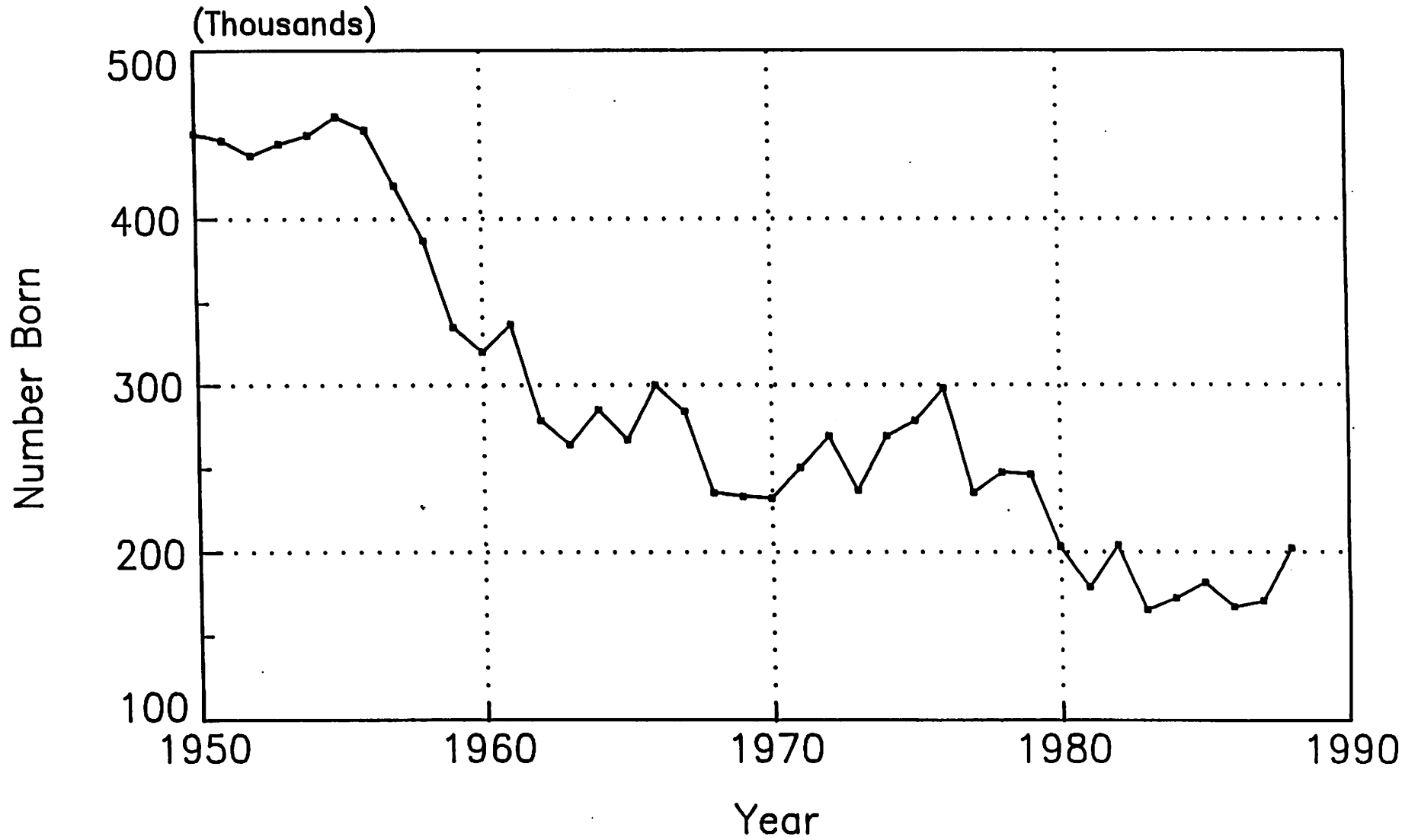


SUMMARY OF TRENDS IN ALASKAN PINNIPED NUMBERS

<u>Species</u>	<u>Trend</u>
Northern fur seals	Reduced but stable.
Northern sea lions	Reduced and declining from Kodiak to the west but stable to east.
Pacific harbor seals	Reduced and declining from Prince William sound to west, stable to east.
Ice seals	Trends unknown.
Pacific walrus	Numbers high and either stable or declining slightly. Recent declines in males hauling out in Bristol Bay and in Soviet waters

