


MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke 
Executive Director

DATE: April 7, 1994

SUBJECT: Pribilof Islands Trawl Closure, Revised Amendment 21(a)

ESTIMATED TIME 2 HOURS

ACTION REQUIRED

- (a) Take final action on Pribilof Islands trawl closure amendment.

BACKGROUND

In the Bering Sea, unique populations of blue king crab are located at the Pribilof Islands, St. Matthew Island and St. Lawrence Island. The surrounding waters provide critical habitat for juvenile and adult blue king crab. The proposed amendment would eliminate bottom trawl activities in areas important to blue king crab and Korean hair crab stocks so that these stocks may build to and be maintained at exploitable levels, and seabird and marine mammal populations may increase to levels sustainable by a habitat undisturbed by bottom trawl activities.

The current revised document analyzes the seven alternatives based on existing management areas or prescribed distance from the Pribilof Islands, and adds four more alternatives that were suggested after review at the September 1993 Council meeting. The eighth alternative examines a closure boundary which is not based on preexisting regulatory areas or a predefined distance from land, but rather on crab distribution and habitat. The ninth and tenth alternatives examine prohibited species caps that would trigger the boundary closure, and the eleventh alternative identifies a subarea for permanent closure.

A revised analysis for Amendment 21a to the BSAI FMP was released for public review on December 15, 1993. An executive summary of the analysis is attached as Item D-3(a)(1). The Council is scheduled to take final action on this amendment at this meeting.

Comments received from the Central Bering Sea Fishermen's Association are attached as item D-3(a)(2).

EXECUTIVE SUMMARY

Amendment 21a - Revised

Background

A prior version of Amendment 21a was released for public review on October 29, 1992 and contained 7 alternatives for closure to trawling in areas surrounding the Pribilof Islands. The areas for closure in the seven alternatives were based on existing management areas, or a prescribed distance from the Pribilof Islands. The current revised Amendment 21a contains the analysis for these seven alternatives and adds four more alternatives for a total of eleven alternatives. The eighth alternative examines a closure boundary which is not based on preexisting regulatory areas, nor a predefined distance from land but rather on crab distribution and habitat. The ninth and tenth alternatives examine prohibited species caps to trigger the boundary closure, and the eleventh alternative identifies a subarea for permanent closure.

The major focus of the revised analysis (Amendment 21a Revised) is to define an area for closure to bottom trawling which was based on blue king crab habitat and distribution. In the Bering Sea, unique populations of blue king crab are located at the Pribilof Islands, St. Matthew Island and St. Lawrence Island. The waters directly surrounding the Pribilof Islands provide critical habitat for juvenile and adult blue king crab.

Historic blue king crab encounters in NMFS annual trawl surveys, bycatch in observed vessels and directed catch of blue king crab were examined to determine a boundary for trawl closure which would protect blue king crab in the Pribilof Islands area. The effects of prohibited species caps were also examined.

The primary closure boundary was selected to allow trawl access to the edge of the 100 m contour and the groundfish resources to the east and north of the Pribilof Islands. The boundary was also drawn with straight edges and as few corners as possible in order to facilitate ease of closure enforcement. Analysis has shown little or no impact on pollock or Pacific cod fisheries and a small impact on flatfish fisheries.

Purpose of the Proposed Action

The stated purpose of the proposed action is to eliminate bottom trawl activities in areas of importance to blue king crab and Korean hair crab stocks so that these stocks may build to and be maintained at exploitable levels, and seabird and marine mammal populations may increase to levels sustainable by a habitat undisturbed by bottom trawl activities. In addition, the proposal contends that elimination of bottom trawl activities in IPHC Area 4C or a similar area will reduce bycatch of juvenile halibut and crab. Bottom trawling is alleged to be destructive to the habitat of these animals including their prey species, as well as to the animals themselves including their juvenile stages.

Alternatives Considered

Revised Amendment 21a (December 1993) includes analysis of the following alternatives:

Alternative 1: Status quo -no area closures adjacent to the Pribilof Islands.

Alternative 2: Close IPHC Area 4C to bottom trawling.

- Alternative 3:** Close IPHC Area 4C to all trawling.
- Alternative 4:** Close waters within a 25-mile zone around the islands to bottom trawling.
- Alternative 5:** Close waters within a 25-mile zone around the islands to all trawling.
- Alternative 6:** Close waters within IPHC Area 4C West of 169 W. to bottom trawling.
- Alternative 7:** Close waters within IPHC Area 4C West of 169 W. to all trawling.
- Alternative 8:** Close an area defined by crab habitat.
- Alternative 9:** Close an area defined by crab habitat when cap of 1% of estimated blue king crab abundance is reached.
- Alternative 10:** Close an area defined by crab habitat when cap of 20,000 king crab is reached.
- Alternative 11:** Close an area defined by crab habitat when a cap is reached. Maintain a subarea permanently closed to trawling.

Summary of Analysis

Results based on the Bering Sea Bycatch Model indicated no discernible differences among Alternatives 1 - 7 in groundfish catch and bycatch levels. In other words, the alternatives did not differ greatly from status quo. Remaining differences could still be attributed to the method of accumulating catches used in the model, however, the scale of model specific differences have been reduced to the smallest level possible. Alternatives 2 - 7 would limit access by trawlers to the area south of the Pribilof Islands between the 200 m and 100 m depth contours which is not important blue king crab habitat, but is important to the pollock and Pacific cod fisheries.

