



# The NOCTURNALS

PRESENTS

## Nighttime Animals

Awesome Features &  
Surprising Adaptations



**LOW RES  
FOR REVIEW  
PURPOSES  
ONLY**

Tracey Hecht



★ Dear Readers,

When was the last time you enjoyed nature after dark? In her book series *The Nocturnals*, Tracey Hecht invites you to explore an imaginative nighttime world and the animals that inspired her writing.

*Nighttime Animals* will introduce you to animals that many never see because most of their activity happens after sunset, while the world is sleeping. You'll learn about amazing features and behaviors that nocturnal animals have adapted to be successful at night.

This book offers new learning connections between science and nature by highlighting several animal adaptations and supporting the Next Generation Science Standards. You will learn about survival characteristics and nocturnal behavior while building science vocabulary.

Many animals featured in this book may not live near you, but that shouldn't stop you from feeling inspired and finding some animals that do! Here are some fun ideas to help you spot nighttime creatures:

- During the humid nights of spring and summer, you may hear the sounds of toads and peepers calling out to each other. Follow a single call and try to find one of these nocturnal amphibians.
- At nighttime, pollinators such as moths, beetles, and bats are hard at work. Head out on a moonlit night to find them on strong-scented and bright white and yellow flowers.

Remember, you need nature, and nature (even in the night) needs you.

Never stop exploring,

*Erica Colón*

Erica Colón, PhD  
Nitty Gritty Science



\*The Fabled Films Press book program was developed under the supervision of science educators and reading specialists to develop kids' reading skills and support national science standards.

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### Note to Reader

Throughout the book, you will see important **vocabulary words in bold type**. You can find the meaning of these words in the Word Glossary on page 57.

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# Meet The Nocturnals



It was dark and much of the world was asleep. But a special group of animals were wide awake...The Nocturnals!

Bismark the sugar glider landed near the group's usual meeting spot. Tobin the pangolin walked over on his two hind legs. Then Dawn the red fox appeared with a flick of her long, bushy tail.

"Welcome, my fine friends!" said Bismark.

Tobin stretched as if he had just woken up. "I'm excited to explore the nighttime world this evening! Maybe we'll even make some new friends."

"Animals that come out in the dark are really special," said Dawn. "They have unique skills and fabulous features!"

"Well, what are we waiting for? Let's get going!" Bismark yelled excitedly as he led the way into the dark night.

# Introducing the Nighttime World

While most of the world goes to sleep, **nocturnal** animals are just getting started. A whole other world comes alive after dark!

Nocturnal animals have important **adaptations** for living life in the darkness. Some have terrific sight or hearing. Others have a keen sense of touch or sense of smell. These adaptations allow them to stay safe from predators and find food—all in the dark. Nocturnal animals live in different areas of the world. Even if they live on opposite sides of the planet, these animals are connected by their nighttime lives.



SUGAR GLIDER



RED FOX



PANGOLIN



## WHY NOT PLAY DURING THE DAY?

Sleeping during the day and being active at night is usually safer for animals. Fewer large **predators** are active at night. Also, fewer animals are searching for food at night. So there is more to go around. In hot areas like the desert, many nocturnal animals snooze during the warmest part of the day. This means they lose less water from their bodies, which helps them to survive.

“Ladies and gentlemen,” Bismark announced. “I present: myself! The sugar glider!” Bismark took a deep, low bow. “Lots of nocturnal animals have awesome athletic abilities—like me, for example!”

“I agree,” said Tobin. “You can really get around.”

“Whoa! Look at that sugar glider soar!” shouted Bismark.



### Fun Fact

A sugar glider can glide more than 150 feet (45 m). That's the length of about 10 cars parked end to end!

## CHAPTER 1

# Awesome Athletic Abilities

Nocturnal animals have some surprising adaptations. Gliding, jumping, and running are just a few of their awesome abilities.

### Meet the Soaring Sugar Glider

A sugar glider doesn't exactly fly like a superhero. But it can glide gracefully through the night air.

