The waters of Long Island are home to various marine mammals, including several **pinniped** and **cetacean** species. Pinnipeds are a group of semiaquatic mammals including the *'eared seals'* (sea lions and fur seals), *'true seals'*, and the walrus, but only the true seals (*Phocids*) occur in the wild on and near Long Island. Cetaceans are a group of fully aquatic marine mammals that includes whales, dolphins, and porpoises. Whales are divided into the *Odontocetes* (toothed whales) and *Mysticetes* (baleen whales).

Taxonomically-speaking, dolphins and porpoises are **toothed whales** (*Odontocetes*), a group that also includes larger species such as beluga and sperm whales. As the name implies, these whales have teeth and feature a single blowhole opening. Odontocetes use echolocation, a type of biological sonar, to hunt, detect predators, and navigate.

#### **Toothed Whales**



Short-beaked Common Dolphin Delphinus delphis < 8.5 feet ~ 170 pounds check here if seen

Short-beaked Common Dolphins are one of the most abundant dolphins in the western North Atlantic. Common dolphins have an hourglass pattern with a dark, V-shaped cape from the head to below the dorsal fin, and a yellow/tan anterior section. Common dolphins occur in social groups (pods) which often swim alongside ships and bow ride. Common dolphins have a rounded forehead (melon) and long rostrum (snout). They feed on fish and squid.



#### **Bottlenose Dolphins**

*Tursiops erebennus* < 9.5 feet, 600 lbs. and/or *Tursiops truncatus* 13 feet, 1,400 lbs.

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Bottlenose dolphins are one of the most recognizable and well-known of all cetaceans. Their name derives from a relatively short and thick rostrum (snout). Light to dark grey in color, they feed on a variety of fish, squid, and crustaceans. There are two species of bottlenose dolphins encountered off Long Island: Tamanend's Bottlenose and the Common Bottlenose.

Tamanend's, which is smaller and lighter than the Common, occurs in relatively shallow, near-shore waters, while the larger and darker Common Bottlenose is found in deeper water, farther from shore.

In contrast to the toothed whales, baleen whales (the *Mysticetes*) lack teeth and have overlapping plates of **baleen**, a hardened tissue made of keratin, used to strain smaller prey (fish, krill, and other small crustaceans) from the water. Baleen whales are further distinguished by a double blow-hole opening and are generally much larger than the *Odontocetes*.

#### **Baleen Whales**



Finback/Fin Whale Balaenoptera physalus < 85 feet ~ 170,000 pounds ENDANGERED

Fin whales are characterized by a prominent, curved dorsal fin found ~2/3 of the way back from the head. Fin whales possess a lightly-colored area on the right side of their heads called a blaze, posterior to which is a dark eye stripe and inter-stripe wash (lightly colored area). Behind these is a distinctive Vshaped pattern of coloration around their head called the chevron. They are the second largest of all the whales and can travel at speeds of 25 knots.



<u>Humpback Whale</u> Megaptera novaeangliae < 60 feet ~ 100,000 pounds

Humpback whales are easily distinguished by long pectoral flippers which occupy 1/4 – 1/3 of their body length and by a namesake hump anterior to their dorsal fin. Pronounced bumps called tubercules line the flippers, providing lift and maneuverability to these acrobatic and oftensurface active whales.



Surface activities of humpbacks include breaching, lunge feeding, flipper and/or tail slapping, and peduncle throwing. Humpbacks sometimes use bubbles to corral and trap fish and small crustaceans, the only known cetacean to do so.



#### Baleen Whales, continued



Minke whales are the smallest baleen whales found off Long Island. They are distinguished by their small size, pointed snout and distinctive white bands on the ends of their flippers. Minkes tend to be solitary and can be difficult to spot because of their small size and lack of visible 'blow' (spout) when surfacing. Breaching and other surface activities by minke whales are rare.



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<u>North Atlantic Right Whale</u> Eubalaena glacialis < 55 feet

<140,000 pounds CRITICALLY ENDANGERED



check here if seen

The North Atlantic Right Whale is extremely rare; approximately 370 individuals remain. Victims of commercial whaling, these were the 'right' whales to hunt. Right whales move slowly at the surface skimming copepods from the water making them vulnerable to ship strikes and entanglement with fishing gear, keeping them at an extremely high risk of extinction.



