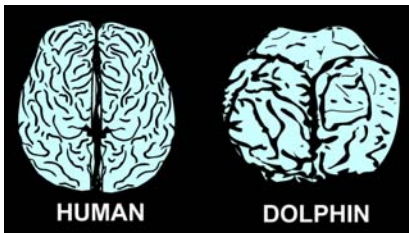


All About Bottlenose Dolphins

by Elizabeth Knapp

In the 1960s, a popular TV series featured a bottlenose dolphin named “Flipper,” who won people over with his clever tricks and happy smile. The Miami Dolphins football team has a picture of a bottlenose dolphin on its helmets. It seems we just can’t get enough of these intelligent, loveable creatures. So what is it about bottlenose dolphins that make them so special?

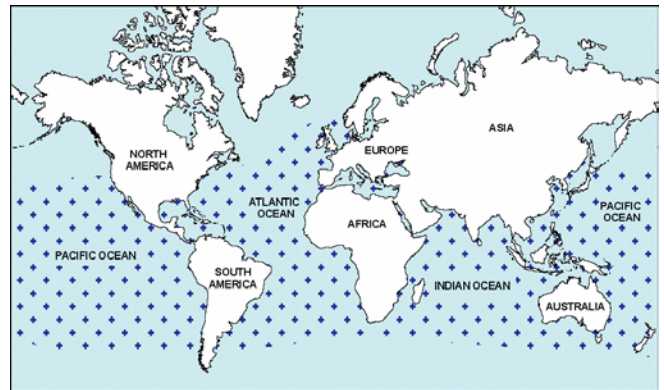
While they may look like fish, bottlenose dolphins are actually mammals. They breathe air like we do and cannot stay under water for too long or they will die. Bottlenose dolphins are among the most intelligent ocean mammals. Their brains are actually larger than ours—three pounds compared to five pounds.



While bottlenose dolphins are very smart, they’re not as advanced as humans. But like us, they do have their own language. Bottlenose dolphins use special sounds to communicate with each other. They also use *echolocation*—bouncing sound and echoes off objects—to “see” things like bats do. While we have learned a great deal about these amazing creatures, there’s still a lot to find out.

Here are some basic facts about bottlenose dolphins:

Habitat: Bottlenose dolphins are found mostly in the Pacific and Atlantic Oceans. But they also live in the Mediterranean Sea and the Indian Ocean.



Population: We do not know exactly how many bottlenose dolphins there are in the world. It is believed there are about 243,500 bottlenose dolphins in the tropical waters of the eastern Pacific. In the waters of Japan, there are thought to be only about 37,000 bottlenose dolphins.

Size: Bottlenose dolphins weigh between 440–600 pounds. Their average length is about 10 feet.

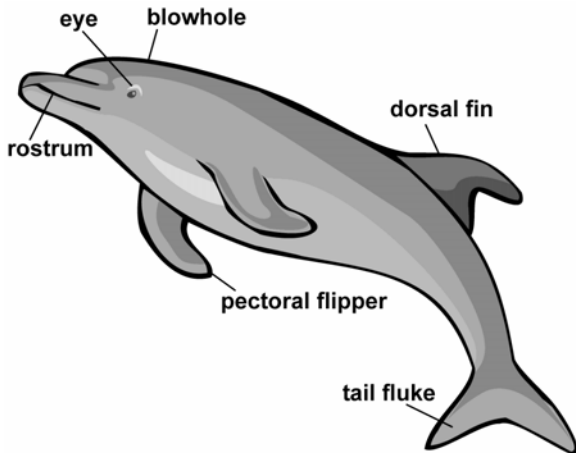
Lifespan: Bottlenose dolphins usually live between 30 to 50 years.

Food: Bottlenose dolphins are meat eaters. They eat fish like herring, mackerel, and sardines. They also enjoy shrimp and squid. Bottlenose dolphins eat 13 to 33 pounds of food a day.

Behavior: Bottlenose dolphins are very social animals and live in small groups called *Pods*. Each pod contains about 12 dolphins. Sometimes several pods join together to form a larger group called a *herd*.

Here are some more fun facts about bottlenose dolphins:

- Bottlenose dolphins often look like they're smiling. This is because of the way their mouths curve.
- Bottlenose dolphins get their name from the bottle shape of their nose, or snout. Their snout is called a *rostrum*.