It takes a springing leap—and then it soars. Thin skin attached to its wrists and ankles acts like a parachute.

In the air, a sugar glider's long, bushy tail helps it to steer. Before landing, all four limbs come forward. Sharp claws grab on to the tree or branch where it lands.

Leaping and gliding from tree to tree help keep the sugar glider safe. That's because many of its predators are on the ground.

### Fun Fact

When danger is near, a sugar glider makes a barking sound like a small dog. This sounds the alarm for others: Watch out!



### STICKING TOGETHER

During the day, sugar gliders sleep in a cozy nest made of leaves. They build the nest in a hollow of a tree. Up to 10 adults and their young will stay in one nest. When it gets cold, they huddle together to sleep and stay warm.

## INCREDIBLE EYES

A sugar glider's large black eyes help it survive, too. Big eyes let in more light so it can see well in the darkness. These eyes can spot predators and help it see where it's going at night.



At night, sharp eyes also help a sugar glider find food. Sugar gliders get their name from the sweet foods they eat, such as tree sap, pollen, and flower nectar. They also eat insects, spiders, lizards, eggs, and small birds.

Since the sugar glider sleeps in the trees and finds its food there, too, there aren't many reasons to come down to the ground.

I can catch a flying insect in midair!  
How's that for an awesome athletic ability?





Lots of nocturnal animals are amazing. Karina, what can you do?

I'll give you a clue: I can do a foot switcheroo!



### Meet the Clever Kinkajou

At night, if a kinkajou runs into a predator, it has a great getaway move. It can change the direction of its feet—without moving its upper body! The kinkajou runs the other way in a flash.



Large predators can climb the trees the kinkajou lives in. So the kinkajou's fancy footwork helps it avoid becoming dinner!



### Fun Fact

It may look like a monkey. But a kinkajou is more closely related to a raccoon.



Sometimes  
I use my tail  
like a blanket  
when I sleep!



### Fun Fact

A kinkajou's tail is longer  
than its entire body.

Being able to rotate its feet and run isn't the kinkajou's only athletic ability. It can also hang upside down by its tail like a monkey.

Almost like another hand, the kinkajou's tail grabs things. This kind of tail is called **prehensile**. A kinkajou can grasp a tree limb with its tail while eating fruit with one hand. Its tail also helps the kinkajou balance.



### SWEET TOOTH

Kinkajous mostly eat fruit. They also eat insects, flowers, and nectar. They even raid beehives looking for honey. That's how the kinkajou got its nickname, "honey bear." Luckily, the kinkajou's short, thick fur protects it from bee stings.

## Terrific Tails

A kinkajou is just one nighttime animal with a terrific tail. Check out these other fantastic nocturnal animal tails!



### POSSUM

Unlike some other possum species, the common brushtail possum has a long, bushy tail. It can be longer than half the length of the possum's body. On the underside of the tail there is a spot with no hair. This helps the possum grab onto tree branches.



### SUGAR GLIDER

Who needs a bucket when you have a tail? When building a nest, the sugar glider uses its tail to carry leaves. The tail also keeps the animal balanced as it runs quickly along tree branches.



### PANGOLIN

Ever heard of a pangolin taxi? Baby black-bellied pangolins catch a ride on their mother's tail. The adults also use their tails to grip branches while climbing trees. And when they move quickly on their two hind feet, their tails keep them balanced, too.



Our dashing Dawn has a beautiful tail—and awesome athletic abilities, too! Will you show us?

Well, if you insist.

### Meet the Fabulous Fox

In a bright red flash, a fox jumps straight up in the air—as high as six feet (1.8 m)! Its body makes an upside-down U shape in the air. Then the fox brings its front paws straight down. This pins down its meal, so it won't get away.



### FLEXIBLE FOXES

Foxes are mostly active at night. But they can be active at dawn and dusk, too. If foxes are in a safe place, sometimes they even come out during the day.

