



# The Mini Page

Betty Debnam, Founding Editor and Editor at Large



© 2014 Universal Uclick

from The Mini Page © 2014 Universal Uclick

## Our Wide-Eyed Cousins

# Lemurs Find a Home

About 60 million years ago, our distant cousins, the **lemurs** (LEE-mers), were castaways on Madagascar, an island off the coast of Africa. For millions of years, this island was a wonderful home for the lemurs — until humans arrived.

Today, lemurs are critically endangered, and many species are extinct. Experts say they are the most endangered mammals in the world. Lemurs are found nowhere on Earth except Madagascar.

To learn more about this entrancing animal, The Mini Page talked with a biologist who helped found a lemur refuge. She is an adviser for a new movie, “Island of Lemurs: Madagascar.”



photo by Drew Fellman, © IMAX® film “Island of Lemurs: Madagascar”

Before settling into the holes of trees to hibernate, fat-tailed dwarf lemurs put on about one-third of their weight. They need these extra fat stores because they hibernate from four to six months a year.



photo by Drew Fellman, © IMAX® film “Island of Lemurs: Madagascar”

The mouse lemur is the smallest primate in the world, weighing about 1 1/2 to 2 ounces. It easily fits in the palm of a person’s hand.

## Distant relatives

Lemurs were one of the first **primates** (PRY-mates), the family that includes humans, monkeys and apes. Primates have **digits**, or fingers and toes, that can grasp things. Most have fingernails instead of claws.

Primates have big brains for their body size. The lemur brain size is smaller than those of later, similar-sized primates such as monkeys.

## Lemur paradise

Millions of years ago, a storm swept a group of small mammals, the early lemurs, out to sea. They floated from Africa on a natural raft of plants until they reached an island about the size of Texas.

This island, Madagascar, was so isolated from other land that there were no other mammals or birds present. There were few **predators**, or enemies, of the lemurs. Snakes and crocodiles lived on the island, but no other predators arrived for about 40 million years.

Lemurs spread out throughout the island. They developed into hundreds of different species, ranging from those as big as a gorilla to those as tiny as a mouse. They filled every **niche** (nitch), or position in the environment.



Because it is isolated in the sea, the island of Madagascar is filled with unusual wildlife.

# Ghosts of the Forest

## The arrival of humans

When people first landed on Madagascar about 2,000 years ago, they began burning the lemurs' forest home. Now, more than 90 percent of the forests there have been destroyed. All the large species of lemurs are extinct. More than 75 percent of the remaining lemurs are endangered.

Most of the people in Madagascar are poor. They may kill lemurs for food. Sometimes they are scared of the strange-looking animals. Lemurs have wide stares, and some kinds move around at night, so many native people believed they were spirits. "Lemur" means "ghost" in Latin.

People are destroying the forests for money or to create new land for growing crops. But people are also making progress in saving the lemurs' habitat. Parks have been set aside as refuges. People are realizing they can make a living by working with tourists who want to see the many special animals in Madagascar.



photo by Drew Fellman, © IMAX® film "Island of Lemurs: Madagascar"

Most lemurs are arboreal (ar-BORE-ee-uhl), or animals that live in trees. Species such as the ring-tailed lemur travel easily through the forest. The ring-tailed lemur also is at home on the ground, which is not true for all lemurs.

## Serving the forest

Lemurs are the main animals spreading pollen in the Madagascar rain forest. It is unusual for non-flying animals to be pollinators in rain forests. Usually, birds or bats fill that niche. However, in Madagascar, most birds and bats eat only insects. They don't dine on nectar.

But lemurs do eat flower nectar. When they lick up the nectar, they get pollen on their faces. As they travel from flower to flower, they spread the pollen, which allows the plants to reproduce.