These robust whales lack a dorsal fin and are characterized by their large, arching mouths and a head that is lined with white patches of thickened skin called callosities. Like human fingerprints, callosity patterns are unique and help researchers identify individuals, like #2681, who is pictured above.

#### Pinnipeds (Seals)

All seals found on Long Island are *Phocid* (true) seals. True seals lack external ear flaps and have fur and claws on their front flippers, differentiating them from the "eared" seals. Although all pinnipeds are marine mammals, they regularly leave the water to rest and/or give birth on land or ice. Known as "hauling out", this is extremely important for the health of the seal. Five species of seal occur on Long Island: harbor, gray, harp, hooded, and ringed (rarely). They migrate southward from New England and Canada, arriving in November and remaining through mid-May, although some occur year round. *All species are protected by the Marine Mammal Protection Act and must not be harassed or harmed in any way.* 



Harbor seals can be viewed in small groups hauled out on sand bars, rocks, or remote beaches, or when popping their heads up in the waters nearby. While resting, they often lie with their heads and hind flippers elevated in a "banana" position.

#### **Atlantic Harbor Seal**

Phoca vitulina vitulina < 5.5 feet ~ 350 pounds

Harbor seals are the most abundant seal on Long Island. Harbor seals are characterized by short, "doglike" snouts and speckled, fur that varies in color from light tan, silver, or blue-grey. Harbor seals feed on fish, crustaceans and mollusks.

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IT IS ILLEGAL AND HARMFUL TO HARASS SEALS. PINNIPEDS ARE FEDERALLY PROTECTED AND YOU MUST NOT TOUCH OR APPROACH A SEAL WITHIN 150 FT.

<u>Harp Seal</u> Pagophilus groenlandicus < 6 feet ~ 400 pounds

Harp seals are named for a dark harp shape on the backs of mature seals. Juveniles, which occur on Long Island more frequently than adults, have <u>distinct</u> blotches, differentiating them from the mottled and "freckled" pelage (fur) of harbor seals. Harp seals spend their summers in the high arctic.



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#### Pinnipeds (Seals), continued

**Atlantic Gray Seal** 

Halichoerus grypus atlantica < 10 feet ~ 900 pounds

Gray seals are characterized by their large size and long, horselike snout. Their color patterns are similar to, but bolder than, harbor seals. Females are lighter in color and smaller than males.



Gray seals are deep-diving pinnipeds with an extremely varied diet which differs by age, sex, season, and region.

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Hooded Seal Cystophora cristata < 9 feet ~ 900 pounds

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Like the harp seal, hooded seals inhabit the arctic and occasionally migrate to the waters of Long Island. Typically, it is juveniles more often than adults that are spotted in our waters. The hooded seal is large and is distinguished by an inflatable sac in the male's nostril that is used in courtship. Adults of both sexes have irregular black patches of fur over a silvery background, but juveniles are counter-shaded, consisting of a dark pattern on top (dorsal) and a light cream or tan color below (ventral).

From our colleagues at NOAA Fisheries New England/Mid-Atlantic: If you see seals on the beach, use the **Rule of Thumb** while watching seals to make sure you are giving them enough space:

1) Close one eye.

2) Make a thumbs up and hold your thumb so it is in line with your vision and the seal.

3) If you can see the seal from behind your thumb, you are too close, so back up!

#### **Spotting Spouts**

Have you ever wondered how naturalists can identify whales from a distance? The blow or "spout" (exhalation) of a whale varies in height, shape, and visibility by species. Fin whales produce a towering blow which can reach heights of 20 feet. In contrast, humpbacks produce a shorter, "bushier" blow similar in shape to a balloon. Minke whales produce an inconspicuous blow only 6 feet high. The blow of Right Whales is unique and distinctive; tall and "V"-shaped, it can reach 15 feet in height. Wind, humidity, light conditions, and animal activity can also influence spout characteristics and our ability to observe them.



#### *"IF YOU SEE A BLOW, GO SLOW!" Observe whales at a distance of >100 yards*

SCAN TO ACCESS THE FOLLOWING HELPFUL LINKS AND RESOURCES:







CRESLI trip photos

Whale SENSE post-trip survey

FAQs: Whales and Offshore Wind

How You Can Help

CRESLI's mission is to promote and foster understanding and stewardship of coastal ecosystems through research and education. CRESLI relies on volunteers, memberships, donations and purchases to support its initiatives.

For more information about marine mammals, ongoing research efforts, and how you can get involved, visit <u>www.cresli.org</u>.

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