

Name: _____

The Big-Eared, Bushy-Tailed Fennec Fox

by Guy Belleranti

In the deserts of North Africa and Saudi Arabia lives the smallest of all foxes with the largest of ears. This animal is the fennec fox.

Fennec foxes have ears that are 5 to 6 inches long. That's big for an animal that weighs less than four pounds. Their ears help shed body heat. And, as you may have guessed, they also provide great hearing.

It's interesting to compare the big ears of fennec foxes to the small ears of arctic foxes. Arctic foxes live in cold climates, so they don't need to shed heat. Instead, they need to save heat. Big ears would not save heat and would probably even cause an arctic fox to get frostbitten!

It's also interesting to think about the hair of fennec foxes. Why would a fox that lives in the desert need a thick, fur coat? Actually, the desert isn't always warm. During the nighttime, a desert can be downright cold! A fennec fox's fur keeps them warm during those chilly desert nights. They also have long bushy tails that they use as a blanket. And the hair on their feet protects them from the hot sand in the daytime.



Fennec foxes live in small communities of burrows or dens. They spend most of the day sleeping in their dens, out of the hot sun. Then, when night comes, out they come in search of food. In addition to their great hearing, fennecs also use their great sense of smell and big eyes to track down dinner. Animals that are active at night are called nocturnal.

Like other foxes, fennecs are omnivores. This means they eat both meat and plants. Some of their favorite foods include rodents, birds, eggs, insects, lizards, snails, fruit and leaves.

Fennec fox mothers give birth to a litter of one to five babies (called kits). The average life span of a Fennec fox is 10 to 12 years.

The cream coloration of fennec foxes help them blend into their desert habitat. Still, they have to watch out for predators. These include caracals (a type of wild cat), jackals, eagle owls, hyenas and humans. Humans catch them for their fur and to sell as exotic pets.

About the Author

Guy Belleranti works as a docent at Reid Park Zoo in Tucson, Arizona. The information in this article comes from his experiences working with animals and teaching others.

Name: _____

The Big-Eared, Bushy-Tailed Fennec Fox

by Guy Belleranti

1. List two ways the fennec fox's ears help it to survive.

2. Why does a fennec fox have thick hair?

- a. to help it survive in cold, arctic climates
- b. to help it survive in the cold, desert night
- c. to help it hear enemies approaching
- d. to help it shed heat



3. Where might you find a fennec fox in the wild?

- a. Brazil
- b. France
- c. Russia
- d. Egypt

4. Name some of the predators of the fennec fox.

5. Name some animals that are prey to the fennec fox.

6. A fennec fox just had a litter of kits. Which number of kits would the fox be most likely to have?

- a. two
- b. seven
- c. ten
- d. twelve

Challenge: With a parent or teacher's help, use the Internet to print out facts about fennec foxes and arctic foxes. Then, make a Venn diagram to compare and contrast the two species.

Name: _____

The Big-Eared, Bushy-Tailed Fennec Fox

by Guy Belleranti



Some of the sentences below are true. Others are false.

Read each sentence. If the sentence is true, write the word true on the line. If the sentence is false, cross out the underlined word(s) and write a new word on the line to make the sentence true.

1. A baby fennec fox is called a cub. _____
2. Fennec foxes are nocturnal. _____
3. Fennec foxes are carnivores. _____
4. The hair on a fennec fox's ears protects it from the hot desert sand. _____
5. Fennec foxes have ears that are about 6 inches long. _____
6. A caracal is a type of wild cat. _____
7. Fennec foxes search for food in the afternoon. _____
8. Fennec foxes live about 20 years. _____
9. Fennec foxes spend a lot of time sleeping during the daylight hours. _____
10. Fennec foxes live in communities of burrows or dens. _____

Name: _____

A Mighty Flier

by Kelly Hashway

What is two inches tall, can hover in mid-air, and flies in every direction including backwards? It's not an insect. The answer is the bee hummingbird.



