



## Common Bottlenose Dolphin *Tursiops truncatus*

### Commonly Asked Questions:

**Name:** Common Bottlenose Dolphin

**Scientific Name:** *Tursiops truncatus*

**Size: Adult**

Avg. Length: 7.2- 8.9 ft (2.2 – 2.7 m)

Avg. Weight: 485 - 595 lbs. (220-270 kg)

**Calf**

Avg. Length: 2.7- 4.6 ft (84 – 140 cm)

Avg. Weight: 22 - 44 lbs. (10 – 20 kg)

**Life Expectancy:** ~13 years (in the wild), >25 years (in human care)

**Range:** Found throughout the Atlantic (also includes the Pacific and Indian Oceans)

**Diet:** Herring, capelin, mackerel and squid (GAQ)

Fish, cephalopods, crustaceans, small rays and sharks (in the wild)

**Exhibit:** 1.8 million gallons

Water Temp: 80°F

Five interconnected pools

Performance pool depth: 29ft.

### Range/Habitat

- Range
  - Found throughout the Atlantic
    - Nova Scotia to Patagonia
    - Norway to the tip of South Africa.
- Distribution
  - In the Northwest Atlantic, this species has separate inshore and offshore distributions:
    - Inshore occurs within about 5 miles (7.5 km) of the coast
    - Offshore occurs beyond about 21 miles (34 km) from shore.
- Habitat
  - Commonly seen in bays, tidal creeks, inlets, marshes, rivers and along open ocean beaches, most often in water depths of about 10 feet (3 m) or less.

### Physical Characteristics

- Color:
  - Generally slate gray to charcoal in color, including counter shading (darker dorsally and lighter ventrally).





GEORGIA AQUARIUM

at Pemberton Place\*

- Sides of the body often have light brush markings.
- Size:
  - Average weight and length of an adult ranges between 485 - 595 lbs. and 7.2 – 8.9 feet (Length and weight vary widely according to geographic region. Body size also typically varies inversely with water temperature of its location (i.e., larger animals occur in colder regions).
  - Average weight and length of a calf is 22 - 44 lbs.; 2.7- 4.6 ft
- Teeth:
  - The common bottlenose dolphin has 72 to 104 teeth.
  - Teeth are not replaced if lost.

### Diet/Feeding

- Diet/Amount:
  - The diet of a coastal bottlenose dolphin is diverse and depends on location.
  - Many eat only fish, although some consume small numbers of cephalopods, crustaceans, small rays and sharks.
  - Dolphins do not chew. Larger prey may be torn into smaller pieces, but most food is swallowed whole.
  - It is estimated that in the wild, an adult consumes about 5 percent of its body weight daily.
- Feeding behaviors:
  - Feeding behavior ranges from hunting individually to occasional cooperative foraging on schooling fishes.
  - Feeding takes place both during the day and at night.
  - There is strong evidence that bottlenose dolphins are selective feeders, taking fish disproportionately based on their availability in the environment and especially selecting soniferous (sound producing) fish.
  - Calves learn hunting methods primarily by observing their mothers.

### Conservation Status

- The common bottlenose dolphin is of “Least Concern” on the IUCN Red List.
- *(For additional information, also see “Bottlenose Dolphin Conservation & Research Fact Sheet”)*

### Additional Information

- The maximum adult weight reported in the wild
  - 626 lbs. (284 kg) from the western North Atlantic
  - 1400 lbs. (635 kg) from the eastern North Atlantic.





