

Northern Fur Seal Population Changes: Rookery Photos, Pribilof Islands, Alaska (1895-2006)



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Northern fur seal, *Callorhinus ursinus*

- Found in the North Pacific and Bering Sea
- Spends a majority of the year at sea
- Spends the rest of the year on rookeries, breeding grounds (May–November)
- Most births occur in late June and early July



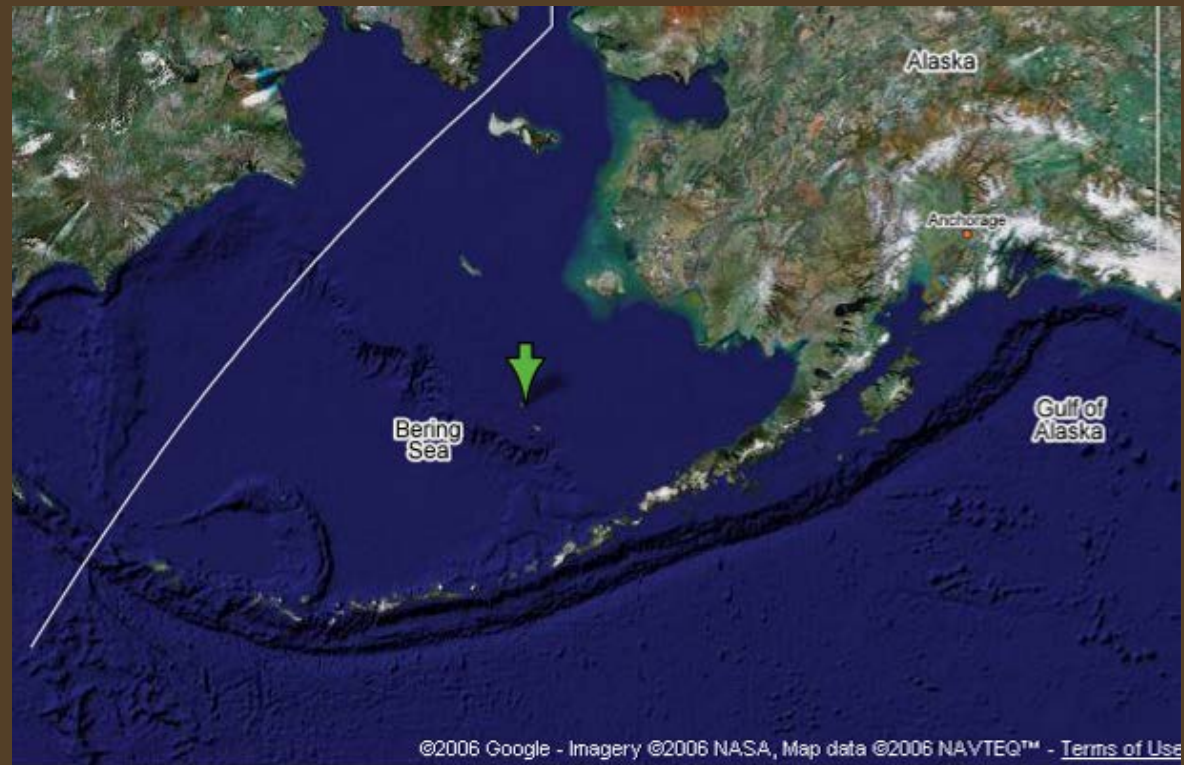
Rookeries (breeding grounds)



- On islands in Russia and the United States
- Largest portion of the worldwide population return to the Pribilof Islands during the breeding season
- Strong tendency to return to rookeries where they were born

