

Forest Essays

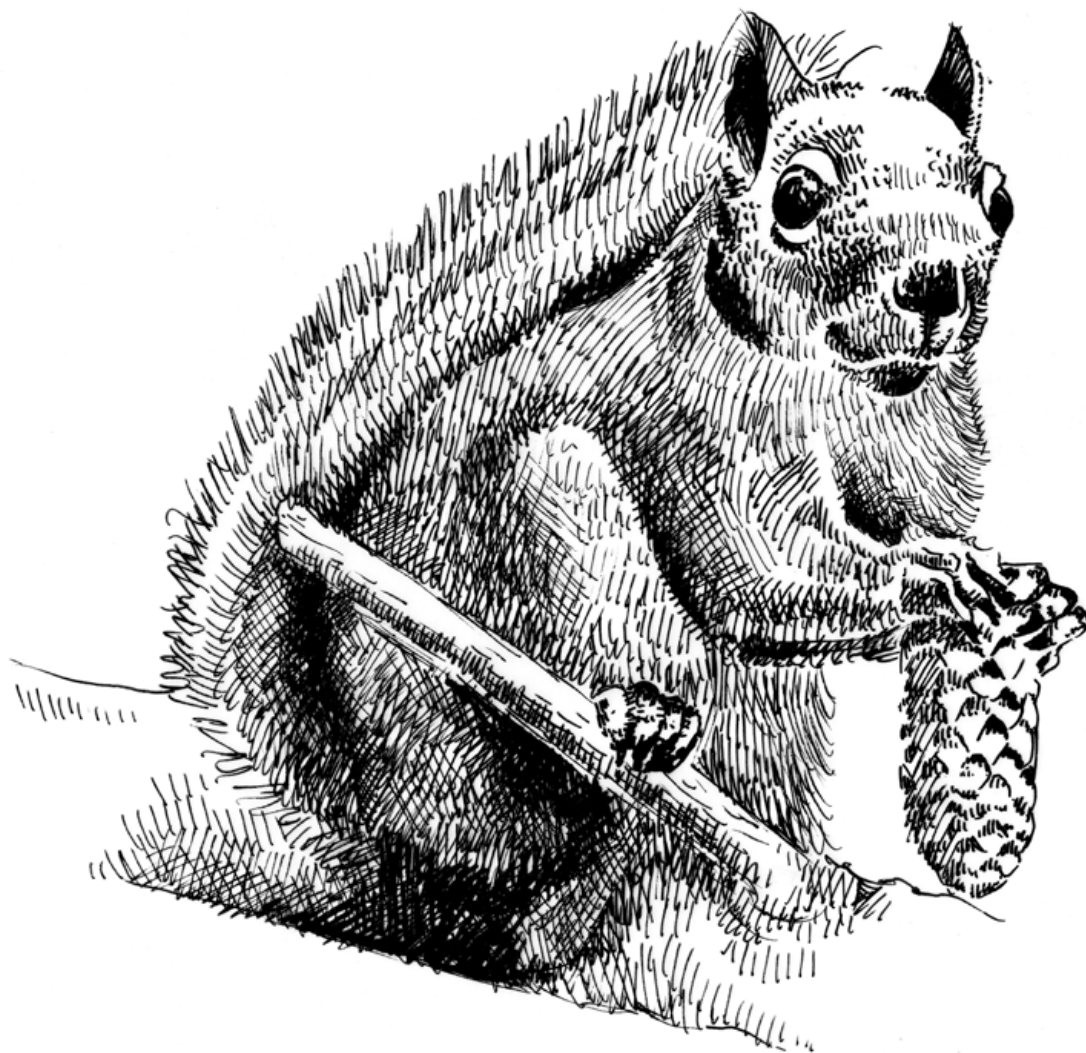
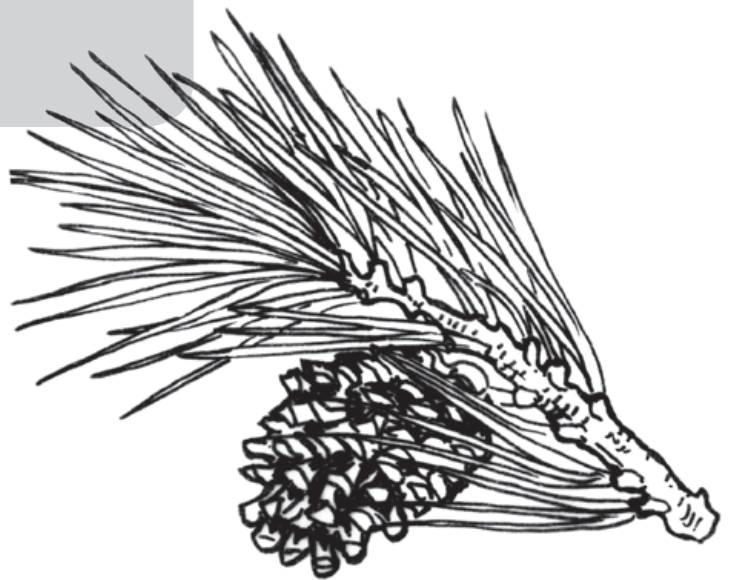
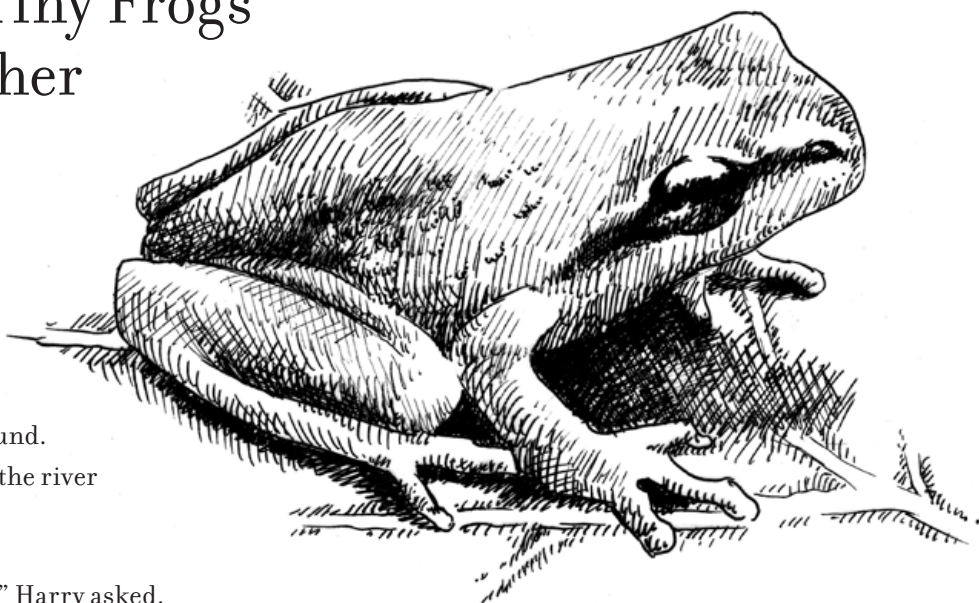


