Episode 11: Mouse Lemurs and Bush Babies

A lemur that we unfortunately do not meet on our regular tours here at the Duke Lemur Center is the smallest lemur we have here: the gray mouse lemur (*Microcebus murinus*). Please do not be fooled by the cute name and the tiny size! They are little, but they are fierce. Mouse lemurs don't live on our tour path because they tend to be pretty feisty. They don't usually enjoy living in the larger viewing rooms that we have on the tour path. Instead we have them in little mouse lemur condo-style housing, so we can separate them to make sure everybody's getting along okay.

Here at the DLC, we do non-invasive research with [our mouse lemurs studying] Alzheimer's disease and other degenerative diseases. [These diseases] that you will see in humans, you can also sometimes see in mouse lemurs. With our mouse lemurs, we can study them over the course of their lifetimes.

Mouse lemurs living in the wild—their age can vary, but they usually won't live past five, six, or seven years in the wild. Whereas here at the Duke Lemur Center, they're a little more spoiled. They have a lot more care, and they tend to live quite a bit longer—sometimes 10, 12, or 13 years old. That's still a relatively short lifespan for a primate, so if we study all we can about these mouse lemurs, pamper them as much as we can, make sure all their other health factors are nice and good, then, if they do start to develop those symptoms, we can study their progression in a much shorter timeframe.

We actually have trained the mouse lemurs to use tiny touchscreens to do very basic tasks—little training tasks on the screens—and then we can keep testing them on those regularly. In order to do those kinds of tests with our lemurs, we need to motivate them properly, because all our research is non-invasive: the lemurs only do it if they feel like doing it.

The way we can help make sure they feel like doing it, is by finding their favorite treat to include in the session. So in the training session for the mouse lemurs, where they do the touchscreen trials, they actually get a drop of pineapple juice whenever they get the correct answer on their trial. If only we [humans] could do all of our things for just a tiny drop of pineapple juice!

One of the newest species that we have living here at the Duke Lemur Center are the Moholi bush babies (*Galago moholi*). These guys are related to lemurs: they are strepsirrhine primates, part of that early, early branch of the primate family tree. But Moholi bush babies stayed on the continent of Africa. So Moholi bush babies are found in southern Africa—you'll find them in habitats like the savanna woodlands and deciduous forests—and they are particularly fond of hunting insects.

Bush babies are pretty small: They're about six inches tall, and then their tail is an additional nine inches long—their tail is actually longer than they are tall. That tail is really, really useful when you're a tiny jumping animal that can jump crazy distances: at least six feet up and across! You need something like a rudder to help keep you stable as you're moving through the air, so that long tail can help act like a balancing agent for them as they jump and land on all these different surfaces.

Bush babies are particularly fond of eating crickets here at the Duke Lemur Center. So every day they get a selection of crickets that we will let loose, and they don't last for very long. Bush babies have incredible hearing with their large ears, and they can move each ear independently, listening and pinpointing exactly where those crickets are hiding so they can snatch them up and eat them.

They also like to eat mealworms here, and they're very fond of anything that's high in sugar. In the wild and here at the Duke Lemur Center, another really important part of their diet is eating saps and gums that come out of the trees around them—so gum, sap, anything that's nice and high in sugar and nice and high in nutrients, because they're little animals that use a lot of energy bouncing and hopping around and moving all over the place.

The name "bush baby" might give you the wrong impression about this species. They're named because the call that they make sounds a little bit like a baby's cry; hence the name "bush baby." But, I do want to caution you if you think that any of the animals here would make good pets, but particularly the bush baby! They do something called **urine washing,** and it's pretty much exactly what it sounds like. There's been some speculation over the years as to why bush babies wash their hands and feet with their own urine. We thought maybe it might have something to do with scent marking, but more evidence suggests that it helps the bush babies grab and stick when they're jumping and landing on branches and twigs.

If you're a tiny bush baby doing these big, impressive jumps up and across in the trees, you need to be absolutely sure that you're going to be able to stick your landing. So that urine helps keep their hands nice and sticky so that they can grab a hold and keep a hold.

That's definitely not something I'm looking for in a pet. And in all seriousness, we recommend that you leave caring for these boisterous little primates to the professionals! [For more information, visit lemur.duke.edu/not-a-pet.]