14.11

Northern fur seal pups born St. Paul Island, Alaska 1950-88

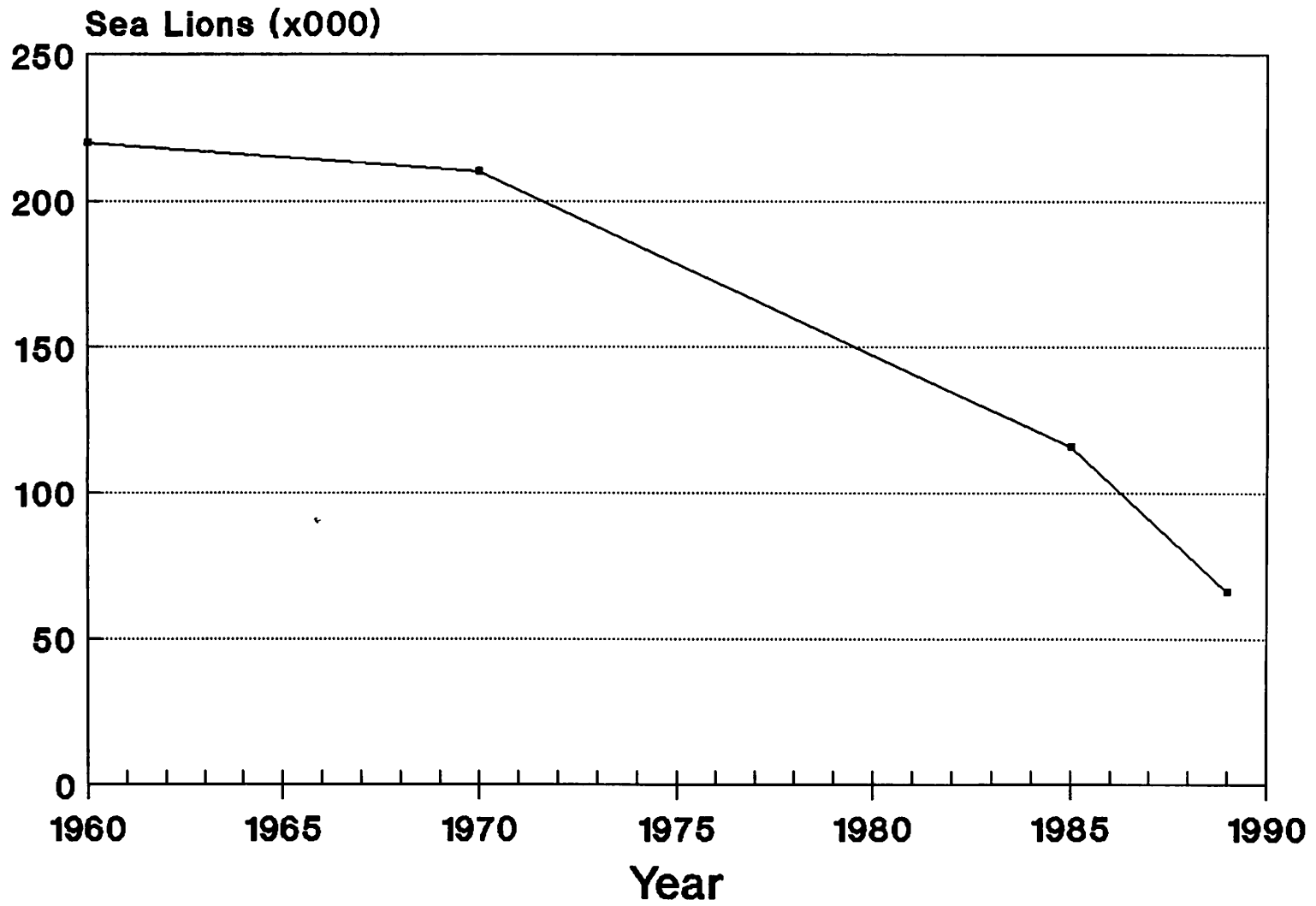


HARBOR SEAL NUMBERS AT ALASKA TREND COUNT SITES

<u>Area</u>	<u>Formerly</u>	<u>Most Recent</u>
Alaska Peninsula	20-25K ca. 1973	12K (-49%) in 1985
Tugidak Island	6.9K in 1976	1.0K (-86%) in 1988*
Prince William Sound	1.6K in 1983	1.1K (-31%) in 1988*
SE Alaska	1.1K in 1983	1.8K (+64%) in 1988
Statewide	270K ca. 1973	?

