

Animal Tails



by Mary Holland

Animal Tails

Readers will be fascinated by the many ways animals use their tails: to move on land, swim, warn others, steer, hold onto things, keep warm, balance, fly, attract a mate, and even to defend themselves! Apparently, tails are not just for wagging when happy. Following *Animal Eyes*, *Animal Mouths* (NSTA/CBC Outstanding Trade Science Award), and *Animal Legs*, Mary Holland continues her photographic *Animal Anatomy and Adaptations* series by exploring the many ways animals use their tails.



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Thanks to Education Staff at Walking Mountains Science Center (Avon, CO) for verifying the accuracy of the information in this book.

The *For Creative Minds* includes

- How Animals Use Their Tails
- Match the Tail
- Tail Adaptations

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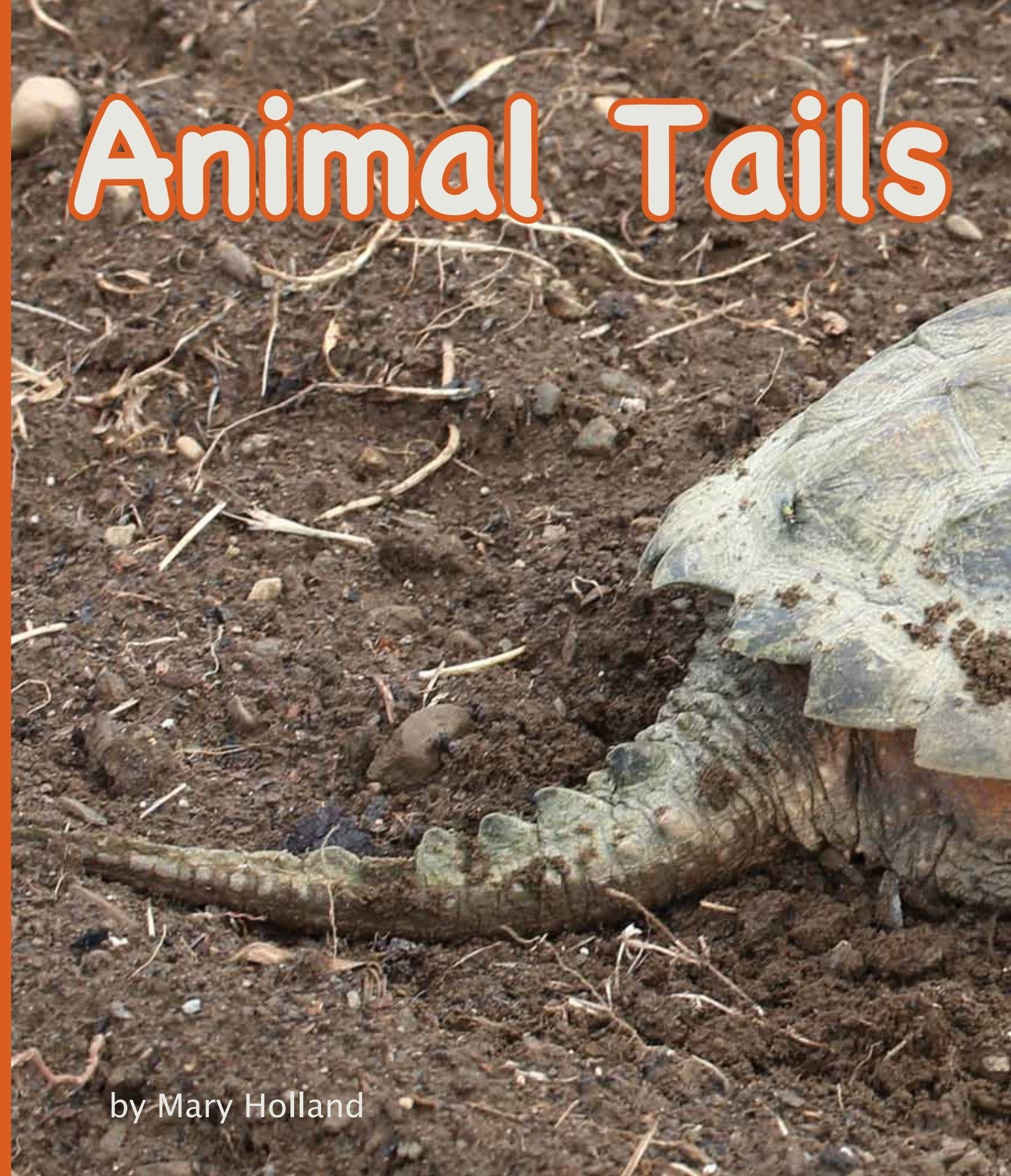
Mary Holland is a naturalist, nature photographer, columnist, and award-winning author with a life-long passion for natural history. After graduating from the University of Michigan's School of Natural Resources, Mary worked as a naturalist at the Museum of the Hudson Highlands in New York state, directed the state-wide Environmental Learning for the Future program for the Vermont Institute of Natural Science, worked as a resource naturalist for the Massachusetts Audubon Society, and designed and presented her own "Knee-High Nature Programs" for libraries and elementary schools throughout Vermont and New Hampshire.

Her other children's books with Arbordale include *Otis the Owl*, *Ferdinand Fox's First Summer* (NSTA / CBC Most Outstanding Science Trade Book and Moonbeam Children's Book Award), *The Beavers' Busy Year*, *Animal Eyes*, *Animal Legs*, and *Animal Mouths* (NSTA / CBC Most Outstanding Science Trade Book). Mary's book *Naturally Curious: a Photographic Field Guide and Month-by-Month Journey Through the Fields, Woods and Marshes of New England* won the 2011 National Outdoor Book Award for the Nature Guidebook category. *Naturally Curious Day by Day* was published in 2016. Mary lives in Vermont with her lab, Emma. Visit Mary's blog at naturallycuriouswithmaryholland.wordpress.com.



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Some animals have tails and some don't. Do you have one? Not anymore, but before you were born, you had one!

Tails come in all kinds of shapes, colors, and sizes. They help animals do many things: move on land, swim, warn others, steer, hold onto things, keep warm, balance, fly, attract a mate, and defend themselves.



There are animals that begin their life with a tail, but lose it by the time they grow up. This is true for most frogs and toads. They lay their eggs in the water. When the eggs hatch, the frog and toad tadpoles have tails.

What do you think their tails help them do?

Before a tadpole comes out of the water to live on land, it grows four legs. Its tail is absorbed by its body, and eventually disappears.

Some animals use their tails to signal other animals like themselves. Sometimes the signal means “*danger—run!*”

White-tailed deer have tails that are brown on top and white underneath. When a deer senses danger, it lifts its tail up so that the white hairs on the bottom of its tail show. The deer waves its tail like a flag as it runs away, warning other deer of the danger.





A beaver uses its tail to warn other beavers of danger. It slaps its tail on the water, which makes a loud sound that tells other beavers to swim to a safe place. A beaver uses its tail for other things as well: to store fat, to steer when it is swimming, and as a prop to rest against when it stands on its hind feet to cut down a tree.

For Creative Minds

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How Animals Use Their Tails



1
beaver



2
earwig



3
field cricket



4
coyote



5
red-tailed hawk

A My tail helps me fly. My short, wide tail feathers catch the wind and let me steer as I soar through the sky.

B My tail is for protecting myself. I have pincers on my tail to protect me from predators. Sometimes I use these pincers to attract a mate or fight over food with other animals like me.

C I use my tail to keep warm at night. When the weather gets cold, I curl up and sleep with my nose tucked into my tail. The soft, fluffy fur helps me stay warm even in snowy weather.

D I use my tail to lay eggs. I have a long, tube-like tail called an "ovipositor." This helps me lay my eggs inside plant stems or in the dirt.

E *Smack.* My tail slaps against the water with a booming sound. Other animals like me hear the sound and know a threat is nearby. They dive for cover. When I swim, I use my tail to steer.

Answers: 1-E, 2-B, 3-D, 4-C, 5-A

Match the Tail

Match each animal with its tail. Answers are below.



mallard



flying squirrel



woodchuck



1



2



3



5



6



painted turtle



hairy-tailed mole



fisher

Answers: 1-woodchuck, 2-mallard, 3-fisher, 4-flying squirrel, 5-hairy-tailed mole, 6-painted turtle

Tail Adaptations

Adaptations help animals to live in their habitat. Adaptations help them to get food and water, to protect themselves from predators, to survive weather, and even to help them make their homes. Adaptations can be physical or behavioral.