Pribilof Islands, Alaska

- Located in the eastern Bering Sea
- 2 main islands
 - St. Paul
 - St. George



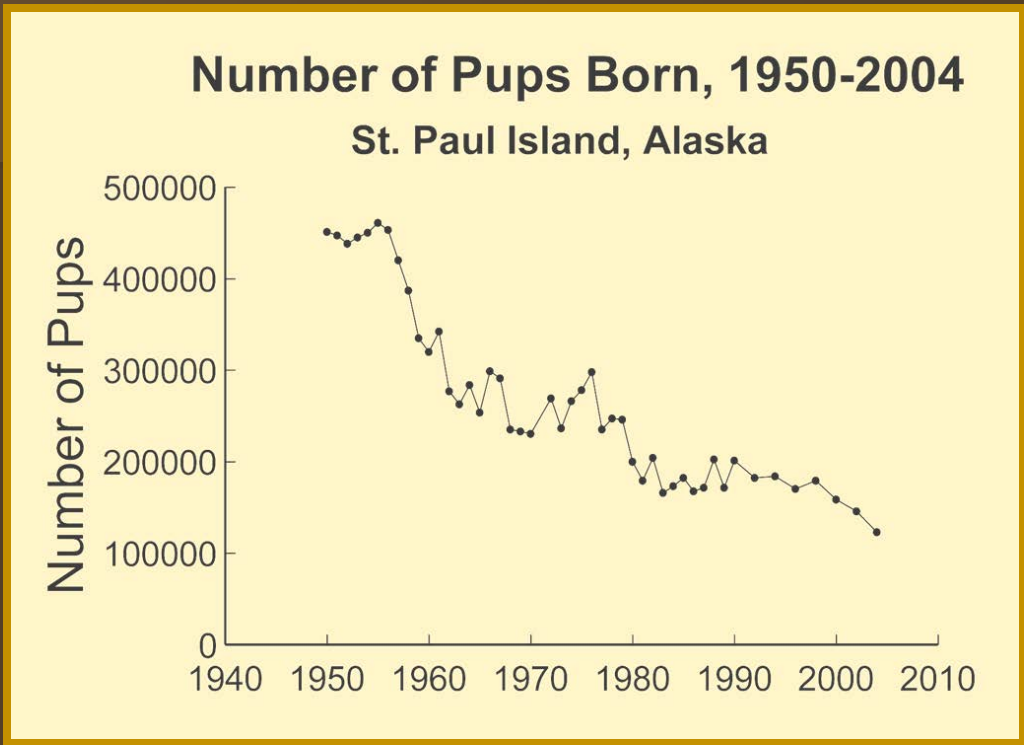
Human Influences

- Their rich pelt led to the commercial harvest of this species (1700s–1984)
- Pelagic sealing and harvests of females caused significant fluctuations in the world population



Changes in Population Size

- Dropped to an extreme low in the early 1900s
- International protection allowed a population increase; the Pribilof Islands population reached a peak, ~2.2 million, in the 1940s-early 1950s
- Then, an overall population decline partially due to commercial harvest of females in 1956-1968
- In 1988, labeled "depleted" under the Marine Mammal Protection Act



- The population continues to decline, as shown in the following photographs

Pribilof Islands, Alaska



20 rookeries

- St. Paul Island (14)
- St. George Island (6)