Through spatial display of NMFS annual trawl surveys; foreign, JV, and domestic observer data; and the directed commercial crab catch, the analysis of Alternative 8 provides an understanding of blue king crab habitat, trawl fishing effort and the distribution or feeding areas of other marine species. Analysis of this information was used to delineate an area for closures that provides trawl access to the majority of groundfish resources in the Pribilof Islands area, yet affords habitat protection for blue king crab. The boundary selected does not encompass the entire range of blue king crab in the area, but does surround the habitat with highest blue king crab concentrations. Included in the boundary is habitat vital to juvenile blue king crab, populations of red king crab, populations of Korean hair crab, and some of the area important to foraging sea birds.

The boundary in Alternative 8 was selected to allow trawl access to the edge of the 100 m contour and the groundfish resources to the east and north of the Pribilof Islands. The boundary was also drawn with straight edges and as few corners as possible in order to facilitate ease of closure enforcement. Analysis has shown little or no impact on pollock or Pacific cod fisheries and a small impact on flatfish fisheries.

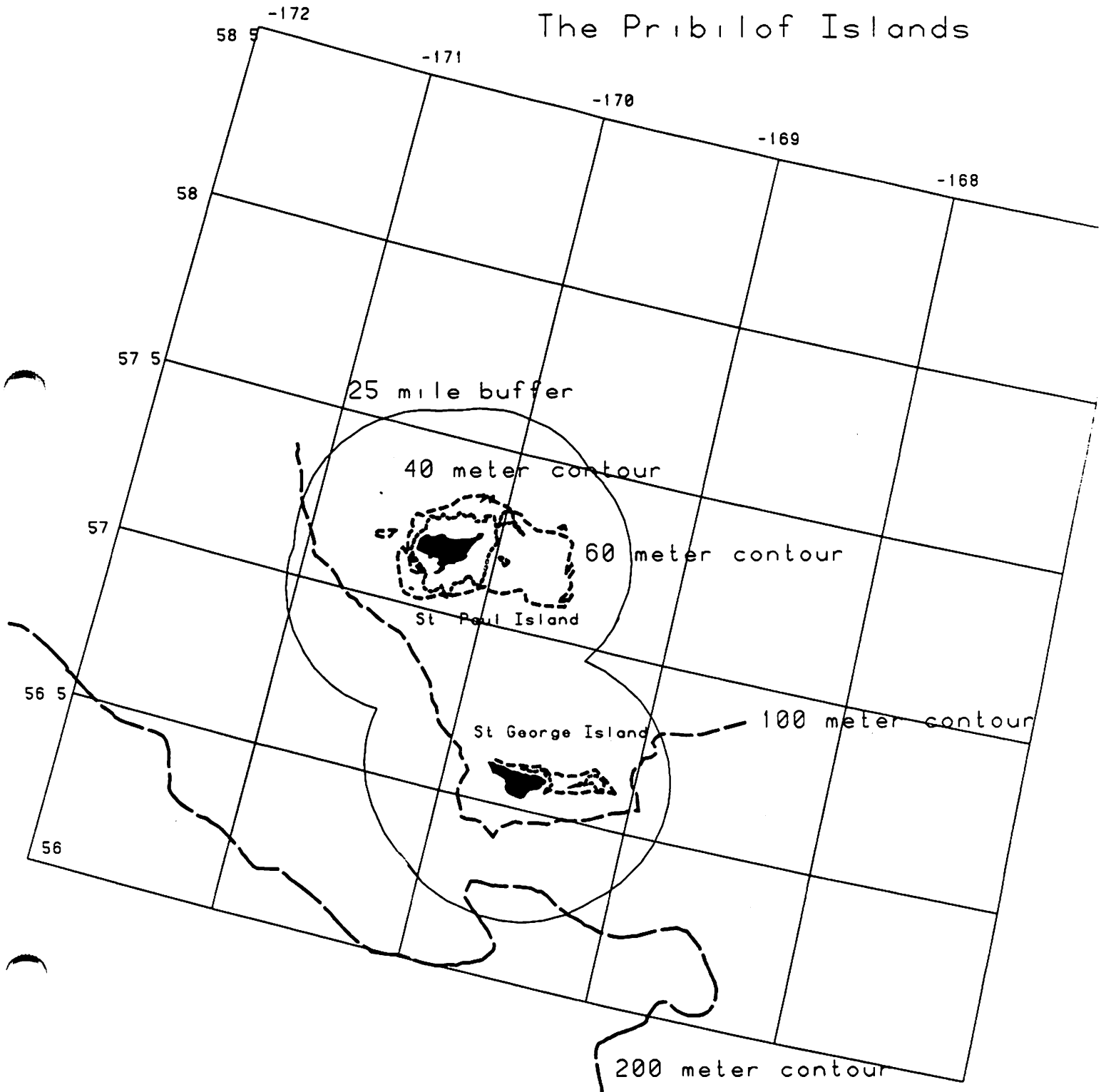
The overall impact of the alternatives on groundfish fisheries is expected to be small in relation to Alternative 1, status quo. The impact on king crab stocks, Korean hair crab stocks, and sea bird foraging under Alternative 8 is expected to provide the most beneficial results and contain no negative impacts when compared with Alternative 1.

The benefits to crabs, sea birds and marine mammals under Alternative 8 are reduced in Alternative 9 because of continued access to the area by trawlers until the cap based on 1% of blue king crab abundance is attained. The benefits of Alternative 8 are reduced by lesser amounts under Alternatives 10 and 11 because of generally lower cap constraints and continued protection of a portion of the area defined for closure under Alternative 8. Alternative 11 would allow an increased bycatch of king crab over Alternative 8 for marginal increases in groundfish catch. Alternatives 9, 10 and 11 all allow greater access to groundfish, but the increased harvest opportunities are minimal in comparison to the increased bycatch of crab which occurs when vessels operate in the area defined for closure in Alternative 8.

