, the department closed the fishery.

No commercial effort occurred in Cook Inlet from 1988 through 1992. Although some local fishermen expressed interest in fishing during these years, the potential of a fishery closure after 1 trip did not warrant the investment in time and effort because the department told fishermen that their catch data would be used to justify continuance of the fishery. Fishermen speculated that the probability of good catches were low. Information required from the fishermen would have included logbooks, shell samples, interviews, and a potential for observers.

In 1993 the fishery was essentially redeveloped when a single fishermen took a chance and began fishing the Kamishak District scallops. After his initial trip it was apparent that the stock had recovered to near historic levels. Two other boats joined the fishery before the season was over. The resultant catch was 20,115 lb. Logbooks and shell samples indicated a small but healthy stock of weathervane scallops once again existed near Augustine Island.

#### 1995 Season Summary

In early 1995 a single vessel commercially fished scallops in a venture that was illegal by state law. This occurred in federal waters off Kayak Island (adjacent to the Prince William Sound Management Area) and resulted in the closure of all commercial scallop fisheries in federal waters. Virtually the entire stock of scallops in the Kamishak District resides in federal waters. Although state waters opened by regulation on August 15, 1995, no one fished as fishermen did not want to waste their time in an area where few scallops existed.

#### 1996 Management Outlook

It appears that the state and federal regulatory problems, that provided a loophole for illegal fishing, have been resolved. The Kamishak District fishery, in both state and federal waters, will likely open by regulation on August 15, 1996. It appears that management of the fishery will be by the state with consent from the federal government. The harvest guideline, however, will be set based on the results of a department dredge survey that will occur in July 1996. It seems likely that the data should justify a harvest guideline of 20,000 lb or more because of the size and age structure of the stock coupled with no fishing mortality in 1995.

The scallop fishery in the Outer and Eastern Districts will be managed by regulation, which includes a requirement for an observer. The department does not anticipate significant effort or catch from these districts because exploratory fishing by 2 large commercial scallopers in 1994 yielded a catch of 11 scallops.

Appendix K. Pacific weathervane scallop catches, Cook Inlet Management Area., 1983-95.

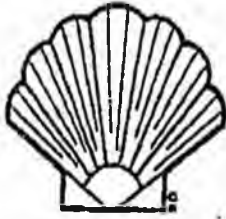
Year	District	Number of vessels	Catch in pounds of shucked meats
1983	Kamishak	1	2,346
1984	Kamishak	3	6,305
1985 <sup>a</sup>	Kamishak	1	11,810
1986	Kamishak	3	15,364
1987	Outer	1	1,128
	Kamishak <sup>b</sup>	2	360
	'87 Total	2	1,488
1988		NO	EFFORT
1989		NO	EFFORT
1990		NO	EFFORT
1991		NO	EFFORT
1992		NO	EFFORT
1993	Kamishak	3	20,115
1994	Kamishak	4	20,431
1995 <sup>c</sup>	Kamishak	0	0

a/ Season and harvest guideline set by regulation.

b/ Season closed by E.O. on August 21, 1987, one week after opening, due to low cpue.

c/ State waters open only.

1996 Kamishak 5 28,228



**KODIAK FISH COMPANY**  
 FT ALLIANCE FT LEGACY FT PROVIDER



326 Center Avenue  
 Kodiak, Alaska 99615

2977 Fox Road  
 Ferndale, Washington 98248

Date: 1-23-96

Fax To: Amy Dougherty 907 465 4956

Attention:

From: Mark K.

Subject: Scallop licence

Amy

This is from NPFOMC.  
It looks like nice vessels for breakeven  
@ 1.3 million lbs. In reality some quota's  
have dropped this year. and I expect  
there will be further reductions as  
the fishery is comprised of one strong  
year class and one weak one in some  
areas with no signs of recruitment which  
actually is normal for scallops. One year  
class sometimes has to last quite a  
while.

Respect.

