



Lined Seahorse

Kingdom: Animalia
 Phylum: Chordata
 Subphylum: Vertebrata
 Class: Actinopterygii
 Order: Gasterosteiformes
 Family: Syngnathidae
 Genus: *Hippocampus*
 Species: *erectus*



Photo courtesy of Karen Marzynski

Habitat

- **In the Wild:** The lined seahorse is a fairly common resident of tropical and temperate waters ranging from Florida to Nova Scotia, the Gulf of Mexico, the Caribbean and the South American coast. They dwell in coastal waters where they can anchor themselves to seaweed, reefs or man-made structures using their prehensile tails (adapted for seizing, grasping, or holding, especially by wrapping around an object). They use their long snouts like a straw to suck up creatures like shrimp into their mouths.
- **Exhibit Location:** Adaptation of Animals

Characteristics

- Length: up to 5 inches
- The seahorse has an upright position, horse-like head set at right angles to the body, and jointed armor that makes it resemble a knight in a chess set. They have prehensile tails that they use to hold onto seaweed and coral. The scales have been replaced by rings of about 50 rectangular bony plates, encasing the body in a semi-rigid skeleton. The eyes can swivel independently or converge to achieve binocular vision.
- The most distinguishing feature between the male and female seahorse is the kangaroo-like pouch that the male has on its ventral side, used for reproduction.
- **Lifespan: In the Wild-** 1 to 4 years; **In Captivity-** 4 years

Behaviors

- The seahorse swims weakly, propelled largely by the rapid motion of its dorsal fin and pectoral fins. Sound making has a sexual significance for the seahorse. They produce snapping or clicking noises by tossing their heads. At the back of the head is a star-shaped bony crest known as the coronet. This has a loose articulation (joint) with the rear edge of the skull. When a seahorse suddenly lifts its head, this edge slips under the coronet, and then, as the head is lowered, snaps out, an action which presumably produces the sound. The seahorse also produces this sound when eating.
- Lined seahorses form long term bonds with their mates and will live out their entire lives in a single small territory. These territories are often widely spaced, with mated pairs rarely encountering any other seahorses. If one member of the mated pair dies, it may be sometime before another eligible seahorse swims by.
- **Enrichments at the Zoo:** Feedings

Reproduction

- Seahorses reproduce sexually through internal fertilization and spawn during every season. The male cares for the fertilized eggs. Male seahorses have an incubation pocket, similar to the pouch of a marsupial mammal, on the lower side of the abdomen, with an opening that can be closed off. During courtship the female sprays between 250 and 650 eggs into the male brood pocket, depending on the size of the seahorse. Development in the brood pocket lasts between 2 and 3 weeks. After hatching, the free embryos are carried in the pouch until they are capable of fairly active swimming. When it is time for the incubated young to be born, the prospective father holds fast to a plant stem or some other object by his prehensile tail. He bends rapidly, sharply, backward and forward; the pouch opens and a baby seahorse

pops out. With brief intervals between births, the jerking motions are repeated until the pouch is emptied. Each infant emerges head first and is a swimming, independent miniature of the adult.

- Newborns are about 5/8 of an inch in length, and within 8-10 months reach their maximum size of about 5 inches. A pair of seahorses may produce about 1,000 young each year, most of which will not survive the hungry fish and other predators that inhabit their watery world.

Diet

- **In the Wild:** copepods, amphipods and crustaceans
- **At the Zoo:** brine and mysis shrimp; guppy fry and ghost shrimp may also be offered.

Conservation Status

- **IUCN status:** Vulnerable; **CITES:** Appendix II
- The lined seahorse is listed as vulnerable based on inferred declines of at least 30% caused by targeted catch, incidental capture and habitat degradation. While there is little information on changes in numbers of the species, there is indirect evidence to suggest that declines have taken place and are continuing.
- The seahorse is traded for use as aquarium fishes, curios and traditional Chinese medicine. They are sometimes incidentally caught as bycatch, in shrimp trawl and other fisheries.
- The CITES II listing makes harvesting seahorses illegal and full monitoring of the trade is underway in the United States. However, this is dependent on traders' declarations. The targeted fishery for the aquarium trade in Florida is monitored and regulations are in place, such as a limitation on the number of commercial harvesters.
- To help with conservation, buy only captive-bred seahorses for aquariums.
- Predators are crabs and large fish.

Did You Know?/Fun Facts

- A seahorse moves so slowly that it would take one about 5 minutes to cross a bathtub.
- The Chinese have used seahorses to make medicines for nearly 500 years. They believe this medicine can cure asthma, throat infections, lethargy and many other diseases.
- All seahorses are pieced together with many different parts and abilities of other animals. They have the head of a horse with the snout of an aardvark, spines like a puffer fish, a pouch of a kangaroo, eyes like a lizard, the tail of a monkey, an armor plated body like Stegosaurus, the ability to change colors like a chameleon and the ability to wrap their tails around things as some monkeys can.

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