Main Points:

- ☛ Alternative 8 closure area is defined by critical blue king crab habitat.
- ☛ A small amount of groundfish catch comes from the closure area defined in Alternative 8, however this is the area of highest crab bycatch.
- ☛ The Pribilof Islands blue king crab population remains depressed while St. Matthew and St. Lawrence populations have rebounded.
- ☛ Closure area generally has higher halibut bycatch rates than surrounding areas.
- ☛ The closure area will protect important foraging areas for seabirds.
- ☛ All alternatives allow increased king crab bycatch for small gains in groundfish catch when compared to Alternative 8.

Figure 2.1. The Pribilof Islands in the Bering Sea with associated depth contours and previously proposed 25 nm buffer.



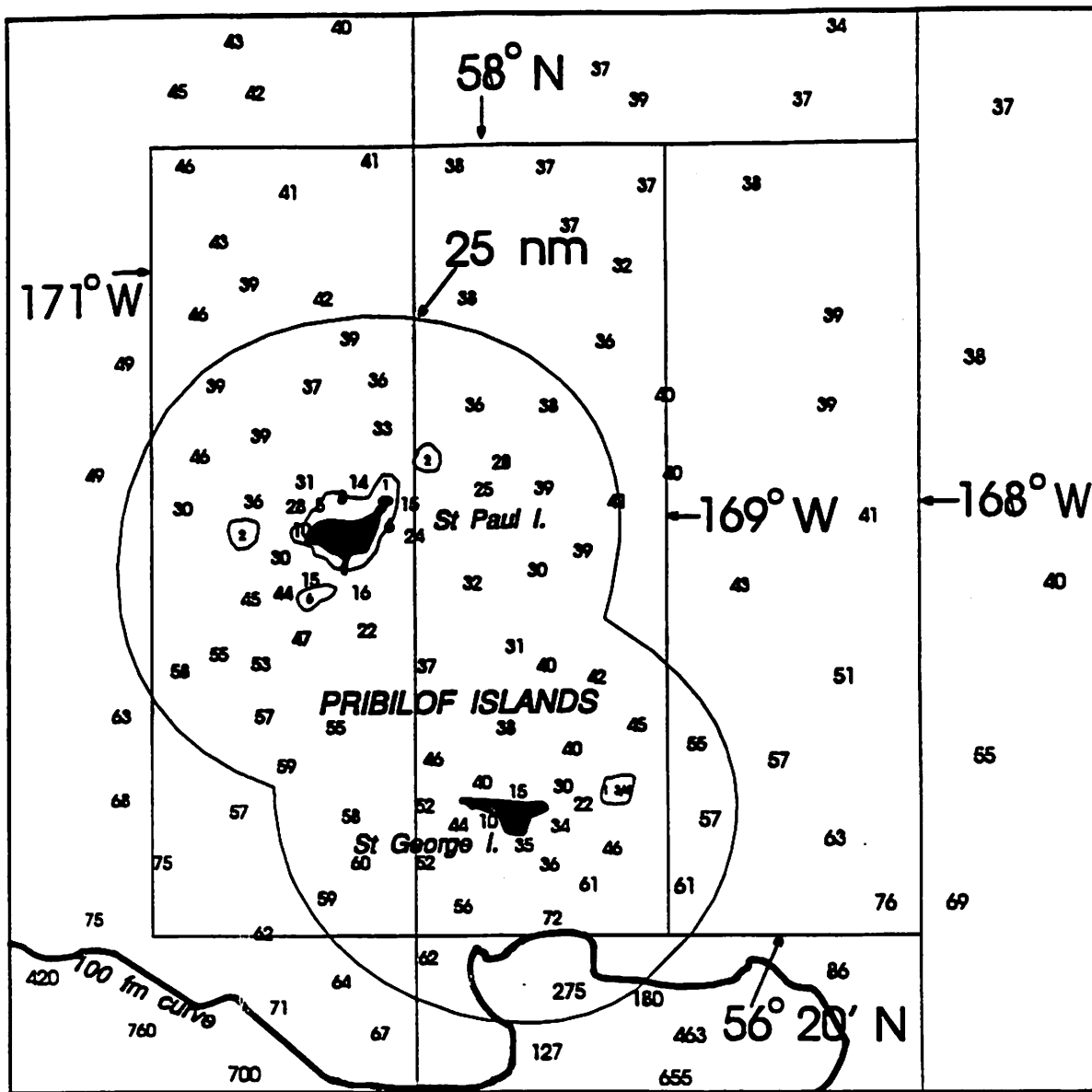


Figure 2.1a. Depth soundings (in fathoms) and 100 fathom contour of proposed trawl closure alternatives around the Pribilof Islands. Alternative closure areas include IPHC Area 4C bounded by 56°20'N, 58°N, 168°W and 171°W; IPHC Area 4C west of 169°W; and the area out to 25 NM around the islands.

Figure 2.20. Subarea defined for permanent closure in the Pribilof Islands area, as in Alternative 11.