Most hummingbirds are about three to five inches long. But the bee hummingbird is only five centimeters, or approximately two inches, making it the smallest species of bird alive today. Really it isn't bigger than a large insect. But don't let its tiny body fool you. This

bird is a fierce flier. It can beat its wings up to 80 times per second. If you ever see one in flight, you'll notice its wings are just a blur to the human eye. Hummingbirds are also the only vertebrates that can hover in one place. Add to that being able to fly backwards and upside down, and these creatures are amazing flying machines.

And being a master flier isn't the only one of the bee hummingbird's talents. The bee hummingbird does a great job performing its part in plant reproduction. During the course of a single day, the bee hummingbird can visit up to 1,500 flowers. And just like a bee, when the bee hummingbird drinks nectar from the flowers, pollen is transferred from the flower to the bird's body. This pollen is carried to the next flower. Transferring pollen from one flower to another helps plants make seeds.

Besides drinking nectar, bee hummingbirds eat insects. In fact, they eat about half their body mass each day. But what's more impressive is that they drink eight times their body mass every day. This is why they live in areas where there are gardens and shrubbery. These tiny birds are found primarily in Cuba, but some have been spotted in Jamaica and Haiti as well.

Despite its size, there's no arguing that the bee hummingbird is a mighty flier.

Name: _____

A Mighty Flier

by Kelly Hashway



- How do hummingbirds help flowering plants?
 - They give the flowering plants energy.
 - They help flowering plants make seeds and reproduce.
 - They build their nests in flowering plants.
 - They drink pollen in the flowers.

- The bee hummingbird is about as large as...
 - a flea
 - a bee
 - a dragonfly
 - a sparrow

- If you ever see a hummingbird in flight, you may have a difficult time seeing the wings. They would look blurry. Why?

- What do hummingbirds drink?
 - pollen
 - insects
 - flowers
 - nectar

- In which countries do bee hummingbirds live?

- If a bee hummingbird weighed 2 grams, about how many grams of liquid would it drink in a day? Use your math skills to figure out the answer. Show your work in the space below.

answer: _____

Name: _____

A Mighty Flier

by Kelly Hashway



The scrambled words below are vocabulary words from the article. Unscramble each word and write it on the line.

Please be sure each word is spelled correctly.

1. _____

l i r m o y e a x a t p p

hint: about; roughly; estimated number

2. _____

b a t v e e t r s r

hint: animals with backbones

3. _____

t e a r n c

hint: sweet liquid inside of flowers

4. _____

e l p n o l

hint: powdery dust in flowers that is used to help them reproduce

5. _____

f a n d t s e e r r

hint: moved

6. _____

a s m s

hint: amount of matter something is made of; can be measured in pounds, ounces, grams, or kilograms

Name: _____

Quills and Thrills

by Kelly Hashway

Forests are homes to many animals. But there's one forest creature that gives off an odor and makes a rattling sound when it feels threatened. No, it's not a cross between a skunk and a rattlesnake. It's a porcupine.



Porcupines are covered with quills—about 30,000 on average. The quills cover most of the porcupine's body with the exception of the face, stomach, and the inside of the animal's legs. You probably know that rattlesnakes shake their tails to scare off predators. It's like a warning signal. Well, porcupines do something similar. When a porcupine is approached by a predator or is feeling threatened, it rustles its quills. This creates a rattling sound as a warning sign, telling other animals or even humans to back off. But the sound isn't the only warning. When a porcupine raises its quills like this, it produces an odor. So the animal uses both sound and smell to ward off enemies.

If a porcupine is attacked, its quills act as protection. You may have heard rumors that porcupines can shoot their quills at attackers. This isn't true. What actually happens is when a porcupine tenses the muscles around their quills and makes them stand up, the quills become loose. If an animal gets too close to the porcupine and brushes up against it, the quills will detach and stick into the attacker.