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A Chorus of Tiny Frogs Chirps Together



“Krrreck! Krrreck!” Harry and his grandpa heard the sound. They were in the forest along the river near their house.

“What’s that noise, Grandpa?” Harry asked.

“I’m not sure. Let’s follow it and see,” Grandpa said.

As they walked toward the sound, they heard more voices chirping: “Krrreck! Krrreck!”

“I think it’s a group of chorus frogs singing,” Grandpa said.

The sound grew louder as they got nearer. Then it stopped. “Why did it stop?” Harry asked.

“Because we’re so close, I think,” Grandpa said. “They get nervous when they hear movement nearby. They’re probably near the water. Let’s see if we can find one.”

Sure enough, Harry and his grandpa soon found a frog. It was perched on some grass right next to a marshy spot along the river. It was tiny and green and bumpy, with a black stripe over its eyes.

Grandpa pulled out his field guide. “It’s a Pacific tree frog,” he said.

They sat very still and watched the frog. “You said it was a chorus frog,” Harry said. “But that book says it’s a tree frog.”

“They used to be called chorus frogs because of the way they chirp together in groups,” Grandpa answered. “But they changed the name because these guys can climb

trees. You see how it’s holding onto the grass? It’s got sticky pads on its feet that help it stick to whatever it climbs on. Pretty cool, isn’t it?”

Harry nodded. “What does it eat?” he asked.

“Flying insects, mostly. And slugs and snails. Its long, sticky tongue pulls the food into its mouth. They look for food in grass — like this one is doing, I guess — and in flowers and shrubs. Even on tree trunks.”

Grandpa looked at the field guide again. “Listen to this, Harry. These frogs start their lives as eggs in the water, then turn into pollywogs — sort of like fish with feet.” He grinned. “And eventually they grow into tiny little frogs and come out of the water.”

“Cool!” Harry said. “I want to find some pollywogs.”

“Also,” Grandpa said, “they change color when the temperature or humidity changes. This lets them blend into their surroundings. Like this one — he’s sitting on a piece of green grass, and he’s bright green. So birds and other animals who’d like to eat this little guy have a hard time seeing him.”

Harry liked this. “Let’s move away and see if it’ll keep chirping.” They got up slowly and walked back to the trail. A few minutes later, they heard the sound again. “Krrreck! Krrreck!”

