

## **11.0 Appendices**

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**ALASKA DEPARTMENT OF  
FISH & GAME**  
*DIVISION OF COMMERCIAL FISHERIES*

**NEWS RELEASE**  
December 13, 2004

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STATE OF ALASKA

CENTRAL REGION

Dept. of Fish & Game  
Wayne Regelin, Acting Commissioner  
Robert D. Mecum, Director  
Division of Commercial Fisheries

Contact: Charlie Trowbridge  
Regional Groundfish/Shellfish  
Management Biologist  
3298 Douglas Place  
Homer, Alaska

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## **Seabird Avoidance Regulations**

Federal regulations (50 CFR 679.24) require certain commercial hook and line fishing vessels to use seabird avoidance measures to reduce the incidence of seabird bycatch. Regulation **5 AAC 28.055**, adopts by reference the federal regulations and **requires seabird avoidance measures in all longline fisheries for groundfish in state waters**. This affects previously exempt vessels in Prince William Sound and Cook Inlet state waters fisheries for sablefish, parallel Pacific cod, and miscellaneous groundfish. Vessels fishing for IFQ halibut in state waters were previously covered under the federal regulations. The new regulations are summarized below. The full text of the federal rule is available at: <http://www.fakr.noaa.gov/frules/fr1930.pdf>

### **Seabird Avoidance Plan**

All vessels greater than 26 feet length overall (LOA) are required to have a current, signed seabird avoidance plan on board and are required make it available for inspection. A plan template can be downloaded from the NMFS website at:

<http://www.fakr.noaa.gov/protectedresources/seabirds/torilines/form.pdf>

### **Seabird Avoidance Gear**

The type of avoidance gear required depends on vessel size. Most vessels over 32 feet are required to use "streamer lines", also called tori lines or bird scaring lines. There are specific design requirements and performance standards for the lines. Detailed information, including diagrams can be found at the NMFS website: <http://www.fakr.noaa.gov/protectedresources/seabirds/guide.htm>

While fishing for groundfish with longline gear in state waters of Cook Inlet and Prince William Sound vessels must have on board, make available for inspection, and use while deploying longline, the following gear:

<b>Vessel LOA (feet) and type</b>	<b>Avoidance Gear</b>
Under 26	none
26 – 55 without masts or rigging	Minimum of 1 buoy bag line
26 – 32 with masts or rigging	Minimum of 1 buoy bag line
32 – 55 with masts or rigging	Minimum of a single streamer line
Over 55	Minimum of a single streamer line

Exceptions: In winds over 45 knots, use of gear is optional.

**Other Requirements**

In addition to the required seabird avoidance plan and gear, the regulations specify that fish waste (offal) must be discharged aft of the hauling station or on the opposite side of the vessel. All hooks must be removed from the offal. No offal or residual bait may be intentionally discharged while setting gear.

All groundlines must be weighted and setting gear at night or using a lining tube (a device that deploys gear underwater) does not exempt the vessel from use of seabird avoidance gear.

**Obtaining Seabird Avoidance Gear**

While supplies last, free streamer lines are available at the following locations. It is important to contact them by telephone to arrange receipt of the lines.

THE AUCTION BLOCK  
 770 FISH DOCK ROAD #7  
 HOMER, AK 99603  
 Phone: 907-235-7267

RESURRECTION BAY SEAFOODS  
 200 LOWELL POINT ROAD  
 SEWARD, AK 99664  
 Phone: 907-224-3366

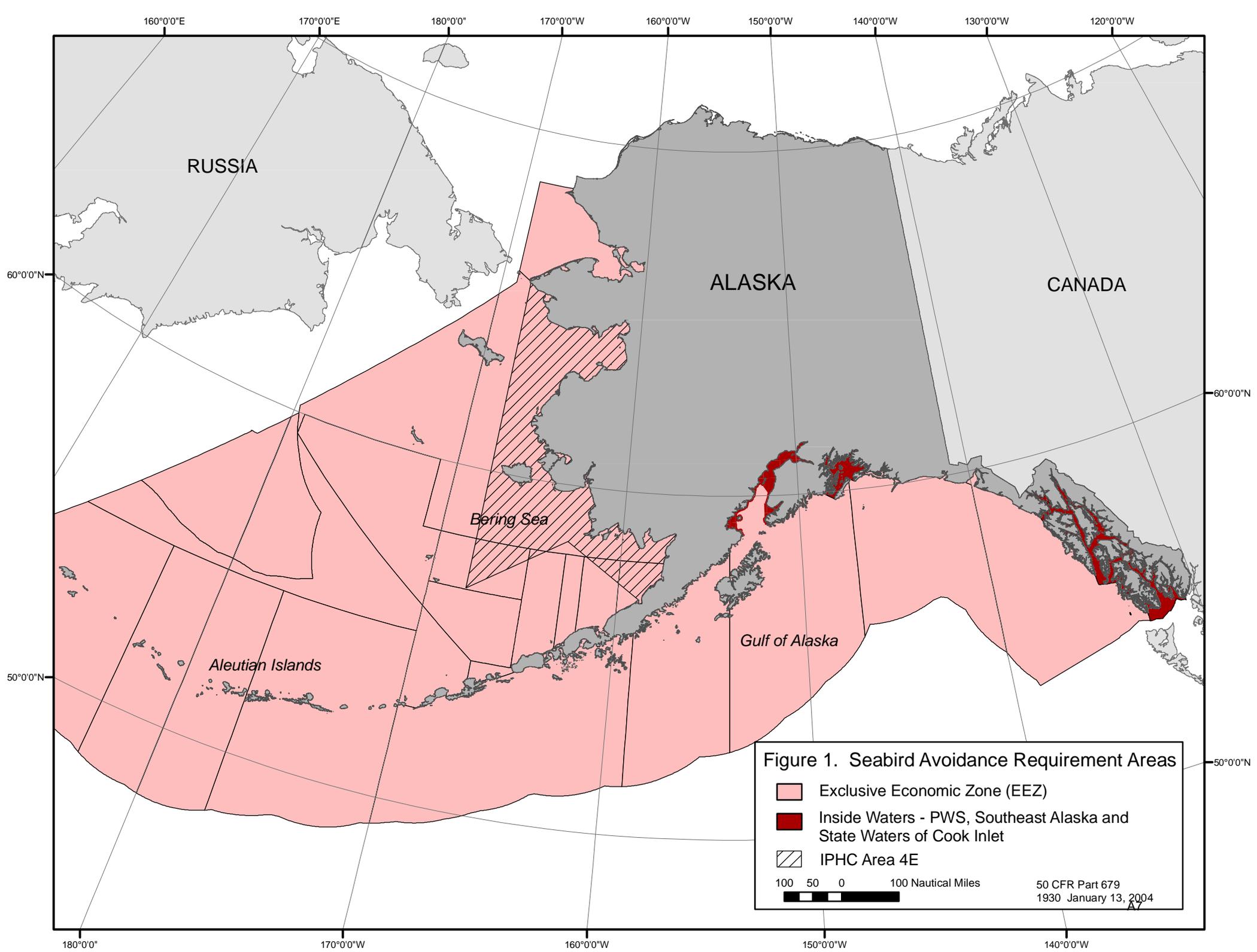
For additional information on Cook Inlet or Prince William Sound groundfish regulations, contact ADF&G in Homer, at 907-235-8191 or in Cordova at 907-424-3212.

**END**

## Appendix 2. Maps and Figures.

- Figure 1. Seabird Avoidance Requirement Areas.
- Figure 2: Alternative 3 Exception Areas.
- Figure 3: Seabird Colonies in the Alaska EEZ
- Figure 4 Two meter seabird access window (Melvin et al 2006).
- Figure 5A: Estimated incidental take of seabirds by fishery management region, 1993 – 2004.
- Figure 5B: Estimated seabird bycatch rate and total number of hooks, 1993 – 2004.
- Figure 6: Observations of Short-tailed albatross, 2002-2004. (Melvin et al, 2006)
- Figure 7A: Estimated Seabird Bycatch in Alaska longline fisheries, Aleutian Islands.
- Figure 7B: Estimated Seabird Bycatch in Alaska longline fisheries, Gulf of Alaska
- Figure 7C: Estimated Seabird Bycatch in Alaska longline fisheries, Bering Sea.
- Figure 7D: Estimated Seabird Bycatch in Alaska longline fisheries, Alaska Total.
- Figure 8: Longline Survey Stations used to observe seabirds.
- Figure 9: Observations of Black-footed albatross, 2002-2004.
- Figure 10: Observations of seabird species of concern in southeast Alaska inside waters.
- Figure 11: Seabird colony locations and distribution of longline effort in inside waters.
- Figure 12: Inside waters seabird colony species composition
- Figure 13: Observations of Laysan albatross, 2002-2004.
- Figure 14: Observations of Gull Species, 2002-2004.
- Figure 15. Spatial distribution of small vessel hook-and-line effort.
- Figure 16. Short-tailed albatross tag locations, 2001-2006.
- Figure 17. Short-tailed albatross locations in Cross Sound, 2006.
- Figure 18. National Weather Service National Data Buoy Center buoys in Alaska waters. (NDBC website accessed December 2006).

- Figure 19. Number of days during which wind speed exceeded 30 knots in at least one 10-minute interval at a minimum of one NDBC buoy. Data from NWS NDBC, 2002-2005.
- Figure 20. Monthly distribution of Pacific cod landings from vessels less than 55 feet fishing in the EEZ, 2003-2005.
- Figure 21. Monthly distribution of Pacific halibut landings, 2003-2005.



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Bering Sea

Aleutian Islands

Gulf of Alaska

Figure 1. Seabird Avoidance Requirement Areas

- Exclusive Economic Zone (EEZ)
- Inside Waters - PWS, Southeast Alaska and State Waters of Cook Inlet
- IPHC Area 4E

