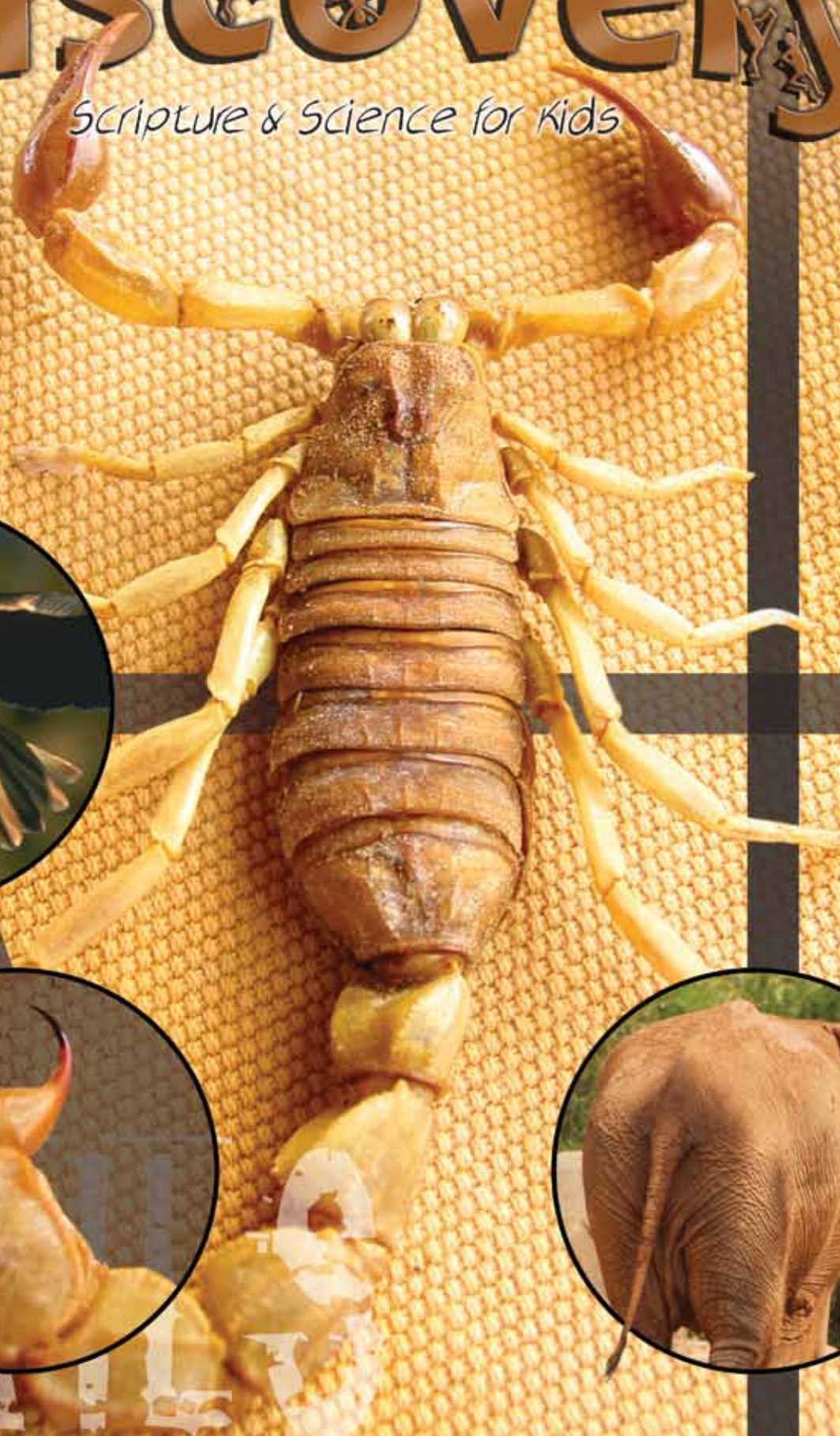


January 2007

Volume 18:1

# Discovery

*Scripture & Science for Kids*



# FEATHERED TAILS

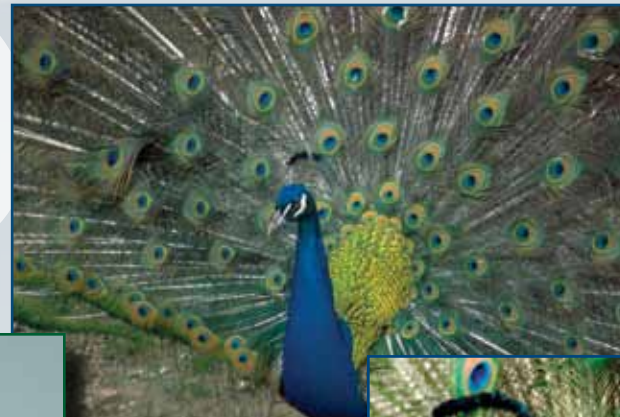
ERIC LYONS

Although birds may not be the first animals that come to mind when you think of tails, God designed them with some of the most beautiful and practical tails in the animal kingdom. Birds use their feathered tails to do all sorts of things. Similar to a rudder on the tail of an airplane, a bird's tail can help it steer while in flight. The surface area of the tail can also help produce lift while in the air. When perched, a bird uses its tail feathers to provide balance. Birds can also use

their tails to communicate to each other. A wagging or flipping tail can indicate happiness, while tail fanning may be a bird's way of showing its strength or anger.

God did not have to "try out" tails on birds to see if they would be helpful. He knew they would be helpful from the beginning. In His infinite wisdom, He created our feathered, flying friends on day five of Creation (Genesis 1:20-23) with a variety of marvelous, well-designed tails.

The stiff tail feathers of woodpeckers are designed perfectly to help provide support while pecking on a tree in search of insects.



Peacocks have some of the largest and most colorful tail feathers of any bird. They can grow more than four feet in length.



Oklahoma's state bird, the scissortail flycatcher, opens its tail feathers during flight so that they appear like scissors. These feathers are normally longer than its body.



A hawk spreads its tail feathers out to soar, and folds them together when swooping down like a dart to attack its prey.



# THE SCOOP ON MR. BEAVER'S TAIL

WILLY THE WORD WORM

WW: Hello kids. This is news reporter Willy the Word Worm. I am committed to finding the facts and reporting them to you. Today I have with me Billy the Beaver. We're going to get right to our interview.

WW: Hello Billy. Thank you for joining me.

BB: Thanks for interviewing me.

WW: It's my pleasure. Now, the current issue of *Discovery* is about tails. I heard that you have a very special tail. Could you tell me about it?

BB: Sure, Willy. I love to tell about my tail. You see, God designed us beavers to have long, flat tails. In fact, my tail is about 18 inches long. It does not have much fur on it. And it is 6 inches wide. Very few animals have a tail like mine.

