









by David Stonner

6 Nothing Beats a Bull's-Eye Shooting a bow is a sure-fire way to build skills and have fun.

10 Campfire Cooking

Next time you pitch a tent, give these recipes a try.

#### DEPARTMENTS

- 1 What Is It?
- 2 You Discover
- 4 Predator vs. Prev
- 5 How To
- 14 Wild Jobs
- 15 Strange But True
- 16 Xplor More





GOVERNOR Jeremiah W. "Jay" Nixon

#### CONSERVATION COMMISSION

Don C. Bedell James T. Blair, IV Marilynn J. Bradford David W. Murphy

**DIRECTOR**Robert L. Ziehmer

XPLOR STAFF

Brett Dufur Les Fortenberry Karen Hudson

Regina Knauer Noppadol Paothong

Marci Porter

Mark Raithel

Laura Scheuler

Matt Seek

Tim Smith

David Stonner

Nichole LeClair Terrill Stephanie Thurber

Cliff White

Xplor (ISSN 2151-8351) is published bimonthly. It is a publication of the Missouri Department of Conservation, 2901 West Truman Boulevard, Jefferson City, M0 (Mailing address: PO Box 180, Jefferson City, M0 65102.) Subscription free to Missouri residents (one per household); out of state \$5 per year; out of country \$8 per year. Please allow 6–8 weeks for first issue. Notification of address change must include both old and new address (send mailing label with the subscriber number on it) with 60-day notice. Preferred periodical postage paid at Jefferson City, Missouri, and at additional entry offices. Postmaster: Send correspondence to Xplor Circulation, PO Box 180, Jefferson City, M0 65102-0180. Phone: 573-751-4115, ext. 3856 or 3249.

Copyright © 2014 by the Conservation Commission of the State of Missouri. Vol. 5, No. 4. August/September 2014 issue printed by RR Donnelley in July 2014 in Liberty, Missouri. Printed in the USA.

Send editorial comments to: Mailing address: Xplor Magazine, PO Box 180, Jefferson City, MO 65102-0180; Email: Xplor@mdc. mo.gov. Please note: Xplor does not accept unsolicited article queries, manuscripts, photographs, or artwork. Any unsolicited material sent will not be returned.

Equal opportunity to participate in and benefit from programs of the Missouri Department of Conservation is available to all individuals without regard to their race, color, national origin, sex, age, or disability. Questions should be directed to the Department of Conservation, PO Box 180, Jefferson City, MO 65102, 573-751-4115 (voice) or 800-735-2966 (TTY), or to the U.S. Fish and Wildlife Service Division of Federal Assistance, 4401 N. Fairfax Drive, Mail Stop: MBSP-4020, Arlington, VA 22203.



We recycle. You can, too! Share Xplor with friends.

ON THE WEB

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

#### DON'T KNOW? Jump to Page 17 to find out.

- 1 wear a fuzzy cap, but not on my head.
- ② I hit bottom in autumn.

- **3** Squirrels go nuts for me.
- 4 Everything about me is big and burly.



Dead Eye a BULL'S-EYE

As summer cools down, turn up the heat on your archery skills. Practice bull's-eyeing your target from a variety of distances and get ready for archery deer season (from September 15 through November 14; and November 26 through January 15). Learn more about archery deer and turkey regulations at mdc.mo.gov/node/3917. Don't have a bow? Learn how to make your own longbow at mdc.mo.gov/node/23955.

# Don't miss the chance to Discover Nature at

Learn to shoot bows and arrows at

#### FAMILY ARCHERY.

Parma Woods Range, Parkville; August 13, 6–8 p.m. Register at 816-891-9941. Discover what lives around you at

#### WILD BACKYARD

Anita B. Gorman Conservation Discovery Center, Kansas City; August 16, 10 a.m.—2:30 p.m. For info, call 816-759-7300.

# Bring in the bucks at INTRODUCTION TO DEER CALLING.

August A. Busch Memorial Conservation Area, St. Charles; September 25, 6–8 p.m.; Ages II and older. For info, call 636-441-4554.

White-tailed deer



Search for BUCK
Male white-tailed deer grow
a new poin of and any a new pair of antlers every

year. Throughout spring and summer, newly sprouted antlers are cloaked in a fuzzy covering called velvet. In the fall, bucks scrape off the velvet by rubbing their antlers against small trees and shrubs. Head to the woods in September to search for "buck rubs." If you find some, it's a good bet there's a buck nearby!

GET NUTTY

Take a walk under a towering oak and you may see dozens of acorns sprouting. Carefully dig up a few and you'll see the newly emerged taproot sprouting from the acorn. These perfect little trees-tobe are easy to transport to another ideal spot. There, you

can replant them and improve the odds of watching another mighty oak grow.

