

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver *Chris*
Executive Director

DATE: September 26, 2003

SUBJECT: New Information on Sea Otters and Short-tailed Albatross

ESTIMATED TIME 1 HOUR

ACTION REQUIRED

Receive report from US Fish & Wildlife Service on the results of the summer 2003 sea otter and short-tailed albatross surveys and recent USFWS Biological Opinions on the Council's FMPs and TAC setting process.

BACKGROUND

Sea Otters

The sea otter population in Alaska is comprised of three stocks, one of which, the southwest Alaska stock (see map, Item B-5(a)), has been declining in abundance over recent years. Because of this decline, in June 2002 the US Fish & Wildlife Service designated this stock as a candidate for listing under the Endangered Species Act. The reasons for the population decline are unknown, but population studies indicate that increased adult mortality appears to be the source. Killer whale predation has been implicated as a contributing factor in the decline (see attached recent newspaper article, Item B-5(b)). Groundfish fisheries are not known to interact with sea otters, but this marine mammal does inhabit coastal areas near fishing ports.

In summer 2003, the USFWS and USGS conducted surveys of the southwest stock of sea otter in the western Aleutian Islands. The surveys this past summer included counts at six sites (Item B-5(c)). Sea otter abundance in this area continues to decline. Since 2000, average counts at these six sites have declined nearly 60%.

Short-tailed Albatross

The short-tailed albatross is listed as endangered under the Endangered Species Act. About 1800 of these seabirds currently exist, many of which inhabit the marine waters of the North Pacific. The short-tailed albatross interacts with groundfish fisheries because they are attracted to fishing activities, primarily because of the availability of food from baited longlines or offal and discards from onboard fish processing. There are also concerns over potential vessel or ship rigging strikes, particularly with trawl third wire gear.

The U.S. Fish and Wildlife Service, Japanese Ministry of the Environment, Oregon State University and Yamashina Institute of Ornithology have undertaken a study of the movements of the critically endangered short-tailed albatross. Albatross are being instrumented with satellite transmitters both on their principal

nesting island in Japan and in Aleutian Island passes where they concentrate during the non-breeding season. To date, 30 birds have been instrumented; 26 at Torishima and 4 in Segum Pass in the Aleutians. The attached figures (Item B-5(d)) indicate where instrumented birds have been re-located. Rob Suryan, a former employee of the Fish and Wildlife Service and a Ph.D candidate at Oregon State University, has the lead role in analysis of the data and will be using the study as his dissertation. Other principals involved in the study include Greg Balogh of the Fish and Wildlife Service, Kiyooki Ozaki of the Yamashina Institute of Ornithology, and Shiho Kanie of the Japanese Ministry of the Environment. Funding for the study has been generously provided by all of the partner agencies and organizations and the North Pacific Research Board. Rob Suryan provided the attached figures and narrative.

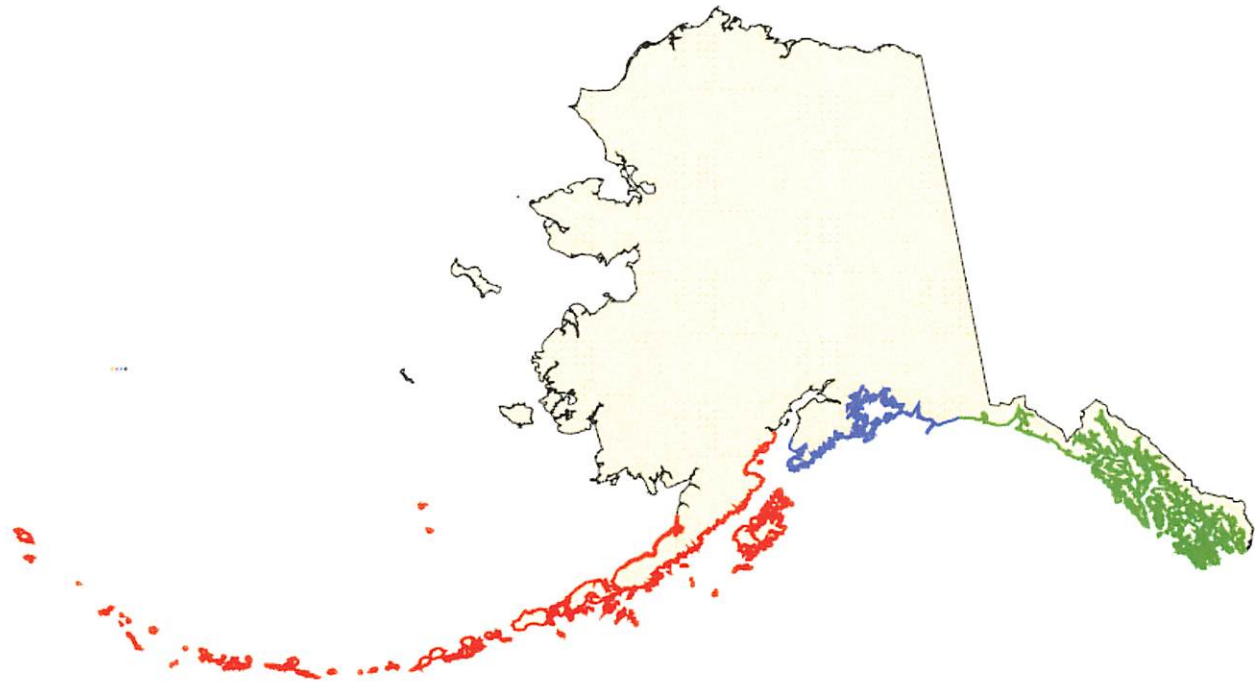
Biological Opinions on Groundfish Fishery FMPs and TAC Setting Process

On September 18, 2003, the USFWS announced two Biological Opinions on the effects of Alaska groundfish fishing on certain seabird species listed under the Endangered Species Act. The press release is attached (Item B-5(e)). One of the BiOps is a programmatic opinion on the FMPs for the GOA and BSAI groundfish fisheries, and the other BiOp is a more specific opinion on the TAC-setting process for the GOA and BSAI groundfish fisheries. The letters of transmittal for the programmatic BiOp (Item B-5(f)) and the TAC-setting BiOp (Item B-5(g)) are also attached.

These BiOps conclude that groundfish fisheries in the Alaskan EEZ are not likely to jeopardize the continued existence of the short-tailed albatross or Steller's eider, and are not likely to result in adverse modification of critical habitat for Steller's eiders (critical habitat for short-tailed albatross has not yet been defined). The BiOps establish an incidental take limit of 4 short-tailed albatross every 2 years in the hook-and-line groundfish fisheries off Alaska, and an incidental take limit of 2 short-tailed albatross in the groundfish trawl fisheries off Alaska over the time period in which the BiOp is in effect (this is estimated to be about 5 years). The BiOps include mandatory Reasonable and Prudent Measures (RPMs) NMFS must implement to minimize the impact of groundfish fishing on short-tailed albatross, and mandatory Terms and Conditions NMFS must comply with to implement the RPMs. Attached as Item B-5(h) is a summary of the RPMs and Terms and Conditions contained in the TAC-setting BiOp.