WW: That's the truth. How do you use your interesting tail?



BB: Yes, well, my tail is one of my most important tools. When I stand on my hind legs to chomp on trees, I use my tail to balance, so I don't fall.

WW: I'm sure you're grateful to have a tail to break your falls.

BB: I sure am, Willy. My tail is also useful for other things. When I'm swimming, I use it as a rudder to steer myself in any direction I need to go.

WW: So you're saying that God gave you a wonderful tail that is handy for all sorts of different jobs?

BB: That's exactly right, Willy. I also use my tail for another important job. When I sense danger, I can slap my tail on the water. This slap makes a very loud noise. My fellow beavers hear this loud slap and know to run or swim away and hide.

WW: Why, that's just like having your own personal alarm system in your tail.

BB: It sure is.

WW: Thank you Billy Beaver, for telling us all about your fantastic tail.

BB: No problem, Willy.

WW: Well kids, there you have the facts on the beaver's tail. Well-designed animals like Billy Beaver remind us what a wonderful God we serve. This is Willy the Word Worm, reporting the facts, all the facts, and nothing but the facts, signing off.



# A Bare TAIL TALE

CALEB COLLEY

There is a Cherokee folk tale explaining why the opossum's tail is bare. According to the story, many years ago, the opossum was very proud of its long, bushy tail. Because the other animals resented the opossum's lovely tail and his pride, they arranged to have his tail shaved. When the opossum discovered that the formerly fluffy tail was now thin and bare, he was so embarrassed that he fainted, with a grin on his face. This was the first time an animal "played possum."

While this interesting fable reminds us of the danger of pride (Romans 12:3), it does not reveal the real story of the origin of the possum's bare tail. Actually, **God** created the possum's tail to be **prehensile**: perfect for climbing, grasping, and wrapping around tree limbs. Possums' tails are long (10-21 inches), thick, and hairless.

The possum can even hang from its tail for a short time. Possums do not sleep hanging from trees, because their tails cannot suspend them for that long. However, many of them live primarily in trees. They use their tails to gather and carry grass and leaves to construct nests.

