

LEVELED Book • U

# Animal Discoveries

ROPE

ASIA

ERICA

INDIAN OCEAN

AUSTRALIA



MULTI  
level  
O•R•U

Written by Karen Mockler

# Animal Discoveries



Written by Karen Mockler

[www.readinga-z.com](http://www.readinga-z.com)

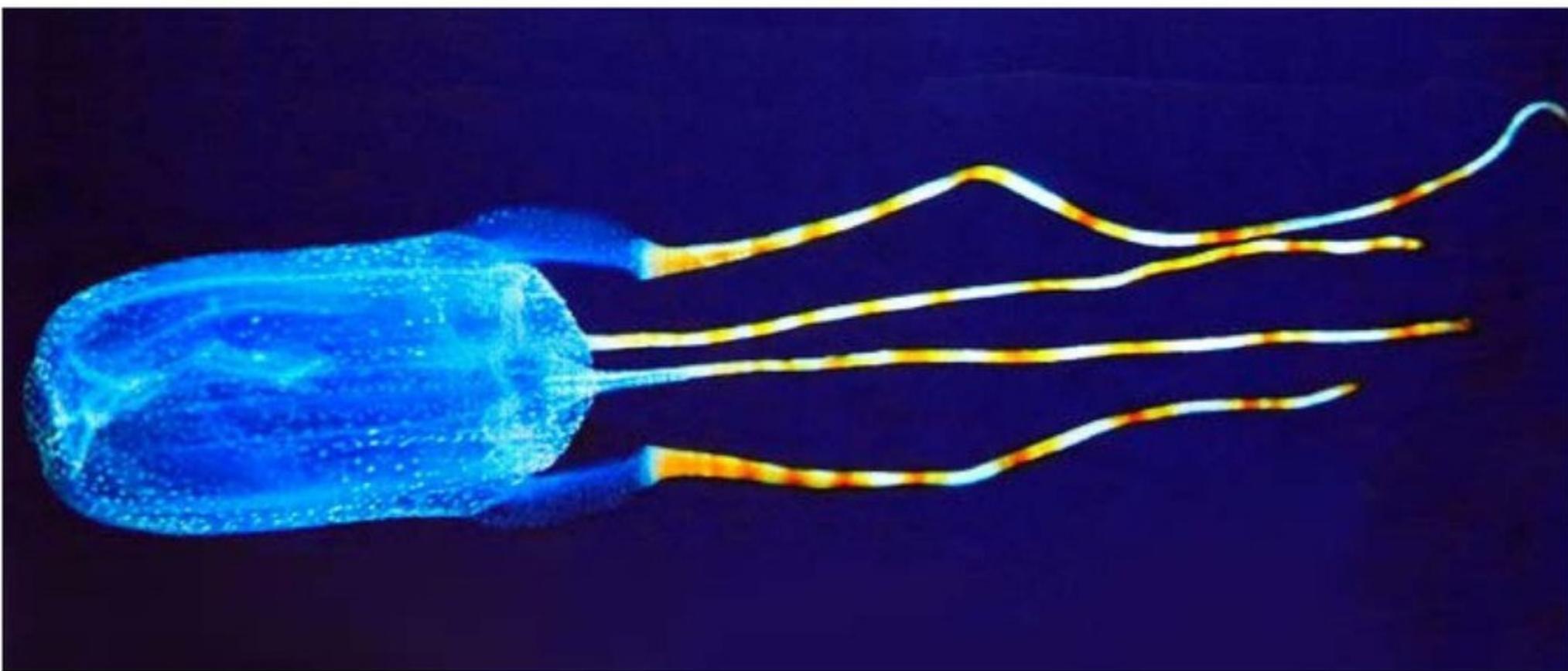
## Where Were They Found?