* Sign. diff. at $P < 0.001$

Numbers of Northern Sea Lions Worldwide

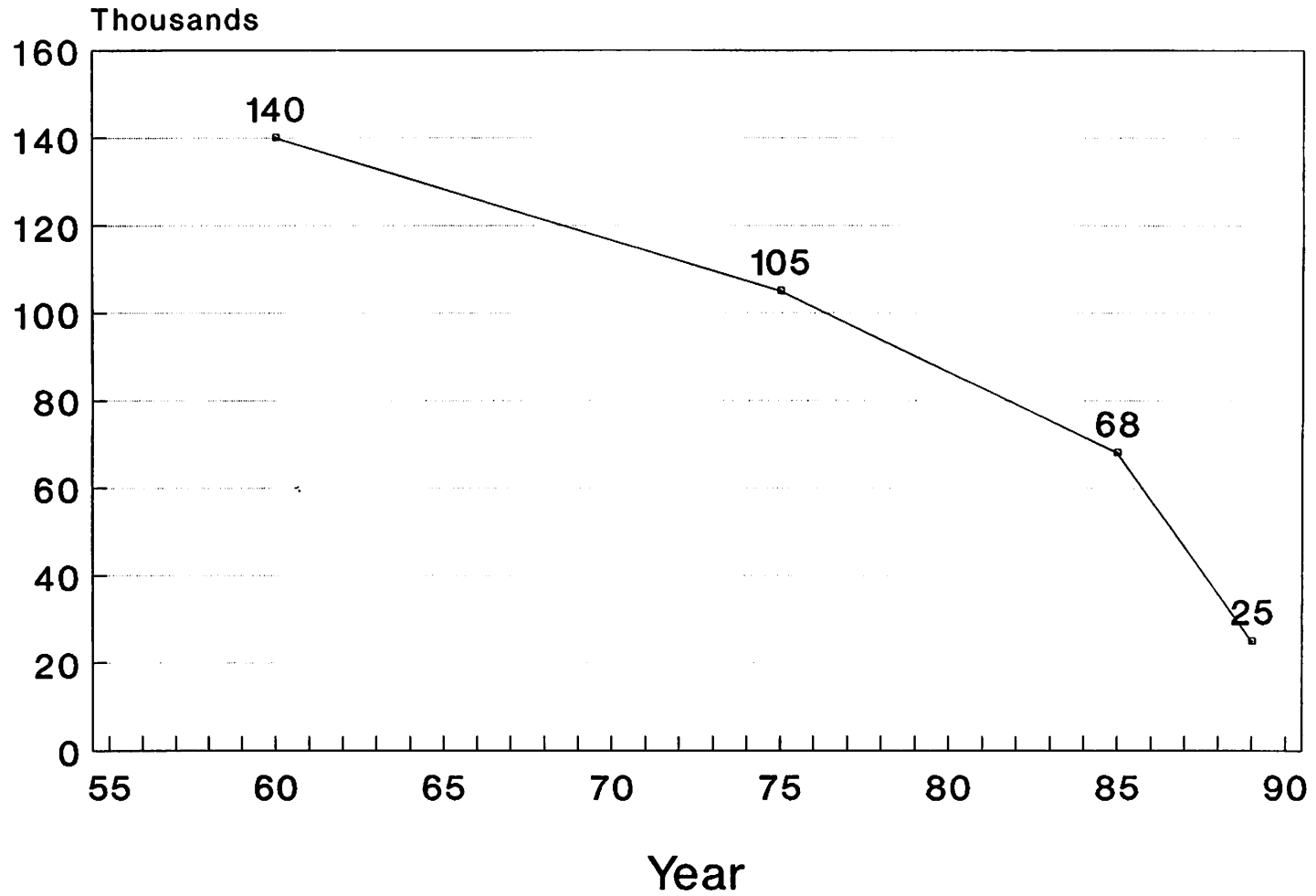


NORTHERN SEA LION NUMBERS BY AREA

<u>Area</u>	<u>1960-70</u>	<u>1989</u>
USSR	23k	3k (-87%)
Alaskawide	172k	53k (-69%)
Aleutian Islands	100k	20k (-80%)
Bering Sea	7k	1k (-86%)
Gulf of Alaska	58k	22k (-62%)
SE Alaska	7k	9k (+29%)
British Columbia	14k	6k (-57%)
WA-OR-CA	8k	4k (-50%)
Worldwide	217k	66k (-70%)

Number of Sea Lions

Kenai to Kiska



Changes in the number of adult and pup northern sea lions observed at Marmot and Sequam Islands between 1979 and 1989.

Site	Year			Percent Change	
	1979	1985	1989	1979-89	1985-89
Marmot Island					
Adults	6,381	4,983	2,331	-63%	-53%
Pups	6,741	4,286	2,199	-67%	-49%
Sequam Island					
Adults	6,493	2,942	709	-89%	-76%
Pups	-	2,635	529	-	-80%

CAUSES OF NORTHERN SEA LION DECLINE

- Bias in Survey Technique
- Redistribution
- Increased Predation
- Oceanographic/Weather (and effects on prey)
- Commercial and Subsistence Harvests
- Disease/Pollutants
- Changed Vital Rates
- Fisheries