Key Ideas and Details Questions (multiple choice)

1. Where do Pacific tree frogs live?

- a. In trees
- b. Near green plants and water
- c. Under rocks
- d. In safe holes in the ground

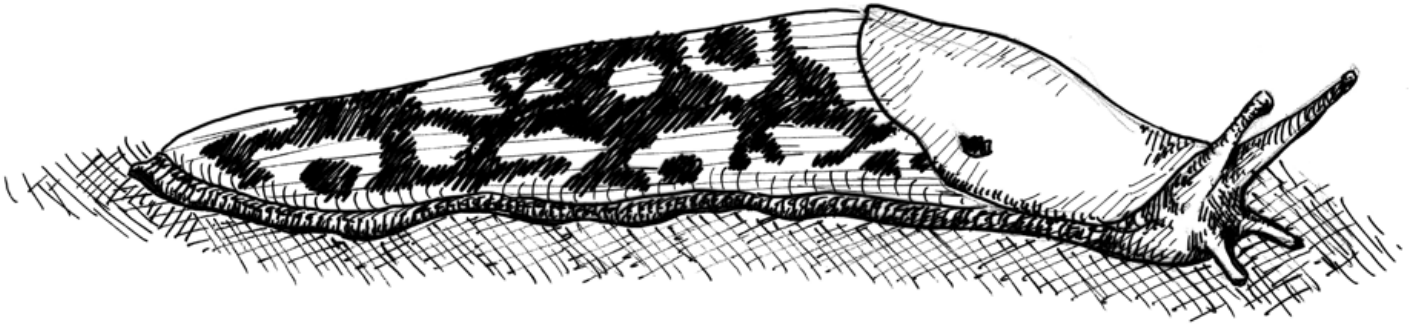
2. What do Pacific tree frogs eat?

- a. Grass
- b. Flowers
- c. Flying insects
- d. Fish

Integration of Knowledge and Ideas Question (short answer)

3. What do Pacific tree frogs do together? Find the answer in the story.

Slimy Slugs Clean Forest Floors



“What is THAT?” shrieked Jacob, pointing. Something moved slowly along the forest path, leaving behind a shiny trail of slime. Yellow and green with brown spots, it looked like a rotten banana.

“It’s just a slug,” said his twin brother, James. “I think slugs are cool. Don’t you, Dad?” James and Jacob loved hiking in the woods with their father, because they always saw something interesting.

“Well, it depends on how you look at it,” their dad said. “Let’s get a little closer.” The three of them gathered around the slug. “This is a banana slug. It’s one of the biggest land slugs in North America. It can grow up to 10 inches long.” He stretched his hands to show how big that was.

“See the four stalks in front?” their dad asked. The boys nodded. “The longer two on top are like eyes. They can sense light and dark. The shorter pair is used to feel and smell, which helps the slug find food.”

“Can I touch it?” asked James. He started to reach for the slug, but his dad put a hand on his shoulder to stop him. “It’s best to leave it alone,” he said. “Slugs have very sensitive skin. If it gets too dry it could die.”

“How does it touch the ground, then?” James asked.

“The slime it makes is called mucus. The mucus protects its skin and helps it move,” his dad said. He explained that a slug is like a snail, except it doesn’t have a shell. “Slugs and snails are called gastropods, which means ‘stomach foot.’ A slug is basically one big stomach that sits on top of a muscle it uses as a foot to help it slide across the ground.” They watched as the slug inched slowly across the trail.

“Mom doesn’t like slugs,” Jacob said. “She says they eat her flowers.”

“Mom doesn’t like them near our house,” their dad said. “But we’re in the woods, which is their home. Slugs are actually a really important part of the forest. They have a jaw that’s like a tongue with thousands of tiny teeth, and they use it to eat pieces of leaves, mushrooms and even animal poop from the ground. They help keep the forest floor clean and put nutrients back into the soil.”

Jacob considered this. “Well... I still think they’re pretty gross.” He grinned. “Can we go? I want to see what else we can find.”

Key Ideas and Details Questions (multiple choice)