March with a Million and it what what down deep into dirt and piles of leaves. Millipedes like damp and dark places. On your next hike, dig down a few inches next to an old stump to study them. Remember — each body segment has two pairs of legs. They don't sting or bite, but some can emit a foul-smelling substance. Beware of biting centipedes — they only have one pair of legs per body segment.

Drop some DOVES What gray, fl

What's small and gray, flies at 40 miles per hour, and

performs mid-air dips and dives that would make a stunt pilot queasy? It's a mourning dove, and there's nothing more challenging than trying to drop a few with a shotgun.

Dove season opens September 1, so grab an adult, put on some camouflage, and pack plenty of shells. Doves flock

> to fields with lots of seeds and bare ground — mowed sunflower fields are perfect. For tips, visit xplormo.org/ node/15696.



Learn how to safely handle a rifle at YOUTH .22-CALIBER RIFLE CLINIC. Jay Henges Shooting Range, High Ridge; September 27, 8-9:30 a.m. Register at 636-938-9548.

Come learn why bugs are important at

#### THE BUZZ ABOUT BUGS.

Powder Valley Conservation Nature Center, Springfield; August 8, 6:30-9 p.m. For info, call 314-301-1500.



Looking for more ways to have fun outside? Find out about Discover Nature programs in your area at xplormo.org/node/2616.



ntlions are tiny insects that dig small, cone-shaped pits in sandy soil. When an ant bumbles into an antlion's pit, sliding sand keeps the ant from climbing out. The antlion waits at the bottom, ready to snare the unlucky insect for supper. To see this in action, keep an antlion as a house guest.

#### PREPARE THE LION'S LAIR Fill a bowl that's at least 5

inches wide and 4 inches

deep with 3 inches of sand. If you don't have sand, table sugar works fine.

Search loose, sandy soil in flower beds or beside houses for

antlion pits. When you find one, use a spoon to scoop out the entire pit. Sift the soil through a strainer and look closely — antlions are easy to mistake for a clump of sand. Once you've found an antlion, put it in the bowl you prepared.





#### MAKE THE LION FEEL AT HOME

Leave the antlion alone for a bit so it can build a new pit. To do this, the antlion will walk backwards in smaller and smaller circles, using its tail and head to flick sand out of the pit.



Feed the antlion two ants each day. Drop one ant at a time into the bowl and watch what happens. Sand at the bottom of the pit will stir. Soon the antlion's

head may pop out. If the ant tries to climb away, the antlion might flick sand to knock the ant back down.

RELEASE THE LION Antlions help control ant numbers in

the wild, which is

helpful to people. So, after the antlion has spent a few days as your guest, put it back where you found it.



# Beats EVAC by Brett Dufur Photos by David Stonner

The air is buzzing with excitement. Hundreds of archers fill the massive arena. They are the best of the best, here to compete in the annual statewide archery competition. They set their arrows, raise their bows, and breathe. They concentrate. Steady. They visualize a perfect arc for their arrows. Their breathing slows. It stops. Fifteen meters away, all that now exists is a distant target. Arrows fly. Bull's-eye.



The Conservation Department helps thousands of students hone their archery skills at school in Missouri's National Archery in the Schools Program (MoNASP). Jordan Guilfoyle and Luke Stephens, like many other students from around the state, continue to sharpen their skills outdoors in the pursuit of wildlife and fun.

#### The Rush of Competition

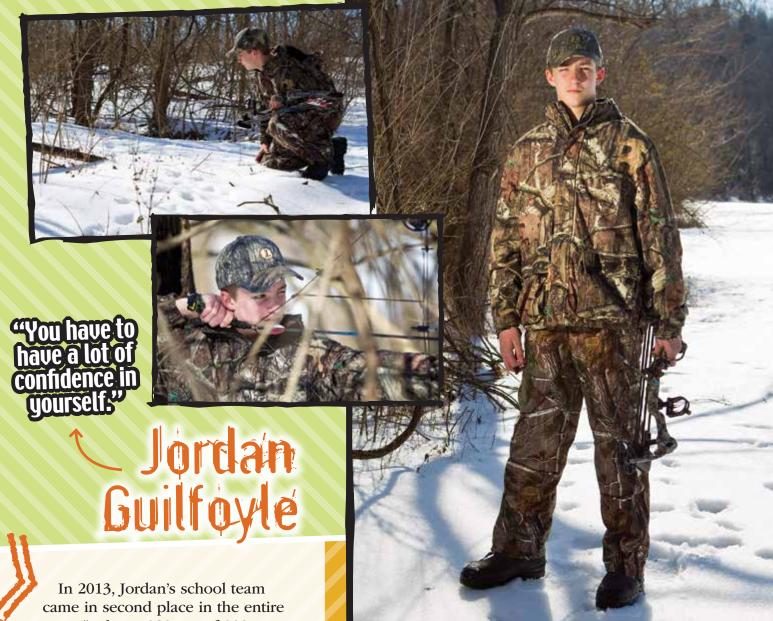
"What I love about archery is, it's all on you — you control everything," Jordan says. Jordan was introduced to archery by his dad, and has been shooting since he was 5 years old. Now he's 14 and is going into ninth grade this fall.