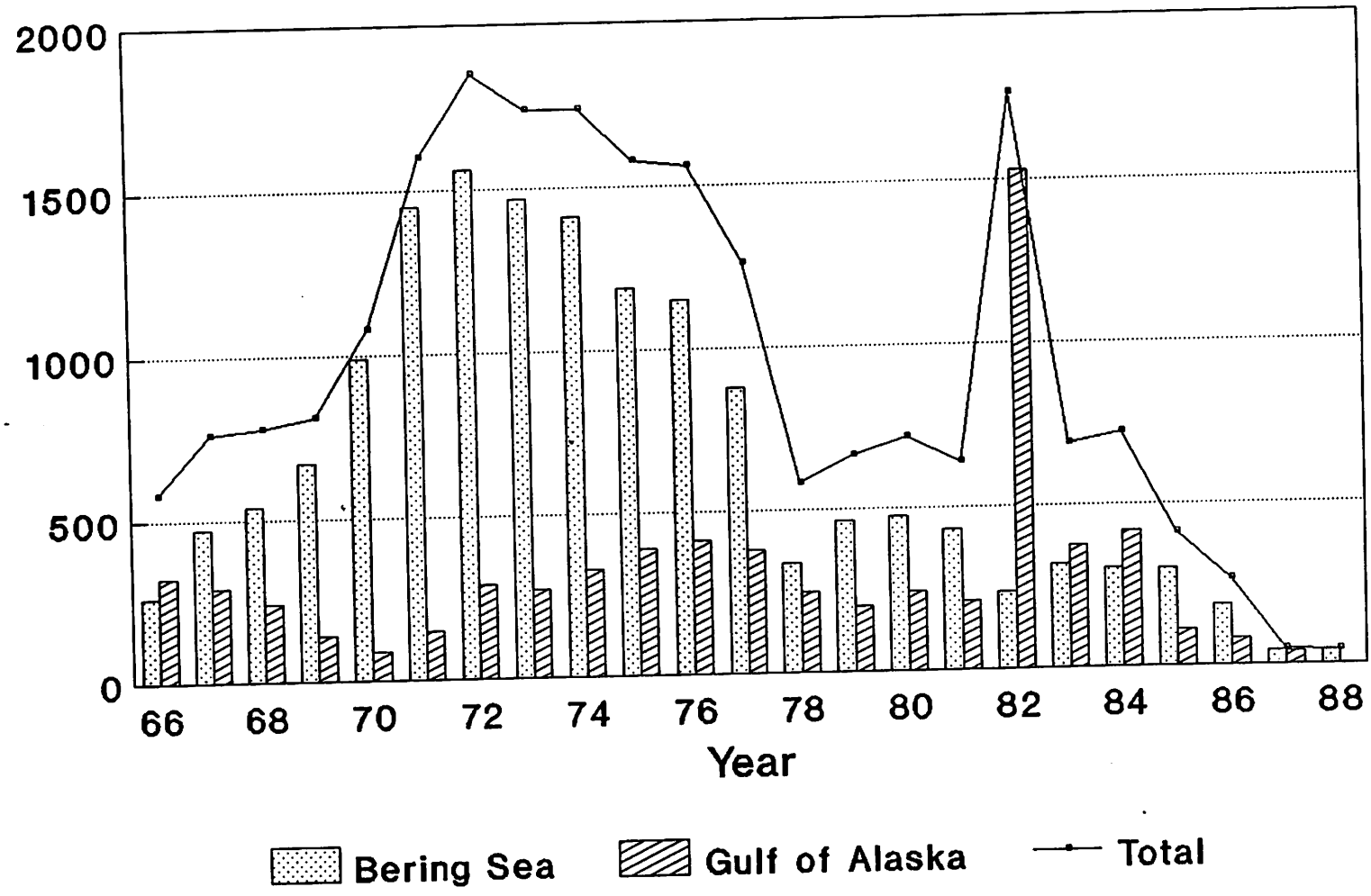
EFFECTS OF FISHERIES

on northern sea lions

- **Incidental Catch**
- **Intentional Killing**
- **Entanglement**
- **Harassment**
- **Prey Reduction**
 Size
 Availability
 Energy
- **Sanctuary Factor**

ESTIMATED SEA LION TAKE IN ALASKA

Foreign and Joint-venture



ENVIRONMENTAL DEFENSE FUND

1616 P Street.,NW
Washington, DC 20036
(202) 387-3500

November 21, 1989

The Honorable Robert Mosbacher
Secretary
Department of Commerce
14th Street & Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Secretary Mosbacher:

An emergency posing a significant risk to the well-being of the northern (or "Steller") sea lion (Eumetopias jubatus) exists as a result of a precipitous, unexplained decline in its numbers throughout much of its range over the course of the past several years. Accordingly, the Environmental Defense Fund, on behalf of itself and the organizations identified below, respectfully petitions you to use your authority under Section 4(b)(7) of the Endangered Species Act, 16 U.S.C. §1533(b)(7), (the "Act") to designate immediately all populations of northern sea lions occurring in whole or in part in Alaska or adjacent waters of the Exclusive Economic Zone as endangered and to initiate a rulemaking to make that emergency designation permanent.

The alarming decline in northern sea lion numbers in Alaska is summarized in the attached October 1989 report by Thomas R. Louglin of the National Marine Mammal Laboratory. The Louglin report shows, on the basis of a joint U.S.-U.S.S.R. survey carried out earlier this year, that northern sea lions have recently experienced a marked acceleration of a decline that apparently began about four decades ago. Since 1985, sea lions have declined in the study area by 63 percent. The decline has been most pronounced in the eastern Aleutian Islands, where sea lion numbers have been reduced by 93 percent since 1960. The decline is not limited to the the eastern Aleutians, however. The Loughlin report notes that "[t]he 1989 joint US-Soviet surveys confirm that the decline in northern sea lion abundance from the Gulf of Alaska to the western Aleutian Islands is continuing and that it has spread both eastward and westward." The fact that the decline

