

ALASKA MARINE MAMMAL OBSERVER PROGRAM

SOUTHEAST ALASKA SALMON DRIFT GILLNET FISHERY

National Marine Fisheries Service Alaska Region Protected Resources Juneau, Alaska



Program Background

In 1972 the U.S. Congress enacted the Marine Mammal Protection Act (MMPA) to protect and conserve marine mammals. Congress stated that marine mammal populations should be "protected and encouraged to develop to the greatest extent feasible commensurate with sound policies of resource management and that the primary objective of their management should be to maintain the health and stability of the ecosystem."

The MMPA allows fishermen to incidentally (unintentionally) take marine mammals in the course of commercial fishing operations, provided they have been issued the appropriate authorization certificate and report any such takes. A "take" means to hunt, harass, capture or kill any marine mammal or to attempt to do any of those things.

However, the *intentional* take of any marine mammal in the course of commercial fishing operations is prohibited.

Pursuant to the goals of the MMPA, the National Marine Fisheries Service (NMFS), which has the delegated responsibility and authority to manage marine mammals, is directed to assess levels of mortality and serious injury of marine mammals during commercial fishing operations.

In Alaska, NMFS's Alaska Marine Mammal Observer Program (AMMOP) monitors marine mammal interactions with state-managed commercial fisheries. Information collected by the AMMOP is incorporated in assessments of the general status of marine mammal populations in Alaska. The AMMOP began monitoring marine mammal interactions with state-managed fisheries in 1990 and has since observed seven fisheries.

The AMMOP in 2010-2013 and Beyond

The Southeast Alaska salmon drift gillnet fishery is subject to monitoring of marine mammal interactions, based in large part on past levels of humpback whales takes. Fishing operations in the Alaska Department of Fish and Game (ADF&G) Management Areas 6&8 for this fishery will be monitored together during the 2012 and 2013 fishing seasons. Operations in this fishery in the remaining ADF&G Management Areas will be monitored in subsequent years.

In 2011 NMFS' AMMOP will conduct industry outreach and logistics scoping to discuss program goals and industry concerns and to determine the best approach for placing observers throughout the fishery for data collection. Public meetings and workshops will be held with fishermen to develop a dialog with permit holders regarding data collection methods. Public meetings also will be held prior to each fishing season in which data collection occurs (initially 2012—2013) to ensure fishermen are well informed about the program and to provide a forum for discussion about program details and concerns.



Key Program Terms

Marine Mammal

Marine mammals are warm-blooded animals that breath oxygen, have hair at some stage of life, give birth to live young, and nurse their young. These animals are adapted to or primarily inhabit the marine environment. They include porpoise, dolphins, whales, seals, sea lions, walrus, sea otter, and polar bears.

Stock Assessment Report

NMFS publishes annual **Stock Assessment Reports** for all marine mammal stocks in U.S. waters. A "stock" is a group of marine mammals of the same species or subspecies in a common area that interbreed when mature. A stock report contains information on the geographic range, population estimate and trend, and productivity rate. Reports also include estimates of total annual human-caused serious injury and mortality to the stock, with serious injury and mortality rates by fishery. A scientific review group determines if that rate is insignificant and approaching the zero mortality rate goal. The status of each stock is noted as either **strategic** or not.

Strategic Stock

A **strategic stock** is one that is listed as threatened or endangered under the Endangered Species Act, is likely to be listed as threatened under the Act in the near feature, or which has a level of direct human-caused serious injury and mortality that exceeds the stock's **potential biological removal level**.

Potential Biological Removal Level: PBR

The **Potential Biological Removal (PBR) level** is the maximum number of animals that may be removed from a marine mammal stock, not including natural mortalities, and still allows that stock to reach or maintain its optimum sustainable population. A PBR for each stock is published in the Stock Assessment Reports. Each stock's PBR is calculated by multiplying:

minimum population estimate

X

one-half the maximum net productivity rate

X

recovery factor between 0.1 and 1.0

List of Fisheries

The National Marine Fisheries Service publishes the **List of Fisheries**, an annual list of all commercial fisheries that legally operate in U.S. waters. The list contains information on each fishery including number of participants, marine mammal stocks affected by the fishery, and the category of the fishery relative to its impact on those marine mammal stocks. Categories range from I to III.

