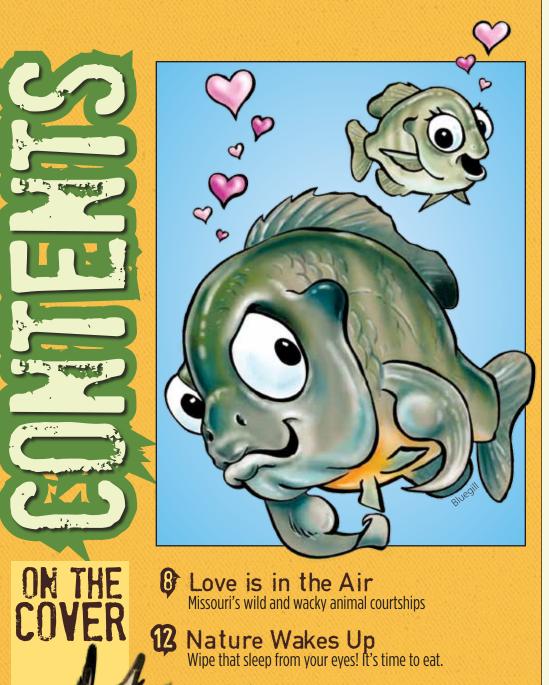
MISSOURI DEPARTMENT OF CONSERVATION

February/March 2010

kids adventures in nature

LOVE IS IN THE AIR THE SCOOP ON MISSOURI'S WILD AND WACKY ANIMAL COURTSHIPS!



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Visit *www.xplormo.org* for cool videos, sounds, photos, fun facts and more!



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GREATER

PRAIRIE CHICKEN photo by Noppadol Paothong

with Nop & Dave

Ice on Bison photo by Noppadol Paothong

storm covered southwest Missouri in 10 inches of ice. "Perfect," said Wildlife Photographer Nop Paothong. A snowy, winter day was just what he wanted to photograph bison at Prairie State Park west of Lamar. Bison used to roam Missouri's prairies, but now you can see them only on private ranches and in this state park.

Nop used a telephoto lens to zoom in on the massive animals, such as this one shaking snow off its head. Although bison can weigh up to 2,000 pounds, they are agile and can run up to 30 miles per hour. Nop wasn't worried about them getting too close. He and the bison were having trouble walking on the slick, frozen ground.

 Nop covered the lens with a neoprene cover to keep off the ice and snow. His down parka kept him warm. Every time he moved his arms, ice on his sleeves shattered like glass. In spite of the harsh wind

> and temperatures below zero, Nop shot photos for 10 hours a day for three days. See more cool photos at **www.xplormo.org**.



ith winter almost gone and spring just around the corner, there's plenty for you to discover outside in February and March. Here are a few ideas to get you started.

Dine on dandelions

Those fuzzy yellow flowers your parents hate to find in their lawn—you can eat 'em. Nearly every part of a dandelion is edible. Dandelion leaves can be used to make a salad or cooked with pasta. Dandelion flowers can be fried to make fritters or stirred into pancake batter. Before you dine on dandelions, make sure no one has sprayed chemicals on your lawn. Go to **www.xplormo.org/node/2902** for tasty dandelion recipes.

Attend a symphony

On warm nights in February and March, spring peepers and chorus frogs sing to attract a mate. Neither amphibian is much bigger

than the end of your thumb, but when a bunch sing together, it gets



loud. To hear this symphony, head outside just before sunset and explore shallow puddles, pools, wet fields or flooded ditches. For help identifying what's singing and to learn more about Missouri's frogs and toads, check out **www.mdc.mo.gov/19246**.

a migration sensation

To see tons of critters moving from one spot to another, visit one of Missouri's wetlands this spring. There you'll see thousands of migrating ducks, geese and shorebirds resting and refueling for their long journey north. To find a wetland, visit www.xplormo.org/node/2907.

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Go on a wildfl wer walk

Animals aren't the only ones waking up from winter. In March, many wildflowers and trees begin to bloom in woodlands throughout the state. Pack a field guide and hit the trail to look for early bloomers, such as harbinger of spring, spring beauty and bird's-foot violets. Later in the month look for flowering trees, such as serviceberry, wild plum and redbud.

Violet photo by James Henderson, Gulf South Research Corporation, Bugwoo

Dandelion photo by Mary Ellen (Mel) Harte, Bugwood.org

Save your nose. Dodge a skunk!