Mark Kaniolianis

Ferndale  
 Phone 360-366-9131  
 Fax 360-366-9132

Kodiak  
 Phone 907-486-3309  
 Fax 907-486-1676

**Draft for Public Review**

**ENVIRONMENTAL ASSESSMENT/  
REGULATORY IMPACT REVIEW/  
INITIAL REGULATORY FLEXIBILITY ANALYSIS  
of**

**Amendment 1**

**to the  
FISHERY MANAGEMENT PLAN  
for the  
SCALLOP FISHERY  
off Alaska**

***NOTE:*** *The Council is scheduled to take final action on this amendment at it's June 1995 meeting. However, reviewers should note that there are a number of policy decisions regarding State and Federal management that need to be resolved before management measures considered by this amendment could be implemented. Also note that several management measures proposed under the alternative to the status quo contain more than one option. The suite of management measures and options identified under Alternative 2 in this document are subject to change when the Council takes final action.*

**Prepared by staff of the  
National Marine Fisheries Service  
North Pacific Fishery Management Council  
Alaska Department of Fish & Game**

**May 26, 1995**

harvested may indicate an increase in fishing mortality of larger individuals, or high recruitment (Ricker 1975). It has been well-established that scallop populations worldwide are vulnerable to overharvest, and stock recovery may be slow (Aschan-1991; Bannister 1986; Bourne 1986; McLoughlin et al. 1991; Orensanz 1986). For these reasons, significant increases in scallop harvests in Alaska beyond historic levels should be avoided, as they may jeopardize stock health and sustained yield.

The longevity of weathervane scallops in Alaska implies that they experience low natural mortality rates (Hoenig 1983), and this requires that conservative commercial harvests of weathervane scallops may be necessary to maintain healthy stocks and sustainable fisheries. The rate of natural mortality is one of the biological reference points commonly used in management of other fisheries to establish appropriate exploitation rates (Clark 1991). Unfortunately, other benchmarks that would bear on the choice of appropriate exploitation rates for weathervane scallops are not presently available; there is inadequate information on other biological production parameters, and uncertainty in scallop population dynamics for Alaskan scallop fisheries.

An unrestricted harvest in the EEZ would allow recruitment overfishing. It is widely accepted that fishery harvest levels should be prescribed in ways to prevent "recruitment overfishing", which is the condition that occurs when stocks are reduced to levels too low to produce adequate numbers of young scallops -- the future recruits to the fishery (Gulland 1983). Recruitment is a prerequisite for maintenance of viable populations, and is needed for sustainable harvests that support long-term economic benefits from the fishery. By closing the EEZ to harvest, recruitment overfishing of scallops would be prevented, and a future fishery would be assured.

#### *Overcapitalized Fleet*

The existence of an overcapitalized fleet increases the potential of overfishing the resource in an unrestricted fishery. At its January 1993 meeting, the Council determined that unrestricted access to this fishery may be harmful to the resource and result in a net loss to the Nation. A control date of January 20, 1993 was set to place the industry on notice that a moratorium for this fishery may be implemented. This control date was again reaffirmed at the Council's June 1993 meeting. As anticipated, effort in this fishery apparently increased in 1993; 32 permits, representing 21 vessels were issued to fish scallops in 1993. Eleven of these vessels had made landings as of July 31, 1993, and a total of 15 vessels had made landings by the end of the year.

Even without additional vessels entering the fishery, the 1993 fishery was overcapitalized. In 1992, seven vessels harvested 1.8 million lb (816 mt), for an average of 257,143 lb (116.6 mt) harvested per vessel. The 1993 quota was set at 890,000 lb (403.7 mt) for areas with specified guideline harvest levels, or about one-half of the 1992 landings. Efficient harvesting of this quota could be done by only three to four vessels. Preliminary estimates of 1993 landings from areas without guideline harvest levels total 524,000 lb (237.7 mt), that potentially could have been taken by an additional two vessels. Yet, 11 vessels participated in the 1993 fishery by July 31. Hence, the 1993 fishery was overcapitalized, meaning that too much capital was invested relative to the fleet size necessary to efficiently conduct the fishery. In 1994 the fishery continued the trend; 16 vessels harvested 1,235,269 lb (560.3 mt) of scallops.

