



A publication by:

NORTHWEST WILDLIFE PRESERVATION SOCIETY

Pacific White-Sided Dolphin

Lagenorhynchus obliquidens



Photo Credit: Eric Preston Photography

By Kathryn MacDonald

The Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), is sometimes called a white-striped dolphin, hookfin porpoise, or a lag (which is a short form of its genus name *Lagenorhynchus*). The dolphin has curved teeth, hence the species name *obliquidens* given to it, which means “slanting tooth.”

Found in the north Pacific, this black, white and grey striped dolphin is a very social animal. Although currently quite numerous in its range, there are multiple threats to this friendly species, but there are many ways that we as humans can help protect this species and continue to have the opportunity to catch a glimpse of this remarkably acrobatic species.

Characteristics

Pacific white-sided dolphins have a very distinctive appearance. Their body is black on their back, and white on their belly, and they have light grey stripes on their sides that cover the length of their back. Their beaks are dark in colour, they have dark rings surrounding their eyes, they have a black tail, and black lips. They have a short snout, long curved pectoral flippers, and a black and grey curved dorsal fin. Although they can be mistaken for porpoises, the stripes on their back make them fairly easy to identify.

Pacific white-sided dolphins range in size and weight and show some sexual dimorphism (the difference in size among the sexes).

NWPS Headquarters
720-1190 Melville Street
Vancouver, BC V6E 3W1

NWPS Vancouver Island
PO Box 39058
RPO James Bay
Victoria, BC V8V 4X8

t Vancouver 604.568.9160
t Victoria 778.967.3379
e info@northwestwildlife.com
w www.northwestwildlife.com

	Males	Females
Size (in length)	Up to 250cm (98in)	170-240cm (66-94in)
Weight	Up to 198kg (436lbs)	85-145 kg (187- 319lbs)

Life Cycle

Females and males differ when it comes to age of sexual maturity, as well as lifespan, which although is 37-46 years on average, females live longer overall.

	Males	Females
Age of Sexual Maturity	10-11 years	8-11 years
Oldest recorded age	42 years	46 years

Reproduction is a long process for the Pacific white-sided dolphin. Mating typically occurs between summer and late fall. While groups are made up of multiple males and females, there is a dominant male that mates with the females who are reproductively available. The gestation period then takes approximately 11-12 months, and females give birth to calves about every 4.5-5 years. Calving season usually occurs in the summer, but studies have also found that calving can occur in early fall. Since the species often migrates to waters closer to shore during the winter, mating and reproduction often coincides with when the groups are further away from shore.

The mother takes the primary role in raising young calves after birth. When they are born, calves are usually about 100 cm (39in) in length, and 15kg (33lbs) in weight. Mothers nurse their calves for a period of about 8-10 months.

Habitat

Pacific white-sided dolphins live in marine environments in temperate zones. They usually live at the border of a continental slope, but can live near shore if an area has deep enough water. Geographically they live in the North Pacific Ocean from Alaska to Baja, Mexico, and they are found year-round in some parts of their range.

Pacific white sided-dolphins have a long history in the north Pacific ocean. For example, archaeological evidence has shown that the species has been off the coast of British Columbia for at least 2000 years. However, during the 20th century, the species was seen in the north Pacific ocean less often. The return of the species in greater numbers is most likely attributed to changing ocean temperatures and prey availability.

Behaviour

The animal is carnivorous, meaning it feeds on meat. Its prey includes 60 different fish species, such as anchovies, and 20 different cephalopod species, such as squid. In weight, its daily food amounts to approximately 9 kg (20 lbs) of food each day. It feeds mostly at night, and gathers its food in cooperation with others in its group. Remarkably, it can dive for more than 6 minutes when feeding, and it uses its small pointed teeth to catch its food, which is then mainly swallowed whole.