1. Slugs are related to:

- a. Snails
- b. Birds
- c. Beetles
- d. Fish

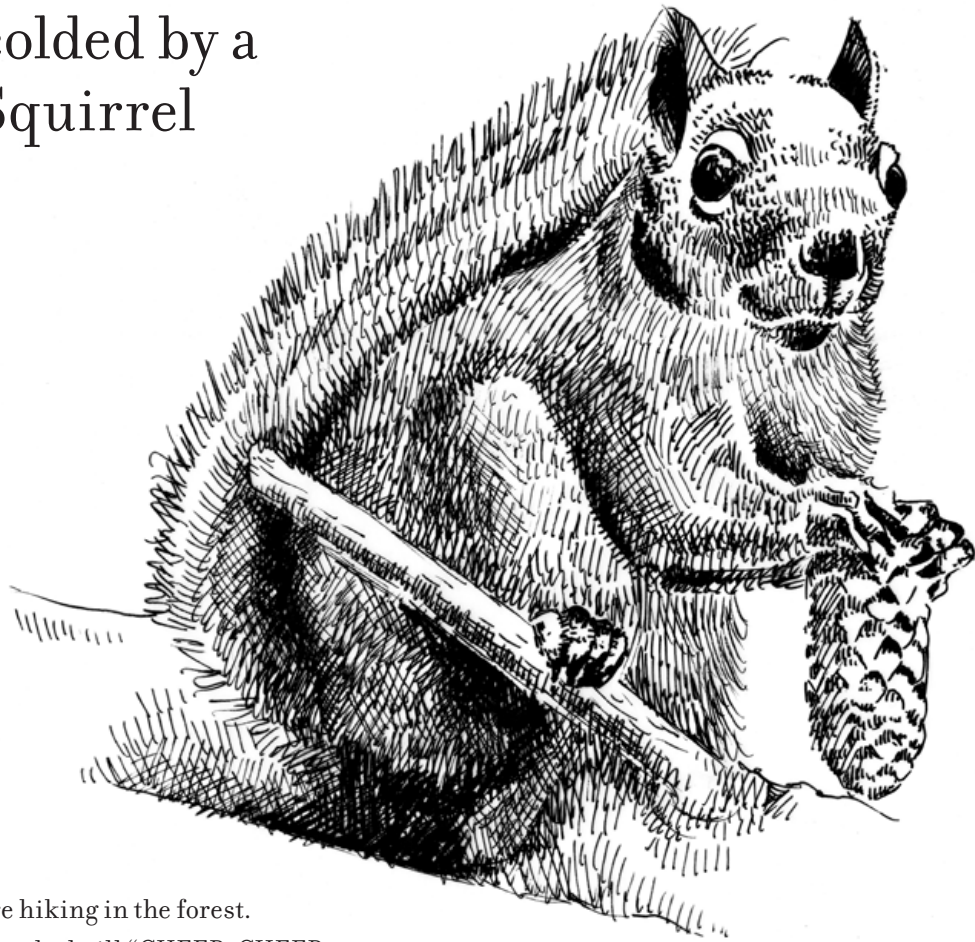
2. Slugs use mucus to:

- a. Taste
- b. Smell
- c. See
- d. Move

3. What important part do slugs play in the forest?

- a. Eat mosquitos
- b. Break down matter
- c. Produce food

Hikers Scolded by a Douglas Squirrel



My grandpa and I were hiking in the forest. Suddenly we heard a loud, shrill “CHEER-CHEER-CHICK-R-R-R-R!” The sound was coming from right above us! We looked up and saw a squirrel in an evergreen tree. It stomped its front feet.

It was small enough to fit in the palm of my hand, except for its long, bushy tail. Its chest and belly were pale orange. The rest of it was mostly brown and gray. The squirrel kept stomping and chattering.

“It seems mad,” I said to my grandpa. “What kind of squirrel is it?”

“I’m not sure,” Grandpa said. “Let’s see if we can find out.” He pulled a slim book out of his backpack and showed me as he flipped through pages with bright, beautiful pictures of plants and animals.

I knew Grandpa never hiked without his field guide. To him, it was just as important as water, a map, extra clothes and food. It told us about all the wonderful things we could see in the forest.

Suddenly he stopped and pointed. “Here it is! It’s a

Douglas squirrel,” he said. The field guide told us the Douglas squirrel is the noisiest squirrel in the forest. It watches for intruders and sounds an alarm when it sees one.

“I guess we’re in its territory and it doesn’t like it,” I said, laughing.

“Look at that,” Grandpa said, pointing to what looked like a pile of shredded tree cones. “What do you think that is?”

I shook my head. I didn’t know.

“The field guide says that’s where the squirrel puts its leftovers,” Grandpa said. “It peels the scales from the cones and eats the seeds. It drops the parts it can’t eat in one big mound, called a midden. We should leave and let it eat its meal in peace.”

We walked away down the trail, watching for more new things to look up in Grandpa’s field guide.

Key Ideas and Details Questions (multiple choice)

1. What kind of squirrel was it?

- a. Giant squirrel
- b. Flying squirrel
- c. Ground squirrel
- d. Douglas squirrel

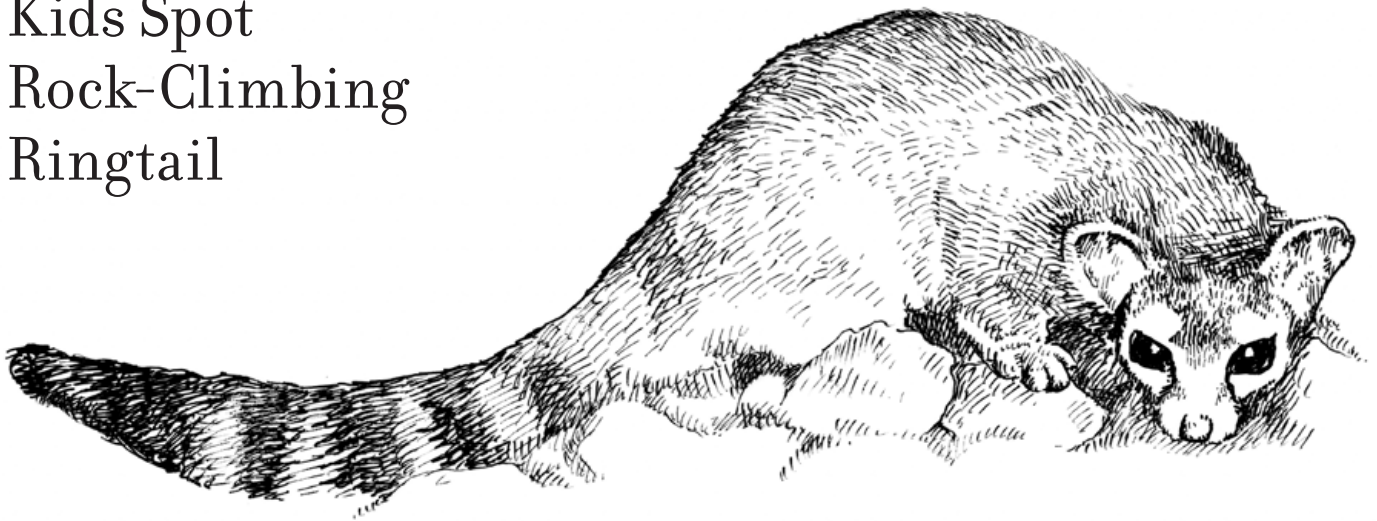
2. What color was the squirrel's chest and belly?