National Headquarters
257 Park Avenue South
New York, NY 10010
(212) 505-2100

1405 Arapahoe Avenue
Boulder, CO 80302
(303) 440-4901

5655 College Avenue
Oakland, CA 94618
(415) 658-8008

1108 East Main Street
Richmond, VA 23219
(804) 780-1297

128 East Hargett Street
Raleigh, NC 27601
(919) 821-7793

continues to spread is regarded in the Loughlin report as "another alarming aspect."

The rate of decline in these long-studied populations clearly reflects an emergency of extraordinary proportions. Rates of decline of this magnitude could quickly lead to the disappearance of a population of animals that reproduces as slowly as the sea lion. Compounding the gravity of the situation is the fact that the cause of the decline has not been determined. A 1986 National Marine Mammal Laboratory workshop on the sea lion noted that parallel declines have apparently occurred in North Pacific fur seal, harbor seals, and fish-eating birds in recent years in the Gulf of Alaska and the Bering Sea, suggesting some ecosystem-wide stress affecting many different species. The Marine Mammal Commission, in its report to Congress earlier this year, noted that "while available information is insufficient to document the cause of the decline, information provided in the [National Marine Fisheries Service's] Status Review suggests that incidental take in commercial fisheries in Alaskan waters has at least contributed to the decline."

The circumstances described above clearly necessitate the emergency listing of the northern sea lion as endangered. The statutory standard for emergency listing is that there exist "any emergency posing a significant risk to the well-being of any species." An imminent risk of extinction is not required to invoke this authority, although the facts outlined above may well constitute such a risk. Documented rates of decline that could quickly lead to disappearance of a population, when coupled with the lack of any understanding of the cause of the decline, clearly constitute a significant risk to the well-being of this species. The U.S. Fish and Wildlife Service, in very analogous circumstances, has recently used its emergency listing authority to designate the Mojave population of desert tortoises as an endangered species.

Authority to designate species as endangered on an emergency basis has existed since 1973. However, amendments to the Endangered Species Act enacted by Congress in 1988 were intended to ensure that this emergency listing authority is in fact used in circumstances like those of the northern sea lion. The 1988 amendments provide that the Secretary "shall make prompt use of the [emergency listing] authority under paragraph 7 to prevent a significant risk to the well being of any such species." 16 U.S.C. §1533(b)(3)(C)(iii) (emphasis added). As a result of the 1988 amendments, the precipitous, unexplained decline of the northern sea lion clearly represents the sort of emergency situation for which the Secretary is directed to use his

The Honorable Robert Mosbacher
 November 21, 1989
 Page 3

emergency listing authority.

As outlined above, the only statutory standard that must be met to trigger an emergency listing is that there be an emergency posing a significant risk to the well-being of a species. That standard is met here. In addition, however, there are many clear benefits that would enhance the species' chances of survival if its listing were promptly accomplished. First, listing would underscore the urgency of the need for attention to the species by federal, state, and private wildlife agencies. Urgently needed work includes research on the causes of and possible preventive measures for the decline. Second, listing would bring into effect the obligation of section 7 of the Act that federal agencies consult with the Service to ensure that their actions not jeopardize the survival of the species. Finally, listing may enable the federal government to deal more effectively with the problem of incidental taking.

For the reasons set forth above, we respectfully petition you to take the action required by Sections 4(b)(7) and 4(g)(2) of the Act, 16 U.S.C. §1533(b)(7) and (g)(2), by designating immediately all populations of northern sea lions occurring in whole or in part in Alaska or adjacent waters of the Exclusive Economic Zone as endangered and by initiating a rulemaking to make that emergency designation permanent. Please be advised also that under section 11(g)(2)(C) of the Act, 16 U.S.C. §1540(g)(2)(C), 60 day advance notice of a violation of the Act respecting such an emergency is not required.