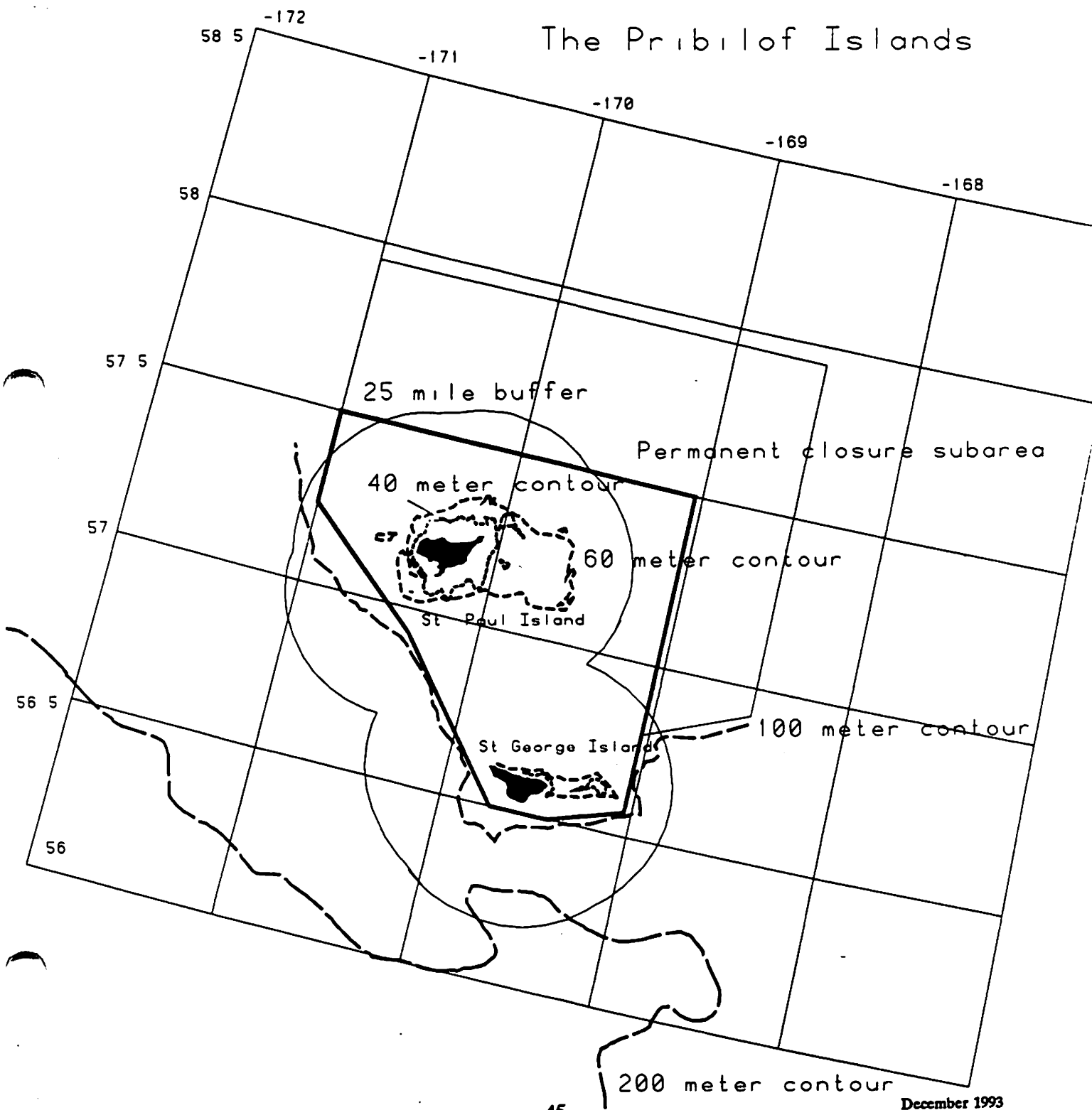
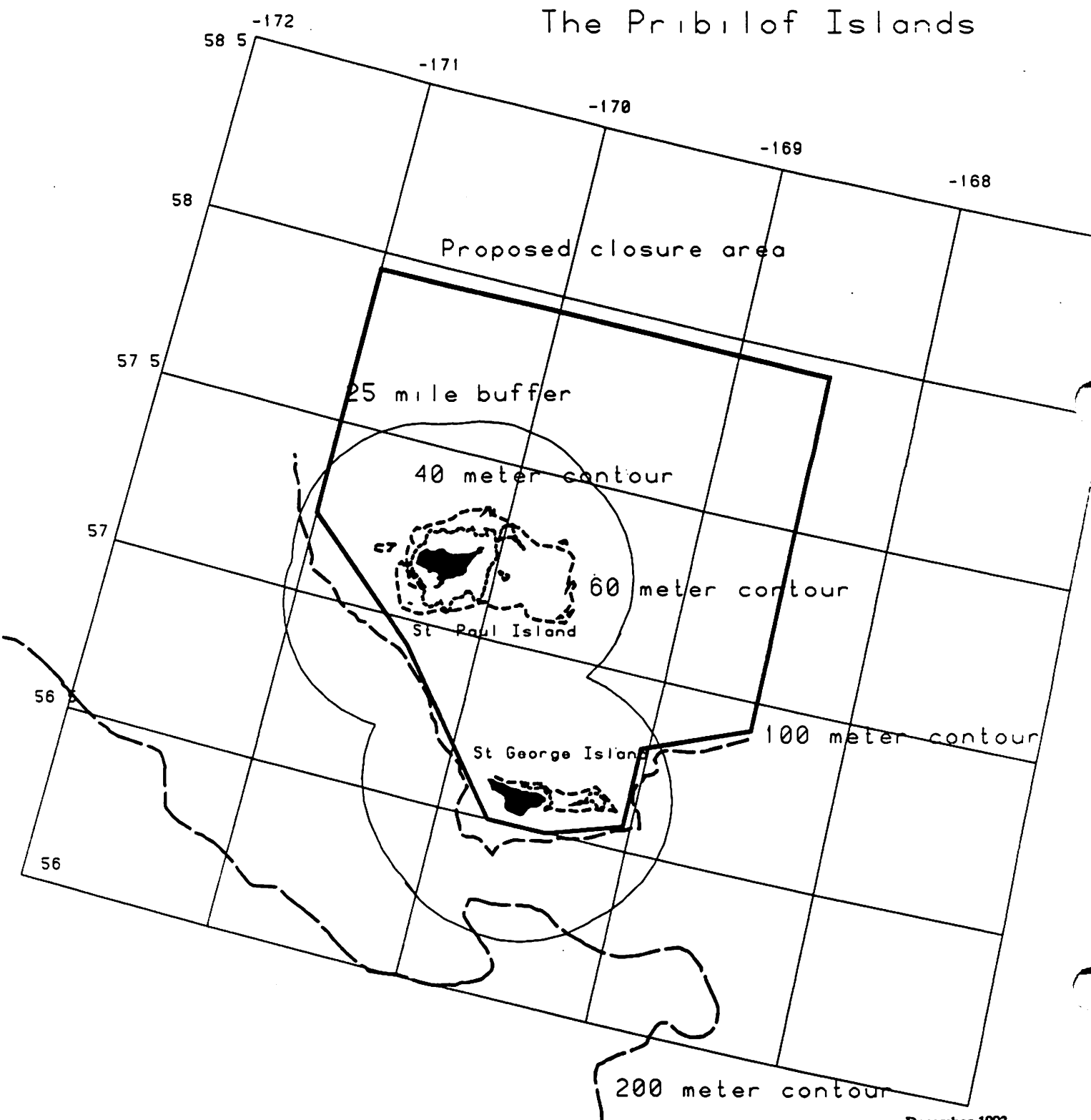