Foxes eat just about everything, including rodents, rabbits, insects, and lizards. They also eat fruit, fish, and grasses. Eating so many different foods helps foxes live in many **habitats**. Foxes live throughout the world.

# Animal Glossary

## Bat

Greater horseshoe bats get their name from the horseshoe shape of their nose leaf. These microbats are found in India, Turkey, Israel, and Jordan, as well as in parts of Africa, Europe, and Asia. They live in forests, grasslands, shrubland, and caves. At roosting sites, these bats hang upside down in groups. Losing their habitat and chemicals used on crops are the biggest dangers to them. Their numbers are currently okay in the wild.

Read more about bats in *The Best Burp*.



## Chinchilla

Long-tailed chinchillas are rodents that live in the high Andes of South America. They are mostly nocturnal. They live in groups and make dens in between rocks. Because of their thick, soft fur, they have been hunted by poachers and caught to sell as pets. They are endangered.

Read more about chinchillas in *The Chestnut Challenge*.



## Kinkajou

Kinkajous live in trees in the tropical forests of Central and South America. They live in small groups. With their prehensile tails, they can hang from tree limbs. Their reversible feet let them climb in either direction, and down a tree headfirst! Scent glands near their jaws, throats, and bellies are used to mark their territory. Kinkajous are not endangered animals.

Read more about kinkajous in *The Kooky Kinkajou*.



## Pangolin

Pangolins are found in Africa and Southeast Asia. All eight species of pangolin are covered in hard scales. They have long snouts and tongues, which help them eat ants and termites. Most pangolins stick close to the ground, but the black-bellied pangolin can climb trees! Strong front claws are used for digging. Because of hunting and poaching, pangolins are critically endangered. This means they are at very high risk of becoming extinct in the near future.

Read more about pangolins in *The Nocturnals Grow & Read* book series.



## Possum

Common brushtail possums are marsupials found throughout Australia and New Zealand. They mostly live in the trees in forests and woodlands.

They usually live alone, but may share sleeping places. Scent glands near their chests, chins, and tails are used to mark their territory. Possums are not endangered animals.

Read more about possums in *The Peculiar Possum*.



## Red Fox

Red foxes are found all over the world. They can live in deserts, mountains, and even cities. While many red foxes have reddish brown fur, their coat color can also be pale yellow, gray, or black. Red foxes are mostly nocturnal, but can be active at dusk and dawn, and even sometimes during the day. Red foxes are losing habitats, though they are doing well in the wild.

Read more about red foxes in *The Nocturnals Grow & Read* book series.



## Snake

Mangrove pit vipers are found in India, Bangladesh, and Southeast Asia. They live in forests and wetlands. They have long fangs and powerful venom. Pits near their eyes sense heat from other animals. Losing their habitat and pollution are dangers to these vipers. Yet they are doing well in the wild.

Read more about snakes in *The Slithery Shakedown*.



## Sugar Glider

Sugar gliders are rodents found in Australia, New Zealand, and Papua New Guinea. They are known for soaring more than 150 feet (45 m) from tree to tree. Sugar gliders do this by using a special kind of skin like a parachute. It is attached at the sugar glider's front feet and back ankles. Sugar gliders nest in groups. Males mark group members with scent glands. They use sounds to "talk" to each other. Sugar gliders are not endangered animals.

Read more about sugar gliders in *The Nocturnals Grow & Read* book series.



## Wombat

Wombats are marsupials only found in a few small areas of Australia. Their stocky bodies help them dig burrows with long tunnels. Sometimes they sunbathe during the day outside their tunnels, but they are mostly nocturnal. Loss of their woodland and grassland habitat is the biggest danger to the three wombat species. The northern hairy-nosed wombat will likely go extinct in the wild in the near future. The southern hairy-nosed wombat is doing better, but is still in danger. The common wombat is doing well in the wild.

Read more about wombats in *The Weeping Wombat*.



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