Conservation impacts of the scallop fishery in Alaska depend upon the particular suite of management measures adopted. Where no management exists there is every indication that the fishery would be subject to local and eventual general overfishing were the condition to persist. One vessel fishing in the EEZ without the effort restrictions on gear, and crew required by State law was apparently able to take over 100 percent of the State's GHL (54,000 lb) (24.5 mt). When the overcapitalization of the fishery is considered, it is clear the current scallop fleet could take several years' worth of the State's GHL in many areas in several months.

Because of the serious effects unrestricted fishing in this overcapitalized fishery would have on this resource, this proposed action concentrates on strict conservation in the fishery. Ideally, management strives to achieve a balance of factors, such as cost-effectiveness, enforceability, resource conservation, and positive economic

### *Projected Landings*

The number of vessels which can participate and still produce profits depend on expected landings in future years. Based on landings of weathervane and other scallop species, up to 1.3 million pounds in landings statewide (EEZ, plus State waters) are expected during the duration of the proposed moratorium. These landings were estimated by assuming that catch limits and landings in the near term will be at the upper end of the OY range for the EEZ (0 - 1.1 million pounds). Some catches will also come from State waters. Hence, using the best available information, near term landings for Alaskan scallops are likely to be on the order of 1.0 to 1.3 million pounds of shucked meats.

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A break even analysis for an individual fishing vessel provides an estimate of the scallop harvest necessary to cover annual operating (variable) and fixed costs. Information about the operating and fixed costs for vessels in the scallop fleet has not been readily available, but owners of seven vessels volunteered cost data for their operations as part of their public testimony. These vessels represent the approximate average size of all vessels participating in the 1993 fishery. With the exception of the smallest vessel in the fleet, all vessels generally carry a 12 person crew, which includes the captain, cook, and engineer. This information represents the best available for the scallop fishery, and therefore, is used to develop a breakeven analysis for the fleet.

Annual operating costs all vessels were estimated to be about 59 percent of the gross revenues and fish taxes about 3 to 4 percent of gross revenues. Fixed costs, however, are likely to vary considerably from one vessel to the next, depending primarily on the amount of repair and supplies required, insurance costs, and debt repayment costs. The number of vessels that will break even in the fishery greatly depends on exvessel price paid for scallops. Industry sources have indicated that price may vary from vessel to vessel. Exvessel prices received in 1993 ranged from \$4.76 to \$6.65 per pound of shucked meat. These prices were higher than the historically paid for Alaskan scallops. Exvessel price ranged from \$3.12 to \$4.88 per pound from 1980-1991.

Based on the information provided through public testimony, about nine vessels would be able to operate at the breakeven level, assuming total landings of 1.3 million pounds and the reported 1993 exvessel price per pound. Fewer vessels would break even if quotas (landings) or price was reduced. Alternatively, more vessels would break even if quotas or price increased. For example, if future exvessel prices were in the order of \$7.00 per pound or more, several more vessels could operate at a breakeven level.

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filleting product, (3) 51 percent for a large longline catcher/processor, and (4) 66 percent for a small longline catcher processor. Note that the size distribution of small longline vessels are similar to the sizes of scallop vessels, hence supporting operating costs used in this analysis for the scallop fishery.

#### *Overcapitalization*

From the perspective of the individual fisherman, net returns decline as the vessel's share of the quota decreases due to increased fishing pressure and shorter seasons. Capitalization of the fishery continues beyond an efficient level because fishermen do not bear the entire social cost of the fishery resource. The resource is owned by the public, and although it has some value, fishermen are allowed to take the fish for free. This encourages capitalization beyond the level of operation that would exist if fishermen had to incur the cost or value society places on the fish. Effort continues to increase in the fishery beyond an efficient or profitable fleet size until average net returns reach or fall below zero. The cumulative effect is a fleet that dissipates net economic value and perpetuates low incomes in the fishery. The overcapitalized fleet also represents an unnecessarily large and unproductive share of the economy's capital investment base. This condition of overcapitalization prevents achievement of optimum yield from the fishery to the extent that economic rents are lower than those achievable, and overall capital costs in the fishery are higher than required. The status quo will perpetuate these inefficiencies.