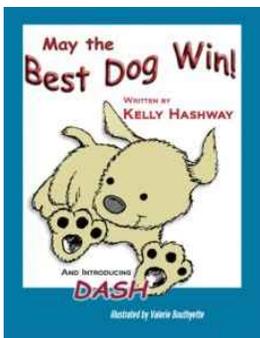


The quills aren't poisonous, but they have multiple layers of barbs like barbed wire, which makes them painful and sometimes difficult to remove because they embed themselves into the attacker's skin. But the interesting thing about quills is that they are coated with

antibiotic fatty acids that help speed up the healing process. Why? To protect the porcupine in case it accidentally pierces its own skin. A porcupine's quills will grow back after losing them, but it does take several months.

So if you ever find yourself in a forest, and you hear a rattling sound followed by a strange odor, beware. Finding yourself on the other end of a porcupine's quills may be more thrills than you're looking for.

About the Author



Kelly Hashway's latest book, *May the Best Dog Win*, is now available!

Dash has the perfect life until the Super Sweeper 5000 shows up. Sweeper runs all over the house sucking up the leftover food scraps, and he even has his own room! But Dash won't give up his place as the favorite dog without a fight.

Hashway, Kelly. *May the Best Dog Win*. ISBN: 9780984589081

Name: _____



Quills and Thrills

by Kelly Hashway

1. Which parts of a porcupine's body are not covered with quills?

2. When a porcupine is feeling threatened by a predator, what does it do?
 - a. shoots quills at the predator
 - b. makes a rattling sounds with its quills
 - c. curls up in a ball
 - d. thumps its tail on the ground

3. A porcupine's quills are barbed. What does this mean?
 - a. They are poisonous to people and animals.
 - b. They are coated with antibiotic fatty acids.
 - c. They grow back when the porcupine loses them.
 - d. They get stuck in an enemy's skin.

4. What is the author's purpose for writing this article.
 - a. to explain how porcupines eat, live, and play
 - b. to teach readers how porcupines defend themselves
 - c. to describe the life cycle of a porcupine
 - d. to entertain readers with a story about porcupines

5. According to the information in the article, Which fact about porcupines in not true?
 - a. When a porcupine's quills stand up, they become loose.
 - b. When a porcupine raises its quills, it produces an odor.
 - c. Porcupines have about thirty thousand quills.
 - d. It takes several years for a porcupine to regrow lost quills.

Name: _____

Quills and Thrills

by Vocabulary Activity



The scrambled words below are vocabulary words from the article. Unscramble each word and write it on the line. Please be sure each word is spelled correctly.

1. _____

r o d o

hint: smell

2. _____

k e s t e t r a n a l

hint: reptile that makes a rattling sound by shaking its tail

3. _____

s o r r u m

hint: facts that haven't been proven true; bits of gossip

4. _____

s t e e n s

hint: tightens muscles because of nervousness

5. _____

c i t a i n o t i b

hint: type of medicine that kills germs

6. _____

p u n a l i f

hint: causing discomfort

7. _____

e n i d a y c t a c l l

hint: not on purpose

Name: _____

Talking About Penguins

by Guy Belleranti

Penguins are one of the world's most interesting birds. They waddle when they walk, and have flippers instead of wings. The bones in a penguin's flippers are heavier and more solid than those in the wings of a flying bird. This helps the penguin "fly" through the water.

The penguin's black back and white front has an important function, too -- camouflage in the water. Penguins blend in with the sea from above and with the sky from below. This makes it harder for predatory birds, leopard seals, sea lions, orcas and sharks to see them.

Many people think all penguins live in the cold and ice of Antarctica. However, only 6 of the 17 species or types of penguins live in Antarctica. The others live in parts of New Zealand, Australia, South Africa and South America and on the Falkland and Galapagos Islands.

Let's talk about two of the penguin species – the Emperor penguin of Antarctica and the Galapagos penguin of the Galapagos Islands.