- |   |   |  |
|---|---|--|
| ① Democratic Republic of Congo: lesula monkey   | ⑤ Madagascar: Goodman's mouse lemur                   | ⑧ Atlantic Ocean: Gorgon's head starfish |
| ② Colombia: Caquetá titi monkey                 | ⑥ Brazil: Sazima's tarantula                          | ⑨ Indonesia: walking bamboo shark        |
| ③ Borneo: Matang narrow-mouthed frog            | ⑦ Brazil, Amazon Rainforest: troll-haired planthopper | ⑩ Ecuador and Colombia: olinguito        |
| ④ New Guinea: long-nosed tree frog, blossom bat |   | ⑪ Cambodia: Cambodian tailorbird         |

## Table of Contents

Introduction .....	4
Monkey Mania .....	5
Freaky, Fabulous Frogs .....	6
Furry Finds .....	8
Interesting Invertebrates .....	9
Underwater Wonders .....	11
Hiding in Plain View .....	13
What's Next? .....	15
Glossary .....	16



The Bonaire banded box jellyfish's scientific name is *Tamoya ohboya*. The name was chosen in a contest. The winner said most people would say "Oh boy!" when seeing the jellyfish.

## Introduction

**Question:** If you wanted to discover a new animal species, where would you look?

**Answer:** In places nobody has looked before.

Many newly discovered species are found on expeditions to **remote** corners of Earth. Other species may be discovered under a microscope. A species' **DNA** can set it apart from other species that may look the same. Some new life forms, though, are found in places people pass by every day.

Scientists discover more than 15,000 animal species each year. That's about 1 percent of the more than 1.5 million species we know about already. At the same time, **extinction** is wiping out species at record rates around the globe. So each new species is an exciting and important discovery.

## Monkey Mania

In 2007, a new species of monkey was identified in the remote forests of the Democratic Republic of the Congo. The lesula has large, expressive eyes. It is described as shy and quiet. The first one found by scientists was being kept as a girl's pet. The lesula was the first new species of monkey found in twenty-eight years. Yet in 2010, scientists found another new monkey by listening to its complex calls.



lesula monkey

The Caquetá titi monkey lives in the Amazon jungle of Colombia, along with about twenty other species of titi monkey. What sets it apart from other titi monkeys is its bushy red beard and the absence of a white bar on its forehead. Another unique feature of this species: Its babies purr like cats.



Caquetá titi monkey

A healthy **population** of these monkeys should be in the thousands. However, fewer than 250 Caquetá titi monkeys are thought to exist today. So the newly discovered titi monkey is already considered **endangered**.

## Freaky, Fabulous Frogs

No bigger than a pea, the Matang narrow-mouthed frog is one of the smallest known frogs in the world. It was discovered on Borneo, an island in Southeast Asia, in 2010. Although examples of these frogs are found in century-old museum collections, scientists simply thought they were **juveniles** of a different species.

They learned otherwise when they heard the frogs calling at dusk from pitcher plants. Since only adult frogs make calls, scientists concluded that these tiny frogs must be full-grown.



### Do You Know?

Pitcher plants are important to the Matang narrow-mouthed frog. Female frogs deposit their eggs on the sides of the pitcher, and tadpoles grow in the liquid that gathers inside the plant.



The long-nosed tree frog is also known as the spike-nosed tree frog.

A herpetologist discovered another frog species, the long-nosed tree frog, during an expedition to the Foja Mountains of New Guinea in 2010. The area is so remote, and so recently explored, that it has been nicknamed the “Lost World.”

This tree frog is notable not for its size but rather for its long, unique nose. When the male frog calls, its nose points upward like a spike. When the frog is done calling, its nose falls. No one knows why.

The frog has a nickname: the Pinocchio frog. The herpetologist spotted it sitting on a bag of rice in his campsite.



When the blossom bat feeds on nectar, it also helps pollinate the flower, which can then make seeds to grow new plants.

### Furry Finds

Another find from the same 2010 Foja Mountains expedition was the blossom bat. Although bats are mammals, this one has been called the “hummingbird of the bat world.” It uses its long tongue to drink nectar from the flowers of rainforest trees.