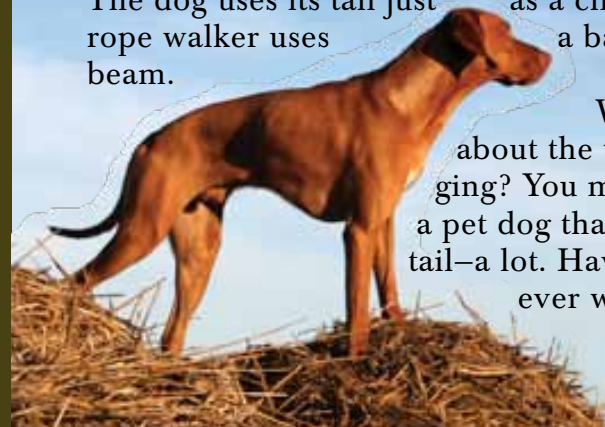
Fortunately, God gave each creature, including the possum, its necessary tools for life. Sometimes, we are surprised to learn that so much of a creature's lifestyle depends on a body part we rarely notice (such as the tail).

We enjoy physical life in a beautiful, natural world filled with amazing creatures, and a spiritual life through Christ—a life that will endure long after we die (John 10:10,28; 11:25; Romans 8:38-39; 1 Corinthians 15). God provides for the animals and, even more, He gives us everything we need in order to live here and hereafter.

# Tail-Waggers with a Message

CALEB COLLEY

Why do dogs make great pets? There are many answers, but one important answer has to do with dogs' tails. For example, tails help dogs keep their balance in high-pressure situations. When a dog is running and has to turn suddenly, it throws the front part of its body in the direction it wants to go. Its back bends, but its forward push pulls the hind-quarters in the original direction. Without a tail for balance, the dog might topple over. The dog uses its tail just as a circus tight-rope walker uses a balance beam.



What about the tail-wagging? You may have a pet dog that wags its tail—a lot. Have you ever wondered why that

tail constantly moves, or why it is occasionally still? It's not an easy question, but scientists believe that dogs use their tail to communicate to other creatures, similar to how humans use facial expressions and "body language."

Wagging tails don't always mean friendliness. A tail may be wagging but still be very stiff—usually a sign that the dog senses hostility. A friendly or curious dog's tail wags in wide sweeps, hanging down (also, its ears are down and its fur is smooth). If a dog is afraid, he probably will let his tail hang low or keep it tucked between its legs.

A dog cannot talk, but its tail speaks volumes about the impossibility of evolution. We're thankful that God designed animals with such fascinating characteristics for our enjoyment and study.

# Human Tails or Human Tales?

ERIC LYONS

Evolutionists teach that the human coccyx (the fused vertebrae at the end of the spinal column) is a "leftover tail" of our supposed evolutionary ancestors. Some also teach that this "tail" is especially obvious while a baby is inside the mother's womb. One current encyclopedia states: "The coccyx...is the remnant of a lost tail.... [I]t is present for a short time during embryonic development."

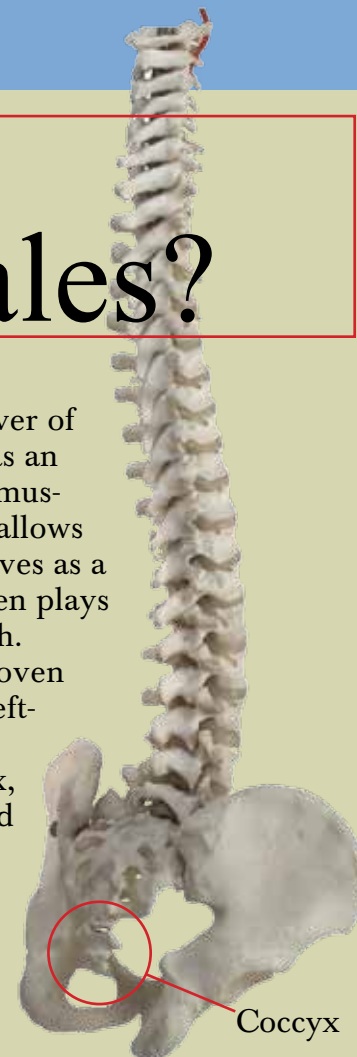
Do humans really have leftover (also called vestigial) tails, which are present during early stages? Or, is this just another tall tale told by evolutionists?