Fishery Categories I, II, and III

NMFS categorizes each commercial fishery based on the level of incidental serious injury and mortality of marine mammals in that fishery. NMFS relies on observer data in the analyses, but also considers other factors such as fishing techniques, gear, methods used to deter marine mammals, seasons and areas fished. Each fishery is categorized through an analysis with a two-tiered approach.

Tier 1: Impact on a stock from all fisheries. For each marine mammal stock, serious injuries and mortalities from all commercial U.S. fisheries are totaled. If the total is less than or equal to 10% of the PBR level for that stock, then all fisheries interacting with this stock are placed in Category III. A fishery remains in Category III unless it interacts with a stock for which total serious injury and mortality exceeds 10% of the PBR level. All fisheries that interact with a stock for which total serious injury and mortality exceeds 10% of the PBR level are subject to a Tier 2 analysis. Fisheries with no serious injuries or mortalities to any marine mammal are placed in Category III. This process is completed for each marine mammal stock in the region.

Tier 2: Impact on a stock from each individual fishery. For each fishery not placed in Category III in the Tier 1 analysis for a given marine mammal stock, the annual serious injury and mortality from that fishery for that stock is evaluated relative to the PBR level of that stock. Each fishery is categorized accordingly:

Category I: Mortality and Serious Injury ≥ 50% PBR
Category II: 50% PBR > Mortality and Serious Injury > 1% PBR
Category III: Mortality and Serious Injury ≤ 1% PBR

NMFS may require monitoring for marine mammal interactions with any Category I or II fishery. Depending on the results of the observations, the fishery may remain in the same category or may be re-categorized. Category III fisheries are not required to be observed, since the level of marine mammal serious injury or mortality is considered to be rare or has met the MMPA's "zero mortality rate goal."

The Marine Mammal Authorization Program

The Marine Mammal Authorization Program provides authorization for the accidental injury or mortality of marine mammals during commercial fishing operations. To lawfully incidentally take a marine mammal in a commercial fishery, the fishing permit holder in a Category I or II fishery must obtain a certificate from the National Marine Fisheries Service. Fishermen holding state or federal fishing permits for Category I or II fisheries in Alaska receive a free authorization certificate from NMFS. The authorization certificate must be available or displayed while fishing. This authorization does not apply to incidental taking of species listed under the Endangered Species Act (ESA) as endangered or threatened.

Fishermen must report to NMFS within 48 hours any injuries and mortalities to marine mammals that occurred during commercial fishing operations, even if an observer was present at the time.

To report an incidental injury or mortality of a marine mammal, see contact information on page 10.

The Alaska Marine Mammal Observer Program Details

Observer Coverage Levels



Remote locations pose unique sampling challenges.

The AMMOP endeavors to collect data that will provide a statistically reliable assessment of the level of serious injury and mortality in ADF&G-managed commercial fisheries for each marine mammal stock. Baseline information such as the number of fishery participants and estimated fishing effort helps determine observer coverage. Coverage should be sufficient to provide a reasonable level of accuracy and preci-

sion, measured in part by a coefficient of variation (CV). A CV of 25% is the AMMOP target. Additionally, coverage levels should allow NMFS to calculate whether serious injury and mortality levels exceed a stock's PBR with 95% certainty, even if no takes are observed. NMFS employs the minimum coverage that allows these goals to be met. Coverage levels are also influenced by available funding.

Permit Sampling Design

The AMMOP sampling design depends on the fishery, location, and logistics of placing observers in the field. Sampling design is based on the random selection of permit numbers, with sampling distributed proportionately across blocks of time and area according to the target coverage level. Alternate permit selections are made when factors like severe weather prevent observation of a selected permit.

Permit holders will be notified at least 24 hours prior to the start of observation deployment. Observers will collect data during the fishing operations of that permit

holder over a 24-hour period.

The AMMOP consults ADF&G managers throughout the season to monitor fishing effort and management changes, and adjusts observer coverage to maintain coverage goals.

The AMMOP designs fishery-specific permit sampling methods to reduce statistical bias and make observations fair and equitable among permit holders. Permit holders can help by providing operational details that facilitate observer deployment, which can affect sampling design.

Observer Hiring and Deployment



The AMMOP is a federally-funded program managed through contracts coordinated by the Protected Resources Division of the National Marine Fisheries Service, Alaska Regional Office in Juneau. NMFS awards contracts through standard competitive government procurement procedures.