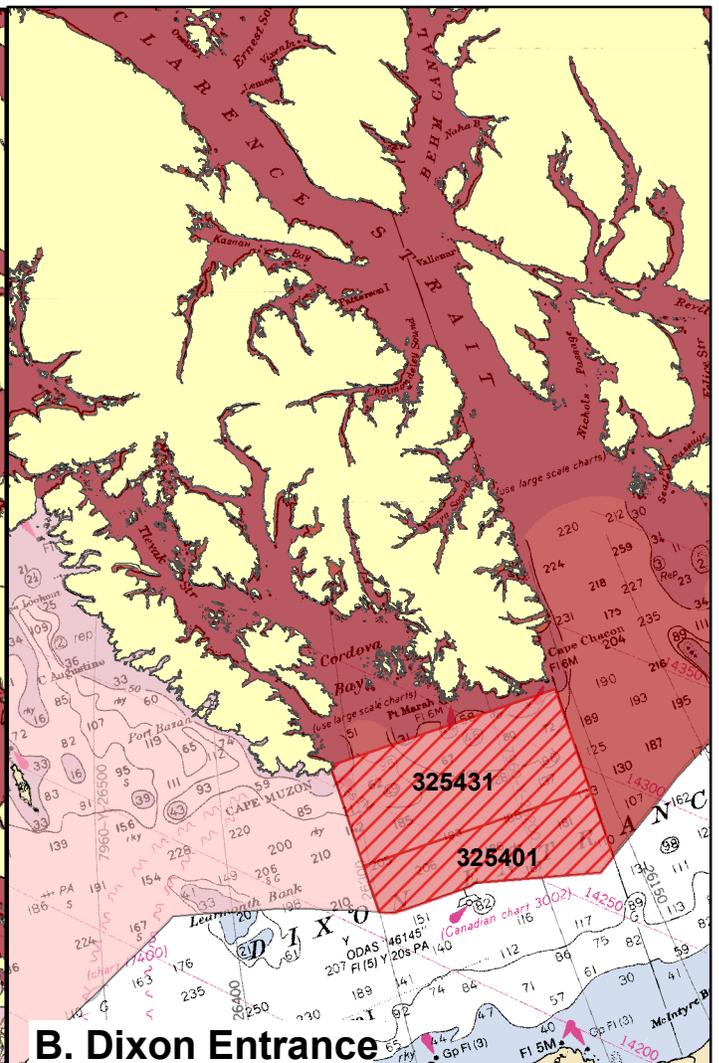
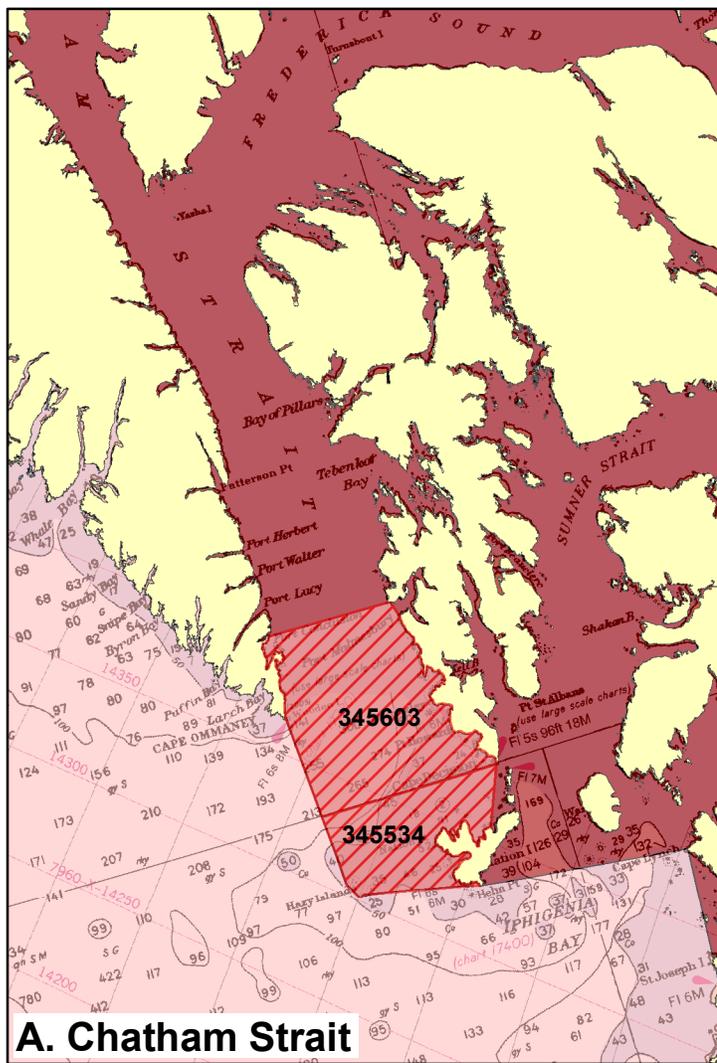
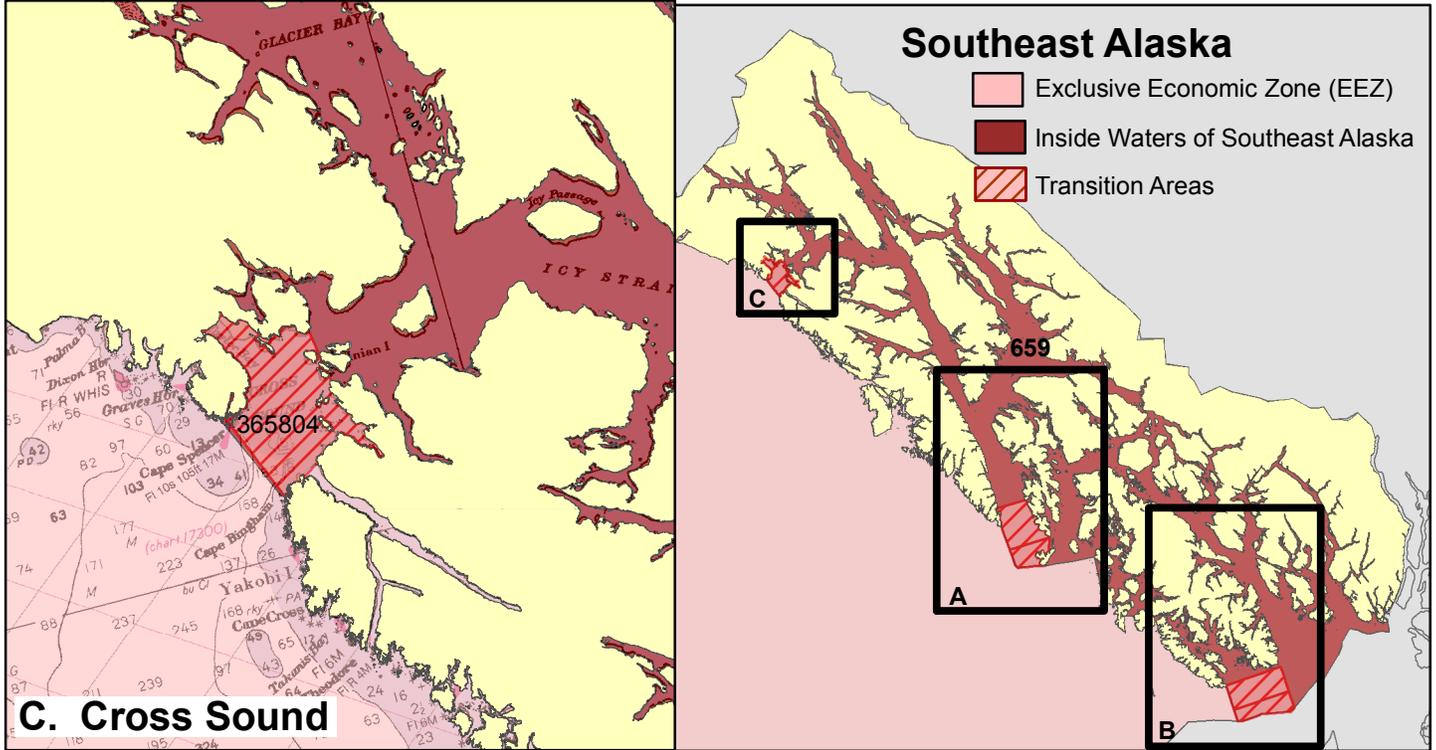
100 50 0 100 Nautical Miles

50 CFR Part 679  
1930 January 13, 2004

A7

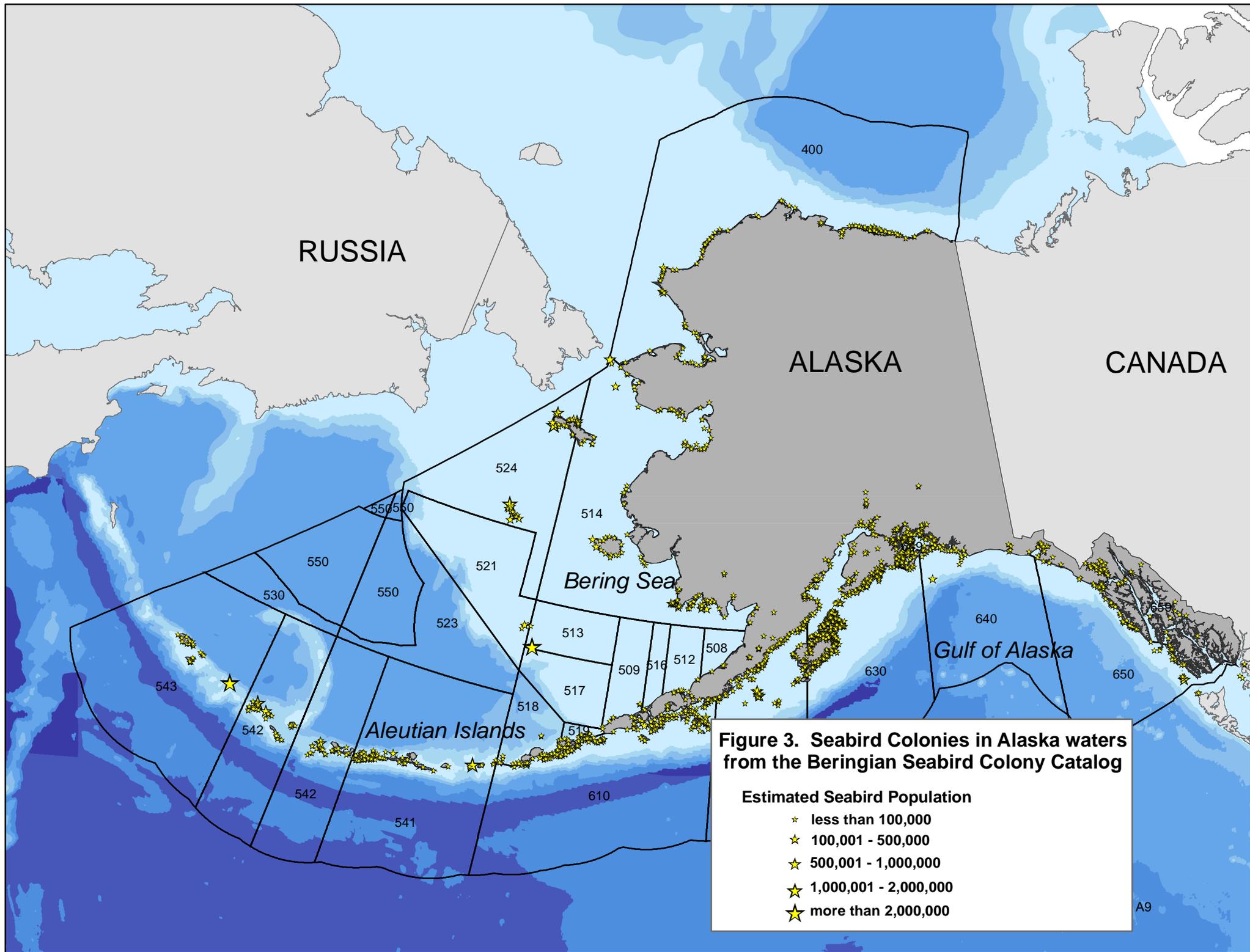
**Figure 2. NPFMC Motion (February 2007)**

In these transition areas, as in EEZ waters, seabird avoidance gear and standards are required.



In Chatham Strait, the transition area is defined as all waters inside ADF&G groundfish statistical areas 345603 and 345534 south of straight line between Point Harris (latitude 56.17.25 N) and Port Armstrong.

In Cross Sound, the transition area is defined as all waters inside ADF&G groundfish statistical areas 365804 west of a straight line from Point Wimbledon extending south through the Inian Islands to Point Lavinia (136.21.17 E).



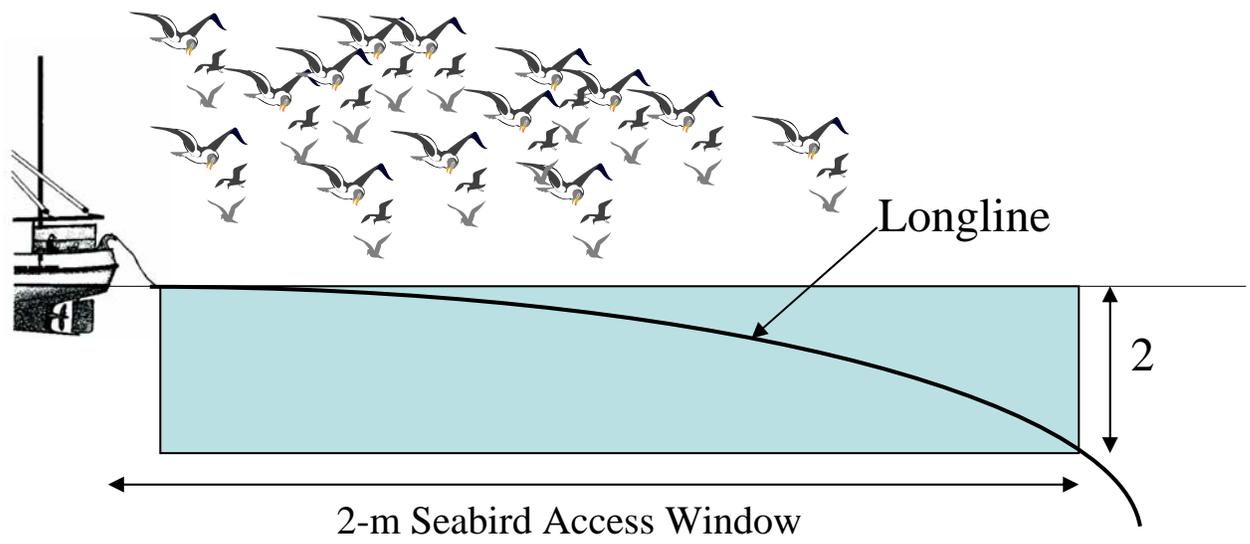


Figure 4. Two meter seabird access window. Source: Melvin et al, 2006.

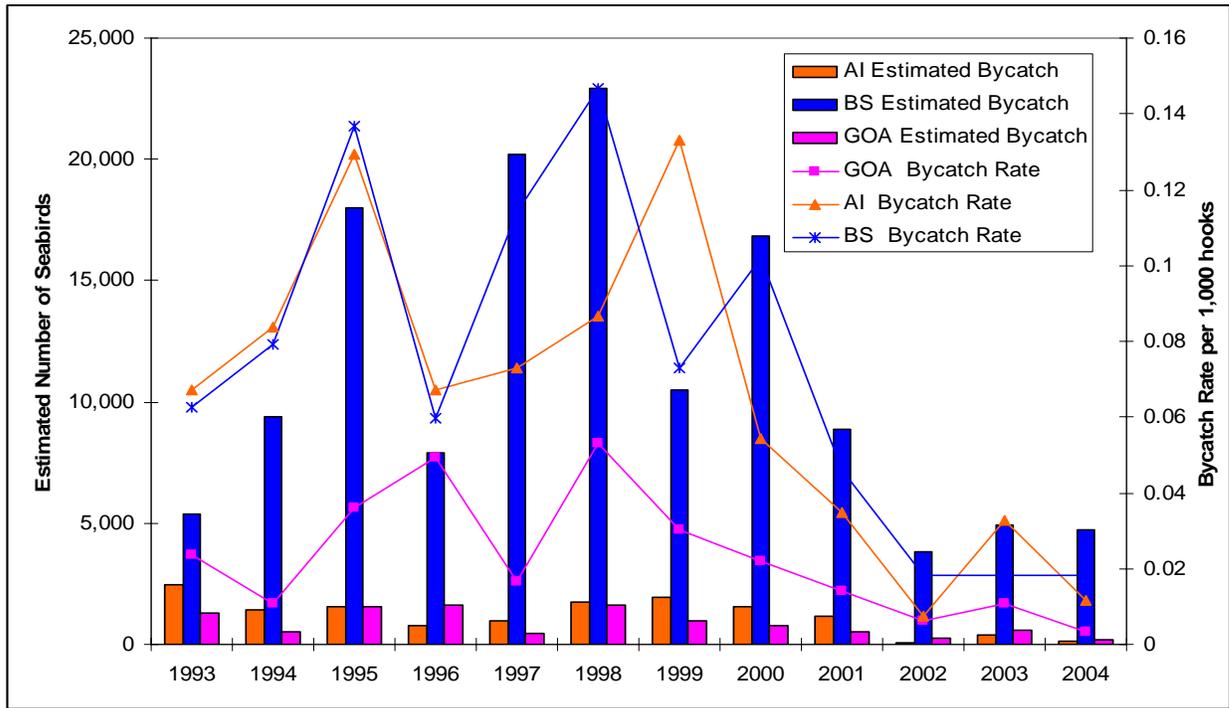


Figure 5A. Estimated incidental take of seabirds in the Aleutian Islands, Bering Sea, and Gulf of Alaska fishery management regions groundfish demersal longline fishery, 1993 – 2004. Data from NMFS (2006).