The truth is, humans do not have tails—never have, never will. What evolutionists call a tail during a baby's development is simply the human spinal column which has not fully matured. What's more, the coccyx of a child or

an adult is not a useless leftover of evolution. It actually serves as an attachment point for certain muscles that help us stand up. It allows us to sit comfortably, and serves as a kind of shock absorber. It even plays a role when women give birth.

Evolutionists have not proven that the human coccyx is a leftover tail of evolution. When we look at the human coccyx, we can see that God designed it to do very important jobs. The idea that the human body has left-over "vestigial" organs is simply a lie.

This human "tail" should actually be spelled T-A-L-E.



Coccyx

# The Scorpion's Venomous Weapon

CALEB COLLEY

The scorpion is an invertebrate (it has no backbone), but it has a segmented tail-like appendage that packs a powerful punch to its enemies. Look closely, and notice that the scorpion's tail is tipped with a venomous stinger. Scorpions use their stingers to capture prey, defend themselves, and possibly to subdue mates. These little animals can control the venom flow, so some stings do not have any venom or are only mildly poisonous.

I remember seeing a scorpion at summer camp when I was about 10 years old, but I didn't know if it was dangerous. All scorpions have venom, though they generally are harmless and timid, running from danger. Watch out, though, because if they feel threatened they might use their stingers. Although you should try to avoid scorpion stings, most of them won't cause serious damage. In humans, stings typically produce effects such as pain, numbness, or swelling only in the area where the sting occurs. A few scorpion species pose a serious threat to humans. But God also gave humans the ability to learn about the venomous tail so that we can avoid its harmful sting.

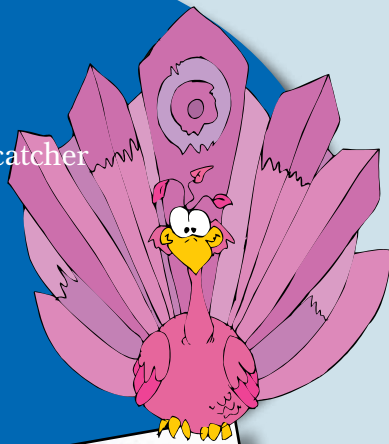
God gave scorpions an incredibly well-designed tail to help them survive. We may not think of small creatures like scorpions as possessing weapons to defend themselves against threatening creatures, but they do. They also fit perfectly into the marvelous design of God's creation.



## MATCHING

1. \_\_\_\_\_ A dog can use its tail to help with this.
2. \_\_\_\_\_ When this animal senses danger it can slap its tail on the water to warn other animals.
3. \_\_\_\_\_ Without a backbone
4. \_\_\_\_\_ A creature mentioned in the book of Job that sounds like a huge plant-eating dinosaur
5. \_\_\_\_\_ God designed this creature with the ability to control the venom flow in its tail, so that some stings do not have any venom or are only mildly poisonous.
6. \_\_\_\_\_ God made land animals on this day of Creation (read Genesis 1:24-31).
7. \_\_\_\_\_ Opens its tail feathers during flight so that they appear like scissors.
8. \_\_\_\_\_ Another word for a supposed “leftover” of evolution.
9. \_\_\_\_\_ The day of Creation on which God made woodpeckers (read Genesis 1:20-23).
10. \_\_\_\_\_ A word describing a possum’s tail, which can grasp and wrap around tree limbs.

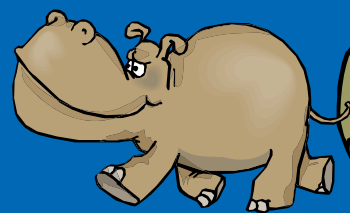
- A. Invertebrate
- B. Behemoth
- C. Prehensile
- D. Scissortail flycatcher
- E. Scorpion
- F. Beaver
- G. Vestigial
- H. Six
- I. Balance
- J. Five



ERIN  
(SELMA, NC)

## ON A SEPARATE SHEET OF PAPER

1. Write down 3 important things about a dog’s tail.
2. What does the behemoth in Job 40 sound like to you? Why?



## TRUE OR FALSE

1. \_\_\_ God has given every animal its necessary tools for life.
2. \_\_\_ Dogs’ tails are leftovers of evolution.
3. \_\_\_ Scientists believe that dogs use their tails to communicate.
4. \_\_\_ Like dogs, beavers use their tail to help them balance.
5. \_\_\_ Hippos and elephants have massive tails.
6. \_\_\_ Possums evolved prehensile tails.
7. \_\_\_ The human coccyx is a leftover of evolution.
8. \_\_\_ God gave scorpions an incredibly well-designed tail to help them survive.
9. \_\_\_ God spoke to Job about a fairy-tale creature that He called behemoth (read Job 40:15).
10. \_\_\_ Well-designed animals like beavers, birds, and behemoths, should remind us what a wonderful God we serve.