- a. Brown
- b. Black
- c. Orange
- d. Yellow

Integration of Knowledge and Ideas Question (short answer)

3. Why was the squirrel making noise? Use details from the reading to support your answer.

Kids Spot Rock-Climbing Ringtail



Eric and Todd were snuggled in their sleeping bags, fast asleep, with their dad sleeping next to them. They'd spent the day exploring the forest along the southern Oregon coast. Their campsite was in the woods, with cliffs rising up tall on one side. The air smelled like Christmas trees.

Eric woke up suddenly. "What's that sound?" he whispered to his brother.

"Hmm?" Todd sat up. They both heard it now. It was a barking, yelping sound, sort of like an unhappy little dog. As Eric shone his flashlight around the campsite, he caught sight of a small animal with a long tail. "Is that a raccoon?"

"What's up?" their dad whispered. He sat up and aimed his big flashlight in the direction of the little animal. Seeing it, he said, "Be very still, and maybe it won't run away." Their dad knew a lot about wildlife, so they stopped moving.

The animal was halfway up the cliff near their tent. It stared at them with its big eyes. It was brown, and about the size of their cat. It had large ears and a very long, fluffy tail with black stripes. "Is it a raccoon, Dad?" Eric asked quietly.

"No, I don't think so," Dad answered. "Raccoons have a wide, black stripe across their eyes. I think it's a ringtail. Wow, look at that tail!"

As they watched, the ringtail used its tail and its feet to climb straight up a crack in the cliff. "It looks like a rock climber!" Todd whispered.

Dad nodded. "Its ankles can rotate about twice as much as yours can. It uses its tail for balance, or wraps it around tree limbs as it climbs."

The two boys had taken a rock-climbing class. They'd learned how to do what the ringtail was doing: They had gotten into a crack in a cliff and leaned back on one side, with their feet pressing against the opposite side. They'd slid their backsides up the crack, a little at a time, using their legs. It was hard work. Their thighs had been really sore the next day.

The ringtail was moving very quickly. "It's pretty good at climbing," their dad said. "Luckily, it has four feet instead of just two."

As they watched, the ringtail reached the top of the cliff and disappeared into the trees. "It's probably looking for a lizard or a bird to eat," Dad said as he turned off his flashlight. "Then it'll go back to its den — maybe a rock pile or a hollow tree. Ringtails are only active at night, and they have to avoid being eaten by owls and bobcats. They're shy — so we were really lucky to see one."

The three of them settled down to sleep again. As Eric dozed off, he thought about how much he liked camping. After all, where else would he see a ringtail?

Key Ideas and Details Questions (multiple choice)

1. How big is a ringtail?

- a. The size of a big dog
- b. The size of a house cat
- c. As big as a coyote
- d. The size of a rat