A 2005 expedition to another island—Madagascar—uncovered Goodman’s mouse lemurs. Not much bigger than mice, these tiny lemurs jump around in the trees at night. In the daytime, they sometimes sleep in vacant birds’ nests.



### Do You Know?

Lemurs are only found in Madagascar.

Goodman’s mouse lemurs



Sazima's tarantulas are only found in the tabletop mountains of Brazil. These mountains have a different climate than the surrounding area.

## Interesting Invertebrates

Scientists estimate that vertebrates—animals with backbones—represent only 3 percent of all species. They include those species that are the most familiar (and similar) to us: amphibians, reptiles, birds, fish, and mammals. The remaining 97 percent of animal species known to science are invertebrates—animals without backbones.

Tarantulas can be one of the more frightening invertebrates. They're big and hairy, come in about nine hundred species, and are predators. The largest species can kill small mammals, lizards, and birds.

Sazima's tarantula, however, has a special beauty. Its dark blue body almost glows. This fantastic arachnid has an extremely limited **habitat**, only living high in the mountains of Brazil.



Like most insects, planthoppers go through stages of development. This young planthopper is just beginning to develop wings.

The “troll-haired” planthopper, discovered in 2013 in the rainforest of South America, may not be good-looking, but at least it has good hair. The wild hair isn’t hair at all, but instead waxy **secretions** from the insect’s belly. When a predator attacks, the “hair” breaks off, and the planthopper can jump to safety. That’s the theory, anyway. Scientists aren’t sure yet.