Respectfully submitted,

Michael J. Bean

Michael J. Bean, Esq.
 Environmental Defense Fund

On behalf of:

American Cetacean Society
 American Humane Association
 Animal Protection Institute of America
 Animal Welfare Institute
 California Marine Mammal Center
 Friends of Animals
 Friends of the Earth
 Friends of the Sea Otter
 (continued on next page)

The Honorable Robert Mosbacher
November 21, 1989
Page 4

Cris Van Nise
Monitor Inc.

Fund for Animals
Greenpeace
International Fund for Animal Welfare
International Wildlife Coalition
National Audubon Society *Mirthe Johnson*
North Wind Undersea Institute
Oceanic Society
The Whale Center *Mark Palmer*

cc Dr. Nancy Foster
Office of Protected Species
National Marine Fisheries Service
1335 East-West Highway
Silver Spring, MD 20910

By separate letter:
Center for Marine Conservation
Humane Society of United States

NORTHERN SEA LIONS: STATUS UPDATE 1989

Thomas R. Loughlin
National Marine Mammal Laboratory
Alaska Fisheries Science Center
7600 Sand Point Way, NE
Seattle, WA 98115
October, 1989

Introduction

This report summarizes research in 1989 on the decline of northern sea lions (Eumetopias jubatus) in Alaska. Results are from aerial and ship surveys in Alaska and the Kuril Islands, U.S.S.R., to determine if the decline is continuing. The work in 1989 was a joint US-USSR project under the US-USSR Environmental Agreement, Area V, Marine Mammals. The last report on the decline was published in 1987 (Merrick et al., Fish. Bull. U.S., 85:351-365). This update is an abbreviated version of two draft manuscripts being prepared at the National Marine Mammal Laboratory for scientific publication.

Methods

Adult and juvenile northern sea lions were counted visually and from photographs using airplanes at rookeries and haul out locations from Outer Island (Kenai Peninsula) to Kiska Island (central Aleutian Islands) during 13-29 June, 1989, and from small boats or from land at the Kuril Islands from 15 June to 12 July, 1989. Pup counts were obtained by forcing all sea lions other than pups into or near the water; pups were then counted by slowly walking along the shore. Counts at Kiska, Seguan and Bogoslof Islands were obtained on 8, 12, and 15 July, respectively; counts at Chirikof and Marmot Islands were on 28

and 29 June, respectively.

Results

A total of 24,953 northern sea lions were counted in the Alaskan study area (Table 1). This represents a decline of 63% from the 67,617 counted from the same area during 1985 (8.5% decline per year) and an 82% decline from the 140,000 counted in 1960 (4.5% decline per year). The time for the population to drop by half between 1960 to 1989 was about 13 years. A comparison of the number of sea lions counted in each study area and the proportion this count represents of the total number in 1985 and 1989 indicates that all areas have exhibited major declines (Table 1). Chernabura Island in the western Gulf of Alaska was the only location with an increase; it went from 487 in 1985 to 544 in 1989.

The largest decline occurred in the eastern Aleutian Islands. The six major rookeries in this area totalled 41,220 adult northern sea lions in (or about) 1960. In 29 years, sea lions declined by 93% to only 2,813 during the 1989 survey (-8.6% per year). From 1956-89, the western Gulf of Alaska, the central Gulf of Alaska, and central Aleutian Islands all show an annual declining trend (-4.8%, -3.1%, and -2.6%, respectively).

Particularly alarming is the magnitude of decline at major rookeries from 1985 to 1989. For instance, Sugarloaf Island declined by 38% (1,130 less animals), Marmot Island (the largest northern sea lion rookery) declined by 53% (2,652 less animals), Ugamak Island (the largest rookery in the Aleutian Islands prior

to the 1980's) declined by 69% (979 less animals), and Sequam Island declined by 80% (2,340 less animals). The smallest decline was noted at Pinnacle Rocks in the western Gulf of Alaska which declined by 14% (222 less animals).