Representatives from the USFWS will give the Council a briefing on these studies and Biological Opinions, and will be available to answer questions.

Sea Otter stocks in Alaska



Stocks:

- Red - Southwest Alaska**
- Blue - Southcentral Alaska**
- Green - Southeast Alaska**

Tuesday, September 23, 2003

AGENDA B-5(b)
OCTOBER 2003

Researchers say whaling altered the food chain

By ROBERT McCLURE
SEATTLE POST-INTELLIGENCER REPORTER

Jim Estes clearly remembers the day when he peered down from a skiff in Alaska's Aleutian Islands and saw what looked like "The Invasion of the Sea Urchins."

The spiny round blobs had eaten right through the underwater kelp forest that shelters many marine creatures. Normally rare except in deeper waters, the urchins were jostling for space almost up to the beach.

"There were just urchins everywhere," said Estes, a researcher with the U.S. Geological Survey in Santa Cruz, Calif. "I was astonished. I just saw lots of urchins where I had not seen them in the past."

For years, Estes had been trying to figure out why the sea otters of western Alaska, which feed heavily on urchins, were disappearing. When he saw the urchin explosion, the researcher knew instantly the otters weren't dying from lack of food.

That realization and another five years of scientific work led to publication of a study scheduled for release today that sets forth a radical and potentially important new idea: An ecological chain reaction dating to industrial-scale hunting of whales in the North Pacific a half-century ago has driven the widespread decline of Alaskan seals, sea lions and otters that have puzzled scientists for decades.

The killing of whales caused a collapse in the food chain, the scientists believe. As a half-million whales were wiped out by Japanese and Russian whaling fleets after World War II, killer whales that once preyed on the larger "great" whales had to look for other food to eat.

So, the scientists theorize, some of the killer whales turned to seals instead. But before whaling, seals were never as numerous as whales. And it takes lots of seals to equal the calories in a single great whale.

It wasn't long before most of the seals were eaten up and the killer whales -- also known as orcas -- turned their attention to Steller's sea lions. Then, when those grew rare enough, they went after otters.

"If our hypothesis is correct, either wholly or in significant part, commercial whaling in the North Pacific Ocean set off one of the longest and most complex ecological chain reactions ever described," says the paper being published online in the Proceedings of the National Academy of Sciences.

Without otters to eat them, sea urchins

ADVERTISING

proliferated. Urchins, in turn, hammered kelp forests just off the Alaskan coast.

The new hypothesis argues strongly against environmentalists' longtime contention that a Seattle-based fishing fleet set to catch a little over 3 billion pounds of Alaskan pollock this year has fueled the decline of sea lions by stealing their food. The pollock fishery, the nation's largest, provides the fish used in sandwiches at Burger King and McDonald's and other fast-food outlets, as well as much of the imitation crab consumed in this country.

The paper, Estes said, carries a message for those trying to manage fisheries one species at a time:

"Food webs are way more complicated than that, and when you take a species out ... it's going to have effects on a number of different things, many of which are impossible to imagine," Estes said.

The theory could revolutionize scientists' evaluation of the Bering Sea and the Gulf of Alaska, which have seen puzzling declines in some species and increases in others.

The advertisement features a black and white portrait of Albert Einstein on the right side. On the left, the text reads "What's your IQ?" followed by a scale with markers at 88, 100, 120, and 140. Below the scale is a dark button with the text "click here" in white. At the bottom of the advertisement, it says "FREE IQ TEST" in large, bold letters, with a small signature "eM 32e" to the right.

THE COLLAPSE OF A FOOD CHAIN

Researchers believe that an ecological chain reaction dating back to right after World War II has driven the disappearances of large numbers of seals, sea lions and otters.

DECLINE OF GREAT WHALES

Between 1946 and 1979, half a million great whales were killed in the Northern Pacific through commercial whaling (at right).

Crews worked farther from home and farther from shore as the local great whale population declined.

KILLER WHALES SWITCH PREY

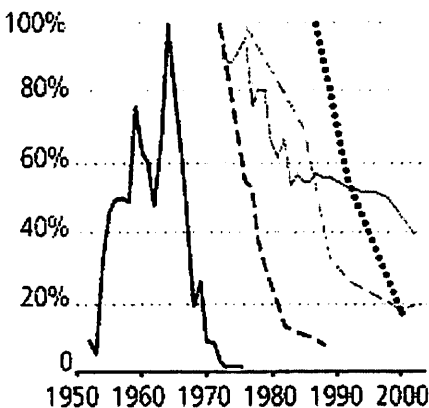
Killer whales, unable to hunt and eat as many great whales as before, substituted large amounts of smaller prey, such as seals, seal lions and otters, scientists theorize.

As one kind of small prey declined in number, killer whales would move on to the next copious prey of choice.

DECLINE IN ABUNDANCE

This graph shows how animal populations plummeted from their highest recorded numbers.

KEY
 — Great whale*
 - - Harbor seal
 - - Sea lion
 — Fur seal
 Sea otter

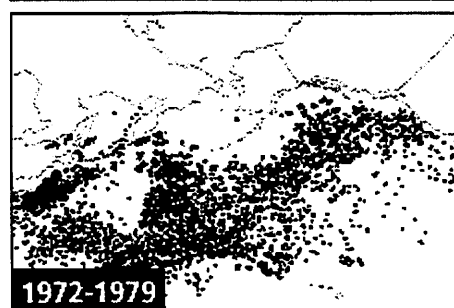
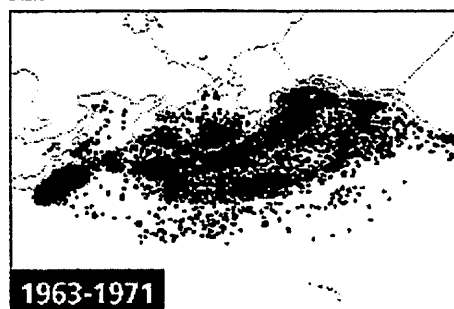
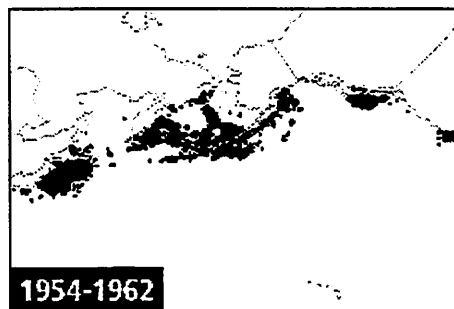
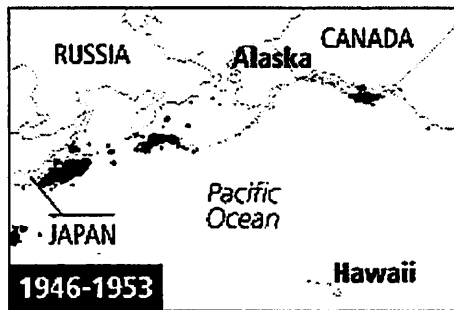


*NOTE: Based on catch records

Source: Proceedings of the National Academy of Sciences.