NWPS Headquarters
720-1190 Melville Street
Vancouver, BC V6E 3W1

NWPS Vancouver Island
PO Box 39058
RPO James Bay
Victoria, BC V8V 4X8

t Vancouver 604.568.9160
t Victoria 778.967.3379
e info@northwestwildlife.com
w www.northwestwildlife.com

Pacific white-sided dolphins are very social animals. They live in pods of 20 to a few hundred individuals. These pods are made up of both males and females of various ages, and groups frequently care for those in their pod that are sick or injured. This species has also been seen travelling or playing with different types of whales, dolphins, seals and sea lions.

Pacific white-sided dolphins are very active. They are fast, powerful and very mobile swimmers, and can swim at speeds up to 47 km/h (30 mph). They love to surf waves, and they can jump fully out of the water, which is unusual for other small cetaceans in the north Pacific, and they usually do so in large groups. These superior leaping abilities can also be used to tell them apart from other porpoises that may look similar.

This dolphin, like other dolphins, can be very noisy. When air is trapped in its blowhole, it is able to make high-pitched squeals and whistles. Their sounds are most likely used for communication, and their ability to use echolocation involves making a clicking noise which allows them to become aware of their surroundings, helping them to catch food.

Threats

Pacific white-sided dolphins are currently not at risk. The IUCN Red List Category has labelled the species as being of “least concern,” COSEWIC as “not at risk” in Canada, and the BC Government lists the species as “yellow,” denoting that the species is “apparently secure and not at risk of extinction.” A current estimate is that there are about 900,000 individuals in the north Pacific.

There are few natural predators of the species. Predators include transient (mammal-eating) orcas, and large sharks. If the balance of predators and prey is thrown off, by human causes or otherwise, this can put the species at risk. An interruption of this balance is predicted to be part of the reason that the dolphin was not seen very often in the north Pacific during the 20th century.

Humans can pose multiple threats to this animal. Gillnet and drift net fisheries can inadvertently catch dolphins in their nets. Also, although this is currently only done in small numbers, some are caught for consumption in Japan, and others can be caught for use in marine aquariums. Ocean noise pollution, as well as human industrial pollution also pose threats to the animal. A recent report by Salvadeo, also expresses a concern that climate change is beginning to affect the range of Pacific white-sided dolphins, and those in the southern boundary of the species’ range may be at a greater risk and may be forced to shift their habitat northward.

What We Can Do To Help

There are many ways that we can help ensure that Pacific white-sided dolphins continue to thrive. Here are some examples:

- Support sustainable fishing practices by buying sustainable seafood.
- Support research and rescue efforts of marine animals to ensure successful release of injured animals.
- Do your part to combat ocean pollution, do not litter and help with shoreline cleanups.
- In order to help keep population numbers and information on the species up to date, you can report sightings at: www.wildwhales.org

The Pacific white-sided dolphin provides an example of the potential for positive impact that humans can have on the world around us. During the 1980s, around 90,000 individuals were killed in Japanese, Korean and Taiwanese driftnet fisheries. In response, driftnet fisheries were halted with the establishment of a 1992 United Nations resolution, contributing to the current stability and protection of the species.

NWPS Headquarters
720-1190 Melville Street
Vancouver, BC V6E 3W1

NWPS Vancouver Island
PO Box 39058
RPO James Bay
Victoria, BC V8V 4X8

t Vancouver 604.568.9160
t Victoria 778.967.3379
e info@northwestwildlife.com
w www.northwestwildlife.com

Other Interesting Facts

- When the dolphins swim very fast, the splash produced by their dorsal fin is called a “rooster tail.”
- Their black, white and grey appearance is thought to provide good camouflage for the species in marine environments, referred to specifically as countershading.
- When the animal sleeps, it sleeps with half of its brain awake. It does this by allowing half of its brain to rest, and the other half to stay awake to ensure normal functioning of the body, which allows the dolphin to not risk drowning while sleeping.

Where & When to view the Pacific white-sided dolphin?

Pacific white-sided dolphins are often seen from boats, as they are attracted to vessels and have been seen many times riding the bow waves of ships. These animals can often be seen on whale-watching tours and other boating excursions. However always follow safe boating procedures to keep a safe distance and cutting a boat engine when in close proximity to the dolphin is very important in order to not put the animal in danger.

