Seahorse Fact Sheet

Common name: Potbelly Seahorse

Scientific name: *Hippocampus abdominalis*

Classification: genus: Hippocampus
family: syngnathidae

General Information

Classification and origin:
Seahorses belong to the family syngnathidae, which also includes seadragon, pipefish and seahorses. There are 200 or more species in the family, 35 of which are seahorses.

Seahorses have some remarkable adaptations, including hard bony armor on the body, a prehensile tail that can be used for gripping, binocular vision, excellent camouflage and an unusual form of reproduction.

The fragile creatures have fascinated mariners for centuries. Seahorses have appeared on charms, talismans and ornaments and were even featured as the figurehead on Captain Cook's vessel, the Resolution.

Physical description:
Seahorses have a horse-like head and a grasping tail. They do not have scales; their skin is covered with bony plates.

Seahorses are considered bony fishes because they have bony skeletons and bodies that are protected by strong external plates, which are arranged into a series of "rings." These rings help to protect the body of the fish, but result in limited flexibility. The number of trunk (body) and tail rings does not vary much among individuals of a species, but does differ among species, so it is a handy characteristic for identifying species.

Seahorses lack a caudal (tail) fin, a feature that provides many other fish with their main swimming power. As a result, seahorses don't swim very fast but they are very maneuverable and can hover precisely. They swim by using their dorsal (back) fin to propel themselves, and their pectoral (side) fins to stabilize and steer.

Like all fish, their eyes can move independently, which helps them catch small crustaceans, their primary food source.

Adult seahorses range in size from less than 1 inch to 1 foot or more, depending upon the species. Their ability to change color is even stronger than the well-known chameleon. They
change color to camouflage themselves, reacting to other seahorses and changes in their environment.

One seahorse features a coronet, a crown-shaped piece of skin on the top of the head that is nearly as distinctive as a thumbprint.

Reproduction:
Most species of seahorses mate for life. After dawn each day, the female swims to the male, and they both change color and perform a special dance, which lasts for about 10 minutes. They separate for the rest of the day, and repeat their dance the next morning.

Only the male becomes pregnant; the female supplies the eggs, but the male carries the embryos. Depending upon the species of seahorse, the female will lay 25 to 1,000 eggs in the pouch on her mate’s belly. Seahorse pregnancy lasts 10 days to six weeks, depending on the species and water temperature. Small seahorses have one to two babies per pregnancy, whereas the largest species can have about 1,000. All species of baby seahorses are fully independent after birth.

Once the male gives birth, he usually becomes pregnant again right away.

Life span:
Seahorses live from one to four years, depending on the species. Generally, the larger the seahorse, the longer it lives.

Distribution:
Seahorses are found in tropical and temperate coastal waters around the world, and live among seagrasses, kelp forests, mangroves, coral reefs and estuaries.

Feeding:
Seahorses are slow, methodical feeders. They eat brine shrimp and other small crustaceans, sucking the food through their snout with a quick snap of the head, swallowing it whole. Seahorses do not have teeth or stomachs. Each day a seahorse can consume up to 3,000 brine shrimp.

Environmental threats:
Habitat degradation and over-fishing are the two major causes of seahorse population decline. Seahorses are generally found in shoreline areas where human populations are sometimes the greatest. Because of this population density, human disturbance is often extensive, making their habitats among the most threatened in the world. At least 24.5 million seahorses perished in 2000, the latest year for which figures are available.

Dredging, pollution, shoreline alteration and destructive fishing methods such as trawling and dynamite fishing each contribute to habitat degradation.
In addition, because of the desire to use seahorses for pre-packaged medicines and in the home aquarium and curio trades, the demand for seahorses exceeds supply. Traditional Chinese medicine is the largest direct market for seahorses.

Adult seahorses usually suffer low mortality. Unfortunately, fishing has changed this, creating new pressures on seahorse populations.

What makes seahorses vulnerable:

- Each pair of seahorses commonly produces 1,000 young per year. This is a low birth rate compared to other fish. For example, cod commonly produce 200,000 eggs per spawning. This means that seahorse populations are slower to recover.

- Seahorses can take a year to mature, but juveniles are popular in the market as home aquarium fishes or in patent medicines. Because of this, young seahorses are fished before they can reproduce.

- Seahorses move slowly and generally stay in the same area. This enables a skilled fisher to make a survey, find an area where seahorses live and eliminate them. Repopulation of the areas is very slow.

Seahorses form long-term pair bonds that enhance their reproductive output, and if one member of the pair is fished, the partner will stop reproducing until it finds a new mate. Because of sparse distributions, it may take a long time for a new mate to be found.

**Communication:**
In addition to their morning ritual dance, seahorses make small clicks by moving two parts of their skull against each other. It is not known whether they are communicating with one another with these clicks.

Seahorses are diurnal, which means they are more active during the day.

**Predators:**
Seahorses fall prey to many fish-eating fish, as well as to humans.

**References:**
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