THE HUNT WIDENS

Black areas represent whale harvests.



SEATTLE POST-INTELLIGENCE

However, the authors acknowledge that so far they haven't proved anything, and that there are other potential explanations for the crashes in numbers of seals, sea lions and otters. It's also possible that their theory only partially explains the collapses, and that other factors such as fishing and climate change also are at work, said the authors and some of their critics.

Still, Estes said: "There's quite a bit of evidence that is consistent with this explanation. I'm not positive, but I think it's reasonably compelling in my mind that this is what happened."

The paper points out that killer whales today are a lot more common than scientists once thought. It wasn't until 1994 that researchers first counted them across a large range of Alaskan waters, and it took several years to compile that data.

At the same time, researchers were watching otter populations plummet. A key clue to the fact that the otters were being eaten by killer whales was that, although they were disappearing, no one was finding lots of otter carcasses.

But researchers did see killer whales eating otters. And, while no one was carefully studying the matter in the 1970s and '80s, people remembered a similar pattern: No carcasses, just plummeting numbers.

As the researchers counted up how many killer whales cruise the Bering Sea and Gulf of Alaska, and the numbers of seals and sea lions and otters and their caloric values, they found that a shift of less than 1 percent in killer whales' diet could account for the declines.

The new interpretation isn't as radical as it first sounds, the authors say. Scientists have long argued that the New World's earliest aboriginal hunters wiped out mastodons and other large animals. And scientists are finding out that in just the last century or so, killing off of wolves in the Rockies allowed elk to proliferate, and they munched down lots of trees.

If the theory about whaling is correct, it remains unclear what the implications are for modern-day officials deciding, for example, how to manage Alaskan fisheries.

"We're not advocating controlling the population of killer whales," said Alan Springer of the University of Alaska-Fairbanks, lead author of the paper. "The lesson is that it advocates a precautionary approach whether you're fishing whales or finfish or crabs or whatever."

Doug DeMaster, director of the National Marine Fisheries Service's Alaska Fisheries Science Center, said he fears some people will interpret the new theory as explaining all the population swings.

"It's pretty clear it's not just one factor that's driving dynamics of large marine mammals in the high latitudes. It's pretty clear there's multiple factors," DeMaster said. "Climate change is an important piece, as well as subsistence harvest and fisheries and a lot of other things."

DeMaster also questions to what degree killer whales ever relied on the great whales as a food source.

But the research team behind the new paper dug up an 1874 history of the whaling industry that said the term "killer whales" originated with whalers, who first called them "whale killers."

"This is a speculative study that will require a lot more research to either refute or accept," DeMaster said.

And critics of the new theory wonder: Why haven't the killer whales shifted back to eating more whales as the larger whales' populations have rebounded to varying degrees in the '90s?

The answer from the authors of the new paper: Maybe they have, at least to some degree. Springer and his co-authors say the fact that no one documented killer whales eating larger whales or seals or sea lions doesn't mean it didn't happen.

"In the Atlantic, no one has ever seen humpback whales copulate, but there is no doubt that they do it," Springer said.

The new paper is attracting support among some longtime observers of ocean trends.

"It's a circumstantial argument, but it's a circumstantial argument that ties together a lot of loose ends that the alternative explanations don't tie together, and it makes sense," said Jeremy Jackson, a scientist at the Scripps Institution of Oceanography in La Jolla, Calif. "This is a really important paper, because it exposes the complexity that we need to address if we're going to manage and protect marine ecosystems in a realistic way."

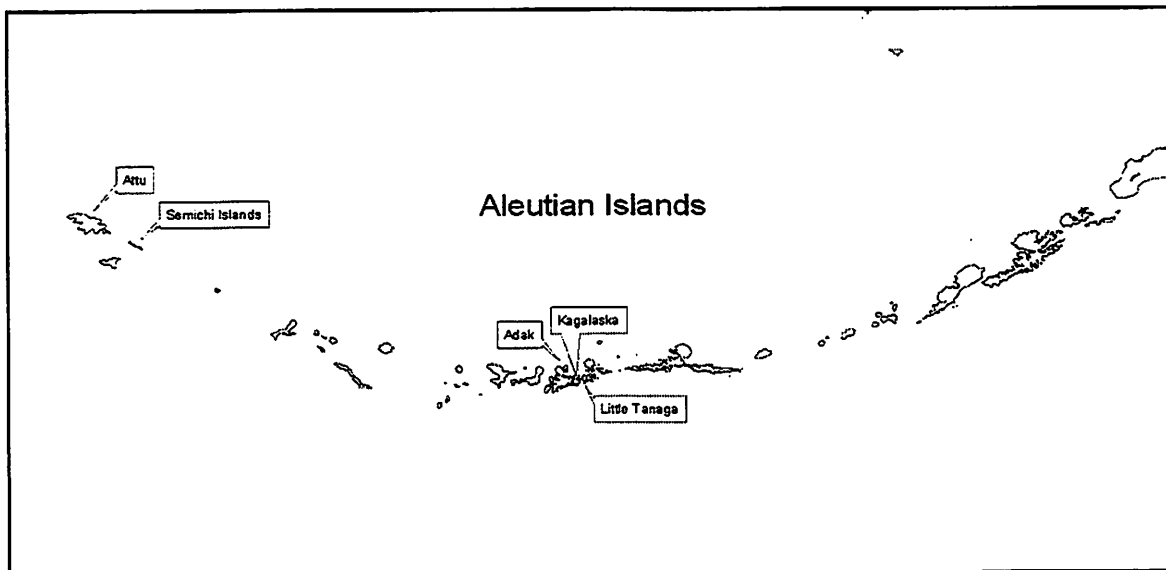
Estes, thinking back to his day on the skiff at Adak Island, says he doesn't blame the Japanese and Russian whalers for doing what they did.

"There's no way someone could have looked forward from the early 1940s and said this is going to happen," Estes said. "They would have locked them up."

P-I reporter Robert McClure can be reached at 206-448-8092 or robertmcclure@seattlepi.com

2003 Sea Otter Skiff Surveys in the Aleutian Islands

Island Name	2000	2001	2002	2003	% Change (2000-2003)	Source
Adak	861	632	573	392	-54.47	USGS/BRD
Kagalaska	54			15	-72.22	USGS/BRD
Little Tanaga	56			19	-66.07	USGS/BRD
Attu	606			125	-79.37	USFWS/MMM
Semichi Islands	76			18	-76.32	USFWS/MMM
Amchitka	157			101	-35.67	USFWS/MMM
Total	1653			670	-59.47	



Update on Short-tailed Albatross Research

The U.S. Fish and Wildlife Service, Japanese Ministry of the Environment, Oregon State University and Yamashina Institute of Ornithology have undertaken a study of the movements of the critically endangered short-tailed albatross. Albatross are being instrumented with satellite transmitters both on their principal nesting island in Japan and in Aleutian Island passes where they concentrate during the non-breeding season. To date, 30 birds have been instrumented; 26 at Torishima and 4 in Seguam Pass in the Aleutians. The attached figures indicate where instrumented birds have been re-located. Rob Suryan, a former employee of the Fish and Wildlife Service and a Ph.D candidate at Oregon State University, has the lead role in analysis of the data and will be using the study as his dissertation. Other principals involved in the study include Greg Balogh of the Fish and Wildlife Service, Kiyooki Ozaki of the Yamashina Institute of Ornithology and Shiho Kanie of the Japanese Ministry of the Environment. Funding for the study has been generously provided by all of the partner agencies and organizations and the North Pacific Research Board. Rob Suryan provided the attached figures and narrative.