Bibliography

Web Resources

BC Ministry of the Environment, Species and Ecosystems Explorer –provides the status of the species in BC:

<http://a100.gov.bc.ca/pub/eswp/search.do>

BC Conservation Data Centre - - a good introduction to the species:

<http://a100.gov.bc.ca/pub/eswp/speciesSummary.do;jsessionid=3cd9b8cadaf183b4c494147c0b13f6b9d7cdbc50737f47e88d381263685ddedb.e3uMah8KbhmLe3aOchqKaNuOci1ynknvrkLOIQzNp65In0?id=15141>

E-Fauna BC: Electronic Atlas of the Wildlife of British Columbia – provides great information on appearance and behaviour of the animal:

<http://linnet.geog.ubc.ca/efauna/Atlas/Atlas.aspx?sciname=Lagenorhynchus+obliquidens>

Wild Whales – BC Cetacean Sightings Network – provides information on the history of the species, its life expectancy, and threats:

<http://wildwhales.org/pacific-white-sided-dolphin/>

Nature Serve Explorer – provides information on threats and the international status of the species:

<http://explorer.natureserve.org/servlet/NatureServe?searchName=Lagenorhynchus+obliquidens>

NWPS Headquarters
720-1190 Melville Street
Vancouver, BC V6E 3W1

NWPS Vancouver Island
PO Box 39058
RPO James Bay
Victoria, BC V8V 4X8

t Vancouver 604.568.9160
t Victoria 778.967.3379
e info@northwestwildlife.com
w www.northwestwildlife.com

Vancouver Aquarium website – provides information on reproduction, size, appearance, habitat, population size and threats to the animal:

<http://www.vanaqua.org/learn/aquafacts/cetaceans/pacific-white-sided-dolphin>

Wild Whales Identification Guide – provides information on how to differentiate Pacific white-sided dolphins from similar animals:

http://wildwhales.org/wp-content/uploads/2008/03/BCCSN-ID-Guide_120323-FINAL.pdf

Whales and Dolphins BC – provides further information on appearance, speed and abilities of the animal:

<http://whalesanddolphinsbc.com/what-species-of-whales-and-dolphins-are-in-bc/pacific-white-sided-dolphins-%E2%80%93-lagenorhynchus-obliquidens/>

NOAA Fisheries, Office of Protected Resources – provides further information on the behaviour of the animal:

http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/whitesideddolphin_pacific.htm

National Park Service – information on behaviour of the dolphin:

<http://www.nps.gov/kefj/naturescience/pacific-white-sided-dolphin.htm>

Kids Do Ecology – information on feeding and migration habits:

<http://kids.nceas.ucsb.edu/mmp/pacwhitesidedolphin.html>

Animal Diversity Web – provides information on the animal's ability to camouflage:

http://animaldiversity.ummz.umich.edu/accounts/Lagenorhynchus_obliquidens/

Marine Life, About Education – provides information on human threats to the animal:

<http://marinelife.about.com/od/Whales/p/Pacific-White-Sided-Dolphin-Lagenorhynchus-Obliquidens.htm>

NOAA Fisheries, National Marine Mammal Laboratory – interesting facts on the animal and information on raising young:

<http://www.afsc.noaa.gov/nmml/education/cetaceans/pacificws.php>

Academia.edu – provides an article on the threats posed by climate change to the species' range:

http://www.academia.edu/5600676/Climate_change_and_a_poleward_shift_in_the_distribution_of_the_Pacific_white-sided_dolphin_in_the_northeastern_Pacific

NWPS Headquarters
720-1190 Melville Street
Vancouver, BC V6E 3W1

NWPS Vancouver Island
PO Box 39058
RPO James Bay
Victoria, BC V8V 4X8

t Vancouver 604.568.9160
t Victoria 778.967.3379
e info@northwestwildlife.com
w www.northwestwildlife.com