

## Habitat

The extant Linnaeus's two-toed sloth is a neotropical mammal utilizing its suspensory capabilities in northern South America.



Habitat preference are large lianas in tropical rainforests that are vastly abundant with their woody vines to assist in their arboreal lifestyle.

# Linnaeus's two-toed sloth *Choloepus didactylus*



## Evolution

Modern sloths are smaller in size than their late ancestors, the megatheriid sloths (referred to as 'ground sloths'). These ground sloths did not overcome the colonization during the Panamanian Isthmus.

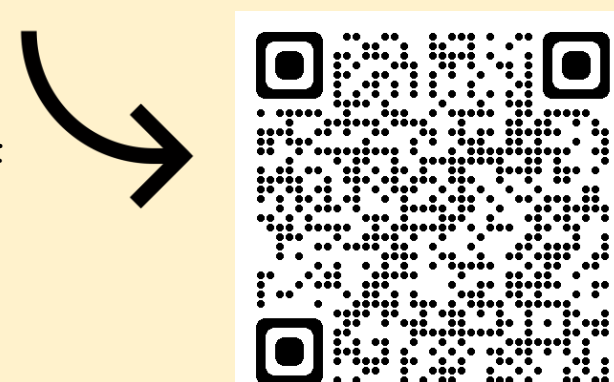
18-40 mya is when two-toed sloths (*Choloepus*) diverged as extant species from their late giant ancestors.



## Fun Facts

- 1.) Hair parts in the middle ventrally sweeping over their body to wick off rain due to living upside.
- 2.) Algae can grow on their hair in moist conditions giving them a green tint.
- 3.) Descend to the base of trees about once a week where they can defecate up to 30% of their total body mass.

Scan for a video of their interesting bathroom habit!



## Classification

Kingdom: Animalia  
Phylum: Chordata  
Class: Mammalia  
Order: Pilosa  
Family: Choloepodidae  
Genus: *Choloepus*  
Species: *didactylus*