Birds Tagged at Torishima in 2003 (Fig. 1):

Overall, we had pretty good performance from all PTTs this year. We lost contact with the last of our birds from Torishima on 28 Aug. Minimum tracking duration was 51 days this year, compared to less than 7 days last year. Four of the 7 PTTs lasted around 3 months or more (max was 1 week shy of 4 months). All but one bird reached the Aleutian Islands before their PTTs failed. The birds this year provided more locations further north in the Bering Sea compared to last year and some highly localized movements among the Aleutians.

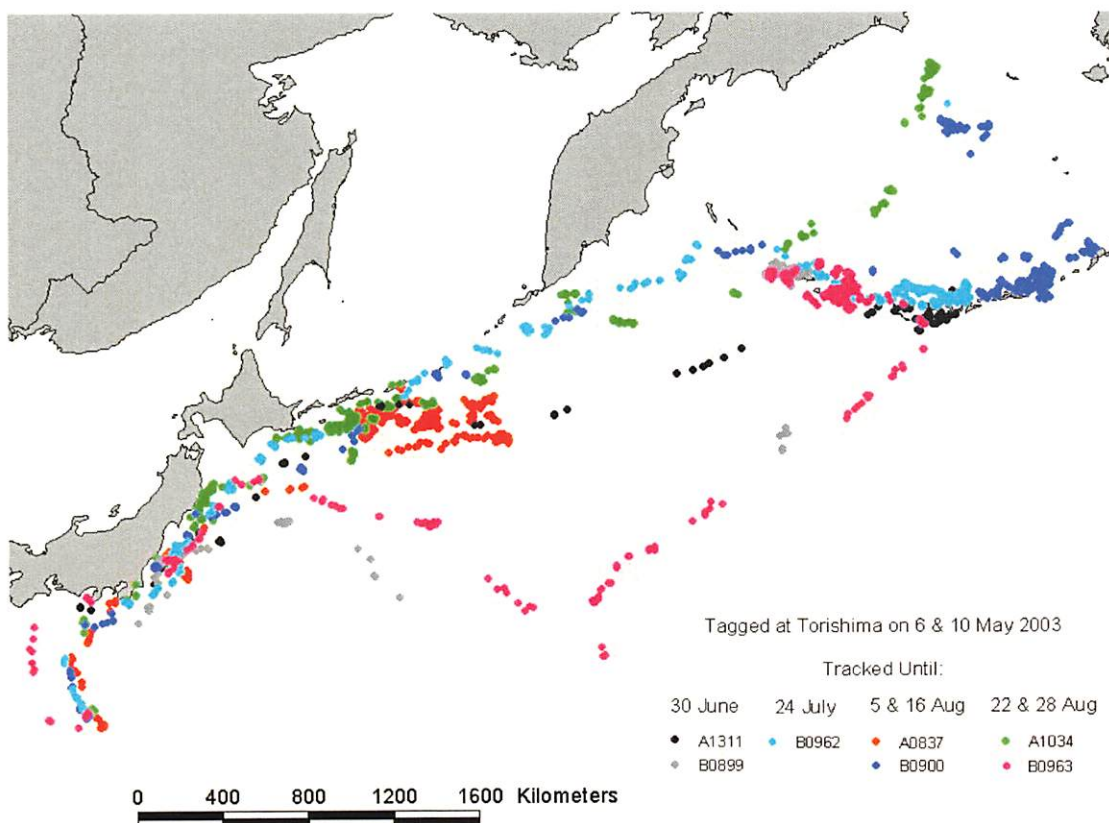


Fig. 1

Birds Tagged in Segum Pass in 2003 (Fig. 2):

We are still receiving consistent signals from 3 of the 4 birds. We lost contact with one bird initially within a few days, but have since started getting sporadic signals from this PTT again – although not enough to be excited about yet!

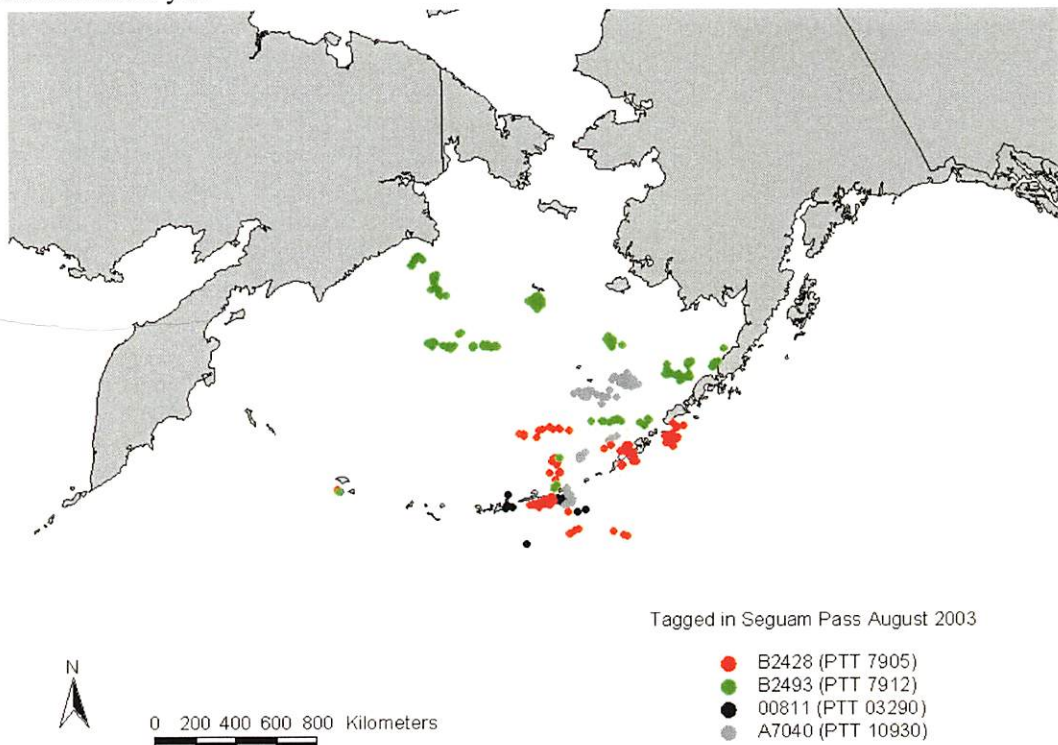


Fig. 2

All PTT data from 2002 and 2003 (Fig. 3):

The dots seem to depict at least one familiar feature!