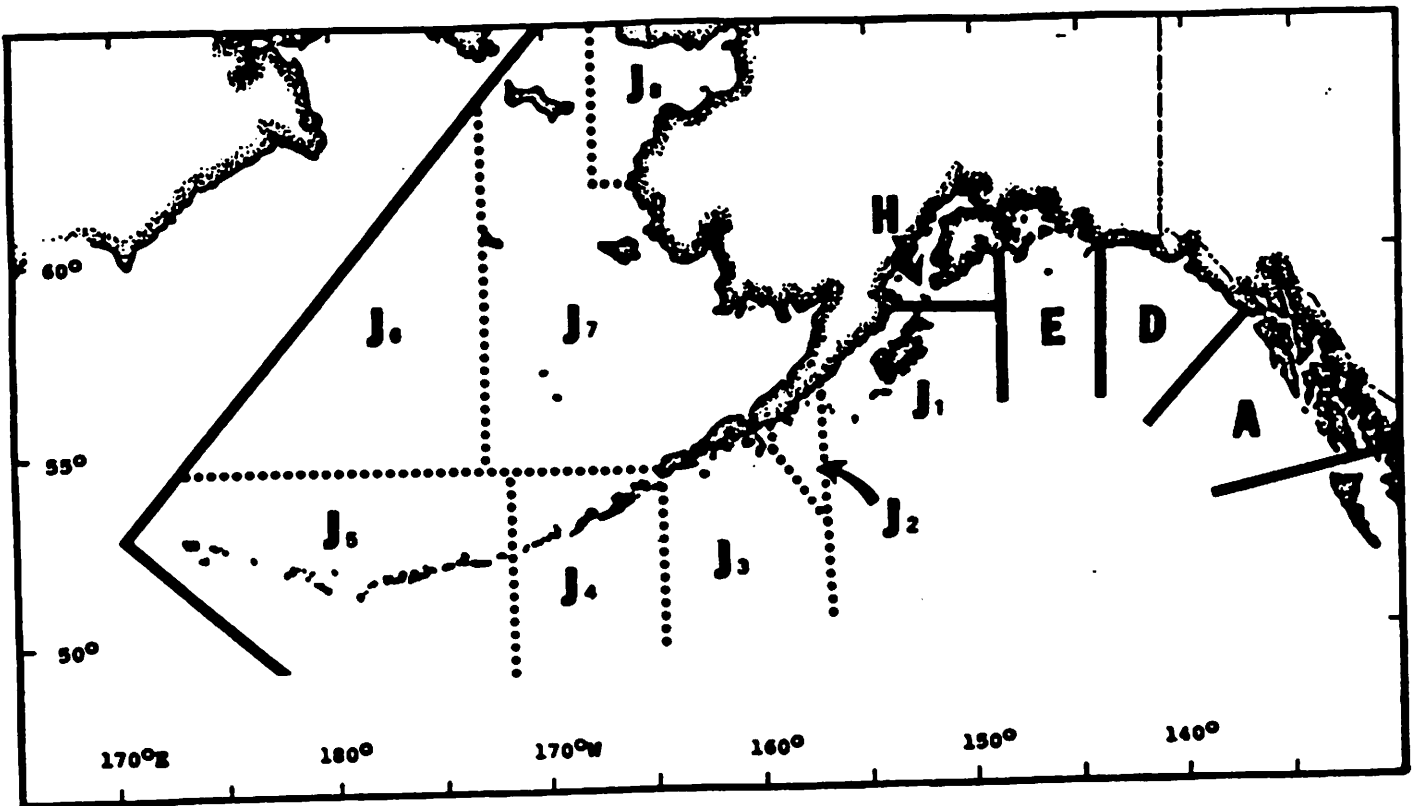