When the weather warms up, skunks leave their underground dens to search for food and mates. Around this time, dead skunks-and stinky smells—start turning up on roads. Skunks are slowmoving and nearsighted. When they waddle across roadways, they're no match for fastmoving cars. You can save a hungry, lovesick skunk by helping your parents keep an eye out for them on car trips especially at night.

ROUND up some robins

A singing robin is a sure sign that spring is just around the corner. Many robins spend the winter in Missouri, while others head south when berries and other foods disappear. Look for large flocks returning to the Show-Me State around the third week of February. You can help scientists track their migration by taking part in Journey North's Robin Roundup. For details, visit www.learner.org/ jnorth/robin.

American robin

HOOK a rainbow

A rainbow trout, that is. These colorful fish are fun to catch and tasty to eat. You don't have to travel far to find them, either—many city lakes are stocked with pan-sized trout. Beginning Feb. I, you can take home four trout, but you'll need a trout permit and—if you're 16 years old or older—a fishing permit. To find a trout-stocked lake, visit www.mdc.mo.gov/18703.

Rainbow trout

Hear a chorus of coyotes

On calm, clear nights just after sunset, you'll hear it: a lonesome howl ending in a bunch of yaps and barks. It sounds eerily like laughter. This is the call of the coyote. Although it sounds spooky, there's nothing to fear. Howling is how coyotes talk to each other. A coyote might howl to say "I'm lonely," "Stay away" or "Let's go find some rabbits to eat." Scientists have recorded 11 different kinds of howls. They think each one means something different. How many can you hear?

MDC

Looking for more ways to have fun outside? Find out about Discover Nature programs in your area at www.xplormo.org.



WHEN HABITATS NEED HELP. TOM JINGST SHOWS UP WITH HIS TRUSTY DRIP TORCH

om Jingst has one of the hottest jobs in the world. He's a burn boss, the leader of a crew that starts and puts out fires.

Not all fires are bad. When used carefully, fire can keep shrubs out of grasslands, create forest openings so young trees get sunlight, and provide habitat for animals. When used carelessly, fire can burn up homes and hurt people. Only someone like Tom, who has years of training, should start a fire.

Burn Boss

Each person on Tom's crew has a specific job. Some use drip torches to dribble flames onto the ground. Others use rakes and water sprayers to keep the fire under control. Tom makes sure everyone works together to stay safe. He keeps a close eye on the weather and puts out the fire if it gets too hot or windy.

Weather and fire, however, can change in an instant. "We were burning a prairie, and the wind picked up," Tom says. "Before I could blink, a 6-foot flame turned into a 20-foot fire tornado. It roared and seemed alive." Luckily, the wind let up, and the fire died down.

Does Tom ever worry one of his burns might escape or someone might get hurt? "Every

time I light a drip torch," he says. "If something goes wrong, it's my fault."

That doesn't mean Tom plans to stop lighting fires. He takes pride in keeping forests and grasslands healthy.

Owls don't have teeth. So what's a hungry bird to do with the tasty mouse it just caught? Swallow it whole. As the unlucky rodent passes through the owl's gut, the mouse's soft meaty parts are digested. Hard parts, such as teeth, bones and fur, get stuck in the owl's stomach and form a pellet. How do owls get rid of these undigestible leftovers? They barf! Although gross, puked-out pellets provide a snapshot of an owl's past meal.

Skull

PELLET

YOUR GUIDE TO ALL THE MASTY STINKY, SLIMY AND GROSS STUFF THAT NATURE HAS TO OFFER

Muskrats are nature's scuba divers. Their dense, waterproof fur acts like a wetsuit to keep them warm and dry. Their webbed hind feet propel them through the water better than a pair of swim fins. And, though you would need an air tank to stay underwater for 17 minutes, these furry divers can do it just by holding their breath.

DON'T KNOW? Jump to Page 16 to find out.

This gaggle can be found near water. Like snow, you can see them in winter. Sometimes they get the blues. Honk if you know the answer.

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BY ERICA ATNIP, AGE 8

ZAP! A-BOOM!

Lightning split the sky. Thunder shook the car. "Dad," Erica yelled over the pounding rain, "maybe we should turn back." Her dad's knuckles were white on the steering wheel. "Let's keep going," he said. "I bet this will blow over before we reach the campground."



It did. The next morning, Erica went to work in a gentle drizzle.

Erica and the other volunteers worked hard. When they started, the trail was just a line of orange flags. After three days of clearing brush and cutting path, Erica walked back to camp on a new trail. and a few other volunteers hoped to build a section of the Ozark Trail. Would the weather cooperate?