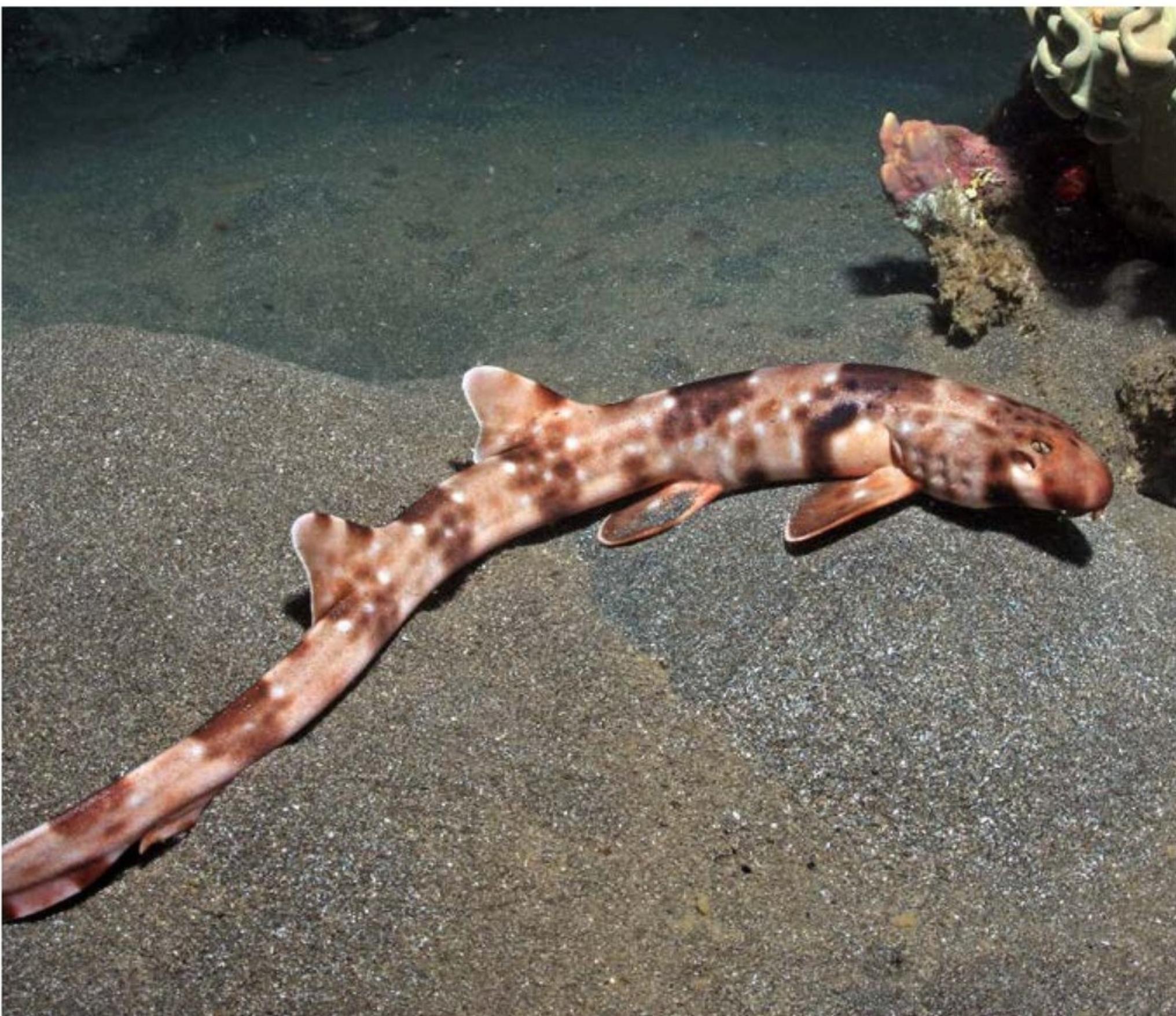


The Gorgon's head starfish is named for the Gorgons from Greek mythology. These creatures had hundreds of snakes on their heads instead of hair.

## Underwater Wonders

Scientists discovered the Gorgon's head starfish in 2010, about half a mile (800 m) beneath the surface of the North Atlantic Ocean. The Gorgon's head, a species of basket star, has five curly, branching arms that split off from its body. The five arms include as many as five thousand tips. The tips help this basket star feed on plankton and shrimp floating by in the water. It also uses its arms to walk along the seabed. They even protect the animal when it's disturbed by curling around it to form a tight ball.

Since Earth's oceans are vast, large portions have yet to be explored. However, that's not the reason it took until 2013 to discover the walking bamboo shark.



The walking bamboo shark has different patterns of spots and bands than other bamboo sharks.

Like most sharks, the walking bamboo shark is no threat to humans. It lives off the coast of Indonesia. Scientists discovered it because its coloration differs from that of other bamboo sharks.

This new species is thought to reach about 30 inches (80 cm) in length. It uses its fins to push itself along the ocean floor in search of food. The wiggling movement makes it look as though the shark is walking. Because these sharks are so **rare**, the government of Indonesia is taking steps to protect them.



Olinguitos have smaller, rounder faces and shorter tails than the olingos, which they were mistaken for.

## Hiding in Plain View

The olinguito (oh-lin-GEE-toh) managed to escape notice for so long by being mistaken for something else. In 2013, researchers discovered that for more than a hundred years, the olinguito had been wrongly identified.

This mammal, which looks a lot like a teddy bear, leaps through trees at night. The smallest member of the raccoon family, the olinguito can be found in Ecuador and Colombia. It is the first species of this type to be discovered in the Americas in thirty-five years.

### Mistaken Identity

Humans may encounter an unidentified species for years while mistaking it for a familiar species. This often happens because the two species look the same, at least on the outside. These are called *cryptic species*. They are only found to be distinct when scientists study their genetic code. As DNA technology is used more and more, reports of distinct new species are on the rise.