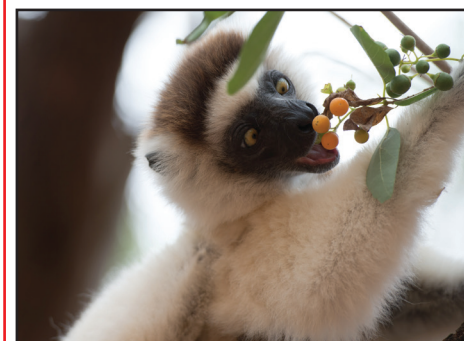


photo by Drew Fellman, © IMAX® film "Island of Lemurs: Madagascar"

Lemurs such as this sifaka eat fruit and other plant matter. Small lemurs also eat insects, and some eat frogs too.

## Ready Resources



The Mini Page provides ideas for websites, books or other resources that will help you learn more about this week's topics.

### On the Web:

- [bit.ly/1lFVbJN](http://bit.ly/1lFVbJN)
- [youtube.com/watch?v=4SQ5iZ6ciDQ](http://youtube.com/watch?v=4SQ5iZ6ciDQ)
- [lemur.duke.edu](http://lemur.duke.edu)

### At the library:

- "Shadows in the Dawn" by Kathryn Lasky
- "Lemurs: On Location" by Kathy Darling



Try  
'n'  
Find

## Lemurs

R	A	T	Y	A	D	L	A	N	R	U	T	C	O	N
N	A	L	R	D	M	E	Z	I	L	A	I	C	O	S
P	I	I	A	E	R	O	T	A	N	I	L	L	O	P
R	B	C	N	R	E	N	L	A	E	R	O	B	R	A
I	A	S	H	E	M	S	E	T	S	E	R	O	F	F
M	M	K	E	E	A	M	L	S	R	U	M	E	L	R
A	B	M	N	A	N	T	V	K	T	L	L	A	C	U
T	O	D	E	R	E	G	N	A	D	N	E	V	C	I
E	O	R	A	C	S	A	G	A	D	A	M	M	M	T

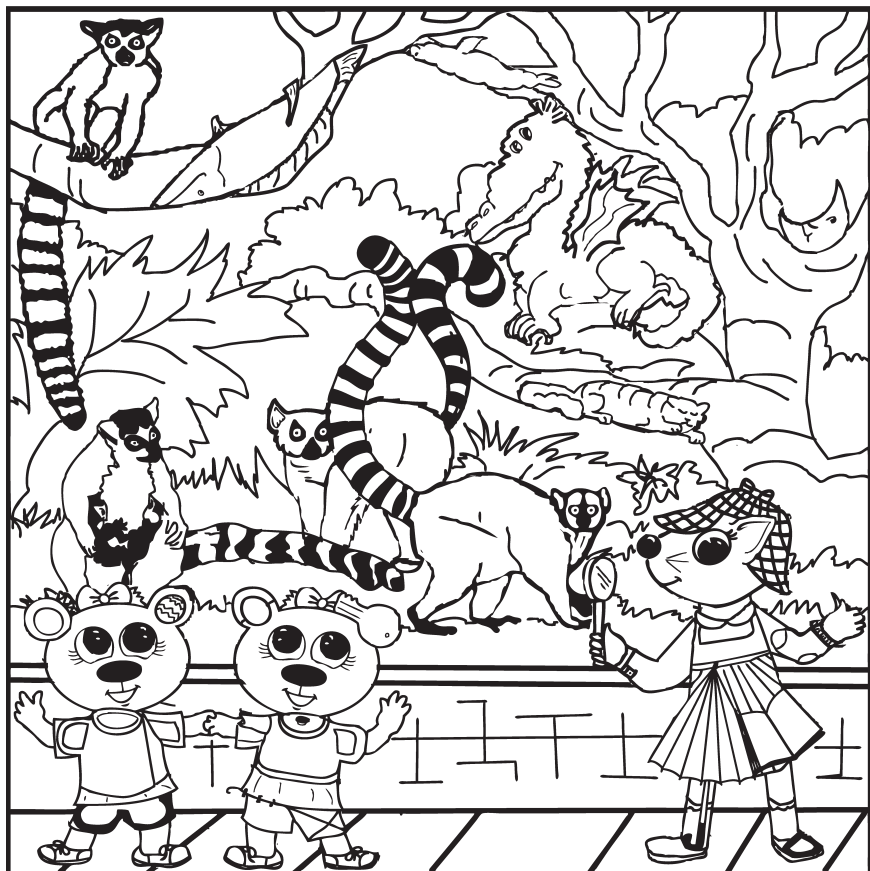
Words that remind us of lemurs are hidden in the block above. Some words are hidden backward or diagonally. See if you can find: ALARM, ARBOREAL, BAMBOO, CALL, DAY, EAT, ENDANGERED, FOREST, FRUIT, LEMUR, MADAGASCAR, NEST, NICHE, NOCTURNAL, POLLINATOR, PRIMATE, RAIN, SEA, SOCIALIZE, TREES.