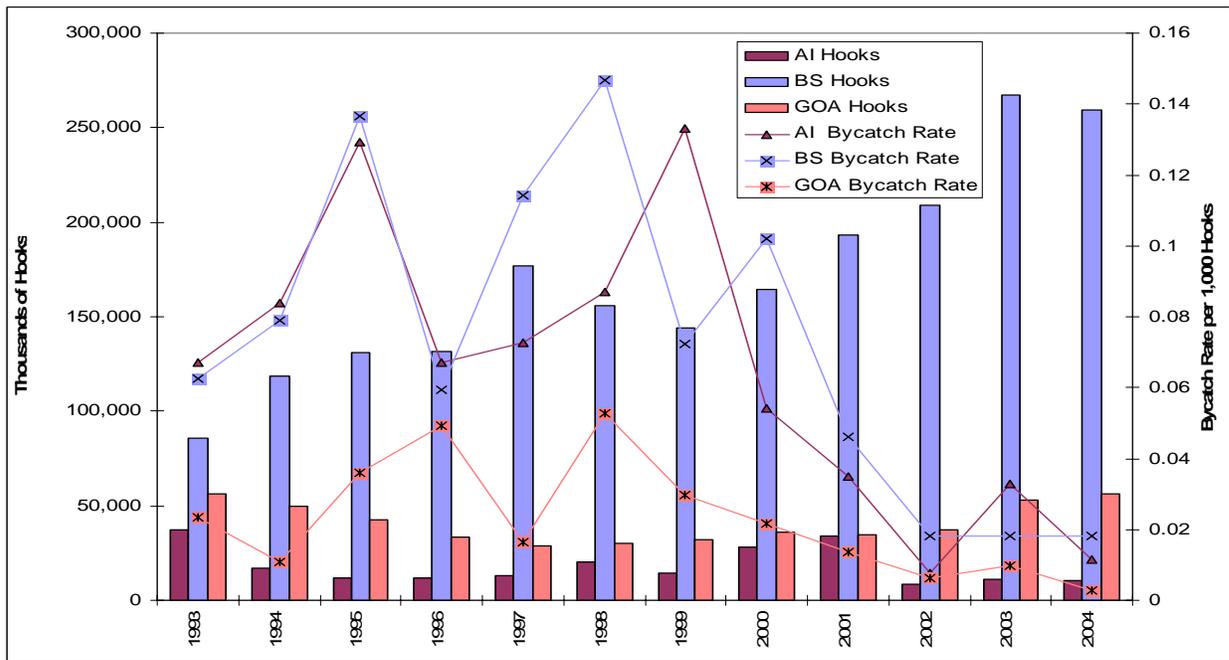
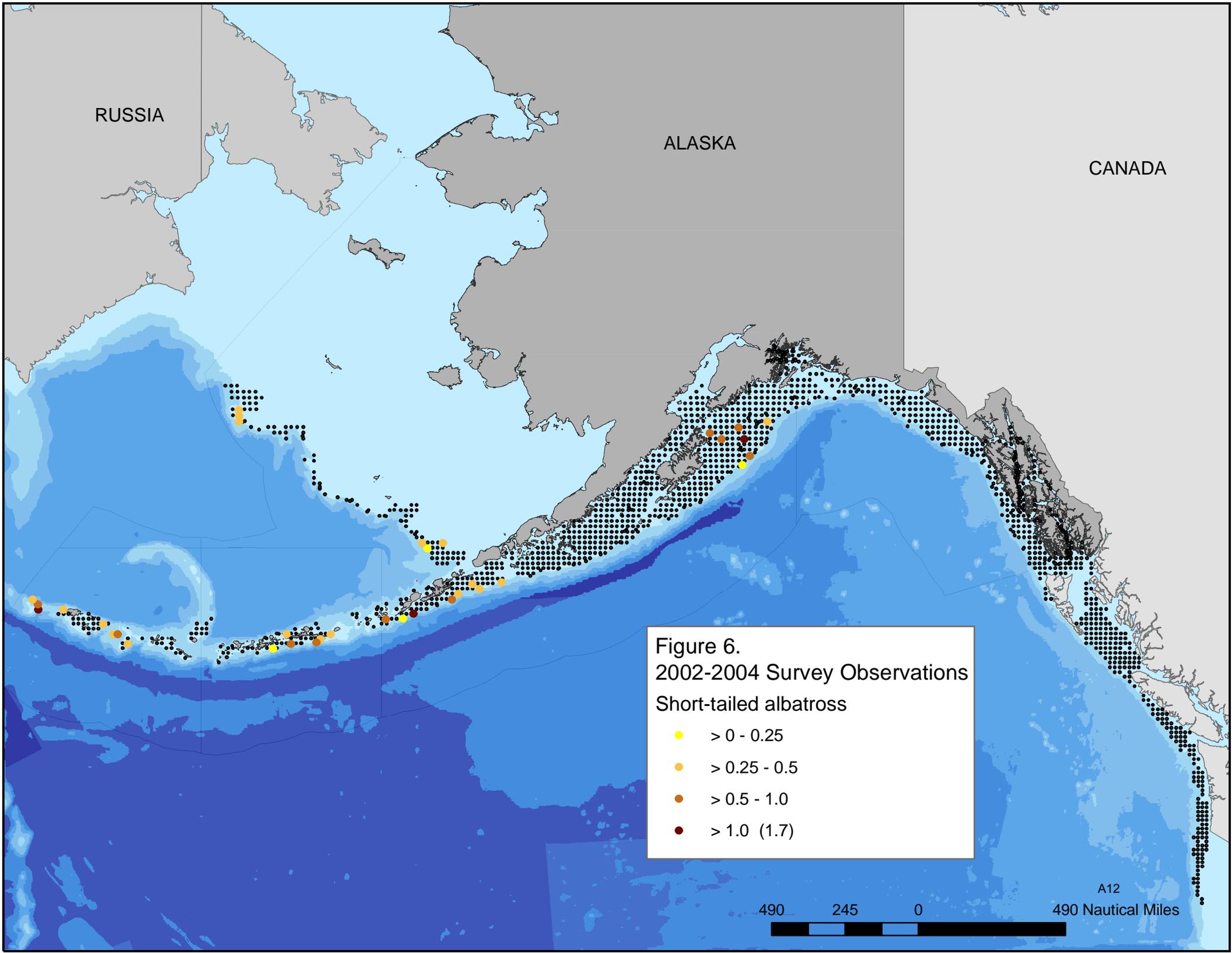


Figure 5B. Estimated bycatch rate of seabirds in the Aleutian Islands, Bering Sea, and Gulf of Alaska fishery management regions groundfish demersal longline fishery, 1993 – 2004, compared to total number of hooks in the water. Data from NMFS (2006).



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Figure 6.  
2002-2004 Survey Observations  
Short-tailed albatross

- > 0 - 0.25
- > 0.25 - 0.5
- > 0.5 - 1.0
- > 1.0 (1.7)

490 245 0

A12  
490 Nautical Miles

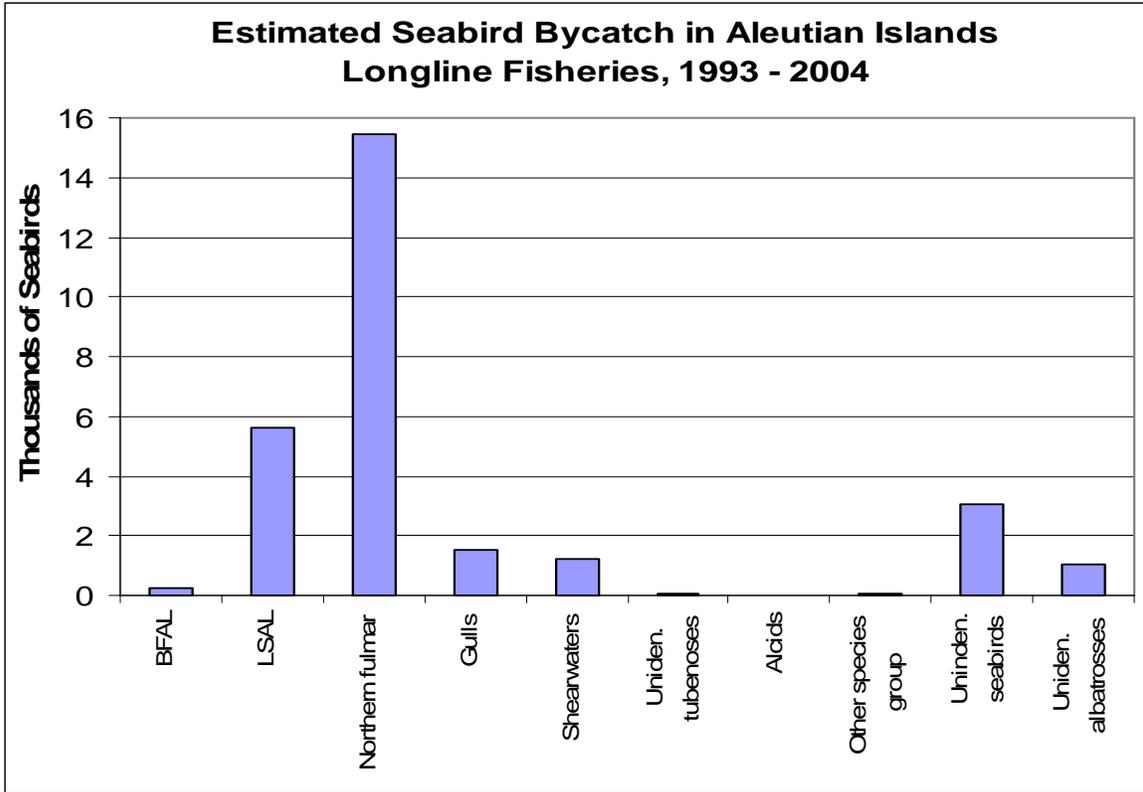


Figure 7A. Estimated seabird mortality in the Aleutian Islands, 1993-2004 (NMFS 2006).

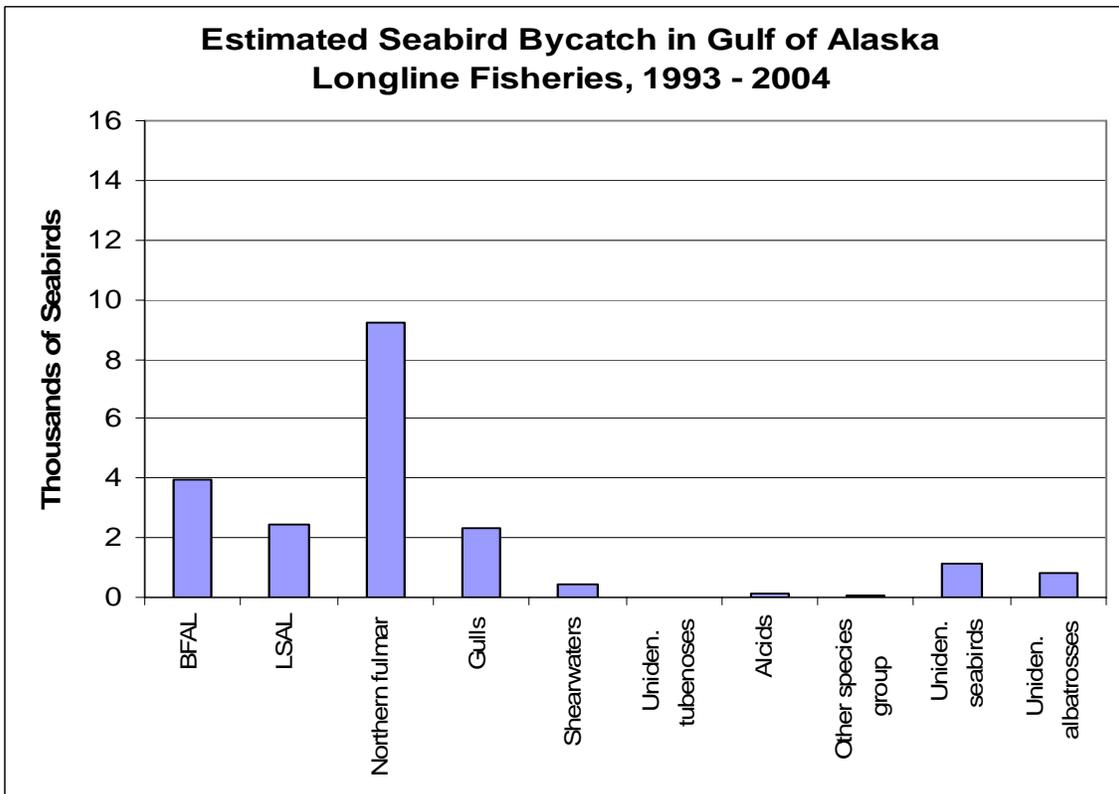


Figure 7B. Estimated seabird mortality in the Gulf of Alaska, 1993-2004 (NMFS 2006).