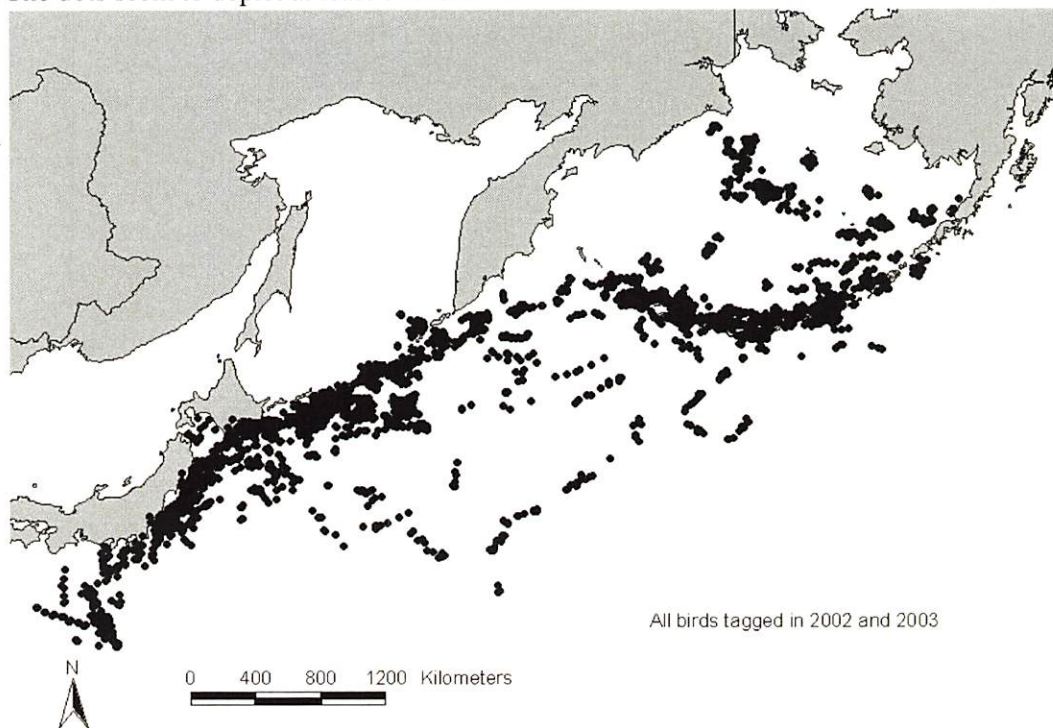


Fig. 3



National Marine
Fisheries Service

ALASKA REGIONAL OFFICE

AGENDA B-5(e)
OCTOBER 2003

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INFORMATION BULLETIN 03-77
Sustainable Fisheries Division
907-586-7228

September 18, 2003
2:00 p.m.

NMFS ANNOUNCES THE INCIDENTAL TAKE LIMITS ESTABLISHED FOR THE ENDANGERED SHORT-TAILED ALBATROSS IN THE ALASKA GROUND FISH FISHERIES

The U.S. Fish & Wildlife Service (USFWS) recently issued two biological opinions on the effects of the groundfish fisheries off Alaska on certain seabird species listed under the Endangered Species Act. One opinion is at the programmatic level and addresses the effects of the Fishery Management Plans for the Gulf of Alaska (GOA) and the Bering Sea/Aleutian Islands (BSAI) groundfish fisheries on listed species. The other biological opinion is on the effects of the Total Allowable Catch (TAC)-setting process for the GOA and the BSAI groundfish fisheries on the listed species and includes incidental take limits for the endangered short-tailed albatross (*Phoebastria albatrus*), according to James W. Balsiger, Administrator, Alaska Region, NMFS.

Both opinions conclude that the GOA and BSAI fishery actions are not likely to jeopardize the continued existence of the short-tailed albatross or Steller's eider (*Polysticta stelleri*), or result in adverse modification of Steller's eider critical habitat. No critical habitat has been designated for the short-tailed albatross; therefore none will be affected. The USFWS also concurred with NMFS' determination that these actions are not likely to adversely affect the threatened spectacled eider (*Somateria fischeri*), based on this species' behavior and distribution relative to fishing activities in the BSAI and GOA. The biological opinions can be found on the NMFS Alaska Region website at <http://www.fakr.noaa.gov/protectedresources/seabirds/section7/biop.htm>

The USFWS anticipates that up to four short-tailed albatross could be taken every two years in the hook-and-line groundfish fishery off Alaska and that up to two short-tailed albatross could be taken in the groundfish trawl fishery off Alaska over the time period in which the biological opinion remains in effect (approximately 5 years). These incidental take limits are in addition to the take limit established in 1998 for the Pacific halibut hook-and-line fishery off Alaska, two short-tailed albatrosses in a two year period. If the level of anticipated take is exceeded in any of these fisheries, NMFS must immediately reinstate a consultation with the USFWS to review the need for possible modification to the fishery. Modifications could range from changes to requirements for seabird avoidance measures to fishery closures. The exact modifications cannot be predicted at this time.

NMFS reminds fishermen using hook-and-line gear that seabird avoidance measures are required by regulation. Changes to the current requirements are forthcoming. A proposed rule ([68 FR 6386, February 7, 2003](#)) called for the use of paired streamer lines, with specified performance and material standards, for larger vessels. NMFS will publicize the new requirements.

When a short-tailed albatross is observed following a fishing vessel, every effort should be made to minimize the possibility of the bird becoming entangled with the gear. NMFS requests that you do the following:

- a) Change the vessel's heading or speed, to discourage the bird from following.
- b) If no sets are in progress: (1) avoid initiating a set while the bird is in sight and (2) avoid

offal discharge in the presence of short-tailed albatross to discourage their association with the fishing vessel.

c) If a short-tailed albatross appears to be attacking baited hooks despite the use of required bird avoidance mechanisms, gear should be deployed without bait, or gear deployment should be suspended, until the albatross discontinues attacks on the gear.

NMFS requests that fishermen continue to report all observations of short-tailed albatross to the USFWS via their reporting forms. The forms can be found at <http://www.fakr.noaa.gov/protectedresources/seabirds/repform.pdf> Any gear-related mortalities of this endangered species are to be reported as well.

In an effort to promote the conservation of seabirds, the USFWS and NMFS, in cooperation with other partners, are providing paired streamer lines free of charge to fishing vessel owners and operators. For a list of streamer line distribution centers, go to <http://www.fakr.noaa.gov/protectedresources/seabirds/streamers.htm>

For additional information about the requirements of the USFWS biological opinions, the free streamer line program, or any aspects of NMFS's Seabird Bycatch Reduction Program, please see <http://www.fakr.noaa.gov/protectedresources/seabirds.html> or contact the NMFS Seabird Coordinator, Kim Rivera, at 907-586-7424, Kim.Rivera@noaa.gov.