Erica pitched camp in a downpour. She

Rain kept things cool and mosquitoes away, but it made the trail slick. While hiking in, Erica slipped on a wet rock. Remembering her training, she tossed away her sharp tools, caught herself, and was able to return to building trail.





That evening, Erica set a goal to be the youngest person to complete 25 trail-building events. She's well on her way to accomplishing this feat.

For more on trails, visit **www.ozarktrail.com** or **www.mdc.mo.gov/trails**.

Chocolates, flowers, mushy cards—people go to a lot of trouble to impress their Valentines. That's nothing, though, compared with some of the weird, wacky-even romantic things wild animals do to attract a mate. With most critters, it's the boys that work hard to impress the girls. Whether they have fins, feathers or fur, these fellas know how to charm the chicks!

Matt Seek, illustrations by Mark Raither



When they're looking for love, male bluegill dress to impress. This fashionable fish sports emerald-green sides, a bright yellow belly and reddish-orange chest when Cupid comes calling. He'll fan out a nest in the mud with his tail and hang out nearby to put out the vibe. If a female likes what she sees, she'll give him a fins-up and be his swimming sweetie.

Bluegil



Cute and cuddly doesn't cut it for bunny babes. Female cottontails want a tough guy for a boyfriend. To show how tough they are, male rabbits, called bucks, fight each other. During a rabbit rumble, males stand up and box each other with their front paws. They bite, growl and thump the ground with their hind feet. Sometimes one rabbit leaps into the air and tries to kick the other in the head like a little flop-eared ninja. The rabbit that loses stays lonesome; the winner gets the girl.

Show some flash

With fireflies, it's the flashiest fella that gets the girl. A male's twinkling tail acts like a bright neon sign. "Here I am," it flashes. "Do you like me?" If he's lucky, a female will answer back with a single flash. She's pretty picky about who makes the cut. If her beau doesn't

flicker often or long enough, the sparks won't fly. Prairie chicken gals like a guy who knows how to get his groove on. When a male wants to strut his stuff, he droops his wings, spreads his tail and stamps his feet. If a hen is watching, he'll stick out his neck, lift long feathers behind his head and inflate bright orange air sacs on his throat. It looks funny to us, but not to a prairie chicken chick. She thinks he looks like a hunk—a hunk who knows how to shake his tail feathers.



Civeheracall

Spring peepers are only about an inch long, but these little frogs have big voices! On warm spring days, male peepers pump up the volume to call to a mate. With each highpitched peep, they say, "Come on over to my lily pad." Persistence pays off. Peepers that call often get more dates.

Male Juna moths like their ladies to smell good. Female winiff Pelease natural perfumes, called pheromones. A tiny ing moths away. They have to flutter fast, thougart, unable of a week. Cover from their cocoons without mouths alive longer that a longer their her sweet, but it won't keep a luna alive.

Bringagift

When romance grips a male roadrunner, he hunts for a gift, but not flowers or chocolates. To charm a female roadrunner, he's got to bring her a tasty lizard or grasshopper. He'd better find a plump and juicy one, too. If his girl doesn't like the present, she won't eat it, and he'll be out of luck.



Male praying mantises know the way to a female's heart is through her stomach. That's why they take their main squeeze out to eat during courtship. What's on the menu? Sometimes the male mantis! If the female is hungry, she'll bite off the male's head and eat him for dinner. Sometimes, love hurts.