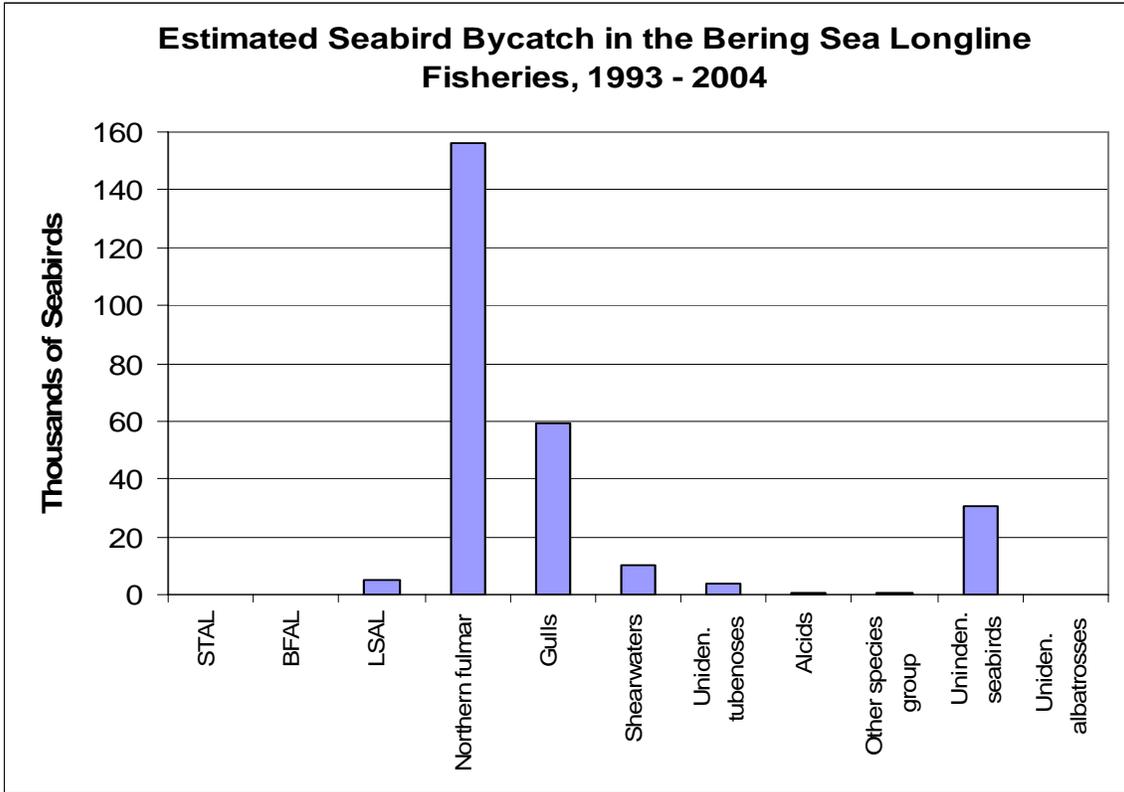


Figure 7C. Estimated seabird mortality in the Bering Sea, 1993-2004 (NMFS 2006).

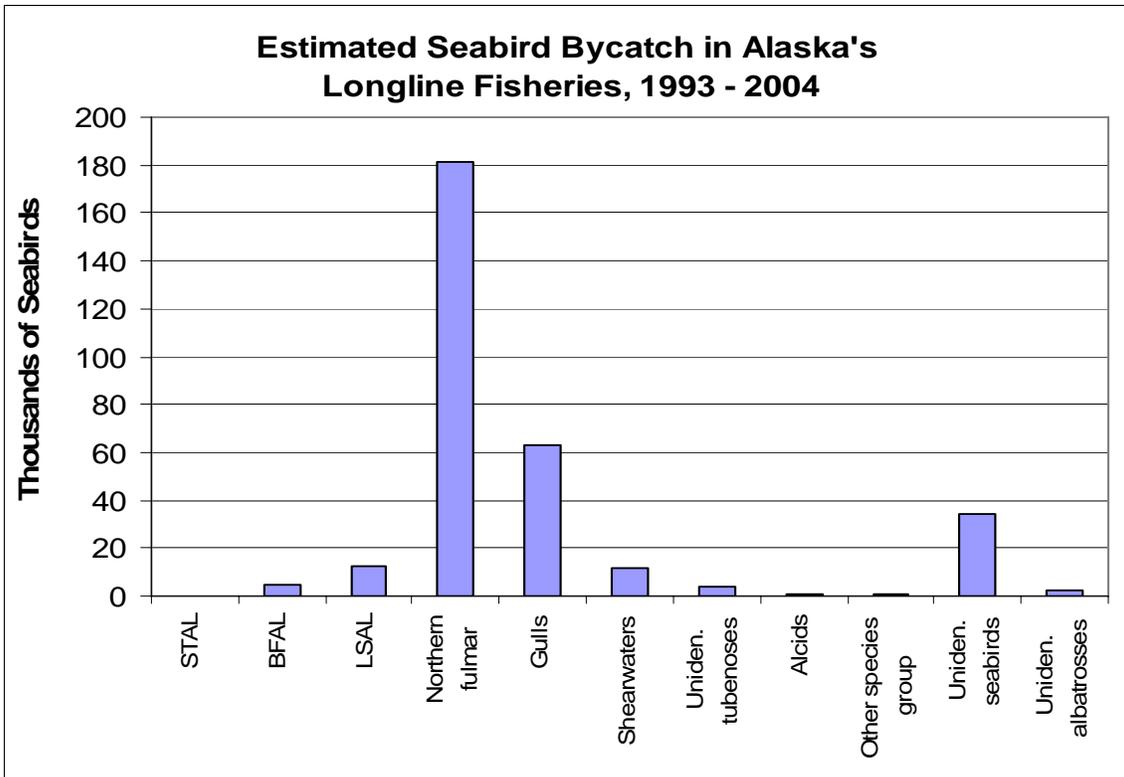


Figure 7D. Estimated seabird mortality in Alaska, 1993-2004 (NMFS 2006).

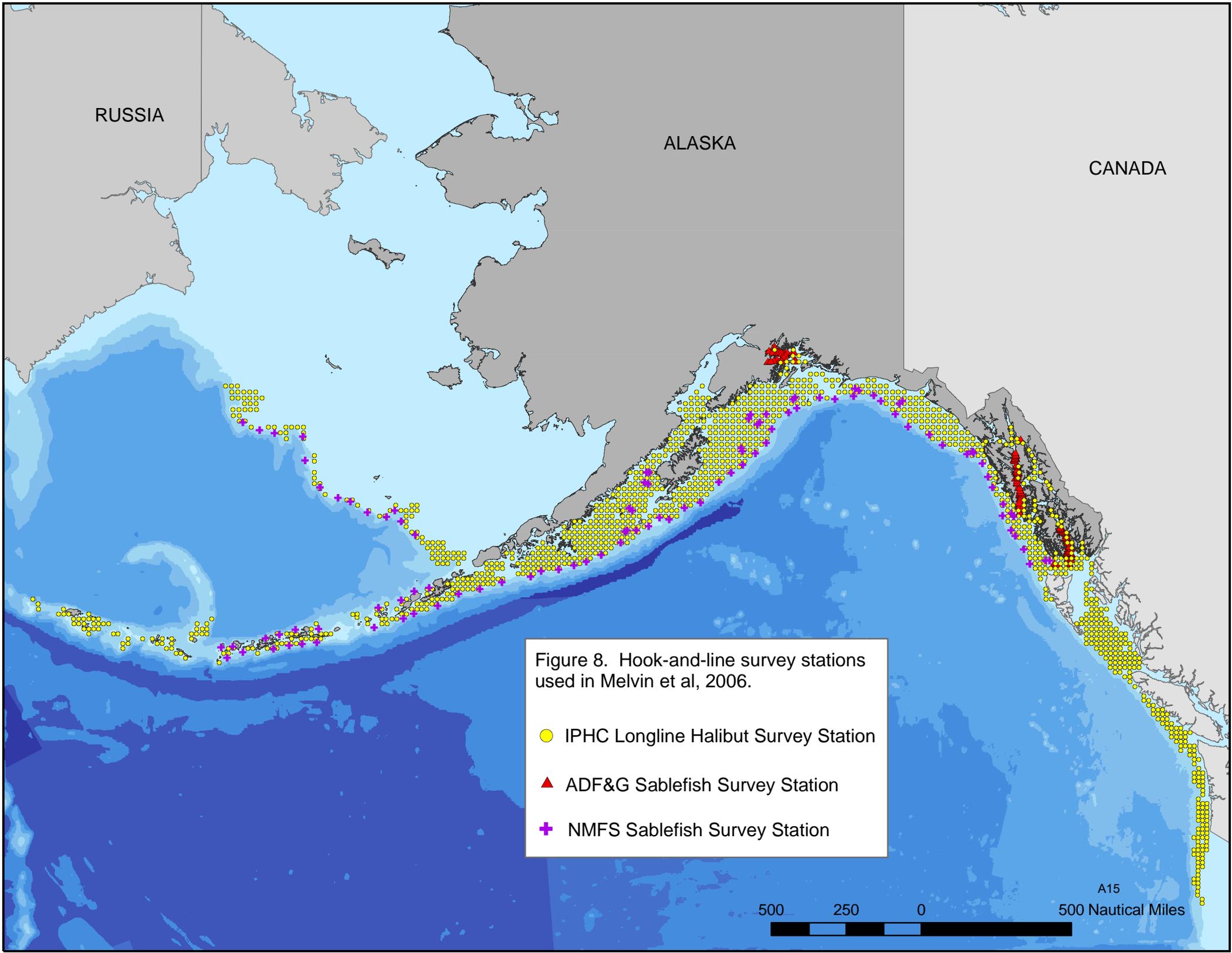
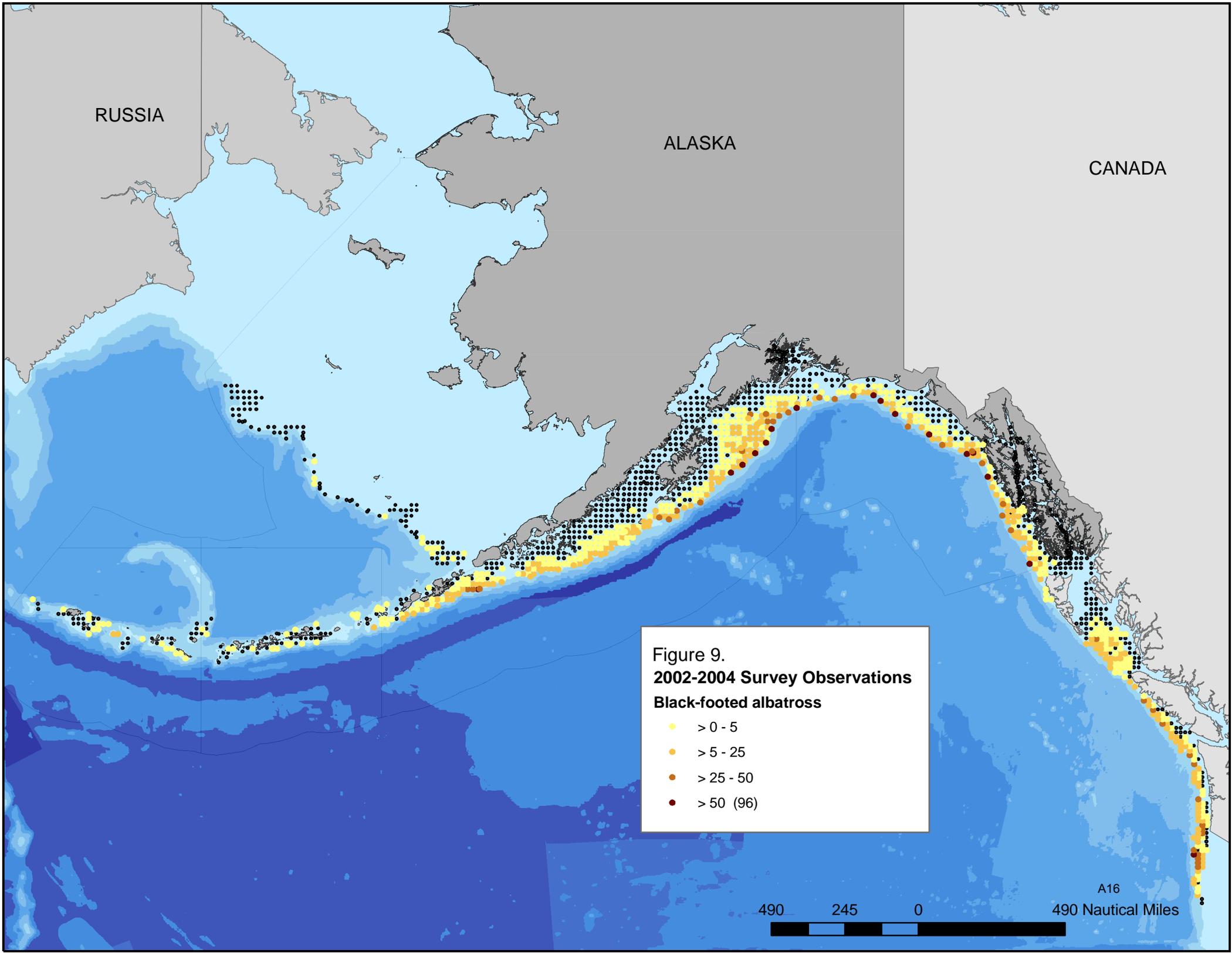


Figure 8. Hook-and-line survey stations used in Melvin et al, 2006.