Saltwater, Inc. of Anchorage has been awarded the contract to hire and deploy observers for data collection in the Southeast Alaska drift gillnet fishery. They have extensive experience over 20 years deploying fishery observers throughout Alaska

in federal- and state-managed fisheries and beyond. Saltwater, Inc. most recently hired and deployed AMMOP observers in the Yakutat set gillnet fishery with excellent results. The Saltwater, Inc. team, led by Kathy Robinson, is well known for fostering positive and productive relationships with the fishing industry.

Observers will collect data from independent vessels and will not be deployed aboard fishing vessels in the Southeast Alaska drift gillnet fishery.

Alaska Marine Mammal Observer Program Observers



O b s e r v e r s worked in Kodiak in 2002 and 2005 and in Yakutat in 2007-2008.

AMMOP observers are motivated, possess good judgment, and are able to work professionally and respectfully in close quarters with fisherman. AMMOP selects observers based on their ability to work independently with limited conveniences.

To work with the AMMOP, observers must have prior fishery observer experience, meet program standards for academic qualifications/ fishing experience and physical fitness, and pass the intensive AMMOP training course. Training covers fishery operations; data collection methods; fish, marine mammal, and seabird id; marine mammal management policy; and much more.

AMMOP observers are trained in wilderness preparedness and survival; CPR; first aid; risk management; and marine communi-

cations, weather, and navigation basics. All observers must pass a physical examination by a licensed physician, ensuring the observer does not have any health conditions that may jeopardize the safety of the observer or others while deployed, or prevent the observer from performing his or her duties.

AMMOP observers must further demonstrate that they can meet foreseeable physical challenges, including swimming, climbing, and strength. AMMOP observers are required to comply with U.S. Coast Guard drug testing regulations, uphold AMMOP Observer Standards of Conduct, and may not have any financial conflicts of interest. The contractor providing observer services must be in compliance with the Federal Civil Rights Act of 1964.

Information Recorded by Observers



Salmon dominate species recorded by observers.

For each permit sampled, observers record information on fishing operations and gear, catch and bycatch (including fish, invertebrates, mammals, and birds) and weather. Examples of gear information recorded include net length, twine material, mesh size, and deterrent devices used. Fishing data collected may be fishing effort during an opener, net location, set and soak times, picking or hauling time, and catch data (the numbers of animals caught by species and condition).

Some information gathered by the observer is best obtained directly from conversation with the permit holder. Information obtained in this way, such as gear configuration, precludes the need for an observer to have direct contact with fishing gear or equipment, thereby minimizing inconveniences to fishing operations.

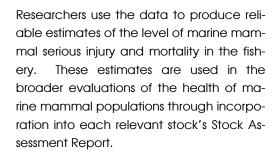
Observers collect biological samples and take photographs for species confirmation

and to support further scientific research on marine mammal health and physiology. Observers may collect biological samples by keeping whole carcasses of smaller animals or collecting tissue samples at sea or on land, if the animal is able to be transported to shore. Tissue samples may be used in DNA analysis to determine species type or stock identification, health of the individual, prey species, or other basic information about the species.

Observers record the species, number, and behavior of marine mammals in the immediate fishing area, and note all entanglements. Observers may collect data before and after hauls, as well as while gear is being hauled or picked.

For complete information on data collected please see the Observer Manual on the following website: http://www.fakr.noaa.gov/protectedresources/observers/ammopmanual.pdf

How Observer Information is Used by NMFS



The estimates are also used to categorize the fisheries in the annual List of Fisheries. Of the seven fisheries observed by the AMMOP, two were downgraded to Category III due to low documented levels of serious injury or mortality by the AMMOP.

If the resulting serious injury and mortality estimates indicate the need for reduction,

marine mammal managers will work in consultation with fishery participants, using the detailed information collected through the AMMOP, to evaluate ways to reduce injuries and mortalities in a fishery, taking the economics of a fishery into account.

Observer programs additionally provide a unique opportunity to collect scientific data on all bycatch, including seabirds and finfish, and other scientific information not obtainable from other sources.

Complete reports from past AMMOP studies may be found at: http://www.fakr.noaa.gov/protectedresources/observers/mmop.htm



Kodiak Island

Data Confidentiality and Privacy

Information collected by the AMMOP is considered proprietary and therefore subject to NOAA data confidentiality restrictions (see 50 Code of Federal Regulations (CFR) 229.11). NOAA Administrative Order 216-100 prescribes policies and procedures for protecting the confidentiality of data submitted to and collected by National Marine Fisheries Service (available at http://www.rdc.noaa.gov/~nao/216-100.html).