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United States Department of the Interior

2003-204

AGENDA B-5(f)
OCTOBER 2003

FISH AND WILDLIFE SERVICE

Anchorage Fish & Wildlife Field Office
605 West 4th Avenue, Room G-61
Anchorage, Alaska 99501-2249

In reply, refer to:
AFWFO Log no. 2003-204

Dr. James W. Balsiger
Alaska Regional Administrator
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802

Subject: Programmatic Biological Opinion on the effects of the Fishery Management Plans (FMPs) for the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) groundfish fisheries on the endangered short-tailed albatross (*Phoebastria albatrus*) and threatened Steller's eider (*Polysticta stelleri*)

Dear Dr. Balsiger:

This document transmits the Fish and Wildlife Service's (Service) programmatic Biological Opinion (BO) on the Fishery Management Plans (FMPs) for the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) groundfish fisheries on the endangered short-tailed albatross (*Phoebastria albatrus*) and threatened Alaska population of Steller's eider (*Polysticta stelleri*), in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

We have concurred with your determination that the implementation of these FMPs is not likely to adversely affect the threatened spectacled eider (*Somateria fischeri*), based on this species' behavior and distribution relative to fishing activities in the BSAI and GOA. Spectacled eiders typically congregate well off-shore and are not anticipated to occur in any near-shore areas where fishing vessels would be refueling. Furthermore, areas designated as spectacled eider critical habitat (where the birds congregate in large numbers) are well away from the shelf break, where the majority of fishing effort occurs, thus minimizing the probability of vessel strikes. Therefore, we do not anticipate that actions conducted under the BSAI and GOA FMPs would adversely affect spectacled eiders or destroy or adversely modify spectacled eider critical habitat.

Your original request for formal consultation on these amended FMPs was received on September 19, 2000. In that letter, you requested consultation not only for the FMPs but also for your proposed amendment to revise regulations for seabird avoidance measures in the hook-and-line fisheries off Alaska. The short-tailed albatross is a species of major concern addressed by these revised avoidance measures. Following your original request, the proposed action was modified by facsimile request on October 23, 2000, when you decided to delay publication of the proposed

rule, pending completion of a Washington Sea Grant study (see below).

In January 2001, NMFS released the Draft Alaska Groundfish Fisheries Programmatic Supplemental Environmental Impact Statement (DSEIS) (NMFS 2001a). The purpose of this document was to address significant changes that have occurred in the environment since the original environmental impact statements (EISs) for the GOA and BSAI groundfish fishery management plans were published, approximately 20 years ago. While many environmental assessments (EAs) and several EISs have been prepared for fishery plan amendments over the ensuing years, none examined the groundfish FMPs at a programmatic level. For the purposes of this consultation, NMFS defines the **federal action as the management of groundfish fisheries off Alaska and the authorization of groundfish fishing activities off Alaska** pursuant to approved FMPs.

Our agencies mutually agreed to delay initiation of formal consultation pending the results of an ongoing study by the Washington Sea Grant Program evaluating the effectiveness of various seabird avoidance measures used in hook-and-line fisheries off Alaska. This study was initiated pursuant to our February 19, 1998, extension of consultation on the BSAI and GOA FMPs, which required testing of the effectiveness of seabird bycatch avoidance devices and methods in the BSAI and GOA fisheries. The results of that study became available in August of 2001. Based on the study results and additional recommendations, the North Pacific Fisheries Management Council (Council) in December 2001, made recommendations to NMFS for revisions to the regulations for seabird avoidance in the groundfish and halibut hook-and-line fisheries off Alaska. These proposed revisions to the regulations implementing the BSAI and GOA FMPs are a major subject addressed in this consultation. In addition to covering longline fisheries, which we have addressed in previous biological opinions, this BO also addresses the trawl fisheries covered under the BSAI and GOA FMPs.

After reviewing the current status of the short-tailed albatross and the Alaskan breeding population of Steller's eider, the environmental baseline for the action area, the cumulative effects, and the effects of the proposed action, it is the Service's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the short-tailed albatross or the Steller's eider, nor is it likely to adversely modify or destroy Steller's eider critical habitat. This biological opinion will be accompanied by a companion BO, conducted under the "umbrella" of this FMP programmatic consultation, on the Total Allowable Catch (TAC)-setting process for the BSAI and GOA. The latter document will include an Incidental Take Statement, Reasonable and Prudent Measures, and Terms and Conditions, which must be implemented for the authorization of any incidental take which occurs in association with the proposed TAC process and the associated commercial fishing activities. We have included non-mandatory Conservation Recommendations in this Programmatic Biological Opinion, which NMFS may wish to implement, to further enhance protection of endangered species and of the environment.

The enclosed document concludes formal consultation on the FMP Programs for the BSAI and GOA. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new

information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this BO; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this BO; or (4) a new species not covered by this BO is listed or additional critical habitat designated that may be affected by this action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take should cease pending reinitiation.

If you have any questions concerning this biological opinion, please contact me at (907) 271-2787, or lead endangered species biologist Judy Jacobs at (907) 271-2780.

Sincerely,



Ann G. Rappoport
Field Supervisor

Enclosure

CC: USFWS, R7 RO, Attn: Sue Detwiler
USFWS, Fairbanks FWFO, Attn: Ted Swem
North Pacific Fisheries Management Council, Attn: Bill Wilson
University of Washington Sea Grant Program, Attn: Ed Melvin
USFWS Pacific Islands Field Office, Attn: Holly Freifeld



United States Department of the Interior

2003-205

AGENDA B-5(g)
OCTOBER 2003

FISH AND WILDLIFE SERVICE

Anchorage Fish & Wildlife Field Office
605 West 4th Avenue, Room G-61
Anchorage, Alaska 99501-2249

In reply, refer to:
AFWFO Log no. 2003-205

Dr. James W. Balsiger
Administrator, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

2003 SEP 15 PM 9:30
NATIONAL MARINE FISHERIES SERVICE

Re: Endangered Species Act Formal Consultation addressing the effects of the Total Allowable Catch (TAC)-setting process for the Gulf of Alaska and Bering Sea/Aleutian Island Groundfish Fisheries on the endangered short-tailed albatross (*Phoebastria albatrus*) and threatened Steller's eider (*Polysticta stelleri*)

Dear Dr. Balsiger:

This document transmits the U.S. Fish and Wildlife Service's (Service) Biological Opinion, based on our review of the Total Allowable Catch (TAC)-setting process for the Gulf of Alaska (GOA) and Bering Sea/Aleutian Island (BSAI) groundfish fisheries and the effects of this process on the endangered short-tailed albatross (*Phoebastria albatrus*), and threatened Steller's eider (*Polysticta stelleri*), in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act). Your September 21, 2000, request for formal consultation was received on October 2, 2000.

We have concurred with your determination that actions related to the TAC-setting process are not likely to adversely affect the threatened spectacled eider (*Somateria fischeri*), based on this species' behavior and distribution relative to fishing activities in the BSAI and GOA. Spectacled eiders typically congregate well off-shore and are not anticipated to occur in any near-shore areas where fishing vessels would be refueling. Furthermore, areas designated as spectacled eider critical habitat (where the birds congregate in large numbers) are well away from the shelf break, where the majority of fishing effort occurs, thus minimizing the probability of vessel strikes. Therefore, we do not anticipate that actions conducted under the BSAI and GOA FMPs would adversely effect spectacled eiders or destroy or adversely modify spectacled eider critical habitat.

