

NOAA Fisheries Service

Alaska Fisheries Science Center

North Pacific Right Whale

Eubalaena japonica

Length 18 m (59 ft) **

Weight 60 mt
(132,000 lbs)*

Age 70 years old**

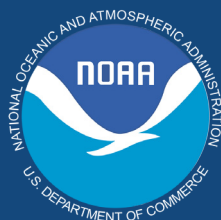
*average

**maximum



Protecting
Conserving
Managing
Marine Resources
in
Alaska

The Alaska Fisheries Science Center is a scientific research organization responsible for the development and implementation of NOAA's scientific research on marine resources in Alaska waters. Our research focuses on more than 250 fish and 42 marine mammal stocks off the coasts of the Bering Sea, Gulf of Alaska and Aleutian Islands.



National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

Range/Habitat

In 2000, North Pacific right whales were recognized as a species separate from North Atlantic right whales (*Eubalaena glacialis*). Two populations are found within the North Pacific: one in the western North Pacific/Okhotsk Sea and the other in the eastern North Pacific. Migratory patterns of North Pacific right whales are unclear: they spend the summer on high-latitude feeding grounds and are thought to migrate to more temperate waters during the winter. Recent sightings of eastern North Pacific right whales have been reported as far south as Baja California, Mexico, as far west as Hawaii in the central North Pacific, and as far north as the sub-arctic waters of the Bering Sea in the summer. Right whales have often been seen in one area of Bristol Bay in the eastern Bering Sea in summer (late May to early November), and occasionally in the Gulf of Alaska off Kodiak Island.

Diet/ Role in Ecosystem

North Pacific right whales use their baleen to strain hundreds of gallons of seawater to collect their main prey zooplankton which is made up of mostly euphausiids and copepods.

Reproduction

Breeding likely happens in the winter or following spring. Gestation lasts 12-months. Calving areas are unknown.

Population

The pre-exploitation size of the North Pacific right whale population certainly exceeded 11,000 animals and was perhaps twice that number. The North Pacific right whale population has been heavily impacted by whaling, especially by large, illegal catches that were made by the former Soviet Union in the 1960s. Estimates of current abundance range from less than 100 for the eastern North Pacific to a few hundred for the population that summers in the Okhotsk Sea. The few sightings reported in the North Pacific since the mid-1960s were primarily of solitary animals or small groups of 4-6 animals, although a group of at least 17 was observed in the Bering Sea in 2004. At this time, a reliable estimate of minimum abundance or population trend cannot be made. The right whale population found during summer in the Bering Sea has been studied since 1997 and as of 2004, a total of 23 individuals have been identified (16 males and 7 females). This includes two male calves accompanied by females. The right whale is listed as endangered under the U.S. Endangered Species Act.



Research

Because of its critically endangered status, research on the eastern North Pacific right whale population is a high priority for the Alaska Fisheries Science Center (AFSC). Periodic surveys have been conducted since 1996, and one whale was monitored by satellite telemetry in 2004. The movements of this whale, together with acoustic detection technology, allowed NOAA to locate a group of 17 right whales in the Bering Sea – the largest aggregation observed since the Soviet catches of the 1960s. Current research has been facilitated by funding from the U.S. Minerals Management Service and the North Pacific Research Board, and includes multi-year surveys from ships and aircraft, as well as acoustic detection, satellite tagging, photo-identification, genetic sampling, and multi-disciplinary studies of the whales' habitat, prey and foraging behavior. The AFSC's studies of right whales are conducted collaboratively with other NMFS centers (notably the Southwest Fisheries Science Center in California), the Woods Hole Oceanographic Institution, the U.S. Minerals Management Service, and researchers from other countries (including the Russian Federation).

Management

The AFSC is conducting a multi-year effort to gather basic information on the size and status of right whales, as well as on the characteristics of their habitat and potential threats to their survival. This information is provided to the NMFS Alaska Regional Office as well as to NMFS Headquarters, and will be used to formulate management policies aimed at promoting recovery of this critically endangered population. Analysis by the AFSC was recently used by the Alaska Regional Office to establish two areas of critical habitat for right whales, in the Bering Sea and Gulf of Alaska. The AFSC also provides regular updates on the status of knowledge regarding this species to the International Whaling Commission.

Issues

Because of the critically small size of the eastern North Pacific right whale population, knowledge of seasonal distribution and habitat use is imperative for effective management. Recent studies indicate that at least a few right whales continue to occupy middle-shelf habitats in the southeastern Bering Sea from late May to early November. Right whale calls have also been recorded from underwater hydrophones deployed in the Gulf of Alaska near Kodiak Island, as well as waters southwest of there (ca. 53°N, 157°W). The Bering Sea slope has also been monitored acoustically for right whale presence.

Data are needed for reliable estimates of abundance, or at least to establish the minimum population size. Genetic analysis and photo-identification are techniques that have been used successfully to determine population abundance, movement patterns, and survival in other cetacean populations (e.g. North Atlantic right whales). Genetic analysis suggests that inbreeding depression may be impacting the recovery of North Atlantic right whales, compared to South Atlantic right whales which exhibit much greater genetic diversity. Further analysis of photographs and genetic samples obtained from North Pacific right whales may provide preliminary estimates of abundance and population viability.

Threats to the North Pacific population are currently unclear. Unlike with North Atlantic right whales, there is currently no evidence for major mortality from fishing gear entanglements or ship strikes. However, there has been comparatively little effort directed at this issue in the North Pacific, in part because right whales are found in remote and often inaccessible areas far from human habitation.

For more information

Species information

http://www.afsc.noaa.gov/nmml/species/species_right.php

Research at AFSC:

http://www.afsc.noaa.gov/nmml/species/species_right.php#research

Management:

<http://www.fakr.noaa.gov/protectedresources/whales/nright/default.htm>

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Illustration: NOAA Fisheries

Questions or Comments?

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