Options available to vessels that do not qualify under the moratorium are limited. Some of the vessels previously harvested scallops in the Atlantic Ocean, and may still qualify to scallop on the east coast. Although many scallop vessels could be rigged to fish for groundfish, the opportunities for new vessels to participate in North Pacific fisheries are limited. The Council recently adopted a moratorium on new vessels entering the groundfish and crab fisheries in the North Pacific, and the analysis for that moratorium (NPFMC 1992c) details many of the same overcapitalization problems addressed in this analysis for a moratorium for the scallop fishery. Beyond existing fisheries under Council management, the opportunities and capabilities of this fleet to engage in other fisheries imply a shift to one of several alternatives: 1) state-managed fisheries within Alaska; 2) state or federally managed fisheries in the U.S. outside Alaska; or 2) high-seas or foreign fisheries elsewhere in the world.

Opportunities for new entrants in Alaska state-managed fisheries are restricted by the state's limited entry program that covers most of the important commercial fisheries, including salmon, sablefish, herring, and crab. In order to access most of these fisheries, new entrants from EEZ fisheries would have to purchase a permit, as well as adopt necessary vessel and gear modifications. In the case of salmon, asking prices for permits vary from around \$50,000 up to over \$250,000 for the most desirable areas. Salmon vessels in some areas have been developed to operate in specific regulatory and oceanographic conditions, such that halibut or groundfish boats may prove inadequate without modifications. The Alaska state fisheries are managed under a limited entry permit system because of existing concerns over excess capacity, such that the entry of vessels from Council-managed fisheries would require the exit of an existing vessel. In general, there appear to be few, if any, unexploited opportunities in existing state-managed fisheries that are capable of absorbing an influx of new entrants from the EEZ fisheries.

Overcapitalization is common in many EEZ fisheries of the United States, and many of these fisheries have been subject to limited entry systems. A moratorium and effort reduction package has recently been adopted for the East Coast scallop fishery under Amendment #4 of the Atlantic Sea Scallop FMP (NEFMC 1993). That moratorium will affect the North Pacific scallop fisheries in two ways. First, vessels that would not participate under the proposed moratorium for Alaska scallop fishery would not be able to participate in the Atlantic sea scallop fishery unless they had previously fished for sea scallops and met the

moratorium qualifying criteria outlined in Amendment #4. Second, vessels that do not qualify to continue scalloping in the Atlantic may look to enter the scallop fishery in Alaska, if access remained unrestricted. Under Amendment #4, 34 vessels that derived at least 85% of their income from sea scallops in 1991, will not qualify under that moratorium (Lou Goodreau, NEFMC staff, personal communication). It is likely that some of these vessels would participate in the Alaska scallop fishery if access were unrestricted.

Many fisheries in the Pacific Council waters off Washington, Oregon, and California are already governed by trip limits, and fishery managers have recommended that the Secretary approve their adoption of a license limitation scheme to restrict further unneeded fishing effort (Pacific Fishery Management Council, 1992). In the Western Pacific waters off Hawaii, a moratorium on entry into certain longline fisheries has already been adopted. Although the fleet operating in the Alaska EEZ may have the technical capability to operate in these and other domestic fisheries, the real constraint is obtaining access to these already overcapitalized fisheries.

Outside domestic waters, fishing opportunities are less certain, although it is recognized that excess harvesting capacity exists for many of the world's developed fisheries. Following the extension of fisheries jurisdiction in the mid-1970s, most coastal nations--led by the U.S.--endeavored to claim the economic benefits associated with the marine resources in their exclusive economic zones, greatly reducing the opportunities for distant water fleets of some countries. As a result, access to the coastal waters of foreign nations must be arranged through joint venture arrangements, in competition with the distant water fleets of many other nations, such as Japan and Korea. However, the shift to foreign fisheries requires both logistical and diplomatic arrangements that may be beyond the scope of many small boat operators. Also, opportunities for the Alaska fleet in foreign fisheries likely favor technologically advanced, higher valued vessels not readily available in the host country.

In summary, the problems associated with excess capacity and overcapitalization cannot be easily overcome by shifting unneeded vessels to other fisheries. This is not so much because of an incompatibility of technology, as the dilemma of widespread overcapitalization. Efficient, adaptable vessels are capable of shifting to other fisheries, and may well enter different fisheries in response to economic efficiency criteria. Entrepreneurs may also be capable of finding and competing in a variety of world-wide fisheries. Overall, however, there is no simple means of shifting excess Alaska EEZ vessels into other fisheries in the current environment, primarily because already there appears to be more than adequate capacity throughout the Alaskan, U.S. and world fishing industry.