- IPHC Longline Halibut Survey Station
- ▲ ADF&G Sablefish Survey Station
- ⊕ NMFS Sablefish Survey Station



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Figure 9.  
2002-2004 Survey Observations  
Black-footed albatross

- > 0 - 5
- > 5 - 25
- > 25 - 50
- > 50 (96)

490 245 0

A16  
490 Nautical Miles

Figure 10. Observations of Seabird Species likely to interact with hook-and-line gear in Chatham Strait and Dixon Entrance

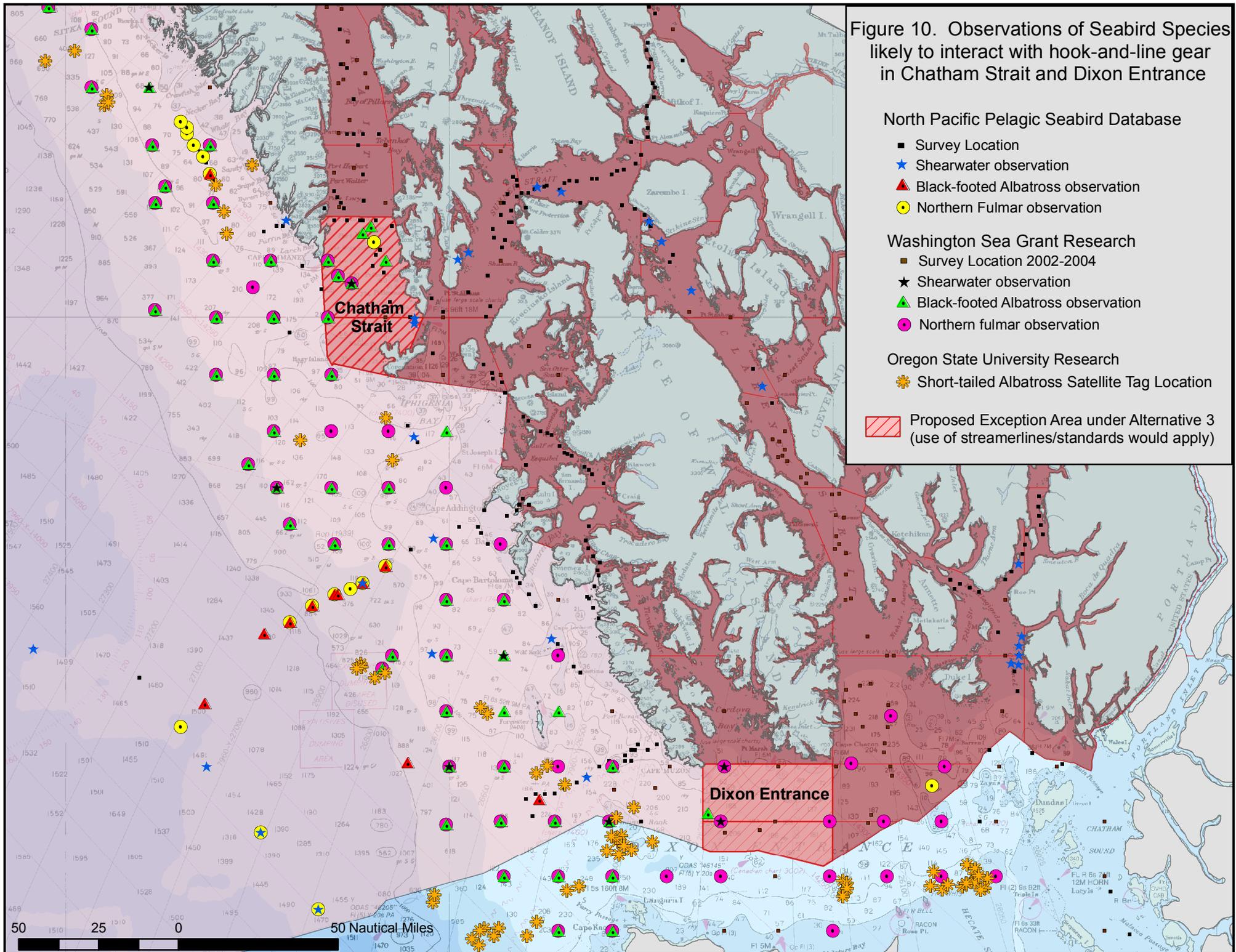


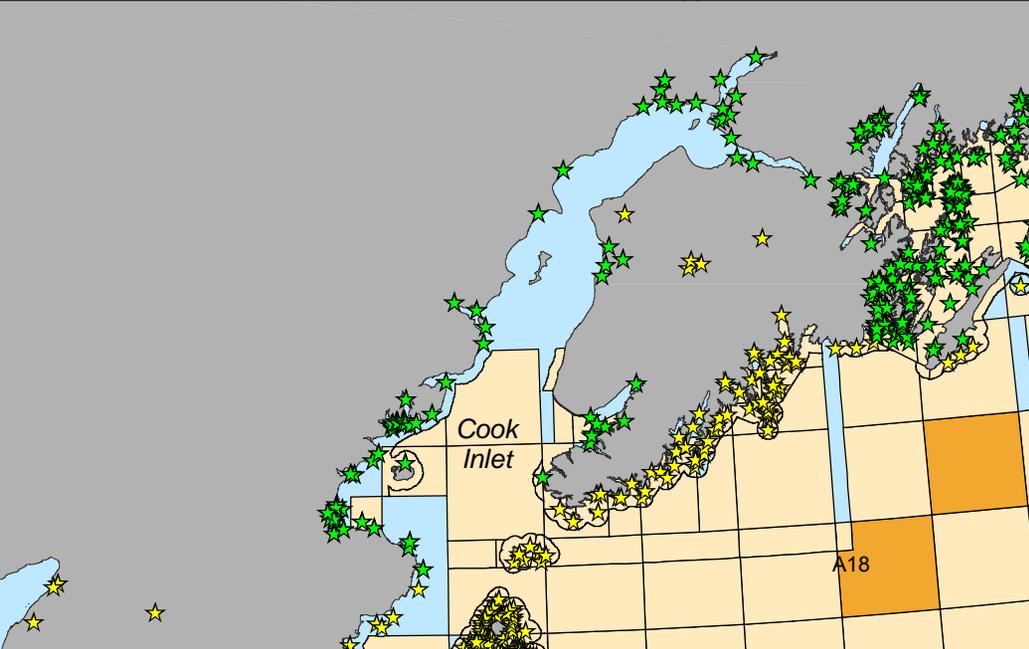
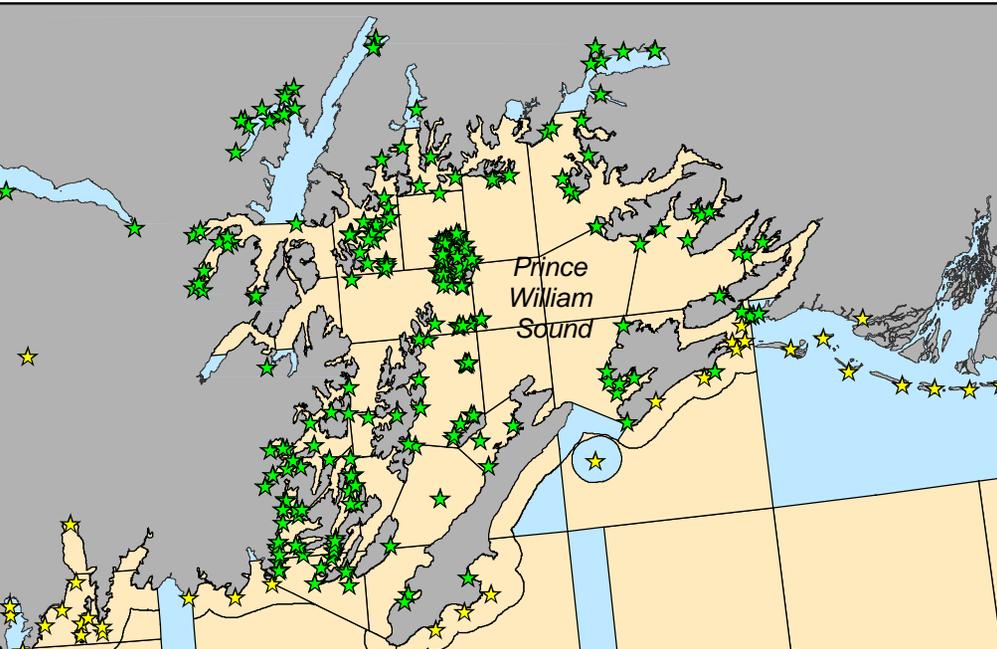
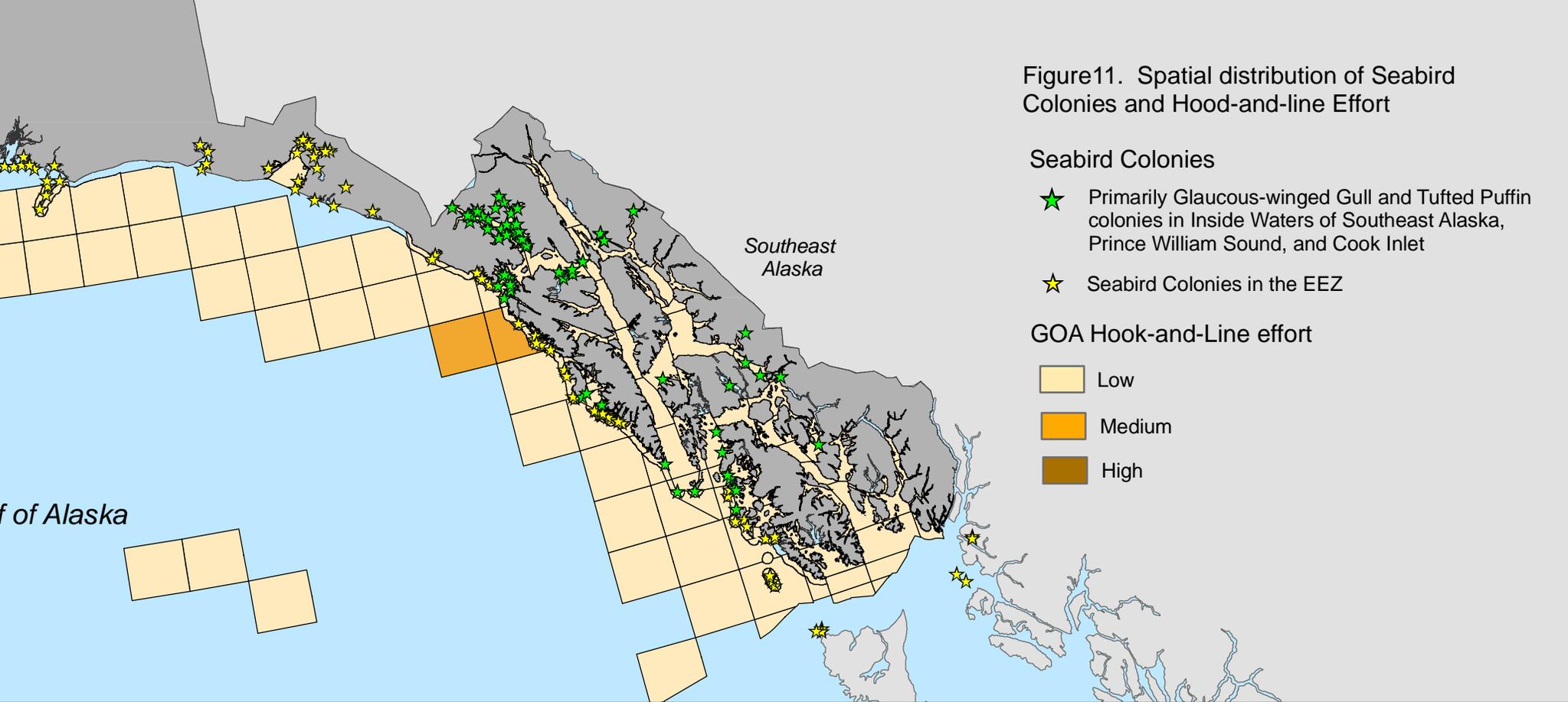
Figure 11. Spatial distribution of Seabird Colonies and Hood-and-line Effort

Seabird Colonies

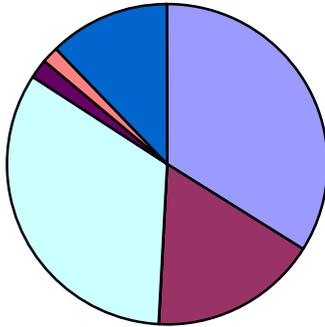
- ★ Primarily Glaucous-winged Gull and Tufted Puffin colonies in Inside Waters of Southeast Alaska, Prince William Sound, and Cook Inlet
- ★ Seabird Colonies in the EEZ