Figure 2.7. Proposed closure area surrounding the Pribilof Islands for blue king crab population and habitat conservation.



TANNER CRAB AREAS



TANNER CRAB SEASON REGULATIONS SUMMARY

J8: BERING SEA DISTRICT EASTERN SUBDISTRICT NORTON SOUND SECTION
 Reg: No open season

J7: BERING SEA DISTRICT EASTERN SUBDISTRICT
 Reg: Nonexclusive
 Pot Limit: 250, for Vessels over 125 feet
 200 for Vessels 125 or less
 Dates: *C. bairdi* - East of 168° W. long., Concurrent With Area T. Red King Crab Season and reopen again 10 days after Area T king crab season between 163° and 173° W. long.
 If no Area T king crab season, open between 163° and 173° W. long. on November 1.
C. opilio - January 15
 Size: *C. bairdi* - 5.5 inches
C. opilio - 3.1 inches

J6: BERING SEA DISTRICT WESTERN SUBDISTRICT
 Reg: Nonexclusive
 Pot Limit: 250, for Vessels over 125 feet
 200 for Vessels 125 or less
 Dates: *C. bairdi* - January 15
C. opilio - January 15
 Size: *C. bairdi* - 5.5 inches
C. opilio - 3.1 inches

J5: WESTERN ALEUTIANS
 Reg: Nonexclusive
 Pot Limit: None
 Dates: November 1
 Size: *C. bairdi* - 5.5 inches

J4: EASTERN ALEUTIANS
 Reg: Nonexclusive
 Pot Limit: None
 Dates: January 15
 Size: *C. bairdi* - 5.5 inches

J3: SOUTH PENINSULA
 Reg: Nonexclusive
 Pot Limit: 40 or 75 Depending on GHL
 Dates: January 15
 Size: *C. bairdi* - 5.5 inches

J2: CHIGNIK
 Reg: Nonexclusive
 Limit: 40 or 75 Depending on GHL
 Date: January 15
 Size: *C. bairdi* - 5.5 inches

J1: KODIAK
 Reg: Nonexclusive
 Pot Limit: 75
 Dates: January 15
 Size: *C. bairdi* - 5.5 inches

H: COOK INLET
 Reg: Superexclusive
 Pot Limit: 40 or 75 depending on GHL in Southern District
 Dates: January 15
 Size: 5.5 inches

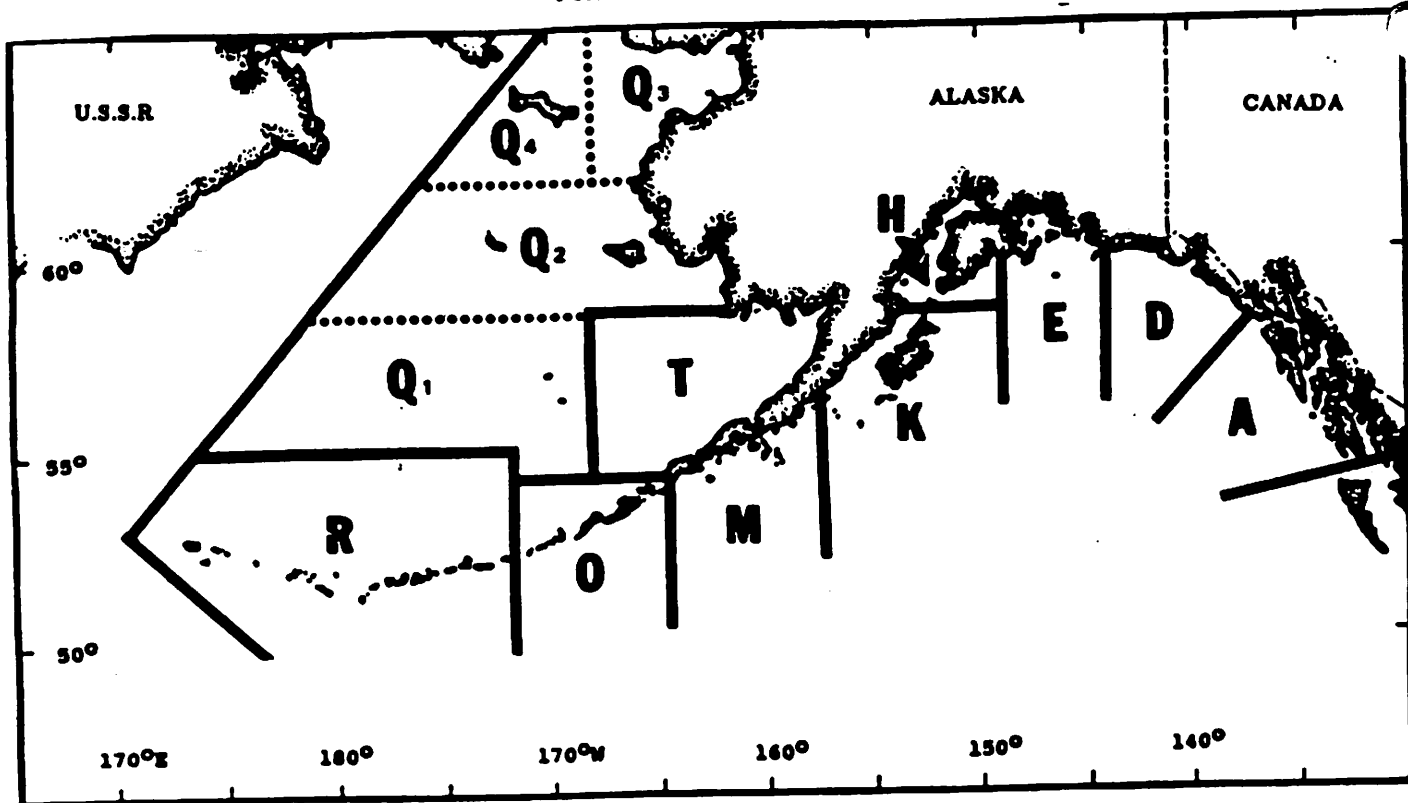
E: PRINCE WILLIAM SOUND
 Reg: Superexclusive
 Pot Limit: 100 or 175 Depending on Area
 Dates: January 15
 Size: 5.3 inches