He started shooting a compound bow in elementary school. "We'd meet in the gym during school and after school a few times a week," Jordan says.

Once he started MoNASP, Jordan was hooked. He kept with it through middle school and plans to shoot in high school, as well.

"I like it because it's very competitive," Jordan says. "It pushes you to try your hardest. I've become a much better shot. And you meet a lot of really good people."

State, regional, and national competitions let archers in Missouri compete with students from around the state and country. Jordan says events are his favorite. "I'm real competitive. I really like the excitement."



In 2013, Jordan's school team came in second place in the entire state. "I shot a 282 out of 300. It was my personal best," he says. In MoNASP, a perfect score is 300. Each archer shoots 15 arrows from 10 meters, and 15 more from 15 meters.

Jordan likes to take the skills he's learned in competition to the field, hunting squirrels, turkeys, and deer. "I'm hoping to harvest my first deer this fall," Jordan says.

About archery, Jordan says, "It's a real thrill because you have to have a lot of confidence in yourself. It takes a lot of thinking to find your target and keep it there." Jordan's little brother likes to shoot with him. "He's 9 years old. He wants to do MoNASP, too."

### outdoor skills. Learn more at mdc.mo.gov/node/6209.

You can become a sharper, safer bowhunter at the

Conservation Department's archery ranges. Staff can help

you or your group master archery as well as many other

#### From Competition to the Field

Luke was also on Jordan's school team that placed second in the state. He'll be entering ninth grade this fall, too.

"Practicing is a major commitment," Luke says. "But I like to go and shoot arrows. It's fun, and you get a good feeling when you have a hot hand going — whenever you're shooting really good."

Luke has been shooting a bow since fourth grade and competing at nationals for the past five years. He plans



to shoot competitively through high school and has his sights set on applying for an archery college scholarship.

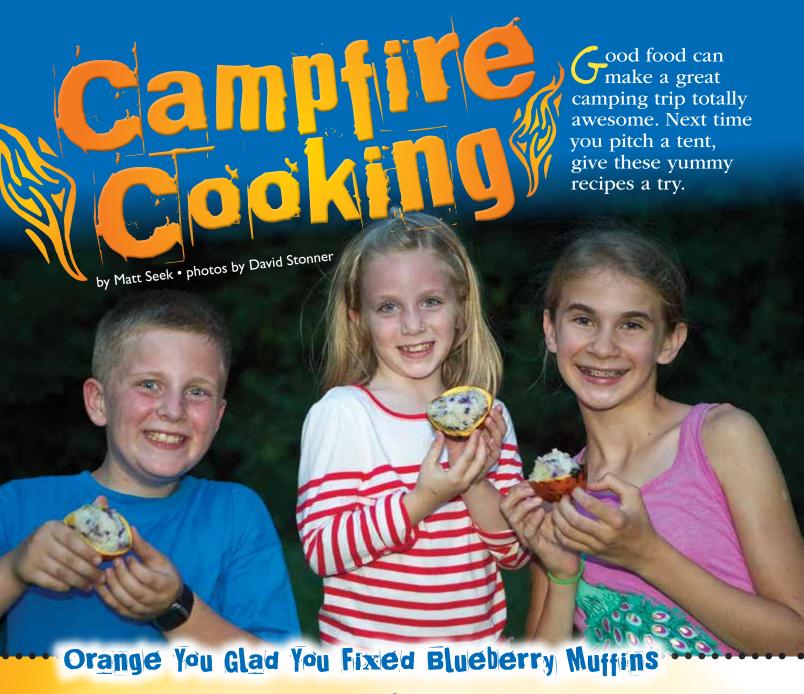
"I like to go bow fishing, too," Luke says. "I'm just starting out. I kind of learned by myself through trial and error. The tricky part is the water refraction. The water bends the light. So you have to stick the arrow tip under the water and adjust your aim to where the fish looks like it is. I've learned it's best to bow fish at noon, when there's less light refraction."

Last fall, Luke tried archery deer hunting for the first time. "It was fun even though I didn't get anything — but I did enjoy myself!"

MoNASP, and has become a mentor for those just starting out.