#### *Implementation of a Moratorium*

Implementation of a moratorium is essentially a matter of issuing licenses for qualified vessels and tracking the vessel configuration to verify adherence to capacity restrictions. There are several levels of possible enforcement and vessel qualification checks that could occur, however. The most basic level of qualification checking would occur when a vessel owner applies for a permit to harvest scallops. The vessel identification would be checked against landings data going back through the applicable qualification dates. If the vessel was found to have made a landing in a moratorium fishery then the owner would be issued a license. A second level of qualification checking would require the maintenance of a vessel database containing all vessels which qualify to participate in the moratorium regardless of whether licensing applications had been submitted. This would be a "master" database which would be the baseline for determining all vessel qualifications.

HS 141

**ALASKAN SCALLOP FISHERY (BERING SEA AND GULF OF ALASKA)****AREA PRODUCTION FORECASTS 07-98**

1. BERING SEA -- SEASON STARTS JULY '97. EXPECT DROP IN CPUE MID SEASON AND BYCATCH PROBLEMS. VIRGIN GROUNDS STARTED '92" (NO QUOTAS, NO OBSERVERS). '93" 100% OBSERVERS AND QUOTAS, HEAVY FISHING EFFORT AND HIGH BYCATCH RATES.
2. SHUMAGINS -- CRAB BYCATCH HAS BEEN MAJOR PROBLEM, TWO VESSELS HAVE CLOSED AREA EARLY WITH HEAVY BYCATCH RATES LAST TWO SEASONS. LOW SCALLOP HARVEST.
3. KODIAK (SHELIKOF) -- EXPECT DROP IN CPUE EARLY ON. HAS BEEN MAINSTAY OF KODIAK SINCE MID 80'S. HAS HAD HEAVY FISHING PRESURE SINCE 92, BYCATCH MED.
4. KODIAK (EAST SIDE) -- FISHED HEAVLY SINCE EARLY 80'S, NOW DEPLETED. NEEDS RECRUITMENT.
5. PRINCE WILLIAM SOUND -- KAYAK ISLAND - DOWN, VESSEL MR. BIG OVEREXPLOITED RESOURCE BY OVER 100% IN '95". QUOTA HAS BEEN CUT FROM 50K TO 17K
6. YAKUTAT -- STABLE, NO BYCATCH PROBLEMS, FISHING SEASON CHANGED FROM JAN 10<sup>TH</sup> TO JULY 1<sup>ST</sup>. NEEDS TO BE WATCHED, MAY BE SOURCE OF LARVAL RECRUITMENT FOR WESTERN AREAS DUE TO THE CURRENT FLOW PATTERNS IN THE GULF OF ALASKA
7. SOUTHEAST (AREA 16) -- CPUE DROPPED FEB '97". EXPECT RESRICTIVE ACTION FOR '98"

SCALLOP HARVEST SHOULD LEVEL OUT AT BETWEEN 600K TO 800K IN THE NEXT FEW YEARS

**COST DATA FOR ALASKAN SCALLOP FLEET**

**AVERAGE BREAKEVEN COST FOR SCALLOP FLEET IS \$ 824,234.00, NPFMC  
RANGE 1.1 MIL- 7 MIL**

**NUMBER OF VESSELS THAT WILL BREAK EVEN AT PROJECTED PRICE LEVELS  
 AND AVAILABLE HARVEST LEVELS**

<u>PRICE /LB</u>		<u>6.00/LB</u>	<u>5.50/LB</u>	<u>5.00/LB</u>	<u>4.50/LB</u>
IF QUOTA =	900,000 LBS	6.5	6	5.4	4.9
IF QUOTA=	800,000 LBS	5.8	5.3	4.8	4.3
"96 HARVEST" aprox	704,000 LBS	5	4.6	4.2	3.8
IF QUOTA=	600,000 LBS	4.3	4	3.6	3.2
IF QUOTA=	500,000 LBS	3.7	3.3	3	2.7