After reviewing the current status of the short-tailed albatross, the Alaskan breeding population of Steller's eider, the environmental baseline for the action area, the cumulative effects, and the effects of the proposed action, it is the Service's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the short-tailed albatross or the Steller's eider, nor is it likely to adversely modify or destroy Steller's eider critical habitat. The attached

Biological Opinion (BO) includes an Incidental Take Statement, Reasonable and Prudent Measures, and Terms and Conditions, which must be implemented for the authorization of any incidental take that occurs as a result of the proposed TAC-setting process and the associated commercial fishing activities.

This BO is based on information provided in the Environmental Assessments for the TACs for 2002 and 2003, economic and ecosystem appendices to the Stock and Fishery Evaluation (SAFE) Documents for 2002, recommended TACs for 2003, telephone conversations and meetings with knowledgeable scientists, agency representatives and fishers, field investigations, and other sources of information. This BO is also tiered to the programmatic BO on the Fishery Management Plans (FMPs) in their entirety for the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) groundfish fisheries that the Service is issuing concomitantly (Fish and Wildlife Service 2003). A complete administrative record of this consultation is on file in the Service's Anchorage Fish and Wildlife Field Office.

This BO will be considered effective until superseded by a more updated version. The Service and NMFS are in a continuing dialog and research effort on the effects of fishing activities to listed species. Both parties have agreed to reinitiate this consultation as appropriate in the future, as new information becomes available, particularly regarding refined technologies for seabird bycatch avoidance.

The enclosed document concludes formal consultation on the TAC-setting process for the BSAI and GOA groundfish fisheries. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a matter or to an extent not considered in this biological opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this biological opinion; or (4) a new species not covered by this opinion is listed or additional critical habitat designated that may be affected by this action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take should cease pending reinitiation.

If you have any questions regarding this consultation, I can be reached at (907) 271-2787, or you may contact Greg Balogh at (907) 271-2778, or Judy Jacobs at (907) 271-2780. Thank you for your cooperation in meeting our joint responsibilities under the Act.

Sincerely yours,



Ann G. Rappoport
Field Supervisor

Enclosure

cc: USFWS, R7 RO, Attn: Sue Detwiler
USFWS, Fairbanks FWFO, Attn: Ted Swem
North Pacific Fisheries Management Council, Attn: Bill Wilson
University of Washington Sea Grant Program, Attn: Ed Melvin
USFWS Pacific Islands Field Office, Attn: Holly Freifeld

EXCERPTS FROM :

Biological Opinion on the Effects of the Total Allowable Catch (TAC)-Setting Process for the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) Groundfish Fisheries to the Endangered Short-tailed Albatross (*Phoebastria albatrus*) and Threatened Steller's Eider (*Polysticta stelleri*)

Issued by USFWS, September 2003

3. Reasonable and Prudent Measures:

The reasonable and prudent measures included below, along with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. The following reasonable and prudent measures (RPMs) shall be implemented in association with this incidental take statement:

1. Within its authority, the NMFS shall minimize take of short-tailed albatrosses.
2. The NMFS shall continue a proactive outreach and education policy to inform fishermen about short-tailed albatrosses and the risk of mortalities in the hook-and-line fisheries.
3. The NMFS shall continue to facilitate the collection of short-tailed albatross spatial and temporal distribution as it overlaps with commercial fisheries.
4. The NMFS shall continue to monitor and report take of short-tailed albatrosses by hook and line and trawl vessels.
5. Handling of Injured or Dead Birds - The NMFS shall advise fishery observers and fishermen that the condition of injured short-tailed albatrosses must be assessed, and the birds handled as specified in the terms and conditions below, and that dead short-tailed albatrosses must be frozen and surrendered to the NMFS or the Service at the first opportunity. The authority for handling and transport of any injured or dead short-tailed albatrosses is provided under the Incidental Take Statement of this Biological Opinion.

4. Terms and Conditions:

In order to be exempt from the prohibitions of section 9 of the Act, the NMFS must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

1. To implement RPM #1 (Minimize take of short-tailed albatrosses):

(a) The NMFS, in cooperation with the North Pacific Fishery Management Council, (Council) shall promulgate final regulations, after considering comments, that reflect the intent of the Management Measures to Reduce Seabird Incidental Take in the Hook-and-Line Halibut and Groundfish Fisheries, as proposed by the NMFS in February 7, 2003 (68 FR 6386) (see Appendix 1).

(B) The NMFS shall continue to keep fishermen informed about the most up-to-date methods for reducing such interactions as new information becomes available.

2. To implement RPM #2 (Continue a proactive outreach and education policy to inform fishermen about short-tailed albatrosses):

a. The NMFS shall distribute seabird bycatch avoidance instructional videos to all Alaska groundfish longline vessel owners and operators, and shall encourage the viewing of this video by captain and crew as part of the vessel's Seabird Avoidance Plan (see Appendix 1 for information on Seabird Avoidance Plan contents).

b. The NMFS shall continue to keep fishermen informed about the most up-to-date methods for reducing such interactions as new information becomes available.

3. To Implement RPM #3 (Continue to facilitate the collection of short-tailed albatross spatial and temporal distribution):

a. The NMFS shall continue to request that fishermen report all observations of short-tailed albatrosses to the Service via the short-tailed albatross encounter reporting form (see Appendix 4). Distribution of this form will continue annually as part of the NMFS' regular mailings to longline and trawl vessel owners and operators that fish in Alaskan waters. Note: This form is also available on-line at: <http://www.fakr.noaa.gov/protectedresources/seabirds/repform.pdf>

b. The NMFS shall continue to require fishery observers to report all observations of short-tailed albatrosses.

4. To implement RPM #4 (Monitor and report take of short-tailed albatrosses by hook-and line and trawl vessels):

a. The NMFS (in cooperation with the Service) shall continue to provide at least 2 hours of training to all new fishery observers in: (1) identification of short-tailed albatrosses and other seabirds; (2) the proper recording of encounters with seabird species of interest; and (3) deployment of seabird avoidance mechanisms during the setting of longline gear.

b. NMFS shall collect information on the deployment and use of seabird avoidance measures for the largest possible sample of hook-and-line gear sets. Data shall be

collected by observers, or other non-self-reporting means, and shall begin no later than January 1, 2004. These data will be summarized and reported to the Service annually, by September 30 of the calendar year following the report year.

c. The NMFS shall require fishermen to retain all birds incidentally taken during observer-sampled portions of hauls, or as requested by observers during nonsampled portions of hauls, until observers have had the opportunity to identify and record the specimens.

d. The NMFS shall continue to require that any short-tailed albatross caught by longline gear (regardless of whether the mortality occurs in a sampled portion of the haul) be retained and reported immediately to NMFS or the Service. Any short-tailed albatross carcass obtained during trawl fishing should likewise be retained. NMFS and the Service will keep each other informed of reported mortalities within two business days of their initial reporting. Observers should contact NMFS Observer Program staff via fax, phone, or Atlas, at the following contact numbers:

Dutch Harbor field office phone: (907) 581-2060 or (907) 581-2063

Fax: (907) 581-2066

Anchorage office phone: (907) 271-1313 Fax: (907) 271-1315

Kodiak office phone: (907) 481-1770 Fax: (907) 481-1771

Seattle office phone: (206) 526-4192 Fax: (206) 526-4066

The Anchorage Field office of the U.S. Fish and Wildlife Service may be reached toll-free at: (800) 272-4174, or by FAX at: (907) 271-2786.

