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INCREDIBLE BATS

by Lanny and Marilyn Johnson

The Jones family was on an evening stroll around a local lake. Mrs. Jones had just commented on how beautiful God's Creation was in a setting sun, when, "Eek!" screamed Mary, arms flailing around her head. "A bat almost flew into my hair. Oh, I hate bats; they are so creepy and ugly!"

Mr. Jones, trying to comfort his daughter, explained, "Mary, bats are excellent fliers, and it is very rare for a bat to get tangled in someone's hair. Just this last week I was reading how to build a bat house, and learned some very interesting things about bats. Some bats may look a little odd but God must really like them because He made over a 1000 different kinds of bats. They make up one fifth of the world's total number of mammals. They are the second largest group of mammals (rodents being the largest group)."

"What's a mammal?" asked young Billy.

"A mammal is a warm-blooded animal with a backbone having the body more or less covered with hair; most are born alive¹ and are fed milk from their mother."

Mr. Jones continued, "Bats are the

only mammals that can fly ..."

"But flying squirrels are mammals, and they can fly," interrupted Mary.

"Yes they are mammals but they don't have wings. They have folds of skin they spread to glide a short distance," replied Dad. "Bats have actual wings that they flap and fly like a bird."

"Bats are grouped into two main groups – Megabats and Microbats. Although both groups are bats, they are quite different from one another, varying in size, looks, what they eat and how they gather or capture what they eat."

"Megabats are the larger bats, having an average wingspan greater than 12 inches (30 cm). The giant flying fox has a wingspan of six feet (1.8 m)!"

"That's what attacked me ... a huge megabat!" Mary exclaimed.

Her father chuckled, "I saw your bat, Mary, and it was not as big as your imagination."

We don't have any megabats in our area. There are over 200 kinds of megabats and they live mainly in the tropical regions of Africa, Asia and



Townsend's Big-eared Bat

https://en.wikipedia.org/wiki/Townsend%27s_Big-eared_Bat

Australia. Megabats have leathery wings, large eyes, small ears and long snouts. Their large eyes enable them to see like owls in low light. Most use their eyesight and good sense of smell to find food². Megabats are mostly vegetarians, feeding on fruit or



Speckled Flying Fox

https://en.wikipedia.org/wiki/Spectacled_flying_fox

pollen.

"Microbats are the smaller bats having an average wingspan of less than 12 inches. The young of the tiny bumble-bee bat is the smallest bat, the size of a jellybean and a wingspan of about 6 inches (15 cm). Most of the world's

bats are microbats and are found worldwide, except for Antarctica and most of the Arctic. Microbats have fur covered wings, small eyes, large ears and most have pushed-in, pug-like snouts. Most microbats usually eat insects, but some kinds eat blood, fish, frogs, lizards, and birds. A few eat the nectar from flowers like some megabats.

"Even though microbats eyes are smaller than those of megabats, they are still able to see well in the daylight. However, because bats do most of their hunting at night, God has provided them with a wonderful design to be able to get around and hunt in the dark."

"Most microbats send out high-pitched squeaks (sounds that are too high for most people to hear)

using their mouth or nose. When the sound hits an object, it is bounced back like an echo. The microbat's wide, forward-pointing, funnel-shaped ears catch the sound of that echo. This is called 'echolocation'³. From the echo, the bat's brain can tell the distance, size, shape and texture of even the tiniest insect. Those bats that use their nose and ears for echolocation have special folds and flaps of skin on their faces called 'nose leaves'. It's those nose leaves that make many people think bats are creepy or odd looking!"

"After a long, hard night of hunting, most bats will spend the day hanging upside down in a cave, under a bridge, in hollow trees or anywhere that is safe and out of the way of predators," Mr. Jones

explained. "One reason most bats hang upside down is their wings don't produce enough lift to take off from a dead stop, and they can't run to build up enough speed for a takeoff, so they will climb to or roost from a high spot and just fall into flight."

"The other thing I found very interesting," Mr. Jones added, "is how bats hang upside down. Instead of their tendons, which pull their claws closed, being connected to muscles, the tendons are connected to the bat's upper body. The bat will fly into position, opens its claws around a surface to grip, and then will let its body relax. The weight of its body pulling down pulls the claws closed. A bat doesn't have to worry about falling while asleep because gravity will keep the claws closed⁴. To let go of the surface, the bat flexes other muscles that pull the claws open."

"Even though some bats might seem creepy, I think you can see that they have amazing designs that only our God could have created," concluded Mr. Jones. "How about tomorrow we begin to build a bat house in our backyard to attract some of those incredible creatures?"

"Really, Dad? Couldn't we just study some of God's other animals ... like bunnies?" Mary smilingly asked.

¹ Except for egg-laying monotremes such as the duckbill platypus, echidna and spiny anteater.

² Only a few megabats can use echolocation like a microbat.

³ Not every kind of bat is able to echolocate, but most can.

⁴ A bat will continue to hang upside down if it dies.

FOR ANSWERS GO TO: <http://www.discovercreation.org/kids/NewsletterAnswers.htm>

What's a bat's favorite desert?
I-Scream!

What is the first thing that bats learn at school?

The alphabet!

What's more amazing than a talking bat?

A spelling bee!

What did a mommy bat say to her naughty son?

You bat boy!

A typical North American bat will eat about 600 mosquitoes an hour. Large colonies will consume between 250,000 and 500,000 pounds of insects per night!
Help the bat find its way out of the cave to have a meal of mosquitoes.