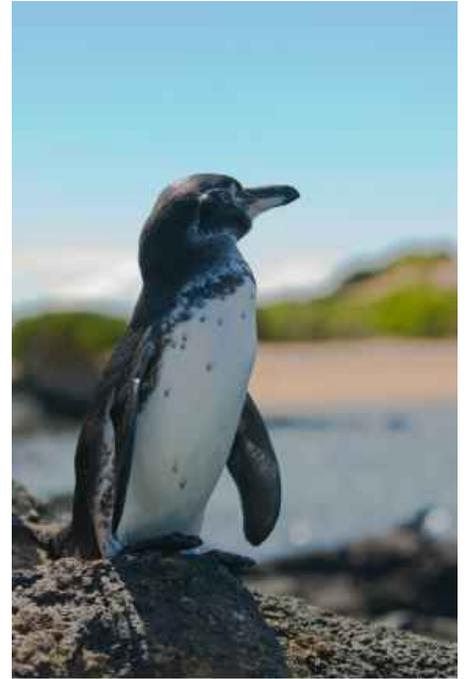
The Emperor penguin is the world's largest penguin. Its oily outer feathers help keep it dry. Its dense inner down feathers and thick fat layer helps keep it warm. Emperor penguins also often huddle in groups to conserve heat.

A mother Emperor penguin lays only one egg at a time. After the mother Emperor penguin lays the egg she travels to open sea to feed on fish, squid and krill (shrimp-like ocean crustaceans). The father stays behind with the egg. He keeps it warm and protected by balancing it on his feet and covering it with feathered skin called a brood pouch. The mother returns two months later, regurgitates food for the newly hatched chick, then stays with it while the father goes out to sea to feed.



Emperor Penguin with Chick

The Galapagos penguin lives in an area much warmer than Antarctica. The Galapagos Islands are on the Equator, 600 miles west of the South American country of Ecuador. This is as far north as any penguin lives in the wild. The Galapagos penguin is one of the smallest and also one of the most endangered of all penguins. It shares the Galapagos Islands with many other unusual animals including the giant Galapagos tortoise and the blue-footed booby. Instead of having to stay warm the Galapagos penguin must find ways to stay cool. The best way is to spend the heat of day in cool water currents hunting small fish and krill. When a Galapagos penguin does get out of the water it often spreads its flippers to cool off. It might also pant like a dog. And it shades its feet by standing with its body hunched forward.



Galapagos Penguin

This has just been a peek at penguins. To find out more visit your school and public libraries.

About the Author

Guy Belleranti works as a docent at the Reid Park Zoo in Tucson, Arizona. The information in this article comes from his experiences teaching children about the wild animals at the zoo.

Name: _____

Talking About Penguins

by Guy Belleranti



1. Most wild penguins live...

- a. in South Africa
- b. near the North Pole
- c. in the Southern Hemisphere
- d. near the Equator

2. The father Emperor penguin keeps the egg warm and hatches the chick. Where is the mother penguin during this time?

3. How are a penguin's flipper bones different from the bones in other birds' wings?

4. A sea lion might have a hard time seeing a penguin swimming in the water. Why?

- a. Sea lions cannot see the color black very well because it blends in with the snow and ice.
- b. When the sea lion looks up, the penguin's white belly blends in with the bright colors of the sky.
- c. Penguins swim very fast and they look like a streak zooming through the water.
- d. A penguin becomes invisible when it swims in cold water.

5. According to the information in the article, what three things does a Galapagos penguin do to cool off when it is too warm?

Name: _____

Talking About Penguins

by Guy Belleranti



Fill in the missing letters to create a vocabulary word from the article. Then write the full word on the line. Be sure you spell each word correctly.

1. ____ u a t ____ _____

hint: imaginary line around the center of the Earth

2. ____ n d a ____ e ____ d _____

hint: nearly extinct

3. ____ r c ____ s _____

hint: killer whales

4. c ____ ____ r v e _____

hint: protect; keep in

5. ____ a ____ n c i n ____ _____

hint: keeping something steady so it does not fall

6. ____ a n ____ _____

hint: take heavy breaths to cool off

7. ____ e g ____ r ____ i t a t ____ s _____

hint: spits up food that has been partly digested