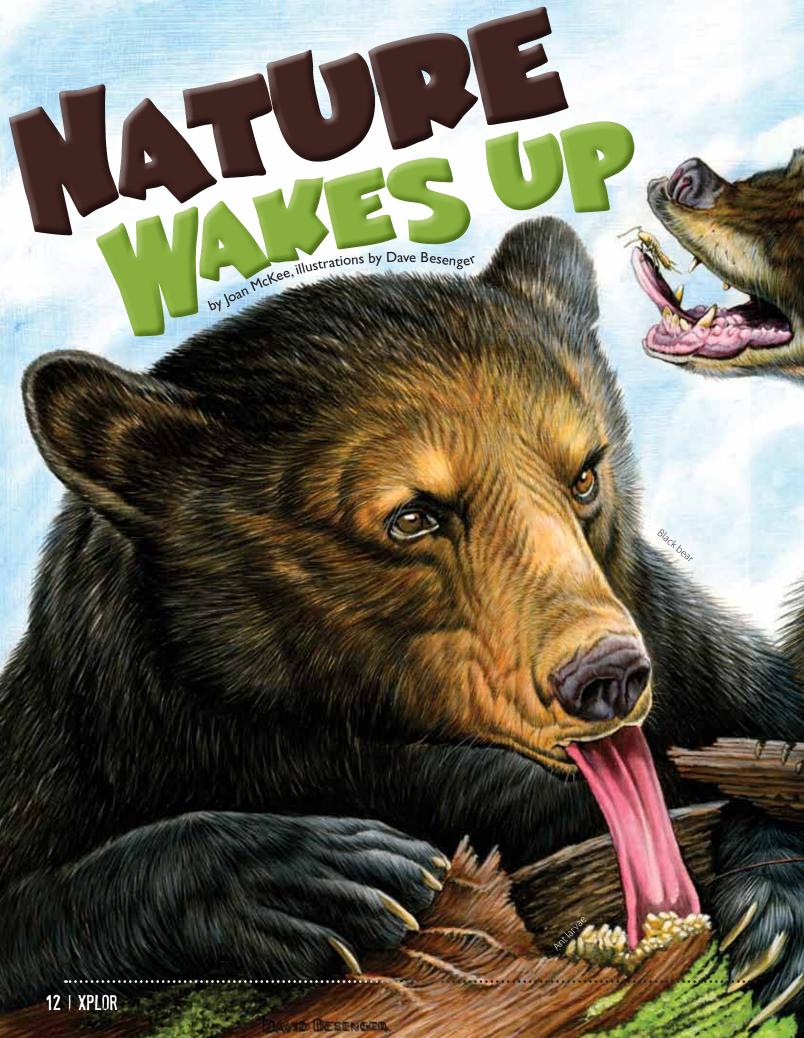
Luna moth

Holdhands

Male bald eagles swoop, cartwheel and somersault through the air to show off for lady eagles. If a female likes what she sees, she flies over to hold hands with her dashing daredevil. Then, the two take the plunge—literally. With their talons locked, the eagle couple plummets to the ground. Just before they go splat, they let go and swoop back into the clear blue sky. For eagles, just like people, love has its ups and downs.

r roadrur

EVATION



When ice melts from ponds and the wind blows warmer, you know that spring is coming. Critters you haven't seen for a while are waking up from winter naps, and tender shoots of plants are struggling to reach the sunshine. It's time for you, too, to get outside and join the fun of watching nature as it wakes up.

HUNGRY AS A BEAR

If you hear a growling noise in the forest, it might be a bear's stomach. When Missouri's black bears emerge from their dens in hollow trees, brushpiles and caves in early spring, their stomachs are empty. They haven't eaten since fall when food such as acorns was plentiful. To get their stomachs working again after many months of no food, they gorge on grasses and young shoots of wildflowers. Bears use their claws to tear open rotten logs and to roll rocks to find hidden insects. Missouri's largest mammals aren't big game hunters, although they eat newborn deer and dead animals when they find them. Mostly they dine on ants and beetles and munch on plants, nuts and berries. Consider yourself lucky if you spot a bear. There are only around 300 in Missouri, and they don't like company. They prefer large forests where people are few.

WATCH WHERE YOU STEP

While bears are difficult to find, box turtles have been just underfoot all winter. In the fall they use their front claws to dig about 5 inches under the leaves and dirt. They don't freeze during the cold months because they produce a type of antifreeze that keeps their blood flowing even when the ground freezes.

Centipede

Termite

American cockroach

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When the sun warms the earth as the days get longer, box turtles dig back through the leaves and look for young shoots of plants, earthworms and other insects to eat, which is pretty much what bears are seeking.

DOWN UNDER

Deeper underground, perhaps in your backyard, in an abandoned animal burrow could be a bunch of eastern garter snakes. When the warmer days of March arrive, these snakes untangle themselves and go in search of frogs, toads, salamanders, earthworms and sometimes small mice. Garter snakes are good swimmers, so look for them near water where they may be looking for a frog or small minnow to munch.

LEAPING FROGS

Fleeing hungry snakes with quick, erratic hops are Blanchard's cricket frogs. Each spring these tiny frogs, less than 1½ inches long, emerge from under grass and leaves near the edge of a stream or pond. They look for insects to eat. These fast frogs are often easy to catch. They jump into the water to escape, but don't wade in after them. In a few seconds, they'll swim back

garter

to shore. Before trying to catch one, get your hands wet. Otherwise you might harm the frog's delicate skin.

> Blanchard's cricket frog



OUT OF THE DARKNESS

When it's warm enough for mayflies and mosquitoes to hatch from rivers and streams, hungry little brown bats leave their hibernation caves. If left undisturbed during the winter, these flying mammals will have enough energy on the first warm spring nights to snatch insects from the air. To protect cave-dwelling bats, some cave owners place gates at cave entrances that keep people out and still allow bats access.

