

★★★ IT'S ALL ANIMALS!

ANIMALS THAT ARE

MAMMALS



Nancy Furstinger

# **Animals That Are Mammals**

**Nancy Furstinger**

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**Copy Editors:** Jennifer Frances and Matt Levine  
**Designer:** Deborah Anker  
**Photo Researcher:** Lydia Evans  
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## Chapter 1:

# What Is a Mammal?



*How is a bat like  
a whale?*

The bumblebee bat and the blue whale couldn't be more different. The tiny bat weighs less than a dime. It's about as long as a paper clip. The blue whale weighs around 200 tons. It's as long as three school buses.

Yet both are in the same group of animals.

They are both **mammals**. What could they possibly share?

Scientists separate animals into groups that share **traits**. Traits tell us how an animal looks, acts, and lives.

Mammals are one group of animals that share traits. They range in size from the bumblebee bat to the blue whale. In between, there are more than 5,000 kinds of mammals. Mammals live in every land, in every ocean. Some even spend time in the air.

Look in the mirror. Yes, humans are mammals, too! We share traits with more than 5,000 other types of animals!

That's a wide range of mammals living all over Earth. What traits do these animals share?

For starters, all mammals have backbones. They are also **warm-blooded**. Their body temperature stays the same whether it's hot or cold outside.

Mammals use energy from food to make body heat. Some, such as wolves, get this energy by eating meat. Others, such as zebras, get it from eating plants. Some mammals eat both meat and plants to get energy.

All mammals have lungs so they can breathe air. Even those that live in the ocean need to come up for air.

Another mammal trait is having hair or fur. Of all animals, only mammals have this trait. Hair and fur help protect them from the cold. Even mammals with smooth skin, such as whales, have hair at some point in their lives. Some mammals only have hair as babies. Many mammals have whiskers. These special hairs act like fingers. They guide mammals in the dark.

What other traits do mammals share? They all have the same three tiny bones in the middle ear. These tiny bones send sounds from the eardrum to the middle ear.

Mammals also have a **hinged** (HINJD) jaw. Their lower jaw is attached with a hinge to the rest of the skull.

Most mother mammals carry their babies in the **womb** (WOOM). That's an organ in a female's belly. Some mammals are pregnant for a short time. Hamsters carry babies in their wombs for only two weeks. Other mammals carry babies in their bodies for much longer.

Elephants are pregnant for up to 22 months.

Most mother mammals give birth to live young. But there are exceptions. In the next chapter, you'll find a few mammals that lay eggs!

All mammal mothers nurse their babies. Their **mammary glands** make milk. Most mammal babies get the milk from the mother's nipples. Mammals are the only animals that feed their babies milk. Their milk helps their babies grow.

## Getting Around

Most mammals that live on land have four legs. Most use all four legs most of the time. Humans are the only mammals that walk and balance on just two legs all the time.

Most mammals live on land. They make their homes above and below ground. Some live in trees. They can climb, crawl, run, and jump.

Some mammals spend time in two places—land and water. Others live only in water. Many water mammals have flippers and tails, to swim and dive.

Birds are *not* mammals. But there is one



mammal that can fly like a bird. Can you guess what it is? It's the bat!

## **A Clever Bunch**

What other traits do mammals share? There is one very important one. Mammals are smart. They have large brains for their body size.

Dolphins, elephants, and chimpanzees are among the smartest mammals. Chimpanzees can use tools. They will use a stick to poke an ant nest. The ants crawl out on the stick and the chimps eat them. Chimps also use leaves like cups to get water. They use stones to crack nuts.

The sea otter also uses stones. The otter catches a clam, then puts the clam on its belly. It breaks open the shell by hitting it with a stone.

Another mammal that lives in the water uses a strange tool. Some dolphins carry sea sponges on their snouts. The sponges protect their snouts from sharp rocks.

The elephant also uses tools. It breaks off a tree branch. Then it swings at flies to keep them away. The elephant also makes its own

water holes. First it digs a small hole where there might be water. It chews up tree bark and uses it to plug the hole. The bark acts like a cork. Now the elephant has its own little water hole. It doesn't have to share with other animals.



*This sea otter uses a stone as a tool to crack open a clamshell.*

## **Rodents Are Mammals, Too**

Remember that there are more than 5,000 different types of mammals. More than half of these are rodents. Mice are rodents. So are prairie dogs and beavers.