D: YAKUTAT
 Reg: Nonexclusive
 Pot Limit: 100 in Yakutat Bay
 Dates: January 15
 Size: 5.5 inches

A: SOUTHEASTERN
 Reg: Superexclusive
 Pot Limit: 100 Pot Limit in Inside Waters
 Dates: February 15
 Size: 5.5 inches

KEY:
 Registration Reg: Opening Dates Dates:
 Guideline Harvest Level . GHL Minimum Legal Size Size:

KING CRAB AREAS



KING CRAB REGULATIONS SUMMARY KEY

**Q3: BERING SEA AREA
NORTHERN DISTRICT
NORTON SOUND SECTION**
Reg: Superexclusive
Pot Limit:
50 - Vessels over 125 feet
40 - Vessels 125 feet or less
Dates: Red & Blue - July 1
& November 15
Brown - By Permit
Size: Red - 4.75
Blue - 5.5 inches

**Q2: BERING SEA AREA
NORTHERN DISTRICT
ST. MATTHEW SECTION**
Reg: Nonexclusive
Pot Limit:
75 - Vessels over 125 feet
60 - Vessels 125 feet or less
Dates:
Red & Blue - September 15
Brown - By Permit
Size: Red - 4.75 inches
Blue & Brown - 5.5 inches

R: ADAK
Reg: Nonexclusive
Pot Limit: No Pot Limit
Dates:
Red & Brown November 1
Size: Red & Blue - 6.5 inches
Brown - 6 inches

M: ALASKA PENINSULA
Reg: Superexclusive
Pot Limit: 40 or 75 Depend-
ing on GHL
Dates:
Red & Blue - September 25
Brown - By Permit
Size: All Species - 6.5 inches

**E: PRINCE WILLIAM
SOUND**
Reg: Superexclusive
Pot Limit: None
Dates:
October 1 & January 15
Size: Red & Brown - 7 inches
Blue - 5.9 inches

**Q4: BERING SEA AREA
NORTHERN DISTRICT
ST. LAWRENCE SECTION**
Reg: Nonexclusive
Pot Limit:
50 - Vessels over 125 feet
40 - Vessels 125 feet or less
Dates:
Red & Blue July 1 &
November 15
Size: Brown - By Permit
Red - 4.75 inches
Blue - 5.5 inches

**Q1: BERING SEA AREA
PRIBILOF DISTRICT**
Reg: Nonexclusive
Pot Limit:
50 - Vessels over 125 feet
40 - Vessels 125 feet or less
Dates:
Red & Blue - September 15
Brown - By Permit
Size: Red & Blue - 6.5 inches
Brown - 5.5 inches

O: DUTCH HARBOR
Reg: Exclusive - Red & Blue
Nonexclusive - Brown
Pot Limit: No Pot Limit
Dates:
Red & Blue - November 1
Brown - September 1
Size: Red & Blue - 6.5 inches
Brown - 6 inches

K: KODIAK
Reg: Exclusive - Red & Blue
Nonexclusive - Brown
Pot Limit: 25, 50, or 75
Depending on GHL
Dates:
Red & Blue - September 25
Brown - By Permit
Size: Red & Blue 7 inches
Brown - 6.5 inches

D: YAKUTAT
Reg: Exclusive
Pot Limit:
100 in Yakutat Bay
Dates:
Red & Blue - November 15
Brown - Emergency Order
Size: Red & Brown - 7 inches
Blue - 6.5 inches

T: BRISTOL BAY
Reg: Exclusive
Pot Limit:
250 - Vessels over 125 feet
200 - Vessels 125 feet or
less
Dates:
Red & Blue November 1
Brown - By Permit
Size: Red & Blue - 6.5 inches
Brown - 5.5 inches

H: COOK INLET
Reg: Superexclusive
Pot Limit: 40 or 75 Depend-
ing on GHL
Dates: Red & Blue - August 1
Brown - By permit during
spring Tanner Crab Season
Size: All species - 7 inches

A: SOUTHEASTERN
Reg: Exclusive
Pot Limits: 20 or 100
Depending on GHL
Dates: Red - November 1
Brown - February 15
Blue - Incidental to Red,
Brown & Tanner
Size: Red & Brown -
Blue - 6.5 inches

KEY:	Registration	Reg: Opening Dates	Dates:
	Guideline Harvest Level ...GHL	Minimum Legal Size	Size:

CENTRAL BERING SEA FISHERMEN'S ASSOCIATION
1500 W 33rd, Suite 110 Anchorage, Alaska 99503 (907) 279-6566 FAX 279-6228

April 8, 1994

FAX CONFIRMATION
Sent _____ Rec'd 4/8/94
hen

APR 11 1994

Rick Lauber, Chairman
North Pacific Fisheries Management Council
605 W. Fourth Avenue
PO Box 103136
Anchorage, Alaska 99510

Dear Mr. Lauber,

Subj: Amendment 21a - Revised, Pribilof Island No-Trawl Zone

Central Bering Sea Fishermen's Association is the original maker of this proposed amendment dating back to 1989. We believed then, and continue to believe now that the available data has been collected and assembled for this amendment, that the islands are a unique environment and ecosystem contributory to the overall health and welfare of the Bering Sea fisheries. We also believed that unrestricted trawling, particularly bottomtrawling, in the areas around the islands, would be detrimental to Blue King Crab and Korean Hair Crab stocks, have unusually high halibut bycatch, and be detrimental overall to fur seals and bird species populations, and the unique Central Bering Sea habitat around the islands.