GOA Hook-and-Line effort

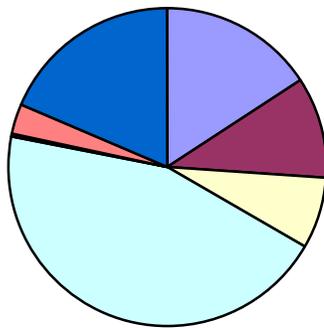
- Low
- Medium
- High



### Prince William Sound



### Southeast Alaska



### Cook Inlet

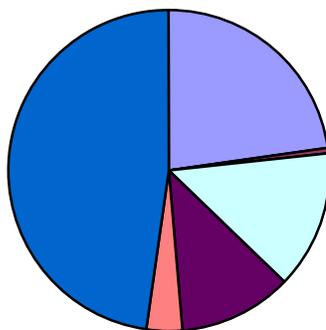
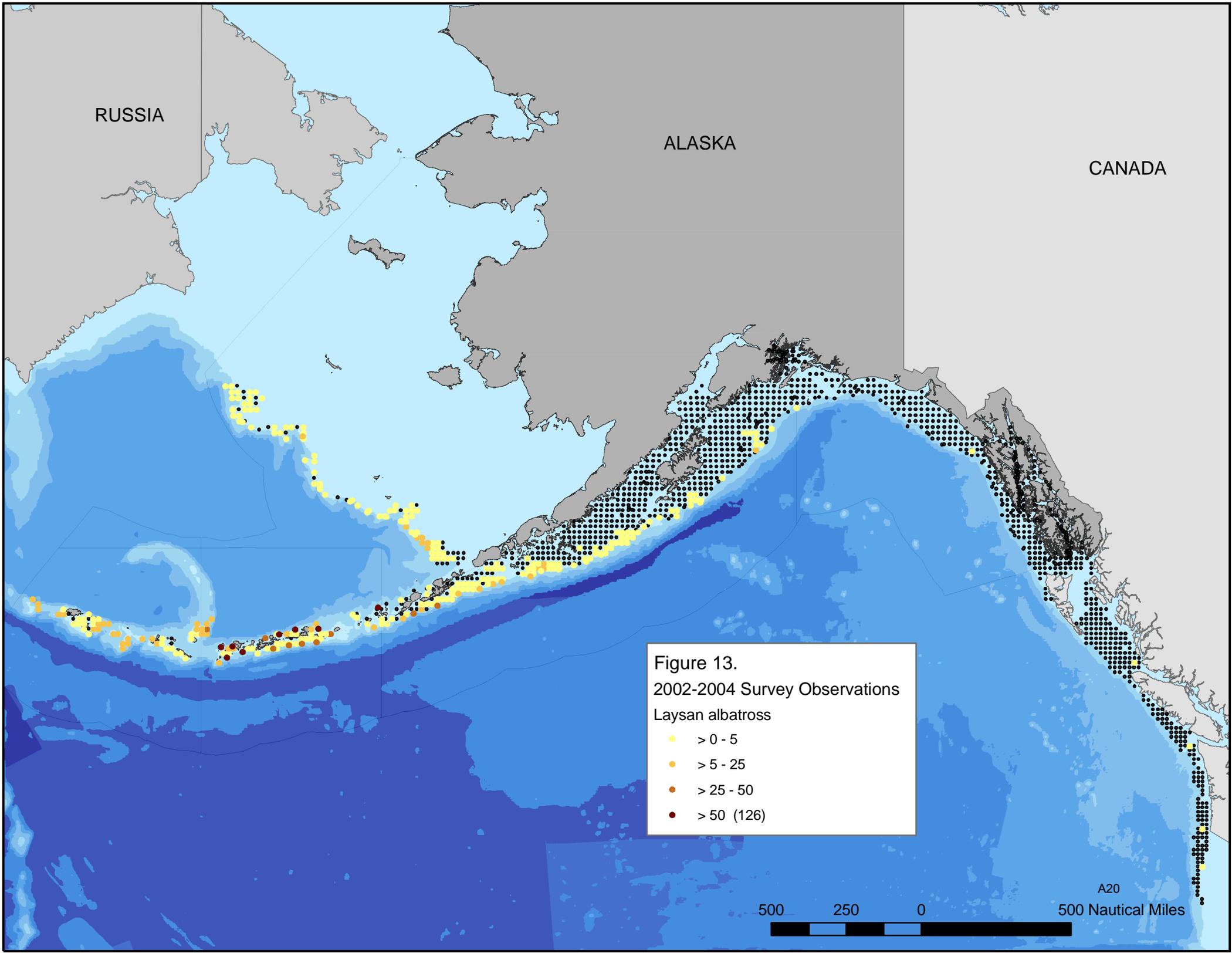


Figure 12. Seabird species composition at colonies in inside waters.



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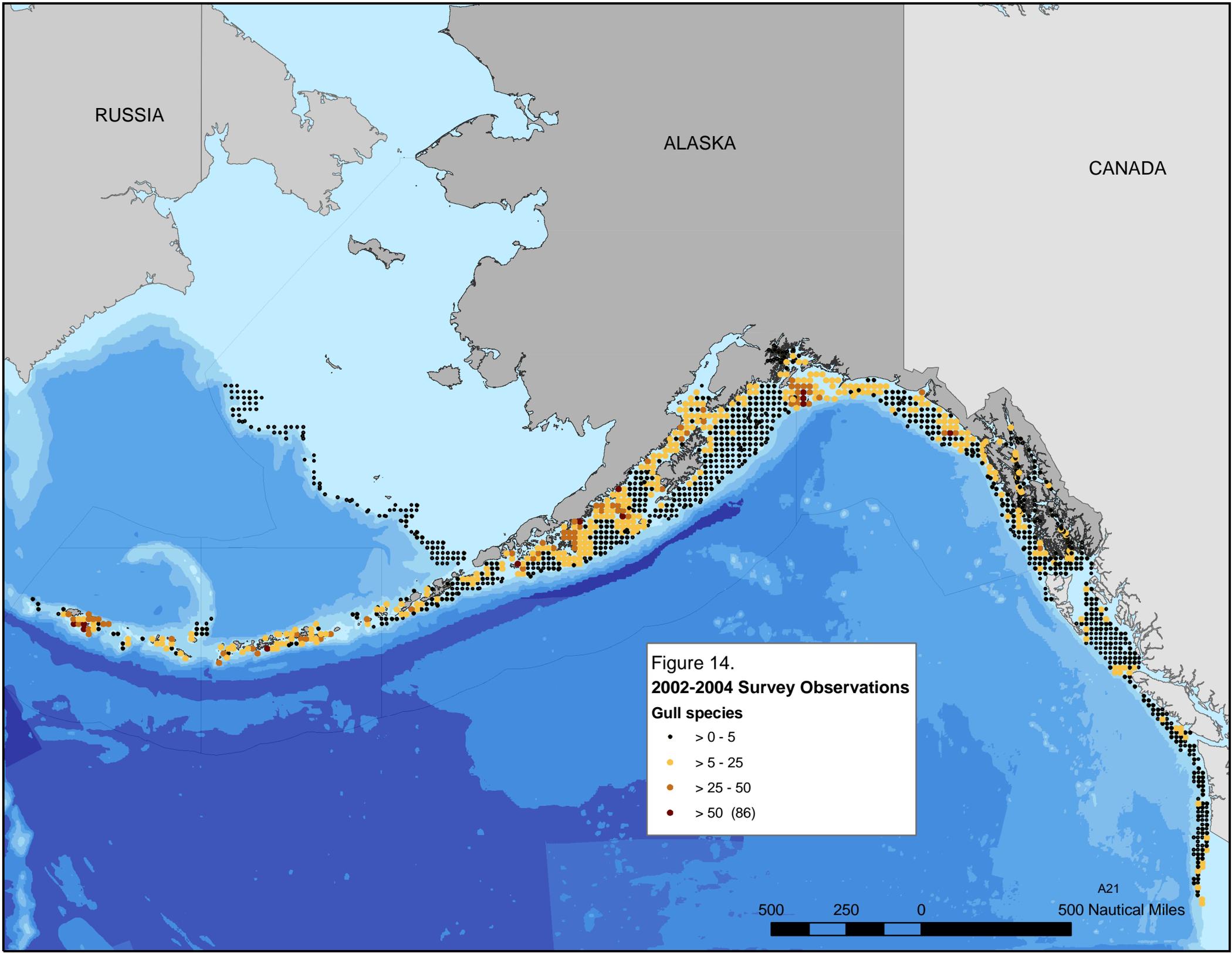
Figure 13.  
2002-2004 Survey Observations

Laysan albatross

- > 0 - 5
- > 5 - 25
- > 25 - 50
- > 50 (126)

500 250 0

A20  
500 Nautical Miles



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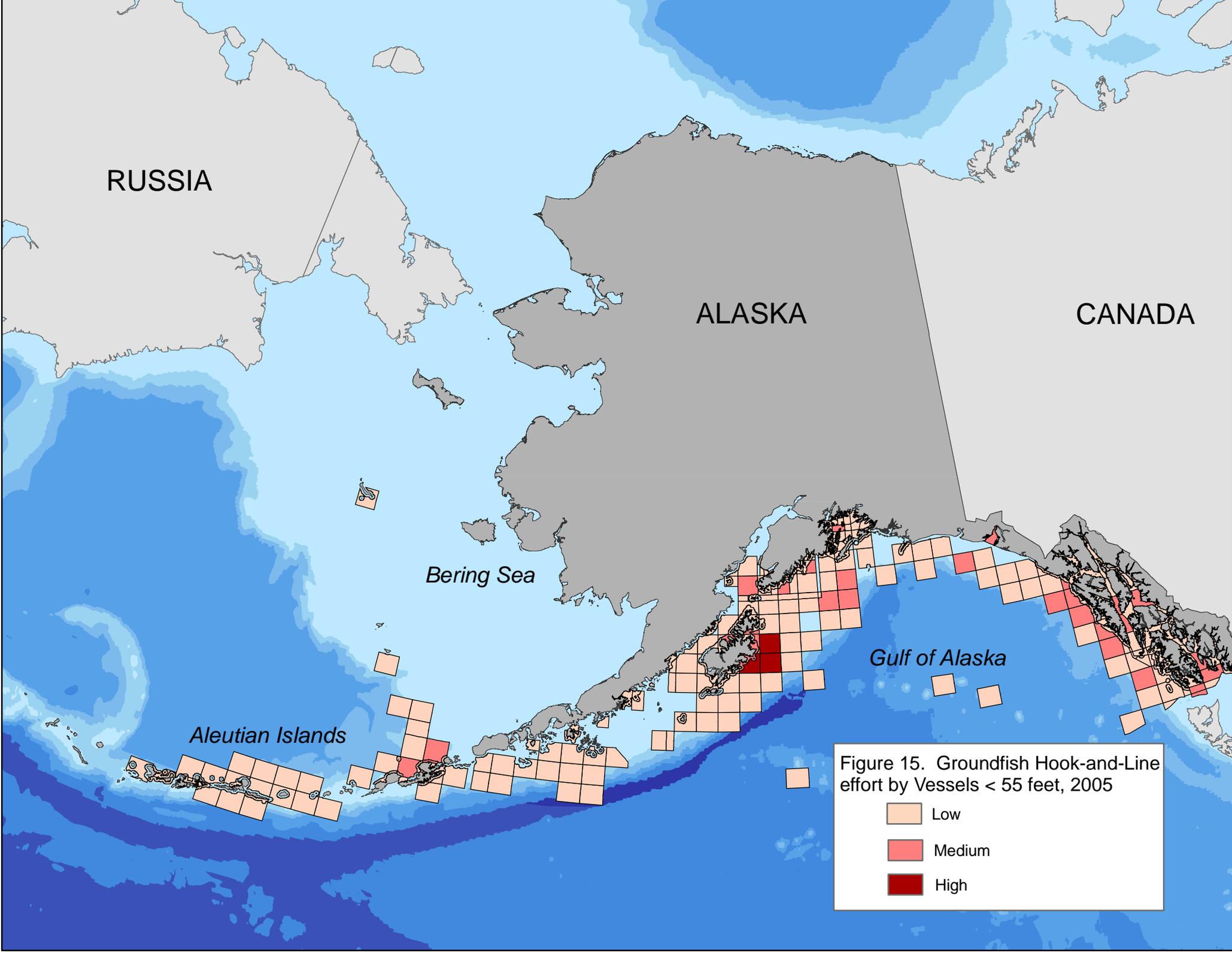
Figure 14.  
2002-2004 Survey Observations

Gull species

- > 0 - 5
- > 5 - 25
- > 25 - 50
- > 50 (86)