AMMOP data are released to the public only in aggregate or summary form so that operations or catch information for an individual permit holder cannot be identified.

The AMMOP will release to permit holders copies of observer forms containing data collected during that permit holder's operations. All data requests must be submitted in writing to the program coordinator at the National Marine Fisheries Service.

All AMMOP observers receive training regarding privacy and confidentiality re-

quirements. Contractors, sub-contractors, and observers must sign and are bound by a Statement of Non-Disclosure after reading and understanding the NOAA Administrative Order 216-100 on Confidentiality of Fisheries Statistics.

NMFS also operates under the requirements of the Freedom of Information Act (FOIA) pursuant to 5 U.S.C. § 552. It is the policy of the agency to make records available to the public to the greatest extent possible, in keeping with the spirit of the FOIA, while at the same time protecting sensitive information. FOIA Exemption (b)(4) protects "trade secrets and commercial or financial information obtained from a person [that is] privileged or confidential." This exemption is intended to protect the interest of both the government and the submitter of information. Further, FOIA entitles businesses, at a minimum, to basic rights of formal notice and full opportunity to object to the disclosure of their information.

Accommodating an Observer

For purposes of data collection in the Southeast Alaska salmon drift gillnet fishery, observers will monitor fishing operations from independent vessels in proximity to the observed fishing vessel.

Although regulations governing marine mammal observer coverage require commercial fishing vessel owner and or operators participating in Category I or II fisheries to accommodate an observer onboard their fishing vessel if requested by NMFS or an contracted agent of NMFS (see Code of Federal Regulations 50 CFR 229.7), the standard sampling design for this fishery will not call for observers to board fishing vessels for data collection.

However, permit holders must still accommodate observer needs for data collec-

tion from nearby independent vessels. Such observer accommodation includes providing accurate information in response to requests by the observer, as well as observer access to fishing gear, operations, and electronics that provide and/or store information as needed by the observer. Such accommodation also includes providing the observer with or access to entangled specimens upon request.

If the reasons for not accommodating an observer are to impede, impair, or interfere with observer efforts, the AMMOP coordinator will notify NMFS Enforcement, who will investigate the situation. Under certain circumstances, a fine may be imposed for refusing to allow an observer to perform official duties.

Permit Holder Input

Meetings, interviews, surveys, conversations, and other correspondence with fishermen have helped to develop this program over the years. The AMMOP values its ongoing relationship with industry participants, recognizes the difficulties inherent in their profession, and views them as part of the marine ecosystem. The success of the AMMOP is heavily reliant on working cooperatively with fishery participants.

As noted earlier, public meetings and workshops will be held in 2011 prior to the commencement of data collection in 2012. These meetings will provide a venue

to discuss the goals of the program and to work with the fishermen to determine the best means for achieving the program goals, while minimizing the impact on the industry. Preseason meetings will be held in 2012 and 2013 to ensure permit holder input is considered and incorporated as appropriate.

Fishermen may call the AMMOP coordinator (see contact information on page 13) at any time to discuss the program and voice any concerns or questions. Permit holders may also request copies of data collected from their permit.



Marine Mammal Incidental Takes Reported in Category II ADF&G-Managed Fisheries

From the 2011 List of Fisheries. This list includes all marine mammal stocks with incidental take reports for each fishery and is compiled from observer data, and fishery permit holder and general entanglement reports. An asterisk (*) means the stock is considered to be "strategic."