## Reproduction

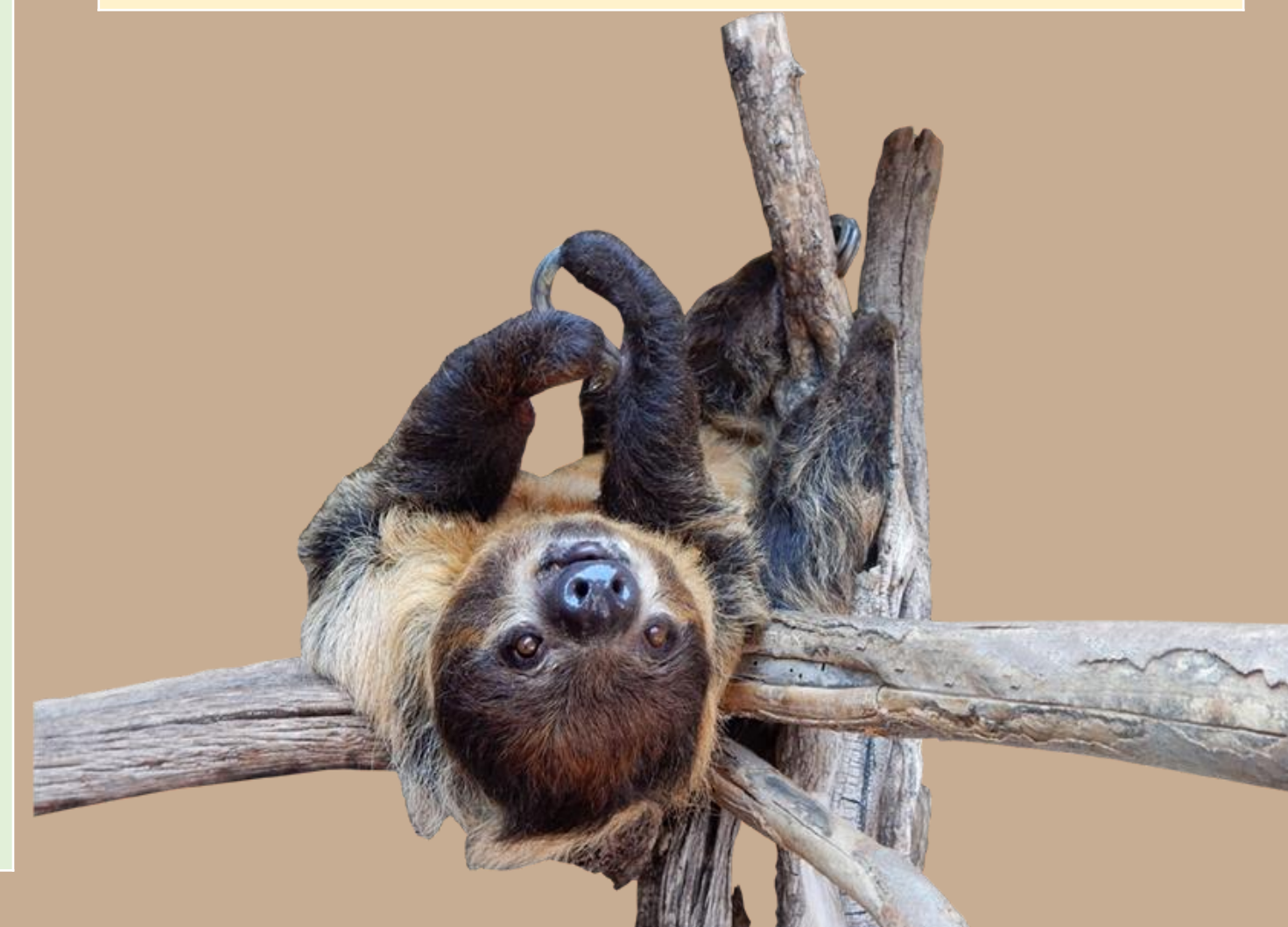
Sexual maturity is reached at 2-4 years of age. Females mate with many males (Polygyny). Males and females rub anal scent glands on trees to send messages. The act of mating typically lasts <1min.

The gestation period is 10-11.5 months. One young is conceived while hanging upside down. The lactation period lasts for 3-5 months.

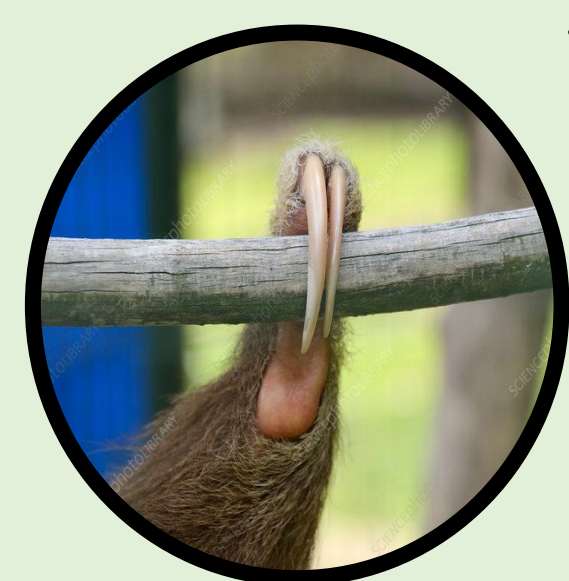
## Sociality & Behavior

Sloths are typically solitary mammals unless with their young.

A mother will carry her young 7-9 months where life skills develop. A behavioral relationship between the two can remain for 12 months. If the bond lasts too long, the survival of the next offspring can be depleted.



## Form & Function



Two-toed sloths are very slow! They move about 1.5 mph. Hook-like fingers and toes anchored perpendicularly on branches allow scansorial movement on the inverse of gravity among tree canopies.

The form of their phalanges make rare occasions on the ground an awkward experience.