500 250 0

A21  
500 Nautical Miles



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Bering Sea

Gulf of Alaska

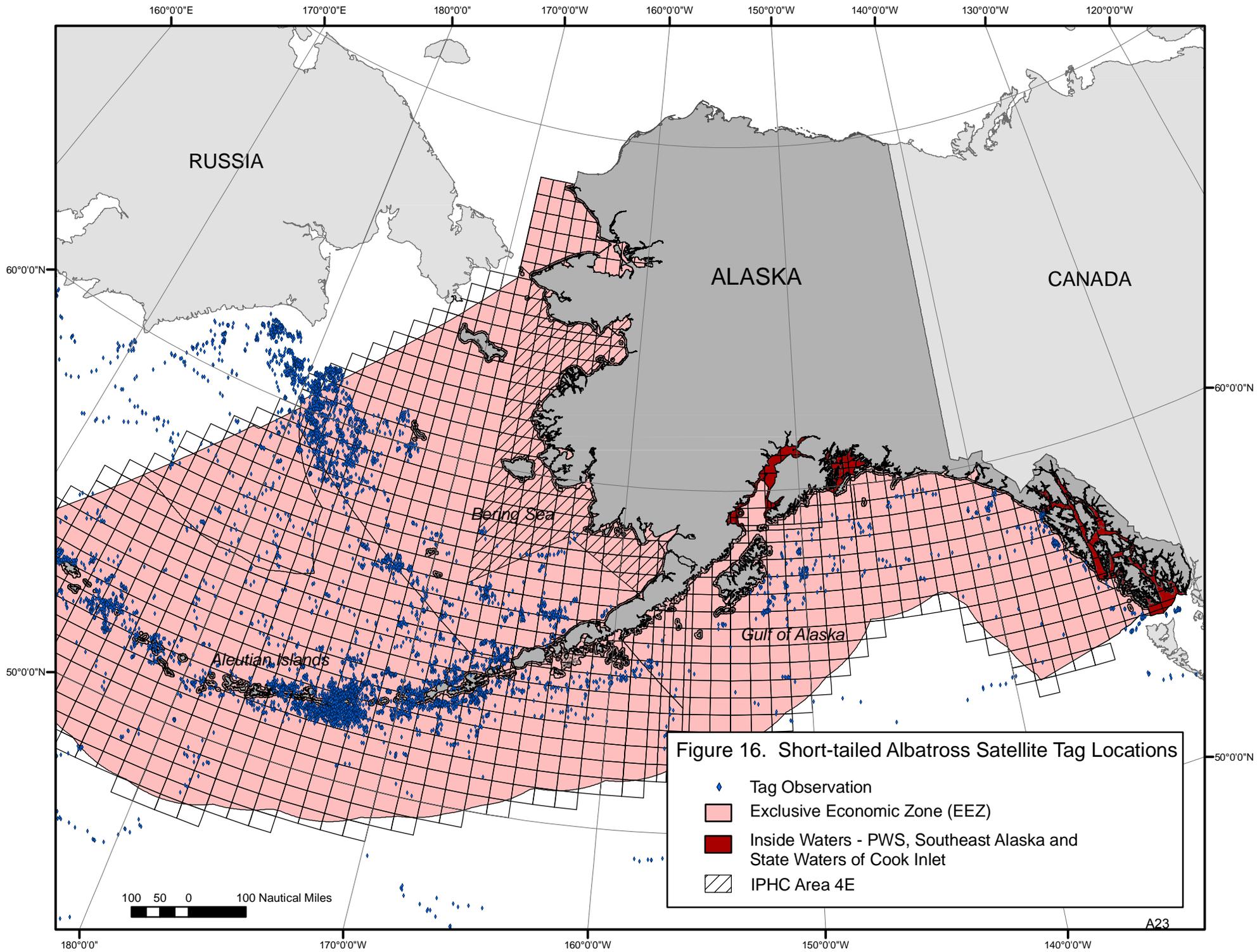
Aleutian Islands

Figure 15. Groundfish Hook-and-Line effort by Vessels < 55 feet, 2005

Low

Medium

High



**Figure 16. Short-tailed Albatross Satellite Tag Locations**

- ◆ Tag Observation
- Exclusive Economic Zone (EEZ)
- Inside Waters - PWS, Southeast Alaska and State Waters of Cook Inlet
- ▨ IPHC Area 4E

Figure 17. Observations of Seabird Species likely to interact with hook-and-line gear in Southeast Alaska Inside Waters

North Pacific Pelagic Seabird Database

- Survey Location
- ★ Shearwater observation
- ▲ Black-footed Albatross observation
- Northern Fulmar observation

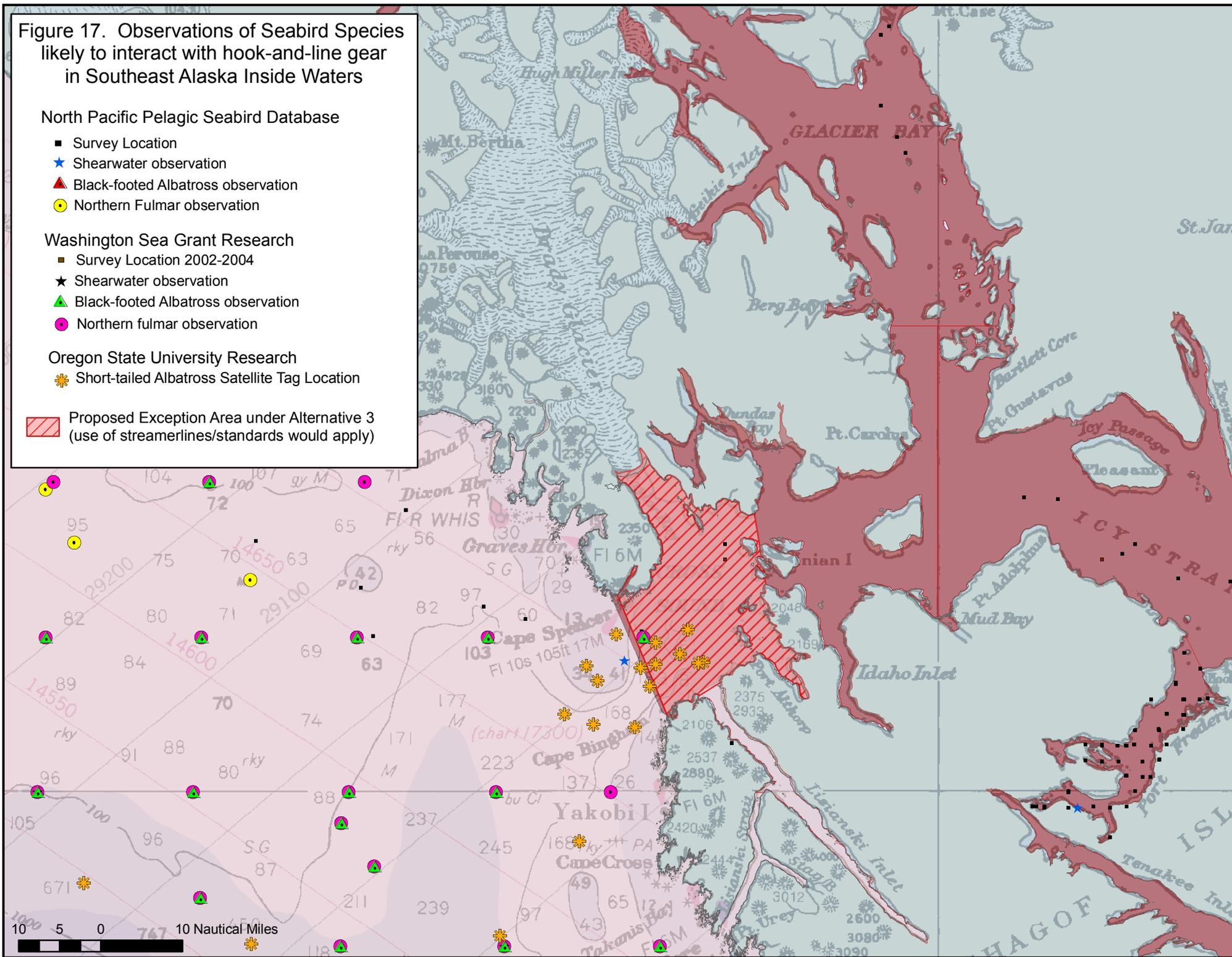
Washington Sea Grant Research

- Survey Location 2002-2004
- ★ Shearwater observation
- ▲ Black-footed Albatross observation
- Northern fulmar observation

Oregon State University Research

- ✱ Short-tailed Albatross Satellite Tag Location

 Proposed Exception Area under Alternative 3 (use of streamerlines/standards would apply)



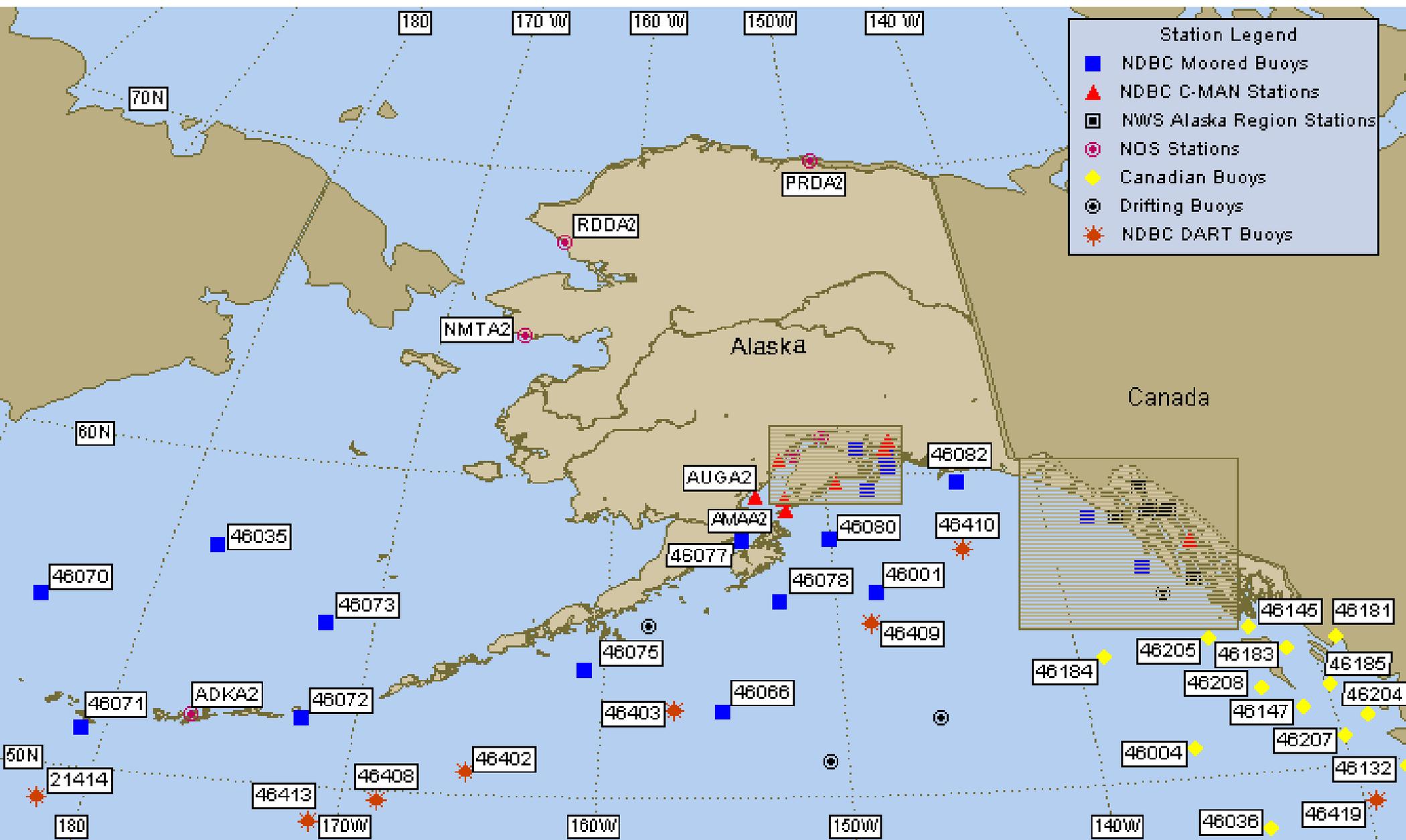


Figure 18. National Weather Service National Buoy Data Center buoy locations in Alaska.

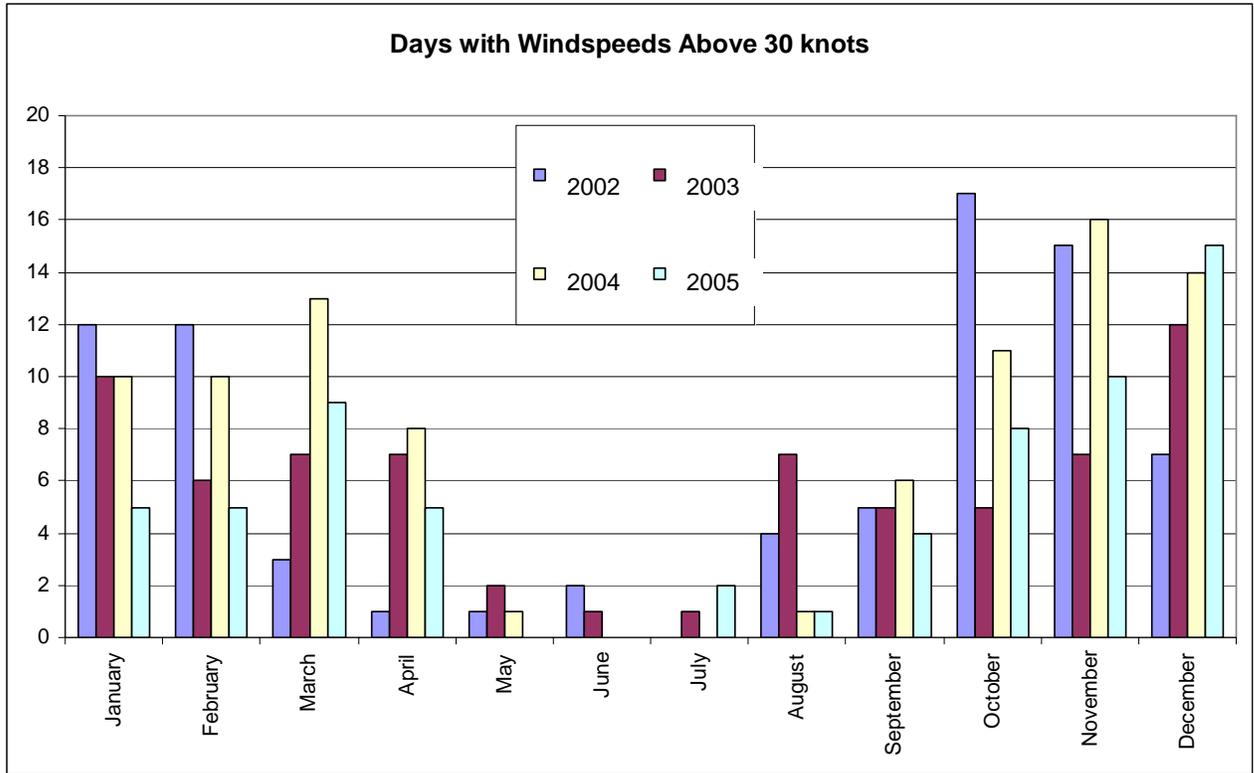


Figure 19. Number of days during which wind speed exceeded 30 knots in at least one 10-minute interval at a minimum of one NDBC buoy. Data from NWS NDBC, 2002-2005.