**\* VESSELS WITH ABOVE THE AVERAGE BREAKEVEN COSTS WILL HAVE TROUBLE WITH  
 THIS SCENARIO**

**Draft for Public Review**

**ENVIRONMENTAL ASSESSMENT/  
REGULATORY IMPACT REVIEW/  
INITIAL REGULATORY FLEXIBILITY ANALYSIS  
of**

**Amendment 1**

**to the  
FISHERY MANAGEMENT PLAN  
for the  
SCALLOP FISHERY  
off Alaska**

***NOTE: The Council is scheduled to take final action on this amendment at it's June 1995 meeting. However, reviewers should note that there are a number of policy decisions regarding State and Federal management that need to be resolved before management measures considered by this amendment could be implemented. Also note that several management measures proposed under the alternative to the status quo contain more than one option. The suite of management measures and options identified under Alternative 2 in this document are subject to change when the Council takes final action.***

**Prepared by staff of the  
National Marine Fisheries Service  
North Pacific Fishery Management Council  
Alaska Department of Fish & Game**

**May 26, 1995**

harvested may indicate an increase in fishing mortality of larger individuals, or high recruitment (Ricker 1975). It has been well-established that scallop populations worldwide are vulnerable to overharvest, and stock recovery may be slow (Aschan-1991; Bannister 1986; Bourne 1986; McLoughlin et al. 1991; Orensanz 1986). For these reasons, significant increases in scallop harvests in Alaska beyond historic levels should be avoided, as they may jeopardize stock health and sustained yield.

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# FISCAL NOTE

STATE OF ALASKA  
1997 LEGISLATIVE SESSION

BILL NO. HB141

Revision Date: \_\_\_\_\_ Dept. Affected: Fish and Game  
 Title: An Act relating to a vessel permit moratorium for the Alaska BRU: Commercial Fisheries (Limited) Entry Commission  
weathervane scallop fishery; relating to management of scallop fisheri Component: Limited Entry Program Administration  
 Sponsor: Rep. Austerman  
 Requester: Rep. Austerman COMPONENT SERIAL NO. 0471

(Thousands of Dollars)

Expenditures/Revenues	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
<b>OPERATING EXPENDITURES</b>						
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	0.0	0.0	0.0	0.0	0.0	0.0
<b>CAPITAL EXPENDITURES</b>						
<b>CHANGE IN REVENUES ( )</b>						

(Thousands of Dollars)

FUND SOURCE	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1006 GF/MHTIA						
Other						
<b>TOTAL</b>	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY97) cost: \$ 0.0

**POSITIONS**

POSITIONS	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary.)

No fiscal impact.

Prepared By: Roger Kolden Phone: 789-6160  
 Agency: Commercial Fisheries (Limited) Entry Commission Date: 2/24/97

Approved by Commissioner: Dale Anderson Date: 2/24/97  
 Agency: Commercial Fisheries (Limited) Entry Commission

**PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE**



KODIAK FISH COMPANY  
 FT ALLIANCE FT LEGACY FT PROVIDER



326 Center Avenue  
 Kodiak, Alaska 99615

2977 Fox Road  
 Ferndale, Washington 98248

Date: 1-23-96

Fax To: Amy Doucynerty 907 465 4956

Attention:

From: Mark K.

Subject: Scallops licence

Amy

This is from NPFMC.  
 It looks like nice vessels for breakeven  
 @ 1.3 million lbs. In reality some quota's  
 have dropped this year.. and I expect  
 there will be further reductions as  
 the fishery is composed of one strong  
 year class and one weak one in some  
 areas with no signs of recruitment which  
 actually is normal for scallops. One year  
 class sometimes has to last quite a  
 while.

Respect.