# Mini Spy

Mini Spy and the Dot twins are watching lemurs at the zoo. See if you can find:  man in the moon

- |                               |                                   |                                   |                                     |
|-------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> mug  | <input type="checkbox"/> kite     | <input type="checkbox"/> book     | <input type="checkbox"/> Easter egg |
| <input type="checkbox"/> cat  | <input type="checkbox"/> umbrella | <input type="checkbox"/> number 3 | <input type="checkbox"/> fish       |
| <input type="checkbox"/> sock | <input type="checkbox"/> key      | <input type="checkbox"/> ring     | <input type="checkbox"/> dragon     |
| <input type="checkbox"/> seal | <input type="checkbox"/> teapot   | <input type="checkbox"/> letter D | <input type="checkbox"/> letter C   |



from The Mini Page © 2014 Universal Uclick



# Rookie Cookie's Recipe Veggie Cream Cheese Pizza

*This makes a good snack or party appetizer.*

## You'll need:

- 1 (8-ounce) package crescent rolls
- 1 (8-ounce) package low-fat cream cheese, softened
- 1 (8-ounce) carton light sour cream
- 1 packet ranch dressing mix
- 1/2 cup broccoli, chopped
- 1/2 cup matchstick carrots
- 1/2 cup red pepper, diced
- 1/2 cup shredded cheddar cheese

## What to do:

1. Spread crescent rolls on a 12-inch pizza pan evenly, pressing out seams to form one big crust. Bake according to package directions.
2. Mix softened cream cheese, sour cream and ranch dressing mix in a bowl. Spread on cooled pizza crust.
3. Spread vegetables and cheese on top.
4. Cut into wedges or squares. Makes 8 servings.

*You will need an adult's help with this recipe.*

from The Mini Page © 2014 Universal Uclick

# Meet Patricia Wright



Photo by Drew Fellman, © IMAX® film Island of Lemurs: Madagascar

Dr. Patricia Wright is one of the main advisers for the new IMAX 3D documentary movie "Island of Lemurs: Madagascar."

Patricia studied biology and anthropology in college and now teaches anthropology. She spent years studying lemurs in the wild. She convinced Madagascar officials to set aside a national park for the lemurs and other animals.

She guided the "Island of Lemurs" moviemakers as they filmed in rugged conditions in Madagascar. There are few roads or hotels, so if it rained, it meant they might not be able to film for a week. Travel was often difficult. In one area, it took them 10 hours to go only 60 miles because they had to keep digging the car out of the mud.

One time they had to tie two canoes together and paddle against the current in the middle of a lightning storm. They filmed part of the movie from a hot-air balloon.

from The Mini Page © 2014 Universal Uclick



**Gus Goodsport's Supersport**



**Height:** 6-1  
**Birthdate:** 7-27-93  
**Hometown:** Dallas, Texas

# Jordan Spieth

from The Mini Page © 2014 Universal Uclick

Professional golf is a game of thrilling individual achievement and lonely personal defeat. Jordan Spieth experienced both feelings in the 2014 Masters Tournament in Augusta, Georgia.