GEORGIA AQUARIUM

at Pemberton Place\*

- Social units:
  - Coastal common bottlenose dolphins are primarily found in groups of 2 to 15 individuals. These associations are fluid, often repeated but not constant. Solitary coastal animals can be observed in various regions of the world.
  - Group composition has been observed to be dependent on sex, age, reproductive condition, familial relationships and affiliation history.
  - Typical social units include: nursery groups (females and their most recent calves), mixed sex groups of juveniles and strongly-bonded pairs of adult males.
- Reproduction:
  - Male bottlenose dolphins reach sexual maturity at between 8 and 13 years of age
  - Female bottlenose dolphins reach sexual maturity at between five and ten years of age
  - Gestation lasts about 12 months and the female may bear young into her 40s.
  - Births may occur in all seasons, but typically peaks occur during spring, early summer and fall.
  - Calves nurse for 18 to 24 months, but may start capturing prey by about one year of age under the tutorage of the mother.
- Skin:
  - Highly specialized and contains tiny ridges that play an important role in reducing drag.
  - The outer layer of skin is shed approximately every 2 hours to increase swimming efficiency by maintaining a smooth body surface.
  - The skin is also an important sensory organ.
  - The epidermis (outer layer of skin) is approximately 15-20 times thicker than that of a human.
- Vision
  - Vision is similar above and below the water surface.
  - Its eyes are adapted for low-light conditions.
  - Oily mucus is secreted that lubricates the eyes, washes away debris and possibly streamline the eye as the dolphin swims.
  - Scientists are unsure whether this dolphin possesses color vision.
- Sleep state:
  - The bottlenose dolphin engages in *unihemispheric slow wave sleep* (USWS) in which one half of its brain in a sleep state, while the other half maintains visual and auditory awareness of the environment, while allowing it to surface to breathe.
- Lifespan:
  - In the wild the average life expectancy is estimated to be approximately 13 years.
  - In human care in AMMPA facilities, on average more than 25 years.
  - The oldest dolphin in human care was born on February 27, 1953 and resides at Marineland Dolphin Adventure in Marineland, Florida.
  - As of 2010, the oldest dolphin in the wild was 60 years, documented in the Sarasota Bay population.
- Swim speed:





GEORGIA AQUARIUM

at Pemberton Place\*

- Adults routinely swim at speeds of about 3 to 7 mph (5 - 11 km/hr).
- The maximum observed swim speed of a common bottlenose dolphin was about 18 mph (29 km/hr) for a very short distance.
- Dives/Depths:
  - The average dive duration for the coastal bottlenose dolphin ranges from 20 to 40 seconds. The maximum voluntary breath hold recorded was 7 minutes 15 seconds.
  - Coastal dolphins inhabit waters about 10 feet (3 m) deep and so rarely go deeper.
  - A trained coastal bottlenose dolphin reached depths of 1,280 feet (390 m).
  - A tagged offshore dolphin reached depths of 1,614 feet (492 m).
- Hearing:
  - This dolphin species has a range of hearing much wider than ours.
  - The sound of human speech falls well within this range, so dolphin can hear what we say.
- Smell:
  - A dolphin's brain lacks an olfactory system (sense of smell)
- Vocalization:
  - Wide range of vocalizations, including whistles, grunts, trills, squeaks and moans.
  - Dolphins communicate in order to hunt efficiently, raise young and guard against predators.
  - It has been determined that individuals develop a specific "signature whistle" within the first few months of life and that this signature whistle remains the same throughout its life. Individuals use their unique whistle to communicate identity, location and, potentially, emotional state.
- Echolocation:
  - Click-like pulses produced by nasal sacs in its trachea are used for echolocation, which is its primary sensory system. The bounce-back from these signals is received in the lower jaw bone and transmitted to the inner ear, which sends nerve impulses to the brain.
  - Echolocation allows the animal to locate prey, identify predators and navigate in the dark or in murky water.
  - Using echolocation, a dolphin can determine size, shape, structure, composition, speed, distance, and direction.
  - Its range is about 230 feet (70 m). Field studies have shown that the common bottlenose dolphin uses its echolocation only as necessary. Field studies have shown that individuals do not continuously produce clicks.
- Threats:
  - Mortalities and serious injuries from entanglement in recreational and commercial fishing gear are currently among the most serious threats to bottlenose dolphin.
  - The accumulation of chemicals and heavy metals released into the environment by human activities continues to impact dolphin populations both directly and indirectly.





GEORGIA AQUARIUM

at Pemberton Place\*

- Feeding or swimming with dolphin in the wild teaches them to approach boats, making them vulnerable to potential propeller strikes, gear entanglement, ingestion of foreign objects, or intentional harm from humans.
- Our Dolphin Habitat:
  - Five interconnected pools:
    - 1- Performance pool: 108 ft. x 60 ft. x 29 ft. deep (acrylic = 6 in.)
    - 3- Holding pools: 12-14 ft. deep
    - 1- Husbandry pool
  - Total water volume: 1.8 million gallons
  - Water temperature: ~80°F

## Sources

### Animal Facts:

- *AMMPA Standardized Information: Bottlenose Dolphin*. Association of Marine Mammal Parks and Aquariums (2/21/2011) 25 pp.
- [John Elliott Reynolds](#), [Randall S. Wells](#), and [Samantha D. Eide](#). *The Bottlenose Dolphin: Biology and Conservation*. Gainesville: University of Florida, 2000.

### Dolphin Habitat Information:

- GAQ