Mark Kenelionis

Ferndale  
 Phone 360-366-9131  
 Fax 360-366-9132

Kodiak  
 Phone 907-486-3309  
 Fax 001-486-4676

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Opportunities for new entrants in Alaska state-managed fisheries are restricted by the state's limited entry program that covers most of the important commercial fisheries, including salmon, sablefish, herring, and crab. In order to access most of these fisheries, new entrants from EEZ fisheries would have to purchase a permit, as well as adopt necessary vessel and gear modifications. In the case of salmon, asking prices for permits vary from around \$50,000 up to over \$250,000 for the most desirable areas. Salmon vessels in some areas have been developed to operate in specific regulatory and oceanographic conditions, such that halibut or groundfish boats may prove inadequate without modifications. The Alaska state fisheries are managed under a limited entry permit system because of existing concerns over excess capacity, such that the entry of vessels from Council-managed fisheries would require the exit of an existing vessel. In general, there appear to be few, if any, unexploited opportunities in existing state-managed fisheries that are capable of absorbing an influx of new entrants from the EEZ fisheries.

Overcapitalization is common in many EEZ fisheries of the United States, and many of these fisheries have been subject to limited entry systems. A moratorium and effort reduction package has recently been adopted for the East Coast scallop fishery under Amendment #4 of the Atlantic Sea Scallop FMP (NEFMC 1993). That moratorium will affect the North Pacific scallop fisheries in two ways. First, vessels that would not participate under the proposed moratorium for Alaska scallop fishery would not be able to participate in the Atlantic sea scallop fishery unless they had previously fished for sea scallops and met the

moratorium qualifying criteria outlined in Amendment #4. Second, vessels that do not qualify to continue scalloping in the Atlantic may look to enter the scallop fishery in Alaska, if access remained unrestricted. Under Amendment #4, 34 vessels that derived at least 85% of their income from sea scallops in 1991, will not qualify under that moratorium (Lou Goodreau, NEFMC staff, personal communication). It is likely that some of these vessels would participate in the Alaska scallop fishery if access were unrestricted.

Many fisheries in the Pacific Council waters off Washington, Oregon, and California are already governed by trip limits, and fishery managers have recommended that the Secretary approve their adoption of a license limitation scheme to restrict further unneeded fishing effort (Pacific Fishery Management Council, 1992). In the Western Pacific waters off Hawaii, a moratorium on entry into certain longline fisheries has already been adopted. Although the fleet operating in the Alaska EEZ may have the technical capability to operate in these and other domestic fisheries, the real constraint is obtaining access to these already overcapitalized fisheries.

Outside domestic waters, fishing opportunities are less certain, although it is recognized that excess harvesting capacity exists for many of the world's developed fisheries. Following the extension of fisheries jurisdiction in the mid-1970s, most coastal nations--led by the U.S.--endeavored to claim the economic benefits associated with the marine resources in their exclusive economic zones, greatly reducing the opportunities for distant water fleets of some countries. As a result, access to the coastal waters of foreign nations must be arranged through joint venture arrangements, in competition with the distant water fleets of many other nations, such as Japan and Korea. However, the shift to foreign fisheries requires both logistical and diplomatic arrangements that may be beyond the scope of many small boat operators. Also, opportunities for the Alaska fleet in foreign fisheries likely favor technologically advanced, higher valued vessels not readily available in the host country.

In summary, the problems associated with excess capacity and overcapitalization cannot be easily overcome by shifting unneeded vessels to other fisheries. This is not so much because of an incompatibility of technology, as the dilemma of widespread overcapitalization. Efficient, adaptable vessels are capable of shifting to other fisheries, and may well enter different fisheries in response to economic efficiency criteria. Entrepreneurs may also be capable of funding and competing in a variety of world-wide fisheries. Overall, however, there is no simple means of shifting excess Alaska EEZ vessels into other fisheries in the current environment, primarily because already there appears to be more than adequate capacity throughout the Alaskan, U.S. and world fishing industry.

#### *Implementation of a Moratorium*

Implementation of a moratorium is essentially a matter of issuing licenses for qualified vessels and tracking the vessel configuration to verify adherence to capacity restrictions. There are several levels of possible enforcement and vessel qualification checks that could occur, however. The most basic level of qualification checking would occur when a vessel owner applies for a permit to harvest scallops. The vessel identification would be checked against landings data going back through the applicable qualification dates. If the vessel was found to have made a landing in a moratorium fishery then the owner would be issued a license. A second level of qualification checking would require the maintenance of a vessel database containing all vessels which qualify to participate in the moratorium regardless of whether licensing applications had been submitted. This would be a "master" database which would be the baseline for determining all vessel qualifications.