They all have one special trait. They have giant front teeth—two upper teeth and two lower teeth. Their teeth never stop growing.

So rodents need to wear down their teeth. They do that by chewing on tough plants. They have powerful jaws.

Most rodents are tiny. This helps them hide from **predators**. Predators hunt and eat smaller animals.

The world's tiniest rodent is the jerboa (jer•BOH•uh). Some jerboas are only as long as your little finger. They have long back legs and very short front legs. They get around mostly by hopping. They stand and move on just their back feet. But they have to use their tails for balance.



*Jerboas take shelter in the heat of the day.  
Then they come out at night.*

The jerboa hops so fast that it appears to be flying. It uses its long back legs to jump as high as 10 feet off the ground. No wonder it is called “the kangaroo of the desert.”

Jerboa ears range in size from large to jumbo. This trait helps the animal keep cool. The jerboa uses its ears to release heat into the air.

The jerboa lives in hot deserts but doesn't need to drink water. It gets all the water it needs from plants. The jerboa chews on roots, which hold the most water.

The jerboa is the smallest rodent. So what is the largest rodent? It's the capybara (ka•pih•BA•ruh). The capybara can be four feet long and 150 pounds. That's a capybara on the cover of this book.

The capybara is sometimes called a water hog. It spends a lot of time in water. It keeps cool by rolling in water and mud. It swims around in search of food. It also chews water plants with its long front teeth.

Webbed feet help this rodent swim away from danger. If that doesn't work, it can escape by diving. The capybara can hide under the

water for up to five minutes.

This giant among rodents looks like a hairy hippo. Like the hippo, its eyes, ears, and nose are near the top of its head. That lets the capybara look for danger by lifting its head out of the water.

## **Weird Mammal Facts**

The first mammals appeared on Earth along with dinosaurs. Most mammals were smaller than mice and lived in trees or underground.

The blue whale is the biggest mammal in the world, and also the loudest. Its voice is louder than a jet engine!

Yellowstone Park has the greatest variety of mammals in the lower 48 US states. This park is home to 67 types of mammals.

## Chapter 2:

# Oddball Mammals



*The platypus has a bill like a duck, yet it is a mammal.*

One group of mammals doesn't have all the traits we might expect. That group is the **monotremes** (MAH•nuh•treemz). Monotremes do have hair. They do make milk like all other mammals.

They are different from other mammals in several important ways. They do not give birth to live young. They lay eggs like birds and many snakes! Then these mammal

mothers keep the eggs warm. In about 10 days, the eggs hatch.

Monotreme babies are called **puggles**. As soon as they're hatched, they do what other mammal babies do. Puggles search for milk. But here's another difference from other mammals. Monotreme mothers have mammary glands to make milk. But they don't have nipples to feed their babies. The milk comes out through openings in their skin.

Monotremes are some of the strangest animals on the planet! They are only found in Australia and New Guinea (GHIN•ee).

Are you ready to meet the monotremes? There are only three types. The first is the duck-billed **platypus** (PLA•tih•puhs). The second and third are two kinds of **echidna** (i•KID•nuh). They are the long-beaked and the short-beaked echidnas.

## **The Puzzling Platypus**

The platypus looks like a mix of many animal parts. It has a flat bill and webbed feet like a duck. It has a paddle tail like a beaver. It has sleek fur like an otter.

A dead platypus was first sent to England in 1799. People thought it was sewn together from several types of other animals! No one could believe this was a real animal.

The platypus' strange traits help it hunt for food in Australia's rivers. It paddles with its front feet. It steers using its back feet and tail. Then it closes its ears, eyes, and nose.

How can it search for food with its ears, eyes, and nose closed? It finds **prey** by sensing electric currents with its bill. It waves its bill back and forth. This helps it find worms, shrimp and other prey underwater.

It stores the food in pockets in its cheeks. The platypus also gathers small stones in its mouth, but not to eat. These act like a knife, helping to cut up its meal. The platypus does this because it has no teeth. It swallows the soft parts of the food. Then it spits out the hard shells and stones.

The hunt for food might last 12 hours, always at night. Then it's time for a well-earned nap. Platypuses' feet have claws. They use these claws to dig holes in riverbanks. The animals settle into their burrows each day. Their claws



also help them run on land.

When a female gets ready to lay eggs, she digs deep into the ground. She makes a bed out of dried plants. Next she seals herself into a tunnel. Then she lays one or two eggs. She curls up and uses her tail to press her eggs to her belly. This keeps the eggs warm.

