

# GEORGIA AQUARIUM ANIMAL FACT SHEET

## Giant Pacific Octopus

*Enteroctopus dofleini*

### Range/Habitat

- The giant Pacific octopus occurs along the Pacific coast from southern California north to Alaska and across to Japan.
- It is found in habitats that range from shallow tidal pools to ocean depths of about 2,500 feet (750 m). It is more abundant in shallow waters to 16 feet (5 m) deep.

### Physical Characteristics

- The giant Pacific octopus is usually reddish-brown in color.
- It averages 16 feet (4.9 m) in length from the top of its body or head (mantle) to the tip of its arms.
- An average adult weighs 50 to 90 lbs. (23 – 41 kg).
- This species tends to be small when it lives in warmer water and larger in colder waters, such as the North Pacific.
- It has eight arms attached to its body. Each arm has two rows of suckers and there may be as many as 1,800 suckers on each one.
- This is the largest species of octopus with the record size at 400 lbs. (181 kg) and a 25-foot (7.6 m) arm span.
- The head or body of the octopus is bulb-shaped and contains all of the octopus' organs and its mouth. The mouth is located on the underside, where the arms converge. In the center of the mouth is a beak that is made of keratin, the same substance that is in the human fingernail and the rhinoceros horn. The beak is used to kill its prey and bite it into pieces prior to swallowing.

### Diet/Feeding

- The young giant Pacific octopus feeds on dead animals and is characterized as a "neustonic feeder".
- The adult preys on crustaceans, such as shrimp, crabs, scallops, clams, as well as other mollusks, flatfishes, redfish and smaller octopods.
- Seals, sea otters, sharks and large fish consume the giant Pacific octopus.

### Conservation Status

- The giant Pacific octopus is not on the IUCN Red List.

### Additional Information

- The giant Pacific octopus is an intelligent animal with a well developed brain. In laboratory tests and aquariums, it has been able to solve mazes very quickly and can unscrew jar lids to retrieve food inside.
- It has acute vision and a sensitive sense of taste in its suckers.
- The giant Pacific octopus lives longer than other species of octopus. Males live about four years and females live about 3.5 years.
- At rest, the octopus' skin is smooth with a reddish-brown coloration. When it becomes excited, it can quickly change the color and texture of its skin by contracting skin cells filled with pigment. This ability allows it to camouflage itself when hunting prey. It is also a major method of avoiding predators.

- The female giant pacific octopus can lay between 18,000 to 100,000 eggs. The eggs are placed on rocks or sandy bottoms at depths less than 164 feet (50 m). She will protect them for about six months from other animals, such as sea stars and crabs. During this time, she will not eat.
- The giant pacific octopus reproduces in the fall. Individuals usually will mate only once. After mating, the male will move into deep water and die. The female will die after her eggs hatch.
- This animal is of major commercial importance and is the most common species caught by fisheries in north Japan, with about 20,000 metric tons taken each year.
- There also are fisheries for this species off Alaska and Washington.
- The octopus is a mollusk and belongs to the same group as snails, chitons, abalone, limpets, clams, scallops, oysters, and mussels. The octopus also belongs to a smaller subgroup of mollusks called “cephalopods”, which means, “head-foot”. It is so named because its arms (“feet”) are attached to its head. Cuttlefish and squid are also classified as cephalopods.
- These animals can rapidly draw water into the mantle and expel it forcefully out of its body. This propels them swiftly backwards helping to escape predators quickly.
- They also can release a cloud of dark ink when alarmed, which also helps them avoid predation.

### **Sources**

[www.monteraybayaquarium.org](http://www.monteraybayaquarium.org)

[www.marine.alaskapacific.edu/octopus/factsheet.html](http://www.marine.alaskapacific.edu/octopus/factsheet.html)

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