Hoffman’s Two-Toed Sloth

Kingdom: Animalia
Phylum: Chordata
Subphylum: Vertebrata
Class: Mammalia
Order: Xenarthra
Family: Megalonychidae
Genus: Choloepus
Species: hoffmanni

Habitat

- **In the Wild:** *Choloepus hoffmanni* is found in Central America and northern South America, including portions of Peru and Central Brazil. It lives in tree canopies within lowland and upland tropical forests.
- **Exhibit Location:** Adaptation of Animals

Characteristics

- Body length: 21-29 inches; Body weight: 9-19 pounds
- Its long, shaggy coat of fur is grayish-brown. Unlike most mammals, its stiff, wiry fur grows from the stomach toward the back, so rain water will run off. Each of the specialized, coarse hairs of its coat has a deep groove enabling colonies of algae to grow. In the wild, this algae growth gives the fur a greenish tint, which helps camouflage (protective coloration) the sloth. As the sloth licks itself, this ingested algae becomes a quick, nutritious meal. The nutrients from the algae are also absorbed through the sloth’s skin.
- It has a lighter colored, short head with large eyes and small ears. Its vestigial short tail is generally not seen.
- The limbs of *Choloepus hoffmanni* are long and well-developed. It has two long, curved claws on its front feet and three on the hind feet. These 3 to 3½ inch claws hook over a tree limb and enable the sloth to hang upside down.
- Like other members of the Xenarthra order, it has no incisors or canine teeth. It does have 18 specialized molars – 10 upper and 8 lower. These primitive, peg-like teeth grow continuously and lack enamel.
- **Lifespan:** *In the Wild* 12–20 years; *In Captivity* 20-32 years.

Behaviors

- Groups of sloths have been known to occupy a single tree at the same time.
- It is nocturnal (active during the night) and usually sleeps 15 hours or more each day. As it sleeps, it hangs from a branch with all 4 legs close together and its head tucked between its forelimbs.
- Because it is vulnerable to predators, it is good at hiding beneath tree branches or curling itself up into a tight ball to resemble a termite nest or a knot in the wood.
- To move through treetops, it slowly advances hand-over-hand, traveling only 120 feet or less in an entire day. It seldom leaves the general area of its birth.
- Being arboreal (tree dwelling), it eats, sleeps, mates, and gives birth while suspended from a tree limb. It ventures to the ground about once a week to urinate and defecate. It may also travel on the ground to relocate to a tree that was not reachable from the treetop it was just hanging in.
- On the ground, it is in constant danger. Because it is physically incapable of truly walking, it lies on its stomach and moves itself along by using its claws. If forced to defend itself, it will use its teeth or its sharp claws.
- Rather than munching all day long, it conserves its energy. Due to its inactivity, it survives with only half as much muscle mass as similar-sized mammals. Because it has less overall muscle, it weighs less, which enables it to climb onto the high, thin branches in the canopy of the tropical forest. In the higher branches, it can easily find food and avoid heavier predators.
- At feeding time, *Choloepus hoffmanni* reaches out, grabs an overhead branch or vine with one of its flexible feet, and pulls until the selected food comes within reach of its long tongue. After the vegetation
enters its mouth, it tears it off with its hard lips. It then slowly grinds the food with its large, peg-like teeth.

- It digests its food very slowly. Because it takes a great deal of time for stomach and intestinal bacteria to digest tough plant material, the entire digestive process may take a month.
- **Enrichments at the Zoo:** scents, browse and fruit.

### Reproduction

- Sexual maturity occurs in the female at 3-3½ years of age and in the male at 4-5 years of age.
- In the wild, the female lets out a high-pitched scream during the night signaling that she is ready to mate. Within a few hours, any interested male in the area moves toward the female. If the males happen to arrive at the same time, they will each grasp a tree branch with their back legs and swing one or both of their forelimbs at one another. This upside-down confrontation continues until one gives up and leaves the area. The remaining male mates with the female several times during the next few hours, then leaves her on her own.
- After a gestation period of 11½ months, the female gives birth to a single offspring while hanging upside down. The newborn is about 10 inches in length and weighs 12 ounces. It is born with claws and clings to its mother’s belly for its first 5-6 weeks of life, while it nurses and sleeps. Weaning occurs at about 10 weeks of age.
- A female sloth is extremely protective of, and attentive to, its baby. When a mother sloth senses that her offspring can survive independently, she leaves it and heads off to another part of her home territory. This separation usually takes place when the offspring is 1-2 years of age.

### Diet

- **In the Wild:** leaves, buds, tender twigs, young plant shoots, fruits, flowers
- **At the Zoo:** fruits, vegetables, and hard boiled eggs

### Conservation Status

- **IUCN status:** Least Concern; **CITES Appendix:** III
- Predators: humans, jaguars, ocelots, and birds of prey, such as harpy eagles

### Did You Know?/Fun Facts

- The genus *Choloepus* means lame or maimed foot, referring to the fact that it one less toe on each of its front feet.
- It has the most variable and lowest body temperature of any mammal, ranging from 76-96 degrees. Its temperature fluctuates with that of the air temperature around it, sometimes varying as much as 10 degrees during a 24-hour period.
- It is the only mammal that can turn its head about 180 degrees in both directions.
- Up to about one third of its weight may be made up of stomach contents. Several plant species germinate only after they have passed through *Choloepus hoffmanni*’s digestive system.
- Although they spend most of their lives hanging upside down in trees and can crawl on the ground for only short distances, they are good swimmers using a type of overhand stroke.

### Sources:

