

DISCOVERY

SCRIPTURE AND
SCIENCE FOR KIDS

VOLUME 35:03
MARCH 2024



IN THIS ISSUE:
**GOD'S FASCINATING
FROGS**



**THE POISON
DART FROG**



**THE PIXIE
FROG**



**THE GLASS
FROG**

Maybe you've seen a toad underneath a light outside your house on a summer night. You probably have been by a pond or lake and heard the deep-throated croak of a bullfrog. It might be that you have seen a super-sticky tree frog. But have you ever heard of a glass frog, a hairy frog, a goliath frog, a pixie frog, a turtle frog, a shovel-headed frog, a purple frog, or an army of golden poison dart frogs? If not, you have come to the right place to learn all about God's fascinating frogs.



Frogs are amphibians. The word "amphibian" means "double life." Most amphibians start their lives in water using gills to breathe, such as when frogs hatch out of eggs in their tadpole stage. As they grow, they often lose their gills and begin to breathe air and live on land (but not always). There are about 6,000 different species of frogs. Most all frogs shed their skin on a regular basis. Many frogs shed their skin once a week, some as often as once each day, and some only a few times a year. You might have seen dried



FROG EATING ITS SKIN



SCAN QR code to watch a video titled
WONDERS OF GOD'S CREATION: ELECTRIC EEL

snakeskin that a shedding snake left behind, but you most likely have never seen a frog skin. Have you ever wondered why? It is because frogs don't leave it behind. They push it toward their mouth and eat it! Another fun frog fact is that a group of frogs together is called an army of frogs, like a group of cows is a herd, or a group of crows is a murder, or a group of owls is a parliament. Can you imagine the army of frogs that covered the land of Egypt during the Ten Plagues?



THE GOLIATH FROG

The largest frog in the world is appropriately called the goliath frog. It can grow to be 12 inches long and weigh as much as seven pounds. Imagine a frog that weighs more than a large bag of bread flour! The goliath frog lives in rivers and streams in Africa and eats what most frogs eat—insects, crawfish, and fish. Sometimes, however, they might eat other frogs, small mammals, or even flying bats.

THE PIXIE FROG

When you think of the word "pixie" you might think of something small and cute. That, however, does not describe the pixie frog, because it is neither small nor cute. This frog gets its name from the fact that its Latin name begins with the letters Pyxi. That is the only thing "pixie" about it. It is a huge frog known as the African bullfrog. It can grow to be 10 inches long and weigh up to three pounds. It is often confused with the goliath frog, but it is only about half the size, though it is fatter looking. Pixie frogs are kept as pets around the world, and they can live more than 30 years in captivity.



PIXIE FROG

THE GLASS FROG

Tree frogs are frogs that spend most of their lives in trees. Many of them have very sticky feet that they use to hang onto the trunks of trees or the undersides of leaves. You may have heard tree frogs chirping on a warm summer night. Many tree frogs have unique appearances. There is the red-eyed tree frog, the giant waxy tree frog, the white-lipped tree frog, and many others. One of the most unique tree frogs is known as the glass frog. The glass frog has translucent (see-through) skin on the



SCAN QR
code to watch a video titled:
**WONDERS OF CREATION:
CONSIDER GOD'S CREATION**

underside of its body. Most of the time, when the frog is active, its blood runs through its body and it is difficult to see through its skin. At times, however, the frog can store most all of its blood in its liver so that you can see its internal organs if you look at it from the underside. Scientists believe this ability helps the glass frog hide on leaves and trees more effectively.

THE HAIRY, HORROR, WOLVERINE FROG

Actually, this frog is normally just called the hairy frog. But some people call it the horror frog or the Wolverine frog. Where did this awesome amphibian get its names? Just by looking at it, you can see why it would be called hairy. You would have to watch it in action to understand the other names. When a hairy frog feels threatened, it breaks the bones in its front feet and sticks the sharp, broken spikes out like retractable claws. Now that does sound scary and is similar to the comic book superhero known as Wolverine.



BORNEO FLAT-HEADED FROG

This frisky frog does not break its bones or have see-through skin, but it does something that other frogs do not do. Most all frogs, when they grow out of their tadpole stage, grow lungs and breathe air into those lungs. Not the Borneo flat-headed frog. In fact, it took a while for scientists to figure out what was going on, but this little creature does not even have lungs. Without lungs, how does it breathe? God designed this lungless wonder to be able to suck oxygen straight through its skin. That's right, it breathes through its skin. Can you imagine being underwater and needing some air, so you simply stick your hand straight out of the water and use it to breathe? The ability to breathe through the skin is called "cutaneous respiration." And while this frog is one of

the few that can breathe completely through its skin, other frogs get some oxygen through their skin and can even “drink” water through their skin by absorbing it from their surroundings.

POISON DART FROGS

Arguably, the most beautiful frogs are poison dart frogs. They are found in the wild in rainforests around the world. Their vibrant colors of orange, gold, blue, and purple grab the eye of a predator and warn it not even to think about eating this tiny frog for a meal. Poison dart frogs get their name from an extremely powerful toxin they produce that they secrete out of their skin. The golden poison dart frog is one of the most deadly animals on Earth. An individual golden dart frog has enough poison in it to kill 10 hu-



mans. Tribes of people in the rainforest catch the frogs and dip the tips of their arrows or darts in the poison and use them to hunt large animals. It is interesting that the frogs are designed in a way that they do not poison themselves.

Furthermore, when they are captured and held for a while in captivity, they no longer produce the toxin. In fact, captive dart frogs are not toxic and can be kept as pets.



ONE GIANT LEAP FOR FROG KIND

Most frogs are good jumpers and can leap 10-20 times their own body length. That would be like a six-foot tall basketball player being able to jump almost 100 feet in one leap. One group of frogs, however, can “jump out of the gym.” The South African sharp-nosed frog does not look all that athletic, but don’t let its looks fool you. These 3-inch amphibians can

(Cont. on p. 8)

Activity Page

FASCINATING FROG MAZE
Help Franklin the frog get back home to his two friends.

WANT MORE?
SCAN THE QR
CODE FOR THREE
MORE ACTIVITIES:
FASCINATING FROG
MAZE
DRAW THE
POISON DART FROG
COLORING SHEETS

Crossword Challenge



- Across
7. Can jump more than 70 times its own body length
- Down
- 1. The largest frog in the world
 - 2. The internal organs of this frog are visible from its underside
 - 3. The stage of life in which a frog uses gills to breathe
 - 4. This lungless wonder can suck oxygen straight through its skin
 - 5. Produces an extremely powerful toxin that it secretes out of its skin
 - 6. Means “double life”
 - 8. A word that means “see-through”
 - 9. Name for a “group of frogs”

True or False

- 1. Scientists classify frogs as reptiles.
- 2. The complex design of frogs easily could have evolved by chance over millions of years.
- 3. As frogs grow, they often lose their gills and begin to breathe air and live on land.
- 4. There are thousands of different species of frogs.
- 5. Frogs eat their shed skin.
- 6. The largest frog in the world is known as the pixie frog.
- 7. Ground frogs are frogs that spend most of their lives in trees.
- 8. When a hairy frog feels threatened, it breaks the bones in its front feet and sticks the sharp, broken spikes out like retractable claws.





APOLOGETICS PRESS, INC.

230 Landmark Drive
Montgomery, AL 36117

(800) 234-8558 (Orders)

(334) 272-8558

DiscoveryMagazine.org

© 2024 Apologetics Press, Inc.
All Rights Reserved

Periodicals Postage
PAID

Editor: Kyle Butt, M.Div.

Associate Editor: Eric Lyons, M.Min.

Layout and Design: Rob Baker, M.Ed.

Discovery is published monthly by Apologetics Press, Inc., 230 Landmark Drive, Montgomery, AL 36117. Subscription price \$14 a year. Periodical Postage paid at Montgomery, AL. **POSTMASTER:** Send address changes to *Discovery*, 230 Landmark Drive, Montgomery, AL 36117; USPS# 23370

jump more than 70 times their own body length. In fact, one sharp-nosed frog named Santje reportedly jumped 33 feet in a jumping contest.

Alas, time does not allow us to explore the turtle frog that looks like a turtle, the wood frog that can survive freezing, or the purple frog that has a snout that looks like an anteater's nose. One thing we do have time to do, however, is recognize that these fascinating frog features could not have evolved by chance over millions of years. Our all-knowing Creator perfectly crafted frogs to show us His amazing brilliance and glory. Oh, and by the way, World Frog Day is March 20th. Be sure to put it on the your calendar and remember to thank God for His fabulous, fantastic, fun frogs.

THE SOUTH AFRICAN SHARP-NOSED FROG



www.wikipedia.org
(Ryanvanhuyssteen) 2024 CC-by-sa-4.0

TURTLE FROG



www.wikipedia.org (Stephen Zozaya) 2024
CC-by-sa-2.5



www.wikipedia.org (Thomas Mesagilo)
2024 CC-by-sa-4.0

**PURPLE
FROG**



www.wikipedia.org
(Karthickbala) 2024 CC-by-sa-4.0

**WOOD
FROG**



ANSWERS

CROSSWORD CHALLENGE: Across: 7. South African sharp-nosed frog; Down: 1. goliath frog; 2. glass frog; 3. tadpole; 4. Borneo flat-headed frog; 5. poison dart frog; 6. amphibian; 8. translucent; 9. army.
TRUE OR FALSE: 1-F; 2-F; 3-T; 4-T; 5-T; 6-F; 7-F; 8-T.
Yearly Subscription Fees in U.S. Funds Only • United States of America: Individual rate: \$14 each • Bulk rate (at least 5 to same address): \$12 each.
Club rate (at least 10 to different addresses paid together): \$12.50 each