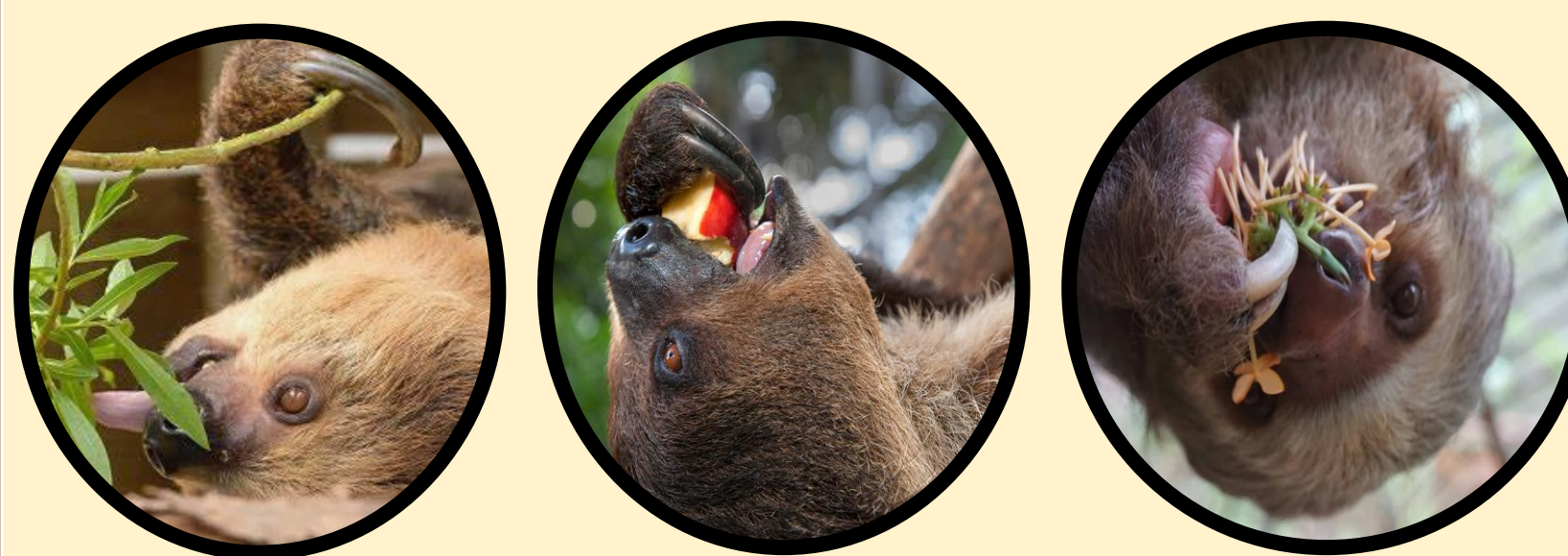
Scan for a visual of this!



Sloths are nocturnal and have monochromacy. Which means they lack cone cells in their eyes making them blind in bright light.

Due to spending much time upside they can't rely on gravity to help blood flow. As a result, they have high blood pressure (128 mmHg) to aid in circulation.

## Diet



Two-toed sloths are primarily florivorous where they selectively eat tropical leaves. They can occasionally feed on fruits and flowers when available. Food can remain for 70-90 hrs. in their stomach from the lengthy process it takes to break down the cellulose of plants.



They have a four-chambered ruminant stomach that aids in breaking down this plant matter. A florivorous diet leads to a slow metabolic rate. To compensate for the low energy content from leaves, they often eat large amounts to make up for it. A full stomach can account for up to 30% of their body mass.

## Conservation

Although a species of least concern, sloth populations still face threats to human expansion, habitat fragmentation, urbanization and obstructions (e.g., roads). The Sloth Conservation Foundation has some solutions.



Check out these 'crossings' in use!



Over 201 'Sloth crossings' have been installed to prevent ground collisions.

5,639 favored tree species have been planted by the conservation group to increase habitat. Have started to use radio telemetry to monitor the population dynamics of 32 sloths in Costa Rica for future management.