You may also contact the following personnel from this office:

Greg Balogh 907-271-2778

Judy Jacobs 907-271-2780

Kim Trust 907-271-2783

Ann Rappoport 907-271-2787

e. The NMFS shall continue to provide to FWS, on an annual basis, seabird bycatch estimates of the numbers of birds (by species) taken in the longline and trawl fisheries of the BSAI and GOA. To the extent that the information is available, these estimates will also be enhanced by more detailed estimates reflecting spatial and temporal patterns of bycatch. The NMFS shall continue to make this information publicly available.

f. The NMFS shall continue to work on developing a safe and reliable means of assessing short-tailed albatross interaction/collision with trawl vessel gear, to: (1) document whether take occurs, and if so, (2) estimate the rate of such take. A report of the interactions between short-tailed albatross and trawl gear shall be submitted to the Service by December 31, 2006.

g. The NMFS shall report any recorded incidences of short-tailed albatross colliding with trawl gear, regardless of whether injury to the bird is apparent. Reports shall be forwarded to the Service within 2 business days of receipt of information by NMFS.

h. The NMFS shall submit a summary report to FWS by July 31, 2005, estimating total third wire effort in Alaska groundfish fisheries and explaining why the use of sonar cables is standard gear in the North Pacific trawl fisheries, whereas such technology is no longer used or allowed in some similar Southern Hemisphere fisheries.

5. To implement RPM#5 (Handling of Injured or Dead Birds)

a. The NMFS shall advise fishermen and fishery observers that every reasonable effort should be made to save any live, injured short-tailed albatrosses or Steller's eiders¹ by adhering to the procedures specified in Appendix 2. The information in Appendix 2 will be made available to observers as an information sheet. If reaching a veterinarian is appropriate, contact the Alaska SeaLife Center (ASLC) stranded animal hotline: 907-224-6395 (direct to veterinary staff on-call), or ASLC Security: 907-224-6342 (24-hr service to reach the veterinarian on-call).

b. The NMFS shall advise fishery observers and fishermen that every effort must be made to recover any dead short-tailed albatrosses, including gaffing them if they fall off of a hook. Observers shall report any mortality of short-tailed albatrosses to the NMFS (by phone, fax, radio, e-mail, etc.) within 48 hours of occurrence, or, if this is not possible, immediately upon reaching port. Short-tailed albatross specimens should be frozen immediately, with identification tags attached directly to the carcass, and a duplicate identification tag attached to the bag or container holding the carcass. Identification tags should include species, date of mortality, name of vessel, location (latitude and longitude) of mortality, observer or skipper name, and any band numbers if the specimen has leg bands. This incidental take permit provides fishery observers and fishermen the authority to transport short-tailed albatross and Steller's eider specimens obtained during the course of the fishing activities covered in this consultation.

c. The NMFS shall inform fishery observers and fishermen that specimens must be transferred as soon as possible to a NMFS or Service office. The specimen must remain frozen and must be shipped as soon as possible, by Goldstreak Air Cargo, Express Mail, or courier, to the Anchorage Field Office, USFWS, 605 West 4th Avenue, Room G-61, Anchorage, AK 99501. Avoid shipping on Thursdays or Fridays, as there is no mail delivery to government offices on Saturdays and Sundays. The U.S. Fish and Wildlife Service will reimburse shipping costs. The Service believes that, as a result of the proposed action, no more than four (4) short-tailed albatross will be reported taken over a 2-year period by the longline fishery, and that no more than two short-tailed albatross will be reported taken by the trawl

fishery during the time period covered by this Opinion. The Reasonable and Prudent Measures (RPMs), with their implementing Terms and Conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information, requiring reinitiation of consultation and review of the RPMs. The NMFS must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the RPMs.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. NMFS may choose, but is not obligated, to undertake the following actions:

1. Inform fishermen and fishery observers that every effort should be made, when a short-tailed albatross is observed following a fishing vessel, to minimize the possibility of the bird becoming entangled with the gear, by adopting the following voluntary measures:

a) Change the vessel's heading or speed, to discourage the short-tailed albatross from following.

b) If no sets are in progress: (1) avoid initiating a set while the short-tailed albatross is in sight, and (2) avoid offal discharge in the presence of short-tailed albatross to discourage their association with the fishing vessel.

c) If a short-tailed albatross appears to be attacking baited hooks despite the use of required bird avoidance mechanisms, gear should be deployed without bait, or gear deployment should be suspended, until the albatross discontinues attacks on the gear.

2. Encourage promulgation of bird bycatch regulations for Alaska's Pacific halibut fishery that mirror those that apply to Alaska's groundfish fishery.

3. Continue assessment of trawl 3rd wire / bird collisions, investigate methods to minimize these collisions and determine whether sonar technology that requires the use of a 3rd wire cable is warranted, given the threat the cable may pose.

4. Continue to collaborate with the fishing industry to promote the goals of achieving zero bycatch of short-tailed albatrosses and minimizing bycatch of other species. Methods may include development of incentives for fishers, creating opportunities for peer-generated solutions, etc.

5. Continue to support research efforts to develop state-of-the-art seabird deterrent

devices for the fishing industry, including novel technologies such as underwater setting (via tubes and chutes, or novel hull designs) and integrated weight lines.

6. Encourage the use of fuel collars on tender vessels to minimize the potential for small spills during re-fueling.

7. Encourage the use of oil water separators on longline vessel bilge systems such that petroleum products are filtered out of bilge water prior to its expulsion from the vessel (see Appendix 4 for source information).

8. Encourage vessel owners and operators to decrease the probability of seabirds striking vessels and rigging by minimizing deck lighting, and/or shielding the lights, such that beams are directed downwards.

9. Share pertinent information with other U.S. fishery management councils, (Pacific and Western Pacific Fishery Management Councils) and other NMFS Regions and Science Centers (Northwest, Southwest, and Pacific Island). Encourage these councils and regions to implement the US National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (NMFS 2001), as well as addressing seabird bycatch issues in other gear types where problems may exist.

7. Coordinate with EPA, Coast Guard or other Federal or state agencies in collecting information important in determining the threat of fuel spills on seabirds and waterfowl, such as the number of groundfish vessels in Alaskan waters, the time they spend there, the location and season of use, the ports where refueling occurs and the level of use of each port.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any of the above recommendations.

[The above numbering is presented here as it is used in the BiOp.]