HEADING NORTH

The sky during the day gets busier, too. Some birds stay in Missouri year-round, but starting in February others begin migrating back from the south. Look for bluebirds, Missouri's state bird, flitting around bushes looking for berries left over from winter. If you don't have shrubs in your yard, you can keep these birds around longer by setting out grapes and other fruits. If you want to see them all summer, put up a bluebird house. Visit *www.xplormo.org/node/2937* to learn how.

TOUGH ENOUGH

Life is tough for early spring woodland wildflowers. They have a short time to bloom, pollinate and produce seeds before the leaves from trees block the sunlight they need to grow. Then along comes a hungry bear or turtle, and *crunch*! The blossom becomes a quick snack, and the plant doesn't get to produce seeds that year.

If you look carefully on woody hills or along streams in February, you might spy the brown and white flower of harbinger of spring, one of the earliest flowers to bloom in the woods. Because the flower's petals are white and the pollen-filled anthers red-brown, the plant is sometimes called pepper and salt. Spring beauty is another early bloomer that can be found in the woods and often in your yard. Look for white flowers with pink veins.

The white blossom of the bloodroot plant should be easy to spot among the dried leaves in the woods. However, these flowers can be easily missed because they only bloom for one day. Start looking for them in March. Native Americans knew where this plant grew and used the root to make a dye the color of blood, hence the name "bloodroot."

SPRING HAS SPRUNG

It's not time to get out the swimming suits yet, but warm weather is coming. What other signs of spring can you find in your backyard?

Bloodroot

bine cone bird feeder Make a

Birds search for seeds, berries and other foods all winter long. By February, pickings are slim, and feathered foragers have a tough time finding enough to eat. Help out by making a bird feeder. You'll need pine cones, yarn, peanut butter and bird seed.

Gather a bunch of pine cones. Tie yarn or twine around the top of each one.

> Use a butter knife or Popsicle stick to cover your cones with peanut butter. Fill all the little spaces.

> > Pour birdseed into a small tub or cake pan. Roll your cones through the seed. Press firmly so plenty of seed sticks to the peanut butter. Keep rolling until each pine cone is completely covered.

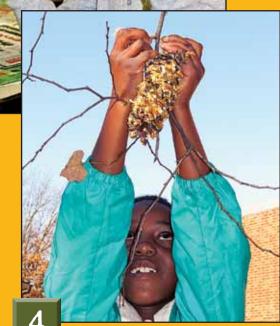
Vou can build bird

feeders out of lots of stuff. Visit www.xplormo.org to learn how to turn an empty bleach bottle into a feeder.

ANSWER TO

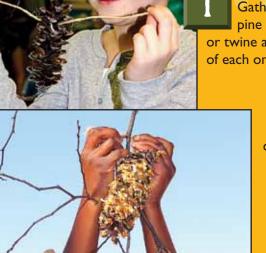


In winter, high-flying gaggles of snow geese head south in large, noisy groups. As they land on wetlands to feed, they look like swirling white snow. Not all snow geese are white. The darker ones are called blues. When snow geese feed, they pull plants out of the ground, roots and all. In some arctic areas, snow goose populations are so large they strip the ground bare. Missouri has a special hunting season to help lower their numbers.



Tie your pine cones to sturdy branches where you can keep an eye on them. In no time, hungry birds will arrive for

a feast! When your pine cones are picked clean, reuse them to make new bird feeders.



Check out the woodcock's A-MAZE-ING sky dance

Want front row seats to an incredible air show? Head to a wet pasture, woodland or cemetery around dusk between February and April. Listen for a sound like a bumblebee blowing its nose—peent. This is a male woodcock looking for a mate. When the peenting stops, watch the sky for the

outline of this chubby brown bird spiraling into the air. Creep over to where he took off and sit quietly. When he's just a speck in the sky, he'll fold his wings and dive, landing in nearly the same spot from which he took off. You'll be just a few feet away, but he'll be too intent on charming a female to notice.

Uh-oh. Each of these woodcocks is after the same female. Who gets the girl? Follow the lines to find out.

DON'T MISS ANOTHER ISSUE!

SUBSCRIBE ONLINE www.xplormo.org FREE TO MISSOURI HOUSEHOLDS



Not much bigger than a squirrel, American mink are small but deadly. Webbed feet help these all-terrain meat-eaters catch fish and frogs in water. With their feisty nature and astounding speed, on land they can attack larger prey such as rabbits.