The joint US-Soviet survey of the Kuril Islands resulted in counts of 656 adult males, 2,959 other adults and juveniles, and 1,479 pups. These counts represent a decline of at least 60% since the late 1960's when about 33,000 animals were counted. Most of the decline occurred between 1969 and 1974. This is the same time period when the decline was first noticed in the eastern Aleutian Islands. No increases have been noted in the Kuril Islands which could account for the decline in Alaska.

Pup counts also declined in both areas. The pup count at Marmot Island in 1989 was 2,199 live pups, down 49% from 4,266 in 1986 (Table 2); at Chirikof Island the count was 709 live pups, down 52% from 1,476 in 1985; at Bogoslof Island the count was 358 live pups, down 62% from 1,120 in 1985; at Sequam Island the count was 529 pups, down 80% from 2,635 in 1985; and at Lief Cove, Kiska Island, the count was 293 live pups, down 67% from 885 in 1985. Pups counts on the Kuril Islands have declined by 25% between 1983 and 1989.

Discussion

The 1989 joint US-Soviet surveys confirm that the decline in northern sea lion abundance from the Gulf of Alaska to the western Aleutian Islands is continuing and that it has spread both eastward and westward. This decline is apparent in reduced

abundance of both adult and juvenile sea lions at rookeries and haul out locations and in the number of pups born at all rookeries. The magnitude of the decline is particularly dramatic when the current count of about 25,000 is compared to the 140,000 counted just 29 years; an 82% decline. Surprisingly, the decline since 1985 has been 63% in just about four years, or about 16% per year. The 1989 count of 25,000 for most of Alaska represents the same number that were counted in the eastern Aleutian Islands alone in 1979. Over the 29 years from 1960 to 1989 the sea lion population in central Alaska has declined at about 4.5% per year; in the eastern Aleutian Islands the rate has been about 8.6% per year.

The magnitude of the decline in the central Aleutian Islands is of concern. This area had declined by only 8% from the mid 1950s to 1985. Since 1985 the population has declined by 70%, from 25,759 animals to only 7,759. The most significant declines were at Seguam Island and Kiska Island; pup production at Seguam had declined by 80% over four years.

Another alarming aspect of the decline is that it is continuing to spread. The 1985 survey suggested that the decline had stopped at Marmot Island, near Kodiak, and that Sugarloaf Island had remained stable. The 1989 survey shows that Sugarloaf and Outer Island to the east have now declined. Unpublished data collected this year under contract to the NMML indicate that sea lion numbers in areas east and south of Outer Island have remained stable.

Table 1. Counts of adult and juvenile northern sea lions by area in the Gulf of Alaska and Aleutian Islands during 1985 to 1989. The percentage of each count to the total for that year is shown in ().

Area	Islands	1985 Count	1989 Count	Percent Change
Cent. Gulf AK	Outer I. to Chirikof I.	24,389 [*] (36%)	9,614(38%)	-61%
West. Gulf AK	Atkins I. to Clubbing Rock	6,667 (10%)	4,435(18%)	-34%
East. Aleutians	Ugamak I. to Samalga	10,802 (16%)	3,145(13%)	-71%
Cent. Aleutians	Is. Four Mnts. to Kiska	25,759 (39%)	7,759(31%)	-70%
Total		67,617	24,953	-63%

* Does not include Outer Island.

Table 2. Counts of live northern sea lion pups at selected major rookeries in the Gulf of Alaska (GOA) and Aleutian Islands (AI), 1979 to 1989.

Rookery	1979(A)	1985-86(B)	1989(C)	Percent Change	
				C/A	C/B
Marmot Island (GOA)	6,658	4,266	2,199	-67	-48
Chirikof Island (GOA)	1,649	1,476	709	-57	-52
Bogoslof Island (AI)	914	1,120	358	-61	-68
Sequam Island (AI)	2,500	2,635	529	-79	-80
Kiska Island (AI)	476	882	293	-38	-67

Figure 1.--Overall trend in northern sea lion abundance from the Kenai Peninsula to Kiska Island, 1960-89.