## FILL IN THE BLANKS

1. A \_\_\_\_\_ can use its tail like a rudder on a boat to steer in the water.
2. A \_\_\_\_\_ can use its tail like a rudder on a plane to change direction in the air.
3. \_\_\_\_\_ ranked “first among the works of God” (Job 40:19) and had a tail that was so massive it swayed “like a \_\_\_\_\_” (40:17).
4. The tail feathers of \_\_\_\_\_ are designed perfectly to help provide support while pecking on a tree in search of insects.
5. “For in \_\_\_\_\_ days the Lord made the heavens and the earth, the sea, and \_\_\_\_\_ that is in them, and rested the seventh day” (Exodus 20:11).

### Dear Digger Doug,

My Bible school teacher mentioned that between the Old Testament and the New Testament there were 400 years. Could you tell me more about this?  
—Hannah, Texas



Dear Hannah,

Thanks for your super question. Your Bible class teacher was right—about 400 years separate the time of Malachi (the last Old Testament prophet) and the time of Jesus. During those 400 years, we have no record of any prophets or inspired writers in Israel (see Psalm 74:9). So, sometimes we call this period the “400 years of silence” or the “Intertestamental Period.”

The first New Testament books, written by Matthew, Mark, Luke, and John, all tell us about the life of Jesus on Earth. The apostle Paul wrote that Jesus came “when the fullness of the time had come” (Galatians 4:4). In other words, Jesus came at exactly the right time in order to carry out His mission to teach the lost, fulfill prophecy, live as a perfect man, die as a sacrifice for our sins, establish His church, and send the Holy Spirit to guide the early church.

So what happened during the 400 years of silence to create the perfect time for Christ to come to Earth? History tells us that during the 400 years, there were six major Israelite time periods: Persian (highlighted by Cyrus), Greek (Alexander the Great), Egyptian (Ptolemy), Syrian (Antiochus Epiphanes), Maccabean (Judas Maccabees), and Roman (Herod and Caesar). Many things occurred during these transitions that made the time just right for Jesus’ ministry and the writing of the New Testament. For example, the Romans built vast road systems that made it easier for Christians to spread the Gospel. Also, the Greek language spread throughout the world, making it easier for common people to read the New Testament. The more you study ancient history, the more you will appreciate God’s wonderful **timing**.



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# “He Moves His Tail Like a CEDAR”

ERIC LYONS

God once spoke to Job about an animal that ranked “first among the works of God” (Job 40:19), whose tail was so massive it swayed “like a cedar” (40:17). What kind of animal was it? It is called *behemoth* in the Hebrew language, and simply “behemoth” in English. But what exactly was this behemoth?

Many people believe that the behemoth of Job’s day (roughly 4,000 years ago) was either a hippo or an elephant. Granted, these land animals are some of the largest on Earth today, and they do fit some of the description of behemoth. But neither the hippo nor the elephant “moves his tail

like a cedar.” A hippo has a little 6-8 inch “twig,” not a stiff or large “cedar” tail like behemoth. And the elephant’s tail

isn’t much more imposing than the hippo’s.

So what could behemoth have been? What creature did God make with a mighty tail that once inhabited the Earth with Job? What animal grew a tail many feet long that could weigh thousands of pounds?

God’s description of behemoth actually sounds more like one of the large plant-eating dinosaurs of the past (like *Diplodocus* or *Argentinosaurus*) than any other animal alive today. What other animal’s tail could be sensibly described as “moving,” “swaying,” or “stiffening” like a cedar?



## ANSWERS

Behemoth, cedar; 4. woodpecker; 5. six; all. (gal); 9. J (Five); 10. C (Prehensile); TRUE OR FALSE: 1-T; 2-F; 3-T; 4-T; 5-F; 6-F; 7-F; 8-T; 9-F; 10-T. FILL IN THE BLANKS: 1. beaver; 2. bird; 3. MATCHING: 1. I (Balance); 2. F (Invertebrate); 4. B (Behemoth); 5. E (Scorpion); 6. H (Six); 7. D (Scissors); 8. G (Vest); 9. J (Five); 10. C (Prehensile).

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