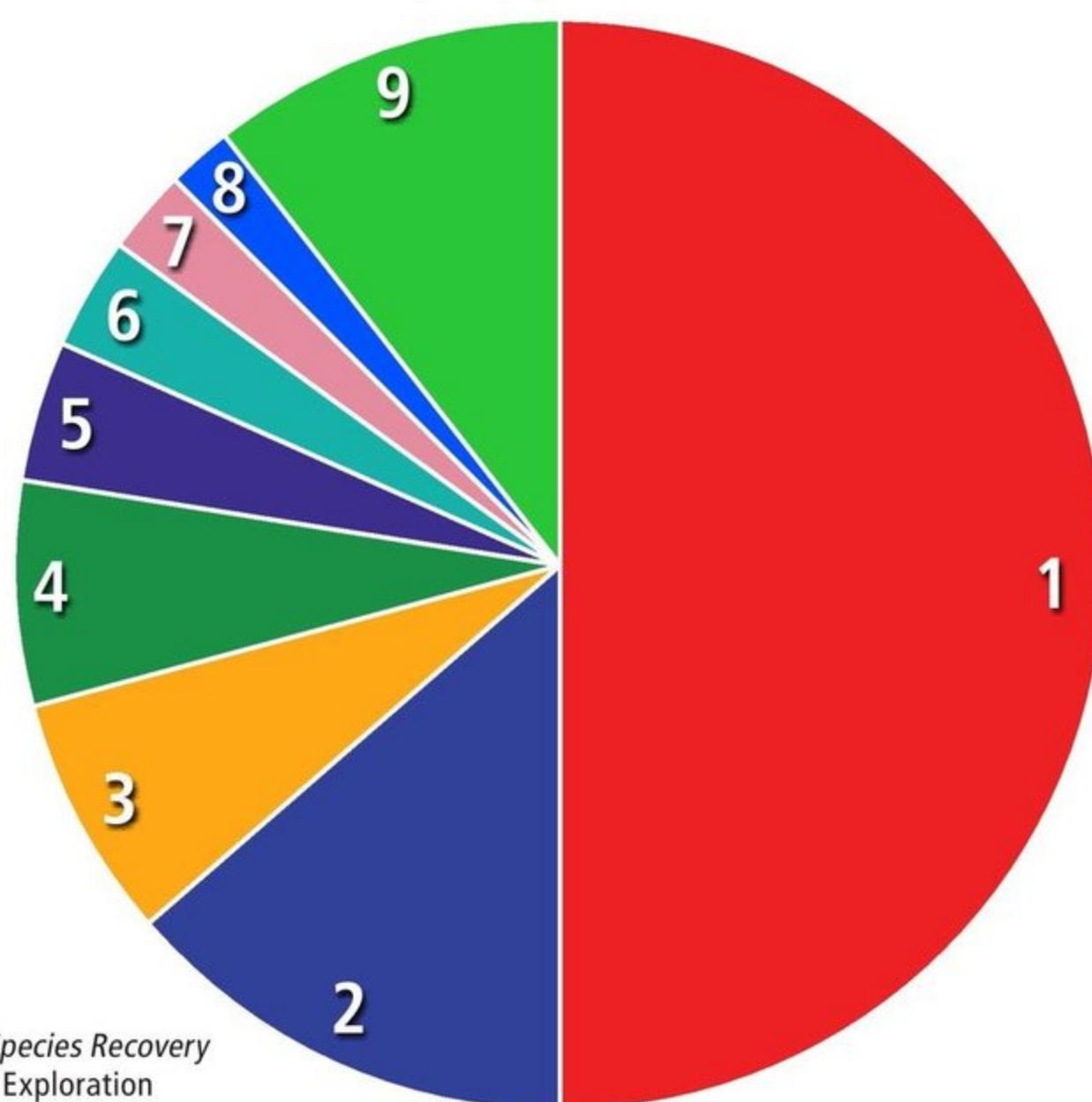
The Cambodian tailorbird is hard to find because it lives in dense brush.

Finding new species of birds is almost as rare as finding new mammals. Finding one in a major city is rarer still. Yet in 2009, researchers discovered the Cambodian tailorbird in and around Phnom Penh—including in the middle of a road construction site.