CBSFA fishermen and island residents, including the City of St. Paul, are fully supportive of this measure. We see this as a conservation measure, primarily. But the amendment is also supportable because of its potential to provide long term benefits to the commercial longline and pot fisheries around the islands, due to improved habitat and fishing stocks, primarily crab. This measure has been supported by the National Wildlife Federation, by the Audubon Society, and by the Nature Conservancy, and by the State of Alaska. We urge the Council to act on the amendment after five long years of consideration and study, and take the initiative in providing special protections to the special areas around the Pribilof Islands.

We support the adoption of the protections that would be provided in either Alternative 7 or Alternative 8, as being within the intent and spirit of our original proposal, which is to provide the protections needed to blue king and hair crab habitats, as well as to eliminate areas of high bycatch, while minimally disrupting existing fishing operations and practices.

CBSFA does understand that some fisheries will be impacted, but it seems to us that the overall benefits will be positive, and that the record presented adequately demonstrates that significant potential economic and fishery benefits will accrue from adoption, including improved crab habitat and stocks, and reduced bycatch of halibut and commercially fished crab species. The record is not as clear that birds and seals will also benefit, but this is so because the data does not exist to demonstrate what may be inferentially deduced, if the amendment measures were adopted. We could suggest that if reservations exist among members of the Council, that the Pribilof No -Trawl Zone issue, if adopted at the April, 1994 meeting, could be revisited by the Council, after a four year period, to see if adjustments were necessary.

CBSFA is grateful to the State of Alaska for the technical support provided to review the existing data and gather the information necessary to present the amendment, and we believe that the job done by State personnel was as competent and as thorough as could possibly be made with existing data under existing conditions. We believe that the Council has acquired sufficient information and provided sufficient public notice to take an action to adopt the amendment.

Thank you very much for the opportunity to comment, and the patience of the Council and Council staff in pursuing this discussion for the past five years. We do urge that the Council take an action at this meeting if at all possible.

Sincerely,

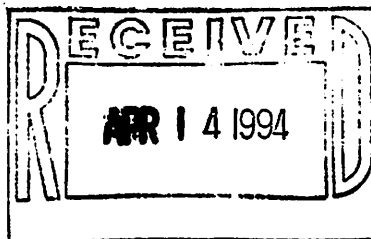


Perfenia Pletnikoff, Jr., Vice-President
Central Bering Sea Fishermen's Association

cc. St. George Tanaq Corporation
APICDA
St. George Fishermen's Association
City of St. George
City of St. Paul
Tanadgusix Corporation



ALASKA CRAB COALITION



3901 Leary Way (Bldg.) N.W., Suite #6 • Seattle, WA 98107 • (206) 547-7560 • FAX (206) 547-0130

April 14, 1994

LATE COMMENT

TO: Clarence G. Pautzke
Executive Director
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99510

FROM: Arni Thomson,
Executive Director

RE: COMMENTS ON THE ENVIRONMENTAL ASSESSMENT/REGULATORY
FLEXIBILITY ANALYSIS (EA/RIR) FOR REVISED AMENDMENT
21A TO THE BERING SEA/ALEUTIAN ISLANDS GROUND FISH
FISHERY MANAGEMENT PLAN.

THE ACC RECOMMENDS ADOPTION OF ALTERNATIVE #8, AN
AREA TO BE CLOSED TO ALL TRAWLING, DEFINED BY
CRITICAL BLUE KING CRAB HABITAT.

The ACC has reviewed the EA/RIR for Amendment 21A to the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan and recommends adoption of Alternative #8, an area defined by blue king crab habitat, to be closed to all trawling.

The Executive Summary of the analysis makes several important points that lead to adoption of Alternative #8.

- ** Alternatives 2-7 would limit access by trawlers to the area south of the Pribilof Islands between the 200m and 100m depth contours which is not important blue king crab habitat.
- ** Through spatial display of NMFS annual trawl surveys; foreign, JV, and domestic observer data; and the directed commercial crab catch, the analysis of Alternative #8 provides an understanding of blue king crab habitat, trawl fishing effort and the distribution of feeding areas of other marine species. Analysis of this information was used to delineate an area for closures that provides trawl access to the majority of groundfish resources in the Pribilof Islands area, yet affords habitat protection for blue king crab. The boundary selected does not encompass the entire range of blue king crab in the area, but does surround the

habitat with highest blue king crab concentrations.

- ** Included in the boundary is habitat vital to juvenile blue king crab, populations of red king crab and populations of Korean hair crab.
- ** The boundary in Alternative #8 was selected to allow trawl access to the edge of the 100m contour and the groundfish resources to the east and north of the Pribilof Islands. The boundary was also drawn with straight edges and as few corners as possible in order to facilitate ease of closure enforcement. Analysis has shown little or no impact on pollock or Pacific cod fisheries and a small impact on flatfish fisheries.
- ** The impact on king crab stocks and Korean hair crab stocks under Alternative 8 is expected to provide the most beneficial results and contain no negative impacts when compared with Alternative #1, status quo.

CONCLUDING REMARKS:

The directed commercial fishery for blue king crab has been closed since 1988 and the Alaska Crab Coalition has supported the closure of the fishery for five years as an experiment in rebuilding a depressed king crab stock. There is some evidence to indicate that stocks are slowly improving in this area.

NMFS 1993 cumulative king crab bycatch reports for the trawl fisheries in portions of the statistical areas #513 and #521, adjacent to the Pribilof Islands, totaled 99,447 blue king crab and 39,000 red king crab.

This is new information that was not available in the EA/RIR that further supports adoption of a king crab protection zone for the Pribilof Islands.

The king crab protection zone, as defined in Alternative #8, for the Pribilof Islands will protect most of the king crab stocks, and enhance the rebuilding of depressed blue king crab stocks without causing foregone harvest of groundfish.