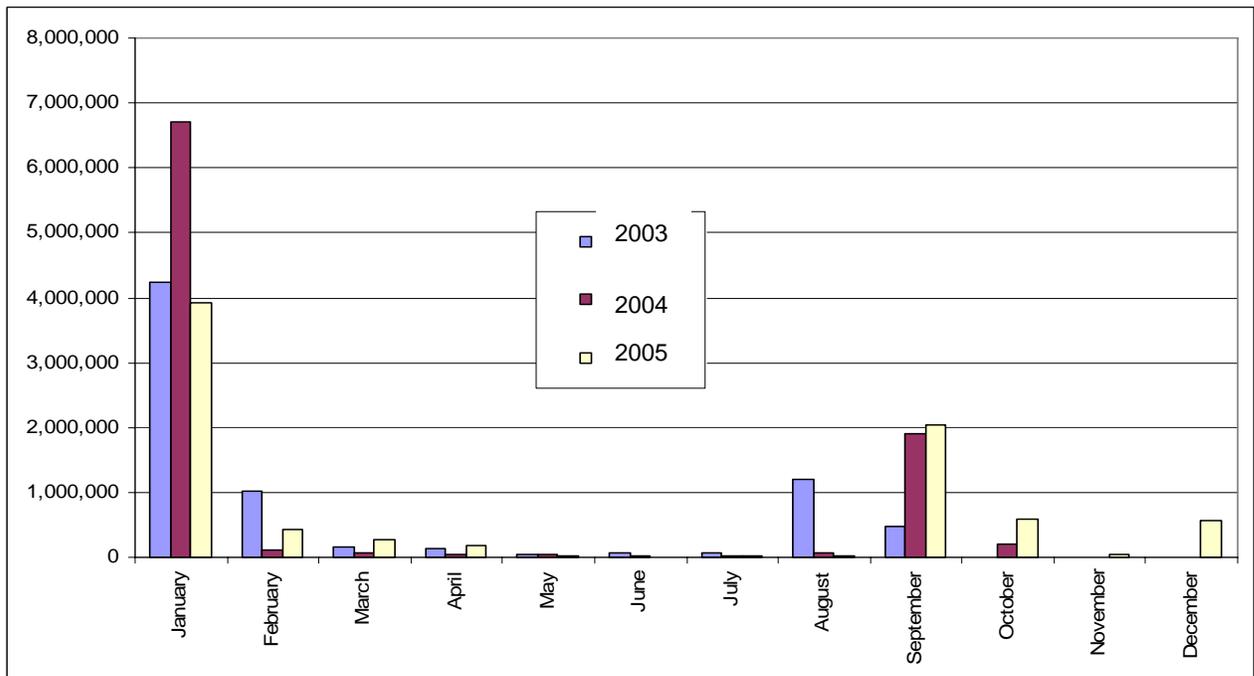


Figure 20. Monthly distribution of Pacific cod landings in pounds from vessels less than 55 feet fishing in the EEZ.

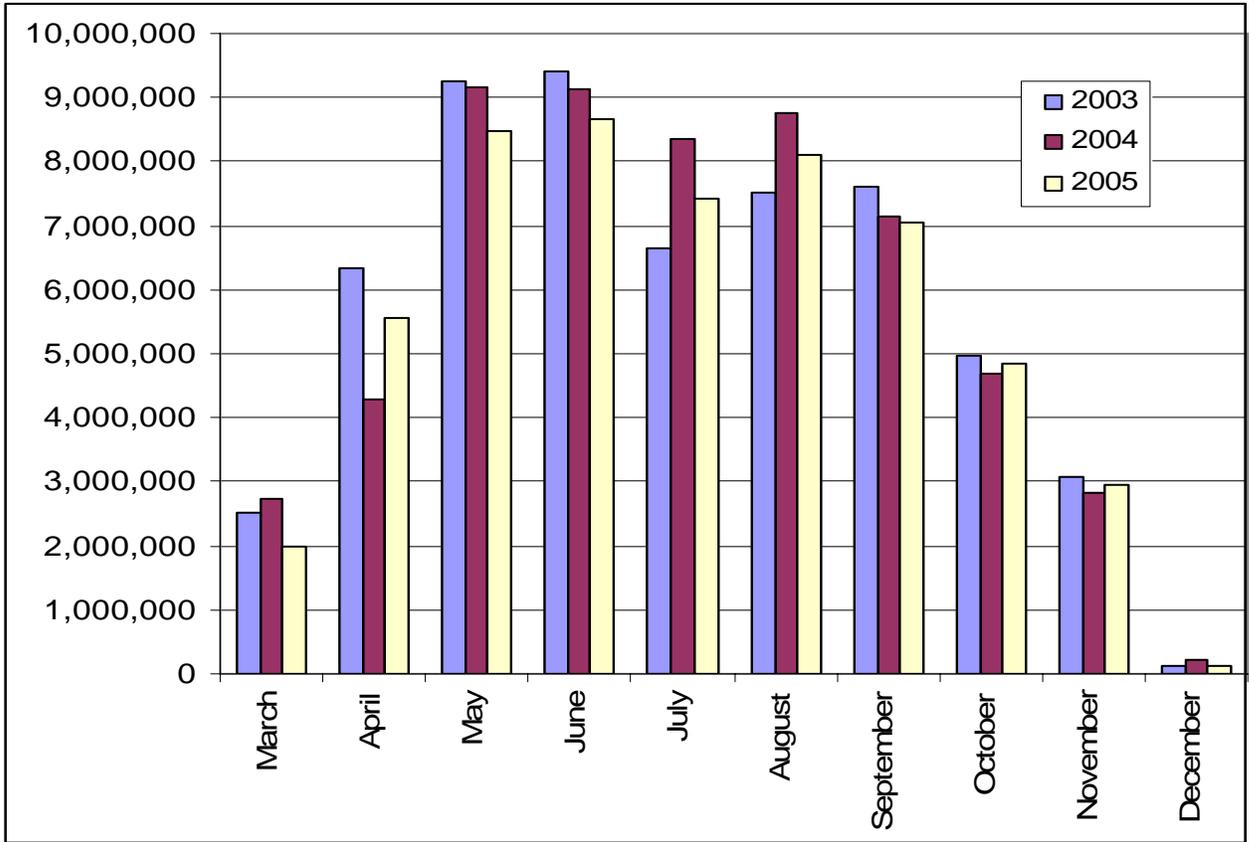


Figure 21. Monthly distribution of Pacific halibut landings in net pounds.



# Free Streamer Lines available for Longline Vessels

## Streamer lines reduce bycatch

Research done by the University of Washington Sea Grant Program has shown that streamer lines, when properly deployed, can reduce seabird bycatch in longline operations at rates approaching 100 percent. The lines create a bird-free corridor in which baited longline hooks can sink, thus reducing seabird mortality.

## Bird avoidance devices required by state and federal regulations

In order to reduce bycatch of short-tailed albatross and other seabirds, federal and state regulations now require most longline vessels to use bird avoidance devices and techniques when longline fishing in state and federal waters off Alaska. Seabird avoidance requirements vary depending on your vessel length, area fished, type of gear used, and the superstructure of your vessel. For your specific requirements, see the NOAA Fisheries Service seabird website at [www.fakr.noaa.gov/protectedresources/seabirds/guide.htm](http://www.fakr.noaa.gov/protectedresources/seabirds/guide.htm) or contact your local NOAA Fisheries Enforcement office.

## Partnership provides free streamer lines

In 2000, the U.S. Fish and Wildlife Service, Pacific States Marine Fisheries Commission (PSMFC), and NOAA Fisheries Service, working in conjunction with Washington Sea Grant, developed and distributed free streamer lines made of 3/8" blue steel poly to Alaska longliners. Over 4000 have been distributed and 1000 are still available. In addition, Mark Lundsten and the Alaska Sea Grant Marine Advisory Program designed and tested three additional streamer line models. These lines are made of 3/16" poly, a lighter material that performs better on smaller vessels and on those that set gear more slowly. These lighter lines are now also available to you for free through the same cooperative effort.

Streamer line requests will be filled in the order that they are received until all of the available lines are distributed.

## Instructions for receiving free streamer lines

You can receive your free streamer line in one of four ways:

1. Return the mail-in form on the back of this sheet. Your requested lines will be mailed to the address you provide.
2. Go to [www.psmfc.org/streamers](http://www.psmfc.org/streamers) to send an electronic request. Your requested lines will be mailed to the address you provide.
3. Send an email to [streamers@psmfc.org](mailto:streamers@psmfc.org). Provide name, address, telephone number, and number and size of lines you would like mailed to you.
4. Pick them up at one of these distribution points:



An aggressive Short-tailed albatross takes on three Laysan albatross, one Black-footed albatross, and several northern fulmars for a mouthful of squid. Short-tailed albatross were hunted to the brink of extinction for their feathers in the early 1900s. From a population low of perhaps a dozen, about 1900 of this endangered species now wander the North Pacific and breed on two small and isolated rocky islands in Japan. Photo courtesy Washington Sea Grant.

In total, four types of streamer lines are now available to longliners for free:

Type of lines	Recommended for use on vessels setting...
150-foot streamer lines made of 3/16" poly	snap-on longline gear
150-foot streamer lines made of 3/16" poly with detachable streamers	snap-on longline gear and using gurdies or spools to deploy/retrieve streamer lines
300-foot streamer lines made of 3/16" poly	conventional (stuck) gear
300-foot streamer lines made of 3/8" blue steel poly	conventional (stuck) gear

### Hanson Hydraulics Repair

22639 Airport Beach Rd  
Dutch Harbor, AK

### Kodiak Marine Supply

412 Shelikof Avenue  
Kodiak, AK

### The Auction Block

770 Fish Dock Road #7  
Homer, AK

### Seward Fisheries

601 Port Avenue  
Seward, AK

### Sea Grant Marine Advisory Program

Prince William Sound  
Aquaculture Corp.  
500 First Ave.  
Cordova, AK

### Yakutat Salmon Board

Courthouse Building,  
Downstairs  
508 Max Italo Dr.  
Yakutat, AK  
907-784-3329

### Taku Fisheries

550 S. Franklin  
Juneau, AK

### Alaska Dept. Fish & Game

304 Lake Street, Room 103  
Sitka, AK

### Sea Grant Marine Advisory Program

219 N. Nordic Dr.  
Petersburg, AK

### Sea Grant Marine Advisory Program

2030 Sealevel Dr., Suite 201B  
Ketchikan, AK

### Craig Fisheries

Cold Storage Rd.  
Craig, AK

### Seattle Marine and Fishing Supply

2121 West Commodore Way  
Seattle, WA



Compiled by Sunny Rice  
Marine Advisory Program,  
Alaska Sea Grant  
P.O. Box 1329  
Petersburg, AK 99833  
907-772-3381  
fnar@uaf.edu  
[www.marineadvisory.org](http://www.marineadvisory.org)

Most NOAA Fisheries Enforcement offices also have lines available.

**In signing this application form, I acknowledge the following:**

This bird deterrence equipment (Equipment) has been developed by the Pacific States Marine Fisheries Commission (PSMFC) based on work supported by the U.S. Fish and Wildlife Service, Region 7 under Grant No. 701810G037. This equipment is being provided free of charge to the User. Rights for use are granted to the User subject to the following provisions:

User acknowledges that there is no warranty for this Equipment.

User acknowledges that neither PSMFC nor the Government attests to the safety or efficacy of this Equipment for the purpose of deterring birds from fishing operations.

User acknowledges that neither PSMFC nor the Government assumes liability for the use of this Equipment. Neither PSMFC nor the Government shall be liable for loss or damage to User's property that (1) occurs after User acceptance, and (2) results from any defect or deficiencies in Equipment. Nor will PSMFC or the Government reimburse the User for its liability to third persons with respect to loss resulting in any way from the use of this Equipment.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Fold here and tape shut**

Place first class stamp here. Post Office cannot deliver without stamp.

**Free Streamer Line Offer**  
**Pacific States Marine Fisheries Commission**  
**205 SE Spokane St, Ste 100**  
**Portland, OR 97202**

**Fold here and tape shut**

Please send me the following type and quantity of streamer lines, free of charge, to the address below:

Name \_\_\_\_\_

P.O. Box or Street Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone number (\_\_\_\_\_) \_\_\_\_\_

Vessel name \_\_\_\_\_

Vessel length \_\_\_\_\_

Quantity	Type
	150-foot 3/16" poly
	150-foot 3/16" poly with detachable streamers
	300-foot 3/16" poly
	300-foot blue 3/8" steel poly