

THE EXTREME LIFE OF SLOTHS



Narrator: If there's one thing you know about sloths, it's that they're, well, slow. But that doesn't mean they're boring.

In fact, sloths are one of the most extreme animals on the planet, and not just because they poop only once a week.

First of all, sloths really are extremely slow. Their top speeds clock in at just 0.25 kph, making them the slowest mammal on the planet.

According to zoologist Becky Cliffe, that's because, well, sloths can't really see.

Becky Cliffe: 60 million years ago, they lost the ability to see. They went almost completely blind. So, in the daytime, a sloth actually can't see anything because it's too bright. If you can't see where you're going, you can't run around because you're going to fall out the tree.

Narrator: Moving slowly may sound like a liability, especially if you're nearly blind, but being sluggish actually comes with all kinds of benefits. For one, they save an enormous amount of energy. In fact, sloths use about 90% less energy than the average mammal, which is vital, considering their diet is a low-energy

snack consisting of leaves...with a side of leaves. And as it turns out, being slow also helps sloths avoid detection. You see, sloths are so slow that predators like jaguars and eagles, which use movement to hunt, can't even find them. But some sloths take predator avoidance to the next level. Thanks to rare extra vertebrae in its neck, the three-fingered sloth can turn its head 270 degrees, which allows it to smell incoming predators from almost any direction, and that's especially useful when you spend nearly all of your time motionless in a tree. In fact, sloths sleep, mate, and even give birth all while hanging upside down on a branch. And, as you might expect, that requires some pretty extreme adaptations.

Cliffe: They've got special tendons in their hands, which lock into place.

Narrator: And, along with their long, hook-like fingernails, allow them to hang easily.

Cliffe: They're like a giant coat hanger.

Narrator: And to combat a rush of blood to the head, which might be familiar if you've ever hung upside down...

Cliffe: They have special sort of valves in their circulatory system that does

actually stop the pooling of blood in the head.

Narrator: But if you think that's extreme, consider this: Once a week, sloths risk their lives on a daring journey from the protective forest canopy to the ground. Their mission? To poop. And it really is risky.

Cliffe: We suspect about 60% of predator-based sloth deaths happen while they're pooping. They literally risk their life to come down to the ground.

Narrator: So they have to make it count. And, boy, they really do. Sloths can lose an astonishing 30% of their body weight each time they go. Plus, they might get a mate out of it.

Cliffe: How do you find a mate if you're solitary and you can't move very far? Well, they're gonna have to use pheromones and scent markers. I think that coming down and leaving a little pile at the base of your favorite trees is sort of like a little signpost.

Narrator: But if there's one thing that really pushes sloths over the top, it's their rough fur. Sloth fur has its very own ecosystem. Because they live in the rainforest, it's often wet, which creates the perfect environment for algae to grow

and provide sloths with green camouflage. But it isn't just algae that calls a sloth's fur home. You can also find beetles, cockroaches, and a species of moth that's found nowhere else in the world except for on a sloth. And the sloths don't seem to mind one bit. But that's not all. Their fur might actually save lives. Fungi in their fur have been shown to fight breast cancer cells, and they may also have properties for fighting malaria. So, despite their slow pace, sloths are far from boring, and in some environments, they aren't even slow. I mean, look at that daredevil go.

Reading Comprehension: The Extreme Life of Sloths

Questions:

What is the main reason sloths move so slowly? a) They are nearly blind

b) They are lazy

c) They have a slow metabolism

d) They are too heavy to move fast

Why does moving slowly help sloths survive in the wild? a) It helps them

avoid predators that use movement to hunt

b) It keeps them from getting tired

c) It helps them save energy for hunting

d) It makes it easier to climb trees

What unique ability helps the three-fingered sloth detect predators? a)

Strong eyesight

b) The ability to move fast

c) A neck that can turn 270 degrees

d) Its camouflage fur

What extreme physical feature allows sloths to hang upside down for long periods? a) Their lightweight bones

b) Special tendons and hook-like fingernails

c) Their long arms

d) Their strong neck muscles

Why do sloths risk their lives when they come down to the ground? a) To look for food

b) To find a mate

c) To poop

d) To drink water

How does the sloth's fur benefit its survival in the rainforest? a) It makes the sloth invisible to predators

b) It provides a home for moths and beetles

c) It helps with camouflage and contains life-saving fungi

d) It keeps the sloth warm in cold weather

True or False:

1. Sloths use about 90% less energy than most mammals.
2. Sloths can only poop while hanging upside down.
3. Sloths sleep, mate, and give birth while hanging from trees.
4. Algae grows in sloths' fur, helping them camouflage in the rainforest.
5. Predators can easily spot sloths because they move so slowly.

Short Answer:

1. Why do sloths only poop once a week, and how does this affect their survival?
2. Explain how the sloth's fur may contribute to medical research.
3. What adaptation helps sloths avoid falling when hanging upside down for long periods?

This reading comprehension activity focuses on sloth behavior, adaptations, and how these fascinating animals survive in their environment. Perfect for English learners, it engages both vocabulary and critical thinking!