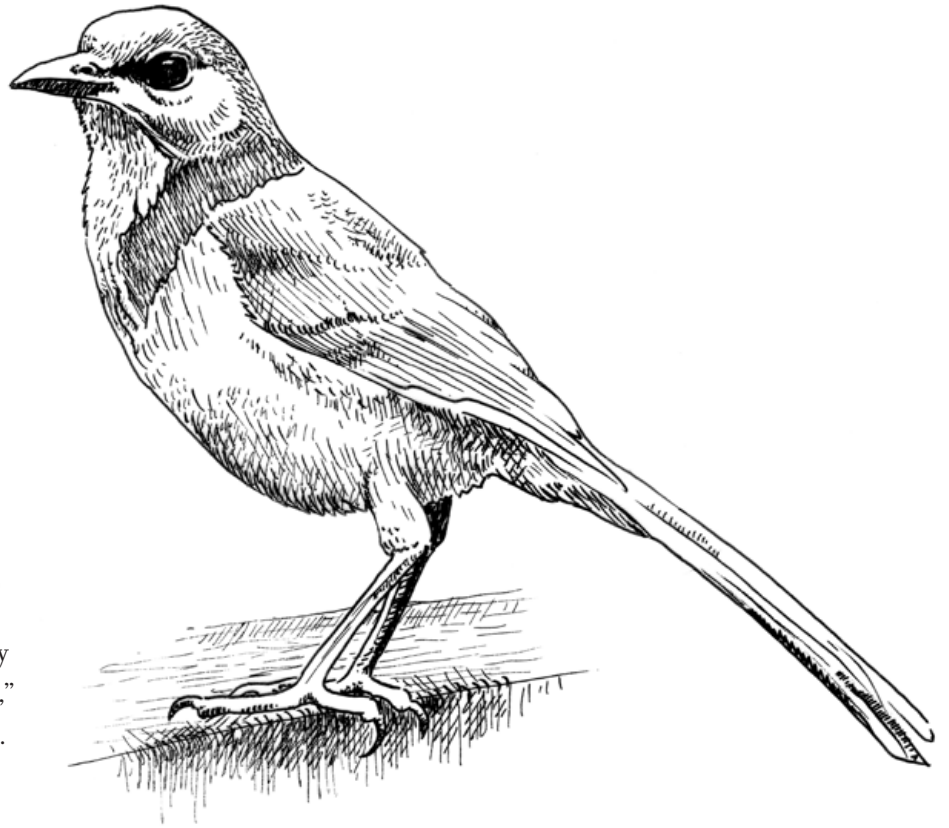
2. What time of day are ringtails active?

- a. Early morning
- b. Noon
- c. Afternoon
- d. Nighttime

Integration of Knowledge and Ideas Question (short answer)

3. How does having a long tail help the ringtail? Please find the answer in the story.

Campsite Robber Strikes Again



“Dad! Dad, look!” the little girl cried, pointing to the bird in a nearby Douglas-fir tree. “Look how close that bird is. What kind is it?”

“Well, Sarah, I think it’s a gray jay. They are known for coming close to humans,” her father said, as he peered at the bird. “You’d better keep an eye on him or he might steal your lunch. He and his friends are the famous campsite robbers of the West.”

The gray jay squawked at them from its perch above their picnic table. Its head, wings, neck and long tail were shades of gray and white. The bird watched as Sarah and her dad unpacked their lunch.

They forgot the bird as soon as they saw the food in front of them: sandwiches on thick bread, golden grapes and homemade trail mix with nuts, dried fruit and chocolate.

Sarah was opening the trail mix when the gray jay swooped down and landed on the picnic table. It tilted its head and looked sideways at her. Then it hopped toward her lunch, grabbed a grape and flew away.

“Hey! It just stole my grape!” she cried.

Within minutes, the gray jay was back, but this time he brought a friend. Both birds sat in the Douglas-fir tree and squawked.

“Uh-oh,” Sarah’s father whispered. “I think they’re up to something. Jays often work in pairs to find food.”

Suddenly both jays flew at them. One landed on the container of trail mix, spilling the contents all over the picnic table and the ground. Both birds grabbed some nuts, flew back to the tree, and then returned for more.

“I warned you!” her dad laughed. “These two are born thieves!”

“They must be really hungry,” Sarah said, as the birds flew away again with more loot. “Maybe we should let them have all the trail mix.”

“Not necessarily. Jays store food so they’ll have something to eat in the winter. But they really shouldn’t have people food,” her dad said as he picked up the spilled pieces of fruit and nuts. “It might not be good for them, and it keeps them from learning how to find the foods they’re supposed to eat.”

Just then a park ranger came by. “Nice day for a picnic, isn’t it?” she said.

Sarah’s dad looked up at the ranger. “Officer, we would like to report a theft,” he said.

Key Ideas and Details Questions (multiple choice)

1. What is the gray jay's nickname?

- a. Bluebird
- b. Robber baron
- c. Campsite robber
- d. Squawking bird

2. What happened to the picnic lunch?

- a. A bear ate it
- b. Birds stole from it
- c. A ranger took it
- d. It fell in the river

Integration of Knowledge and Ideas Question (short answer)

3. How did the two jays work together to find food? Use details from the reading to support your answer.

Forest Lessons from a Wolf Tree

“Look at that wolf!” Grandpa exclaimed.

Jake was casting his fishing line when his grandfather spoke. He looked up, excited to see a wolf. All he saw were trees.

“Where, Grandpa?” Jake asked. “I don’t see a wolf.”

“That big tree on the other side of the river,” said Grandpa, as he reeled in his line. “The one in the clearing with all the long branches. Can’t you see it?”

“Well, I can see the big tree. Why did you call it a wolf?” asked Jake.

“That’s what you call a big tree that hogs all the sunlight,” Grandpa said. “See how there’s nothing growing underneath it?” Grandpa explained that it’s because the long, thick limbs prevent the sunlight from reaching the ground. “Don’t they teach you kids anything in school these days?” Grandpa teased. “Back in my day, you had to know something about the forest to make a decent living in Oregon.”