St. Paul Island

Vostochni Rookery



Vostochni Rookery, 1948



Vostochni Rookery, 1960



Vostochni Rookery, 2006



Vostochni Rookery



1948



1960



2006

Morjovi Rookery



Morjovi Rookery, 1948



Morjovi Rookery, 1960



Morjovi Rookery, 2006



Morjovi Rookery



1948



1960



2006

Little Polovina Rookery



Little Polovina Rookery, 1948



Little Polovina Rookery, 1988



Little Polovina Rookery, 2005



Little Polovina Rookery



1948



1988



2005

Polovina Cliffs Rookery



Polovina Cliffs Rookery, 1948



Polovina Cliffs Rookery, 1960



Polovina Cliffs Rookery, 2006



Polovina Cliffs Rookery



1948



1960



2006

Polovina Rookery



Polovina Rookery, 1895



Polovina Rookery, 1948



Polovina Rookery, 1960



Polovina Rookery, 2005



Polovina Rookery



Lukanin Rookery



Lukanin Rookery, 1895



Lukanin Rookery, 1948



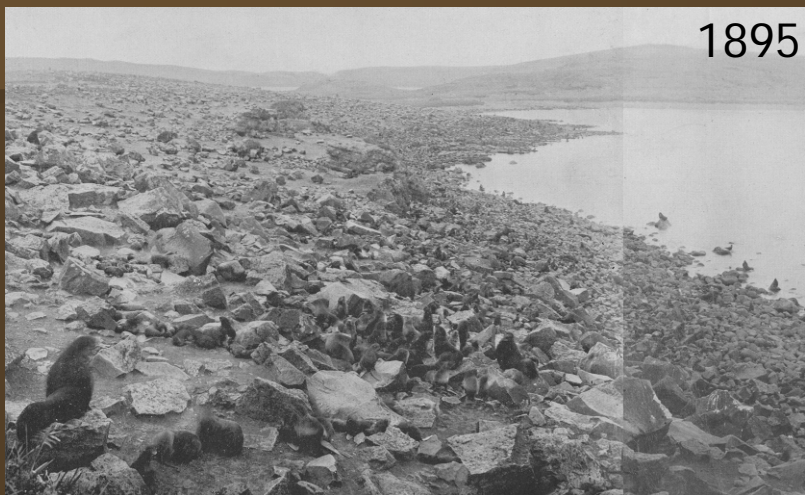
Lukanin Rookery, 1988



Lukanin Rookery, 2005



Lukanin Rookery



Kitovi Rookery



Kitovi Rookery, 1895



Kitovi Rookery, 1948



Kitovi Rookery, 1960



Kitovi Rookery, 2006



Kitovi Rookery



Reef Rookery



Reef Rookery, 1895



Reef Rookery, 1948



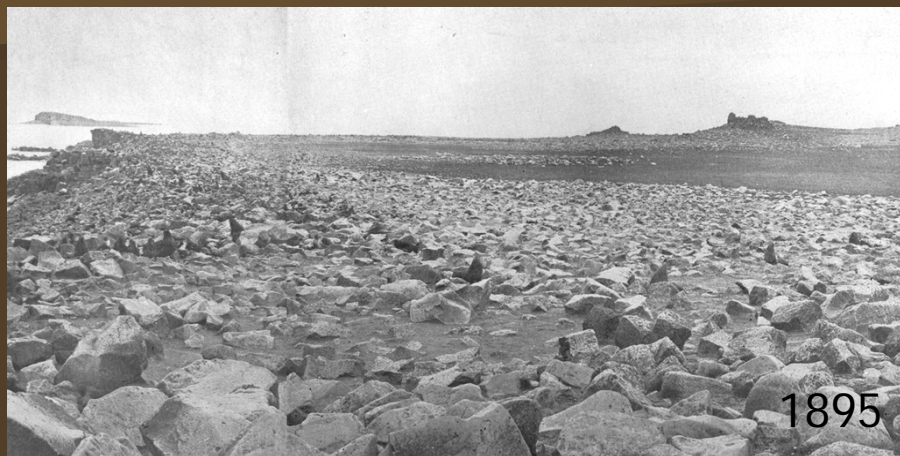
Reef Rookery, 1960



Reef Rookery, 2006



Reef Rookery



Ardiguen Rookery



Ardiguen Rookery, 1948



Ardiguen Rookery, 1960



Ardiguen Rookery, 2006



Ardiguen Rookery



1948



1960



2006

Gorbatch Rookery



Gorbatch Rookery, 1948



Gorbatch Rookery, 1960



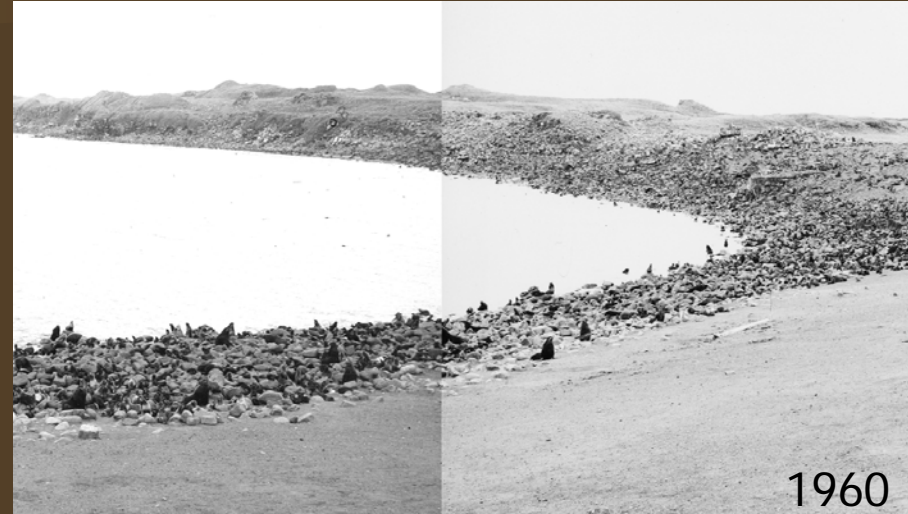
Gorbatch Rookery, 1988



Gorbatch Rookery, 2005



Gorbatch Rookery



Tolstoi Rookery



Tolstoi Rookery, 1948



Tolstoi Rookery, 2006



Tolstoi Rookery



1948



2006

Zapadni Reef Rookery



Zapadni Reef Rookery, 1948



