THE CRASH OF THE NORTHERN FUR SEAL

Situated at the edge of the Continental Shelf, the Pribilof Islands are a group of five volcanic rocks some 300 miles off the west coast of Alaska. The Bering Sea surrounds the islands with its rich diversity of life. More than 70 percent of the world's northern fur seals come to the Pribilofs every summer to breed and feed.

St. Paul, the largest of the group, has by far the most northern fur seals in the world. St. George, the second largest island, has the second largest fur seal group. Much smaller numbers breed on Bogoslov Island further south in the Aleutian chain and on St. Miguel Island in California.

The northern fur seal's population has crashed three times in recorded history, Dr. Roger Gentry wrote in his book, *Behavior and Ecology of the Northern Fur Seal (Princeton University Press 1998)*. "Twice it recovered rapidly when sealing was controlled." The third crash appeared to end in 1983 when the commercial harvest was closed. By the time Gentry wrote his book in 1998, the population had been stable for 15 years but had not seen the rapid increase following previous crashes.

Then in 1998, the fur seal population began to crash a fourth time. Since 1999, the total population of northern fur seals in the Pribilof Islands has dropped from more than 1 million animals to fewer than 600,000 in 2004. Since 1975, the number of fur seals born each year has plummeted 57 percent. Since 2000, the pup decline has exceeded 22 percent, and in 2004 alone the number dropped 15 percent.

As for the total northern fur seal population in the Eastern Pacific, a preliminary draft estimate by the National Marine Mammal Laboratory in 2004 says it has dropped nearly 33 percent from 1994 to 2004.

Scientists say the fur seal pups are particularly vulnerable to food shortages because they are weaned more abruptly and have less developed foraging skills. Fur seal studies show that food shortages in one season may affect the pregnancy status of females in subsequent seasons, blocking estrus, terminating pregnancy, and preventing lactation.

"It's clearly not good news," says Lowell Fritz, head of the National Marine Mammal Laboratory. "It means one of two things, either the numbers of females giving birth is a lot lower, or the birth rate has gone down."

This time, there is no sealing to curtail or blame. Officially, the federal agencies that manage the fur seal — NOAA Fisheries and the North Pacific Fishery Management Council — say they do not know why the fur seal is in trouble, or what to do about it.

Could it be that killer whales are eating the fur seals? There's some speculation, but no evidence, of that. Perhaps a climate change in 1998 is having an effect. But the 1998 change seems mild compared to previous climactic shifts. What is certain is that since the 1970s the Bering Sea has been home to a growing commercial fishing industry that now produces half America's seafood. And since 1999, the pollock catch in fur seal feeding areas has exploded, including a tenfold increase off rookeries on St. George Island, as shown on the series of maps below.

Studies of fur seals show that food shortages in one season may affect pregnancy in subsequent seasons, blocking estrus, terminating pregnancy, and preventing lactation.

Russian explorers discovered the Pribilof rookeries in 1786 by following a fur seal north from the Aleutian Islands. A large, unregulated kill dramatically reduced seal numbers until the 1830s when Russians banned the slaughter of females. In 1867, the U.S. purchase of Alaska included the Pribilofs, and under American management the population crashed a second time. Starting in 1868, the fleet of 300 boats killed up to 75,000 seals a year at sea — mostly pregnant females. By 1910, the fur seal herd had been decimated.

Under the International North Pacific Fur Seal Treaty of 1911, the U.S. agreed to share the harvest in exchange for a promise to halt pelagic (at sea) harvests. The U.S. also decided to force Pribilof Aleuts to work in the fur seal trade under conditions they say amounted to slavery. Involuntary servitude continued until 1984, Aleut leaders say, when the fur seal treaty expired and the commercial harvest ended.

The fur seal decline shows no signs of slowing down. Idle males — males without harems — on both islands declined from last year. Researchers counted 33.6 percent fewer idle males on St. Paul and a 21.8 percent decline on St. George. However, Tom Loughlin, a scientist who ran the fur seal program until his recent retirement, says the count of idle males this year could be influenced by males who lingered the cool Bering Sea water, rather than haul out in the warm air and be counted, as in the past.

In 1976, researchers counted 291,000 pups born on St. Paul Island. In 2002, only 145,000 were born. In 2004, the number dropped to 118,000. Annual pup production is now lower than that estimated on the Pribilofs in 1916.

While the cause of the current decline remains a mystery, a 19-year study conducted by a veterinarian working for the Pribilof Aleuts shows that among all the pups that died and were examined, 52 percent succumbed to starvation.

Some scientists speculate that too much pollock fishing in areas where female fur seals forage is a key factor in the decline. But Arne Fuglvog, a Council member from Petersburg, Alaska, says more research is needed before the Council takes any action to reduce the pollock catch.

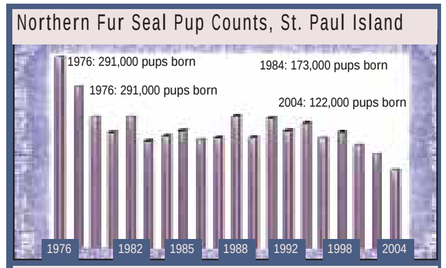
Sadly, the fur seal has done poorly in the competition for research dollars. In 2003, the fur seal research budget was $100,000. In 2004, Congress slashed it to $0. The Steller sea lion research, in contrast, has received nearly $130 million since 2000, mostly because it is listed as an endangered species.

The fur seal's health, however, is hardly more tenuous than that of the people who live at the epicenter of these conflicts. The Native Aleuts of the Pribilof Islands, a people who rely on the Bering Sea for sustenance, despair at the prospect of losing their annual fur seal subsistence harvests.

"The fur seal situation out here is getting worse," says Ron Philemonoff, the chief executive officer of TDX Corp., a Native Aleut company on St. Paul Island. "Listing the fur seal as threatened or endangered is one of the ideas being considered."

Listing the fur seal could draw needed attention — and research dollars — to the decline of the fur seal and ecosystem. ■

AROUND THE ROOKERY — Photographs of northern fur seals on these pages show mid-August activity at a rookery on St. Paul Island in the Pribilofs. Clockwise, starting at left: A newborn climbs among the rocks. At top, adult females display markedly different colors and furs. At top right, a fur seal scratches herself. At bottom right, an idle male fur seal finds solace on a beach. Idle males are ones that did not breed this season, losing out in competition for females to bigger or more powerful males. *Photos by Paul Koberstein/Cascadia Times.*



FUR SEAL SLIDE — Since 1975, the number of fur seals born each year has plummeted 57 percent. Since 2000, the decline has exceeded 22 percent, and in 2004 alone the number dropped 15 percent.

POLLOCK FLEET MOVES DEEPER INTO NORTHERN FUR SEAL TERRITORY

The maps at right show where the pollock fleet in the Bering Sea fished every year from 1997 through 2001. The series shows how much closer the fleet moved toward the Pribilof Islands and northern fur seal rookeries each year. The green line shows the approximate boundaries of where northern fur seal females forage for food during summer. They have been known to venture as far away as 200 miles on trips that can take from three to 14 days.