“I know the forest! That’s a Douglas-fir tree right there,” Jake said. “And that one is an alder, and over there is a western redcedar.”

“But can you tell a widowmaker from a staghead?” asked Grandpa.

“A what?”

Grandpa laughed. “Not all Douglas-firs are alike. See that tree with the dead branches sticking out of its top? It’s called a stag head because it looks like the antlers of a deer.”

The two were silent for a while, as Grandpa scanned the trees along the river.

“There!” he said, pointing up the slope. “Do you see the



tree with the mean lean and all the dead limbs at the top? That’s a widowmaker. Some people call it a fool-killer. A logger could get himself killed trying to fell a tree like that if he didn’t know what he was doing.”

“So there are lots of different types of trees,” Jake said.

“Yes, and there are different types of forests, too,” Grandpa said. “People think of Oregon as this rainy, wet place, but more than half the state is high desert.” He told Jake all about the rain shadow of the Cascade Mountains, and how it traps moisture from storms coming off the Pacific Ocean. Forests west of the mountains are more shade-tolerant, while the ones on the east are more drought-tolerant.

Jake thought about this. He’d seen the dense, dark forests west of the Cascades, full of firs, vine maples and shrubs. And he’d seen the forests east of the Cascades, where there are open stands of ponderosa pine, with more grass than bushes underneath. He told Grandpa what he had observed.

“That’s right!” Grandpa said. “OK, let’s get back to fishing. I promised Grandma a big old steelhead for dinner tonight, and I don’t want to disappoint her.”

Key Ideas and Details Question (multiple choice)

1. What is a wolf tree?
 - a. A large tree with dark bark
 - b. A tree with a scar that looks like a dog's face
 - c. A large tree with spreading branches
 - d. A tree with dead branches

Integration of Knowledge and Ideas Questions (short answer)

2. How are forests west of the Cascade Mountains different from those east of the mountains? Use details from the reading to support your answer.

3. Why are forests west of the Cascade Mountains different from those to the east? Use details from the reading to support your answer.

The Mystery of the Fox Sparrow



“What’s wrong with that bird, Mom?” Jo asked. A chubby, brown and white striped bird was flopping on the ground a little way off from the trail. It held one of its wings out to one side and made a short chirping sound. “It looks like its wing is broken,” Jo said.

The two of them squatted on the trail and looked at the bird. They had been walking along a creek in the Blue Mountains of eastern Oregon. Young ponderosa pines and other conifers grew around the creek, and dense shrubs, leaves and moss covered the ground between them. The bird hopped crookedly between a couple of the pine trees.

Jo’s mom raised her binoculars and watched the bird closely. Then she gave the binoculars to Jo. “Look in those bushes, just past the bird,” she said. “I think it’s a nest.” Jo lifted the binoculars to her eyes. She saw the bird up close, and behind it a round pile of twigs and moss with small oval objects inside, just above the surface. “Are those eggs?” she asked her mom.

“Yes, I think they are.” Her mom pulled a field guide out of her jacket pocket and flipped through the pages. “It looks like a fox sparrow,” she said. “One of the biggest sparrows around, it says here.”

“What’s wrong with it?” asked Jo.

“Nothing,” her mom said. “It’s trying to distract us from its nest. A bird with a broken wing is an easy target for a predator. So the mother bird pretends to be wounded. She’d rather be killed than have her eggs destroyed.”

This impressed Jo.

“Let’s move down the trail a little bit and stay very quiet, and see what happens,” her mom suggested. They moved several steps down the trail, turned and looked back, keeping very still. The fox sparrow had hopped away, back to its nest.

“Why does it make its nest on the ground?” Jo asked. “And so close to the trail, too?”

“Lots of birds make nests on the ground, because that’s where they find their food,” her mom said. “Meadowlarks do, and so do pheasants, killdeer and some sparrows, like this one.” She checked her guidebook again. “Fox sparrows like forests where there’s a lot of open space between the trees. When they’re looking for insects or caterpillars to eat, they do a little dance called a ‘double-scratch’ — they hop forward and backward, kicking the leaf litter aside so they can search under it.”

Sure enough, when they looked back using the binoculars, the fox sparrow was hopping forward, then back, over and over, moving pine needles and leaves to clear the ground. It pounced on something and came up with a beetle in its beak. “Gross!” Jo exclaimed as the bird munched it down.

“We all have our own tastes, huh?” laughed her mom.

Key Ideas and Details Questions (multiple choice)

1. What kind of forests do fox sparrows live in?

- a. Forests with lots of trees and shade
- b. Forests with lots of space between trees
- c. Forests near the water
- d. Redwood forests

2. Where do fox sparrows nest?

- a. On the ground
- b. In a tree
- c. By the ocean
- d. All the above

Integration of Knowledge and Ideas Question (short answer)

3. Why did the mother bird pretend to have a broken wing?

Bald Eagles Build a Home

The big bald eagle sits on a branch near the top of an old tree in the forest. He's very hungry, and ready to hunt. Raising his huge, dark wings, he flies off his perch.