In around 10 days, the eggs hatch. Her babies are as tiny as jellybeans! The mother nurses her babies for three to four months. Her milk comes out through pores in her skin.

The puggles lick up their mother's milk. They grow larger. Soon they start swimming on their own.

Male puggles are born with a special power. They are among the few mammals that make poison. The spurs on their back feet have poison! They use these sharp spurs to protect themselves. They also use them to fight off other males when it's time to mate.

If a platypus faces a predator, it digs its spurs into the enemy. The spurs release poison. This can kill small animals such as foxes. The poison won't kill a human, but it can be very painful.



*Only the male platypus has a poison spur.*

## **The Echidna**

The echidna also looks like a mix of animals. It has pointy spines on its back and sides. The echidna's "beak" is both nose and mouth. The animal has a pouch like a kangaroo.

The echidna is named after a monster in a Greek legend. She was half woman and half snake. The echidna was given this name because it has both mammal and reptile traits. (Snakes are reptiles.)

Echidnas have sharp spines about two inches long. The echidna can't shoot the spines the way porcupines do. The spines do help

echidnas hide and protect themselves.

If echidnas are in danger, they curl up into a ball. They also might quickly bury themselves. Then only their spines stick out. They can even squeeze between rocks. Their spines help lock them in place.

Like the platypus, the male echidna has spurs on his back feet. But these don't have poison. Males use their spurs to mark their territory.



*Male echidnas have spurs but do not have poison in them. These are short-beaked echidnas.*

The two types of echidna live in different habitats. The short-beaked lives all over

Australia and the flatlands of New Guinea. It has fur that grows between its spines to protect it from the cold. The long-beaked lives only in the hills of New Guinea. It does not have much fur.

The two types also look different from each other. As you might have guessed from their names, the long-beaked has a longer nose. Its nose can be eight inches long. Along with a bigger beak, this echidna weighs more—about 25 pounds. It doesn't have much fur, so its spines are easy to see.

The short-beaked has a shorter nose. It weighs less—around 16 pounds. It has dark fur covered with spines.

Both types have long, sticky tongues (TUNGZ) like anteaters. This is why they are also called “spiny anteaters.” The echidna uses the nostrils on its beak to sniff out meals. The beak can also sense electric signals from insects.

Once it locates food, the echidna gets to work. It uses its strong legs and sharp claws to rip open insect nests. Then it grabs termites, worms, and ants with its long, sticky tongue.

The echidna does not have teeth. It grinds up its food using hard pads in its mouth. Sometimes it crushes big bugs with its claws before eating them.

Besides sniffing out bugs, the echidna uses its beak to sniff out a mate. Then the female digs a burrow where her baby will live. She grows a pouch on her belly. She lays one egg. It is about the size of a grape and has a shell like leather.

The mother curves her body into a “C” shape. She lifts the egg with her feet and rolls it into her pouch. After 10 days the puggle rips open its shell. It uses an **egg tooth** to do this. This is a tiny sharp tip. It drops off soon after the puggle comes out of the shell.

Then the puggle uses tiny claws to grab hairs inside the mother’s pouch. It licks up milk that the mother makes from mammary glands in her pouch.

The baby is about the size of a raisin. Lucky for the mother, the puggle does not have spines yet. It is bald.

In two to three months, spines form. Then the baby must leave the pouch and live in the

burrow. Soon the puggle starts eating bugs. It will still nurse on its mother's milk for up to seven months.

## **Weird Monotreme Facts**

The platypus's legs are attached to the sides of its body, instead of underneath. It waddles like a reptile.

Echidna poop is easy to spot. It's tube shaped, and it glitters! That's because it's full of the hard coverings of ants the echidna ate.

The world's largest flea lives on the echidna. It is 0.15 (fifteen-hundredths) of an inch long. That's about as long as three grains of sand.

## Chapter 3:

# Brainy Beasts



*The mouse lemur is the world's smallest primate.*

**Primates** have the biggest brains of any land mammals. These animals are super smart. Mammals with big brains mostly live longer. They also take longer to become adults. They take more time to learn skills to survive.

Primates are a big group. There are more than 300 kinds of primates. They include monkeys and apes. The smallest is the tiny mouse lemur (LEE•mur), at one ounce. That's the weight of 11 pennies! The biggest is the

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