He lost his first Masters, one of golf's four "major" competitions, by just three strokes, yet became the youngest runner-up in the tournament's history. Spieth tweeted his mixed emotions: "Dream come true competing at Augusta! ... Stinging badly but it's just fuel going forward."

Though only 20 years old, Spieth was the top U.S. amateur golfer in 2009 and 2011. He helped the University of Texas win an NCAA championship in 2012 as an All-American and was named last season's PGA Tour Rookie of the Year.

Jordan recently began the Jordan Spieth Charitable Trust, which is dedicated to helping children with special needs, military families and youth golf.



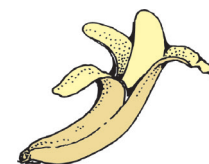
# Mighty Funny's Mini Jokes

from The Mini Page © 2014 Universal Uclick

All the following jokes have something in common. Can you guess the common theme or category?

**Lisa:** Why does the lemur go crazy?

**Larry:** Because he is bananas!



**Lena:** Where do lemurs go when they lose their tails?

**Lilly:** To the retail store!



**Lonny:** What do you call a lemur with a banana in each ear?

**Letty:** Whatever you want — it can't hear you!



# Lemur Lifestyle

## Spreading over the island

Lemurs occupy niches all over the forest. Different species can survive because they each fill a separate niche.

For example, three types of lemurs eat bamboo, but they don't compete with one another for food. The largest one, about the size of a large cat, has teeth sharp enough to chew bamboo trunks.

The medium-sized bamboo-eater eats **shoots**, or young branches. These shoots are filled with cyanide, which is poisonous to most animals. These lemurs can change the poisons in their bodies so it doesn't hurt them.

The littlest types eat the smallest bamboo leaves. The big leaves and stems are too tough. But they can eat the littlest leaves, which most animals don't like because they are full of **silica**, a substance like sand.



photo by Drew Fellman, © IMAX® film "Island of Lemurs: Madagascar"

The eastern grey bamboo lemur is the smallest bamboo lemur, at about 5 pounds.

Next week, The Mini Page offers suggestions for fun summer reading.



photo by Drew Fellman, © IMAX® film "Island of Lemurs: Madagascar"

Ring-tailed lemurs stay together for extra protection during the day.

## Family life

In a group of black and white ruffed lemurs, all the females have their babies at the same time. They reproduce only when there is enough food to support lots of babies. They may go years without having any at all. When there is enough food, they may each have two to five babies in a litter.

In order to care for all these babies at once, the mothers form a type of kindergarten. They put six to eight young together in a nest. While the mothers seek food, older daughters, female cousins, fathers or brothers care for the babies.

Lone fathers and groups of lemurs may attack a predator.

A baby lemur can't cling to its mother. She carries it in her mouth like a cat carries her kittens. If she is moving to a new nest, she carries one baby at a time to the new home.

The Mini Page thanks primatologist Dr. Patricia C. Wright, founder of a lemur refuge in Madagascar; and the Warner Bros. Pictures and IMAX Entertainment movie "Island of Lemurs: Madagascar," for help with this issue.

## Social life

Female lemurs are **dominant**, or the most powerful animals in a group. This is opposite of how it usually is in primate groups.

Different types of lemurs get together, or **socialize**, in different ways. Many groups stay together for years. **Nocturnal** lemurs, or those that are active at night, often seek food alone, but nest together during the day. Many females, and sometimes a male, may share a nest.

Lemurs keep track of other lemurs by calls and smells. They have different calls for greeting or alarms. Lemurs may rush to help lemurs of a different species or even to help birds that aren't lemur enemies.

Some have different calls for different types of predators. For example, the alarm call for a snake is different than the alarm call for a predatory bird, such as a hawk.



photo by Drew Fellman, © IMAX® film "Island of Lemurs: Madagascar"

Indri lemurs sing loud songs, bark when threatened and make kissing sounds to show affection.

Look through your newspaper for stories about primates.

## The Mini Page Staff

Betty Debnam - Founding Editor and Editor at Large Lisa Tarry - Managing Editor Lucy Lien - Associate Editor Wendy Daley - Artist