A detailed set of tests revealed that this tailorbird was a separate, new species. Besides studying its **genes** and feathers, scientists studied its pretty song. While all tailorbirds warble, no two species sound quite the same. Sure enough, the song of the Cambodian tailorbird sets it apart from all the rest.

## Number of Species Discovered by Type 2000–2009

- ① Insects 88,598
- ② Plants 23,604
- ③ Arachnids 12,751
- ④ Fungi 11,984
- ⑤ Crustaceans 7,070
- ⑥ Mollusks 5,949
- ⑦ Bacteria 4,417
- ⑧ Fish 3,587
- ⑨ All other 18,351



Source: *Retro SOS 2000–2009: A Decade of Species Recovery in Review*; International Institute for Species Exploration

## What's Next?

Scientists continue to amaze us by finding new species. Estimates of just how many animal species fill our planet vary widely. However, experts agree that most have yet to be discovered.

Those animals we have discovered highlight some challenges. For instance, many species have tiny populations. Human activity causes many species to face small and shrinking habitats.

Yet each new discovery is also cause for hope. It can spark a renewed effort to save and even restore a habitat. That, in turn, can save the rare and surprising animals that live there, both those we know about and those we don't know about . . . yet.

## Glossary

<b>DNA</b> ( <i>n.</i> )	a code that carries genetic information about a living thing; abbreviation of deoxyribonucleic acid (p. 4)
<b>endangered</b> ( <i>adj.</i> )	in danger of dying out completely (p. 5)
<b>extinction</b> ( <i>n.</i> )	the process by which an entire group of animals or plants dies out (p. 4)
<b>genes</b> ( <i>n.</i> )	basic units of heredity that transfer traits from one generation to the next (p. 14)
<b>habitat</b> ( <i>n.</i> )	the natural environment of a plant or animal (p. 9)
<b>herpetologist</b> ( <i>n.</i> )	a scientist who studies reptiles and amphibians (p. 7)
<b>juveniles</b> ( <i>n.</i> )	young people or other animals that have not reached maturity (p. 6)
<b>population</b> ( <i>n.</i> )	all the members of one species in a particular area (p. 5)
<b>rare</b> ( <i>adj.</i> )	not happening very often; uncommon (p. 12)
<b>remote</b> ( <i>adj.</i> )	distant or isolated (p. 4)
<b>secretions</b> ( <i>n.</i> )	substances, usually liquids, produced and released by a plant or animal (p. 10)

**Photo Credits:**

Front cover (top left), page 14: © Wildlife Conservation Society/AP Images; front cover (top right), pages 7, 8 (top): © Tim Laman/National Geographic Creative; front cover (bottom left): © Inaki Relanzon/NPL/Minden Pictures; back cover (top right), page 13: © Handout/Reuters/Landov; back cover (bottom left), page 10: © Trond Larsen; title page: © WaterFrame/Alamy; page 4: © ZUMA Press, Inc./Alamy; page 5 (top): © REUTERS/Hart JA, Detwiler KM, Gilbert CC/PA; page 5 (bottom): © WWF/Splash News/Corbis; page 6 (all): © Ch'ien Lee/Minden Pictures; page 8 (bottom): © Thomas Marent/ardea.com; page 9: © Rogerio Bertani; page 11: © David Shale/NPL/Minden Pictures; page 12: © CI/photo by Mark Erdmann

Title page: The psychedelic frogfish, discovered in 2009 in Indonesia, hops rather than swims. It pushes off the seafloor with its fins and pushes water out from its gills.

Animal Discoveries  
Level U Leveled Book  
© Learning A-Z  
Written by Karen Mockler  
  
All rights reserved.  
[www.readinga-z.com](http://www.readinga-z.com)

**Correlation**

LEVEL U	
Fountas & Pinnell	Q
Reading Recovery	40
DRA	40