Gear	Area (Observed by AMMOP)	Marine Mammal Stock with Incidental Take Attributed to the Fishery
Salmon Drift Gillnet	Alaska Peninsula/ Aleutian Islands (1991)	Dall's porpoise, Alaska
		Harbor porpoise, Gulf of Alaska
		Harbor seal, Gulf of Alaska
		Northern fur seal, Eastern Pacific*
	Bristol Bay (None)	Beluga whale, Bristol Bay
		Gray whale, Eastern North Pacific
		Harbor seal, Bering Sea
		Northern fur seal, Eastern North Pacific *
		Pacific white-sided dolphin, North Pacific
		Spotted seal, Alaska
		Steller sea lion, Western U.S. *
	Cook Inlet (1999-2000)	Beluga whale, Cook Inlet*
		Dall's porpoise, Alaska
		Harbor seal, Gulf of Alaska
		Harbor porpoise, Gulf of Alaska
		Steller sea lion, Western U.S. *
	Drings William Sound (1000 1001)	Dall'a payraina Alaska
	Prince William Sound (1990-1991)	Dall's porpoise, Alaska
		Harbor seal, Gulf of Alaska
		Harbor porpoise, Gulf of Alaska
		Northern fur seal, Eastern North Pacific * Pacific white-sided dolphin, North Pacific
		Sea otter, South Central Alaska
		Steller sea lion, Western U.S. *
		Steller sea lion, Western 0.5.
	Southeast Alaska (None)	Humpback whale, Central North Pacific*
		Steller sea lion, Eastern U.S. *
		Dall's porpoise, Alaska
		Harbor seal, Southeast Alaska
		Harbor porpoise, Southeast Alaska Pacific white-sided dolphin, North Pacific
Set Gillnet	Alcoka Daningula/ Alcution Islanda (None)	Steller sea lion, Western U.S. *
	Alaska Peninsula/ Aleutian Islands (None)	Harbor porpoise, Bering Sea
	Drietal Bass (Nama)	Dalvas vihala Darias Cas
	Bristol Bay (None)	Beluga whale, Bering Sea
		Gray whale, Eastern North Pacific
		Harbor seal, Bering Sea
		Northern fur seal, Eastern Pacific * Spotted seal, Alaska
	14 II I (2222 12225)	
	Kodiak (2002 and 2005)	Harbor seal, Gulf of Alaska
		Harbor porpoise, Gulf of Alaska
		Sea otter, Southwest Alaska*
		Steller sea lion, Western U.S.*
	Yakutat (2007-2008)	Harbor seal, Southeast Alaska
	, , ,	Steller sea lion, Eastern U.S. *
		Harbor porpoise, Southeast Alaska
		Gray whale, Eastern North Pacific
		Humpback whale, Central North Pacific*
Purse Seine	Kodiak (none)	Humpback whale, Central North Pacific *
	Cook Inlet (none)	Humpback whale, Central North Pacific *

Regulatory Language Mandating Marine Mammal Observers

Regulations from 50 CFR 229.7: Authorization for commercial fisheries under the Marine Mammal Protection Act of 1972; Monitoring of incidental mortalities and serious injuries.

- a) Purpose. The Assistant Administrator will establish a program to monitor incidental mortality and serious injury of marine mammals during the course of commercial fishing operations in order to:
- Obtain statistically reliable estimates of incidental mortality and serious injury;
- (2) Determine the reliability of reports of incidental mortality and injury under Sec. 229.6; and
- (3) Identify changes in fishing methods or technology that may increase or decrease incidental mortality and serious injury.
- b) Observer program. Pursuant to paragraph (a) of this section, the Assistant Administrator may observe Category I and II vessels as necessary. Observers may, among other tasks:
- Record incidental mortality and injury, and by-catch of other non-target species;
- (2) Record numbers of marine mammals sighted; and
- (3) Perform other scientific investigations, which may include, but are not limited to, sampling and photographing incidental mortalities and serious injuries.
- c) Observer requirements for participants in Category I and II fisheries.
- (1) If requested by NMFS or by a designated contractor providing observer services to NMFS, a vessel owner/operator must take aboard an observer to accompany the vessel on fishing trips.
- (2) After being notified by NMFS, or by a designated contractor providing observer services to NMFS, that the vessel is required to carry an observer, the vessel owner/operator must comply with the notification by providing information requested within the specified time on scheduled or anticipated fishing trips.
- (3) NMFS, or a designated contractor providing observer services to NMFS, may waive the observer requirement based on a finding that the facilities for housing the observer or for carrying out observer functions are so inadequate or unsafe that the health or safety of the observer or the safe operation of the vessel would be jeopardized.
- (4) The vessel owner/operator and crew must cooperate with the observer in the performance of the observer's duties including:
- (i) Providing, at no cost to the observer, the United States government, or the designated observer provider, food, toilet, bathing, sleeping accommodations, and other amenities that are equivalent to those provided to the crew, unless other arrangements are approved in advance by the Regional Administrator;
- (ii) Allowing for the embarking and debarking of the observer as specified by NMFS personnel or designated contractors. The operator of a vessel must ensure that transfers of observers at sea are accomplished in a safe manner, via small boat or raft, during daylight hours if feasible, as weather and sea conditions allow, and with the agreement of the observer involved;
- (iii) Allowing the observer access to all areas of the vessel necessary to conduct observer duties:
- (iv) Allowing the observer access to communications equipment and navigation equipment, when available on the vessel, as necessary to perform observer duties;

