

White-spotted Bamboo Shark

Kingdom: Animalia Phylum: Chordata Subphylum: Vertebrata Class: Chondrichthyes Order: Orectolobiformes Family: Hemiscylliidae Genus: Chiloscyllium Species: plagiosum



Photo courtesy of Janet Wisneski

Habitat

- In the Wild: The white-spotted bamboo shark is found in the Indo-West Pacific near Madagascar, India, Sri Lanka, Malaysia, Singapore, Thailand, Indonesia, Vietnam, China, Japan and the Philippines. They inhabit shallower waters near the shore and on coral reefs in these tropics.
- Exhibit Location: USS Antiquities

Characteristics

- Length: Males- 1.5 to 2.5 feet; Females- 3 to 3.5 feet
- The body of the *Chiloscyllium plagiosum* is slender and elongated with a color pattern of numerous white or bluish spots, dark bands and saddles on a light background. The posterior (rear) edges of the dorsal (top) fins are rounded. The pectoral (chest) fins are very muscular.
- The mouth is well in front of the eyes. Their eyes are small with elliptical (egg-shaped) pupils. The snout is rounded and they have short, pointed sensory organs called "barbells" attached to each nostril.
- **Lifespan: In the Wild** 25 years; **In Captivity** Unknown

Behaviors

- The white-spotted bamboo shark is considered common, but little study has been done on this fish.
- They are oviparous (egg laying) and nocturnal (feed at night). They use their strong pectoral fins to crawl along the bottom in search of food.
- Since their bodies are slender, they can glide between coral branches and hide in tight reef structures.
- Enrichments at the Zoo: various feedings mussels, clams, other types of fish not in regular diet

Reproduction

- Little is known about the reproduction of the *Chiloscyllium plagiosum*.
- The males have external appendages called claspers used to fertilize the female. After she is fertilized, the female lays egg cases with a developing embryo shark inside each case.
- The embryos feed solely on the yolk and it can take up to 3 months to hatch. The young sharks are approximately 5 inches long when they are born.

Diet

- In the Wild: invertebrates, crustaceans, small fish
- At the Zoo: Fish gelatin (vitamins, trout chow, minerals, clam juice, gelatin), smelt, squid

Conservation Status

- The *Chiloscyllium plagiosum* are common and not endangered.
- Although they are not heavily preyed upon, their survival is in jeopardy. As reef animals, the dynamics of the food chain on the reef determines their future. As coral reefs are affected by global warming, so are the sharks.
- They are a regular catch of the commercial fishing industries in China, India and Thailand.
- Predators: humans

Did You Know?/Fun Facts

• A female white-spotted bamboo shark that had not had contact with a male for at least 6 years gave birth to 3 babies. There are some theories about this occurrence. The mother may have both male and female reproductive characteristics and be able to fertilize her own eggs, OR were the product of stored sperm (delayed implantation), OR she somehow stimulated the eggs without sperm. This complex process, known as parthenogenesis, is the ability of unfertilized eggs to develop into embryos without sperm.

Sources:

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