- A bottlenose dolphin's skin is smooth and feels something like an inner tube. It sheds its outer layer of skin every two hours.

- Bottlenose dolphins have been known to play with humans. A bottlenose dolphin named Percy who lived off the coast of England used to follow local fishing boats and play with their crab pots. He even gave people rides by letting them hang onto his fins.

- In the town of Laguna in Brazil, bottlenose dolphins help fishermen catch fish. The fishermen wait on the beach with their nets in the water, and the dolphins drive the fish toward the beach. As the fish approach the nets, the dolphins roll over on the surface of the water to let the fishermen know to throw their nets.

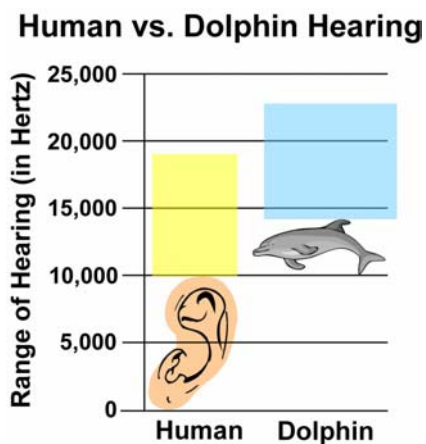
Sadly, humans are the greatest threat to bottlenose dolphins. In some parts of the world, bottlenose dolphins are hunted for food. In other areas, they are dying from polluted waters. Sometimes they get caught in the large nets fishermen use to catch tuna. As a result, people around the world have created laws to help protect them. Today, it is even possible to "adopt" a dolphin through special programs like The Dolphin Project. As we learn how to keep them safe, we will also learn more about what makes them tick. Who knows—maybe they'll even teach us a thing or two!

Do You Speak Dolphin?

by Elizabeth Knapp

There's a lot of whistling going on at Sea Life Park Hawaii. People there are coming up with a new language to communicate with dolphins. But instead of using words, they're using whistles. And the dolphins are whistling back.

Dolphins communicate with each other by making different sounds, such as whistles, clicks, and squeaks. Dolphins whistle to each other under water, through a special place under their blowholes. Each dolphin has its own "signature" whistle that it learns from its mother. This whistle is the dolphin's name. When dolphins greet each other, they whistle their names, as we would say "hello." Dolphins are also very good at imitating each other's whistles. So the people at Sea Life Park think that dolphins will be able to learn a new language based on whistles—and they're right.



So far, this new language has been a success. Ken Marten, the director of the project at Sea Life Park, created special

whistles for certain objects that the dolphins recognize. One of the objects is a ball. "So I'll hold up the ball and I'll play the (whistle) word for ball," he says. Then the dolphins imitate the sound of the whistle. Over time, they learn how to put the "whistle word" for ball with the object. But dolphins have their own way of pronouncing the whistles. So Marten and his team have to figure out exactly what they are saying.

Another fun way researchers are communicating with dolphins is with a special underwater touchscreen. This screen acts as both an underwater classroom and as an entertainment center. "One experiment used the touchscreen like a jukebox; each quadrant of the screen was a different type of music," Marten says. It's a kind of game. "We instruct the dolphin so it knows that if they touch the screen something happens." Another game is to put four objects on the screen and play the whistle word for one of them. If the dolphin recognizes the whistle, it touches the object on the screen. When the dolphin has answered correctly, the screen lights up, and the object dances around. The dolphins love it!

Marten's research is entirely new. Never before has a language based on sound been created to communicate with animals. With chimpanzees and gorillas, people use sign language. This is much easier, because apes are more similar to us. They have hands, and they use their bodies

to express themselves. But dolphins communicate entirely through sound. Also, their environment—water—is different from ours. So researchers have to come up with creative ways of working with them.

As Marten has found, dolphins are fast learners. But the communication between them is still very basic. One day, Marten hopes to have a real conversation with dolphins. “It won’t be free-floating

conversation,” he says. “We will be able to ask questions, and they will be able to answer in very simple terms.” Marten’s goal is to help protect dolphins by showing the world how intelligent they are. “The rest of my career is dedicated to talking to these guys, so I guess you could call me Dr. Doolittle now,” Marten says. His enthusiasm has got a crowd on both sides of the water whistling.