Body parts, body coverings, and camouflage are all **physical adaptations**. A bat's ears are adapted so that it can listen for echoes to "see" its surroundings at night. A toad's brown, bumpy skin helps it blend in with soil and leaves.

Instincts and habits learned from other animals are **behavioral adaptations**. Some animals hibernate through the winter to conserve energy while other animals may migrate to warmer locations where they can find food. An opossum faints and looks like it is dead so predators won't eat it.

Are the animal tails in this section examples of physical or behavioral adaptations?

Even though they are called flying squirrels, these small rodents do not fly, or propel themselves through the air. Instead, they glide from a spot on one tree to a lower spot on another tree, or the ground. Flying squirrels run up a tree, jump into the air and stretch out their feet, using the flap of skin (patagium) that goes from their front feet to their hind feet as a parachute. While gliding downwards, they use their tail to keep from wobbling back and forth in the air and as a brake to slow down before they reach their landing spot. Flying squirrels can glide more than 150 feet in one glide.



Fireflies, also called lightning bugs, do not have a real tail. What they do have is a special tip at the end of their abdomen that they can light up. When we want to say "hello" to someone who is not right next to us, we wave to them. When a firefly wants to say "hello" to another firefly, it flashes the tail-like tip of its body. There are many kinds (species) of fireflies, and most are active at night when they cannot see each other very well. A firefly can light up the tip of its body and turn it on and off like a flashlight to signal to another firefly. Each species of firefly has a certain pattern of flashes that it uses, so even in the dark fireflies can tell if they have found another firefly like themselves. Males and females of the same species flash back and forth to each other if they want to get to know each other better.

Some bats don't have tails. But most do. In some species, the tail extends beyond the skin (membrane) that connects its thighs. This looks something like a mouse's tail. Sometimes these bats use their tails to feel their way as they back into a crack. In other species, the tail runs just to the edge of the membrane. Whether a bat's tail is short or long, the bat uses it to take off into the air, to fly, to change direction while flying, and to sweep prey up into its mouth.



Most salamanders have tails which they can shed when attacked by a predator. When the predator grabs a salamander by the tail, the tail separates from the salamander, allowing it to escape. The salamander's tail grows back in a few months. Sometimes a salamander's tail that has been shed will continue to wiggle, fooling the predator into watching it, rather than chasing after the salamander that shed it.

Salamanders that live in the water move their tails from side to side, propelling them through the water. Some salamanders that live on land and climb trees can grasp the bark with their tail. Still other salamanders use their tails when attracting a mate or for storage of food.



A North American river otter's tail is about one-third the length of its body. It is very long, very wide and very muscular. An otter uses its tail to help it swim fast through the water. It also uses its tail to steer when swimming slowly and to help prop itself up when it is standing on its hind legs.



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Translated into Spanish: *Las colas de los animales*

Lexile® Level: AD770L

key phrases: physical adaptations, tails

Animals in this book include (in order of appearance): red squirrel (cover), snapping turtle (title page), common garter snake, green frog tadpole, white-tailed deer, beaver, striped skunk, Virginia opossum, red fox, bald eagle, muskrat, downy woodpecker, porcupine, honey bee, and tortoise beetle.

Bibliography:

Holland, Mary, and Chiho Kaneko. *Naturally curious: a photographic field guide and month-by-month journey through the fields, woods, and marshes of New England.* North Pomfret, VT: Trafalgar Square, 2010. Print.

Cataloging Information is available through the Library of Congress.

Library of Congress Cataloging in Publication Control Number: 2017018954

- 978-1-628559767 English hardcover
- 978-1-628559774 English paperback
- 978-1-628559781 Spanish paperback
- 978-1-628559798 English ebook downloadable
- 978-1-628559804 Spanish ebook downloadable

Interactive, read-aloud ebook featuring selectable English (9781628559811) and Spanish (9781628559828) text and audio (web and iPad/tablet based)

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Manufactured in China, June 2017
This product conforms to CPSIA 2008
First Printing

Arbordale Publishing
Mt. Pleasant, SC 29464
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