- (v) Providing true vessel locations by latitude and longitude, accurate to the minute, or by loran coordinates, upon request by the observer:
- (vi) Sampling, retaining, and storing of marine mammal specimens, other protected species specimens, or target or non-target catch specimens, upon request by NMFS personnel, designated contractors, or the observer, if adequate facilities are available and if feasible:
- (vii) Notifying the observer in a timely fashion of when all commercial fishing operations are to begin and end;
- (viii) Not impairing or in any way interfering with the research or observations being carried out; and
- (ix) Complying with other guidelines or regulations that NMFS may develop to ensure the effective deployment and use of observers.
- (5) Marine mammals or other specimens identified in paragraph (c)(4)(vi) of this section, which are readily accessible to crew members, must be brought on board the vessel and retained for the purposes of scientific research if feasible and requested by NMFS personnel, designated contractors, or the observer. Specimens so collected and retained must, upon request by NMFS personnel, designated contractors, or the observer, be retained in cold storage on board the vessel, if feasible, until removed at the request of NMFS personnel, designated contractors, or the observer, retrieved by authorized personnel of NMFS, or released by the observer for return to the ocean. These biological specimens may be transported on board the vessel during the fishing trip and back to port under this authorization.
- d) Observer requirements for participants in Category III fisheries.
- (1) The Assistant Administrator may place observers on Category III vessels if the Assistant Administrator: (i) Believes that the incidental mortality and serious injury of marine mammals from such fishery may be contributing to the immediate and significant adverse impact on a species or stock listed as a threatened species or endangered species under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.); and (ii) Has complied with Sec. 229.9(a)(3)(i) and (ii); or (iii) Has the consent of the vessel owner.
- (2) If an observer is placed on a Category III vessel, the vessel owner and/or operator must comply with the requirements of Sec. 229.7(c).
- (e) Alternative observer program. The Assistant Administrator may establish an alternative observer program to provide statistically reliable information on the species and number of marine mammals incidentally taken in the course of commercial fishing operations. The alternative observer program may include direct observation of fishing activities from vessels, airplanes, or points on shore.

[60 FR 45100, Aug. 30, 1995, as amended at 64 FR 9087, Feb. 24, 1999]

Contact Information

For more information on the Alaska Marine Mammal Observer Program:

Bridget Mansfield, AMMOP Coordinator

National Marine Fisheries Service

Protected Resources Division

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Juneau, AK 99802-1668

(907) 586-7642 or Fax (907) 586-7012

Bridget.Mansfield@noaa.gov

http://www.fakr.noaa.gov/protectedresources/

observers/mmop.htm

For information about Saltwater, Inc and hiring and deploying observers:

Kathy Robinson

Saltwater, Inc.

733 N Street

Anchorage, AK 99501

(907) 276-3241 or fax (907) 258-5999

http://www.saltwaterinc.com/

For questions relating to the Marine Mammal Authorization Certificate:

Rhonda McMichael

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(907) 586-7235 or Fax (907) 586-7012

Rhonda.McMichael@noaa.gov

For questions or to report an injury or death of a marine mammal during commercial fishing or for additional Mortality/Injury Reporting Forms:

Patricia Lawson

National Marine Fisheries Service

Office of Protected Resources

1315 East-West Hwy.

Silver Spring, MD 20910-3226

(301) 713-2322 or Fax (301) 713-4060

http://www.nmfs.noaa.gov/pr/pdfs/

interactions/mmap_reporting_form.pdf

To obtain a copy of the most recent Alaska Marine Mammal Stock Assessments:

National Marine Fisheries Service

Office of Protected Resources

1315 East-West Hwy.

Silver Spring, MD 20910-3226

(301) 713-2322 or Fax (301) 713-4060

http://www.nmfs.noaa.gov/prot_res/PR2/

Stock_Assessment_Program/

To obtain a copy of the List of Fisheries:

Melissa Anderson

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1315 East-West Hwy.

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(301) 713-2322

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http://www.nmfs.noaa.gov/prot_res/PR2/

Fisheries_Interactions/

For questions relating to sea bird interactions with commercial fisheries:

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(907) 586-7424 or Fax (907) 586-7012

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For questions relating to sea otters:

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Marine Mammals Management

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For questions relating to NMFS Enforcement, observer program issues in particular:

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For questions relating to the National Observer Program:

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http://www.st.nmfs.gov/st1/nop/index.html