Up, up he flies, way up in the sky. He opens his wings and floats in the wind, circling round and round over the water far below. He is a raptor — a bird that eats other animals to survive.

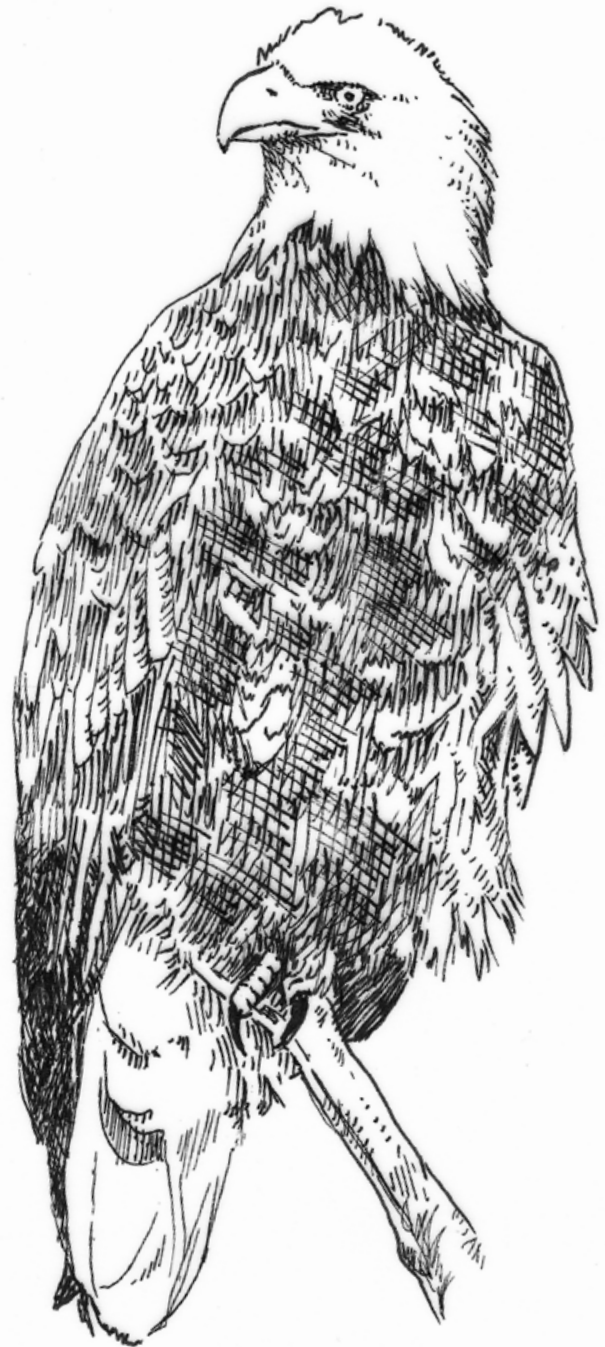
Studying carefully with his sharp, yellow eyes, he sees a nice, big fish swimming in the lake. He pulls his wings in and dives straight down toward the water. He flies faster and faster.

As he reaches the water, he stretches out his big, yellow feet. He grabs the wriggling fish with his sharp talons. Then he flies back to his tree. He sits on his favorite perch once again to enjoy his fish dinner.

The bald eagle and his mate are building a nest high in a nearby tree. They chose this tree carefully. It's a big, old tree with a broken-off top. It has a thick trunk and sturdy branches. Because it's so big, the nest won't fall to the ground. From the nest the two bald eagles can see a long way. It's far from any enemies. They don't know it, but this nesting site is also protected by Oregon law — no one can cut it down. Their new babies, called eaglets, will be safe.

The two eagles have been working on their nest for three weeks. They have a long way to go before it will be finished. They will live together for many years. They want to use this nest for their family each year, so they're making it very carefully.

Day after day, the male and the female go back and forth, gathering materials. Each of them brings bits of green grass and brown twigs and soft moss to the nest. They weave them together. Layer after layer, the nest



grows bigger. Eventually it will be as big as the bed a human sleeps in.

When they're almost finished, they line the huge nest with feathers. The female will lay two eggs in the soft nest, and the couple will settle in and wait 35 days for the eaglets to hatch.

The new eaglets will fly when they're about 3 months old. Then they'll join the male and female and go hunting for fish!

Key Ideas and Details Questions (multiple choice)

1. What is a raptor?
 - a. A bird that eats other animals
 - b. A big, dark bird
 - c. A bird that makes a big nest
 - d. A bird that mates for life
2. How does a bald eagle hunt?
 - a. It flies down from its nest
 - b. It flies far up in the sky, then dives
 - c. It flies down from a perch
 - d. It sits on the water, then dives into the water
3. Why do bald eagles need big trees?
 - a. Because they need to hide from enemies
 - b. Because if the tree isn't big enough, their big nest will fall to the ground
 - c. Because the big tree has food in it
 - d. Because they eat the bark on big trees