Zapadni Reef Rookery, 1988



Zapadni Reef Rookery, 2005



Zapadni Reef Rookery



1948



1960



2006

Little Zapadni Rookery



Little Zapadni Rookery, 1895



Little Zapadni Rookery, 1948



Little Zapadni Rookery, 1988



Little Zapadni Rookery, 2005



Little Zapadni Rookery



Zapadni Rookery



Zapadni Rookery, 1948



Zapadni Rookery, 2005



Zapadni Rookery



St. George Island

Staraya Artil Rookery



Staraya Artil Rookery, 1895



Staraya Artil Rookery, 1948



Staraya Artil Rookery, 1960



Staraya Artil Rookery



1895



1948



1960

North Rookery



North Rookery, 1895



North Rookery, 1948



North Rookery, 1960



North Rookery



1895



1948



1960

East Reef Rookery



East Reef Rookery, 1948



East Reef Rookery, 1960



East Reef Rookery



East Cliffs Rookery



East Cliffs Rookery, 1895



East Cliffs Rookery, 1948



East Cliffs Rookery, 1960



East Cliffs Rookery



1895



1948



1960

Zapadni Rookery



Zapadni Rookery, 1895



Zapadni Rookery, 1948



Zapadni Rookery, 1960



Zapadni Rookery



1895



1948



1960

Photographers

- C.H. Townsend and N.B. Miller (1895)
- E.C. Johnston (1948)
- F. Wilke, R. Hurd, and C. Hoverson (1960)
- C.W. Fowler (1988 and 2005)
- C.W. Fowler and K.M. Yano (2006)

References

- Baker, R. C., F. Wilke, and C. H. Baltzo. 1970. The northern fur seal. U.S. Dep. Int., U.S. Fish Wildl. Serv., Circ. 336, 21 p.
- Gentry, R. L., and G. L. Kooyman. 1986. Fur seals: Maternal strategies on land and at sea. Princeton Univ. Press, Princeton, NJ. 292 p.
- York A. E., and J. R. Hartley. 1981. Pup production following harvest of female northern fur seals. Can. J. Fish. Aquat. Sci. 38(1):84-90.



Thank You!



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