Luke's advice for beginning archers is: "Try new things and don't give up. You will get it eventually. Even after just a couple of weeks things started picking up for me."

Take your archery skills to the next level with Bowhunter Education. Be a better, safer, more successful bowhunter. Find free Missouri bowhunter education classes near you online at mdc.mo.gov/node/9723.



- \* 1 package blueberry muffin mix
- \* 6 large oranges
- Heavy-duty aluminum foil

#### At Home

Mix up the muffin batter according to the directions on the package. Pour the batter into a wide-mouthed plastic bottle.



1 Cut the oranges in half. Scoop out the fruit, leaving behind bowl-shaped peels.

- 2 Fill half the orange peels with muffin batter. Put empty peels over the top of the ones you just filled.
- 3 Wrap each orange in heavy-duty aluminum foil. Try not to let any of the batter leak out.
- 4 Carefully place the foil-covered oranges in a bed of hot coals. Now would be a good time to eat the orange wedges you scooped out earlier.
- 5 Use a long stick to roll the oranges every minute or so.
- 6 After 5 minutes, roll one of the oranges out of the coals. Carefully open the hot foil to see if the muffin is done. If it is, roll all the oranges out of the coals. If it isn't, put the orange back in the fire and check it again in another minute.



#### Eggs in a Raincoat

- ★ 8 large eggs
- \* Large pot

**\*** Tongs

- ★ ¼ cup milk
- \* Salt and pepper
- Shredded cheese
- \* Omelet fillings: onions, peppers, tomatoes, mushrooms, ham, smoked turkey, cooked bacon, or cooked sausage
- ★ Quart-sized zip-top freezer bags

#### At Home

- Orack the eggs into a mixing bowl, pour in the milk, and add a pinch of salt and pepper. Whisk until the mixture is creamy yellow.
- Pour an equal amount of egg goop into four zip-top freezer bags. Push all the air out of the bags and seal them shut.
- 3 Cut the omelet toppings into bite-sized pieces. Put each topping into its own zip-top bag. Store all the ingredients in a cold cooler until you're ready to use them.

#### At Camp

- Place a pot of water over a bed of hot coals.
- 2 While waiting for the water to boil, give each camper a bag of egg goop and let them add whatever fillings they want to the mixture.
- 3 Push the air out of the bags, seal them shut, and smoosh everything inside around until it's well-mixed.
- 4 Carefully place the bags in the pot of boiling water. Make sure none of the bags hang over the edge of the pot. You don't want the plastic to melt!
- 5 After 12 minutes, use tongs to fish the bags out

of the boiling water. cool a few minutes before digging in.



#### Pro Tip: For easy cleanup, rub dishwashing soap over the outside of your pot before you put it on the fire



#### Campfire Calzones

- \* Pita bread
- Pizza sauce
- \* Shredded mozzarella cheese
- Pepperoni slices
- Heavy-duty aluminum foil
- \* Tongs
- Cut each pita bread in half to form two pockets. Smear a thin layer of pizza sauce inside each pocket.
- 2 Stuff a handful of cheese and pepperoni into each pocket.
- 3 Wrap the pockets in aluminum foil and place them on hot coals.
- 4 After 2 minutes, flip them over. Wait another 2 minutes and then pull them off the coals. Let your calzones cool for as long as you can stand and then dig in.





#### Banana Boats

- \* Large bananas
- \* Mini marshmallows
- \* Chocolate chips
- ★ Graham crackers
- ★ Heavy-duty aluminum foil
- **\*** Tongs
- Without removing the peels, cut a slit down the length of each banana to form a pocket.
- Stuff the pockets with marshmallows and chocolate chips.

Pro Tip:

If you forget tongs,
you can use two long
sticks to pluck foil
packets out of the
coals.

3 Wrap the bananas in aluminum foil and place them on hot coals.

4 After 5 minutes, use tongs to pull the bananas off the coals. Let them cool for a bit, and then remove the foil. Crumble graham crackers over the bananas. Eat the ooeygooey goodness with a spoon.

AUGUST/SEPTEMBER 2014 1 13



#### Q: WHAT'S AN OMBUDSMAN?

A: An ombudsman is a person who makes sure peoples' questions get answered quickly, accurately, and courteously.

#### Q: HOW MANY QUESTIONS DO YOU GET?

A: I've responded to more than 36,000 questions since I became ombudsman, which averages to be about 400 to 600 questions a month.

#### Q: WHAT KINDS OF QUESTIONS DO PEOPLE ASK?

A: I get lots of "what is this?" questions.

People send me photos of something — a snake, an insect, an animal track — and ask me what it is. I also get lots of questions about hunting and fishing rules.

#### Q: WHAT'S THE STRANGEST QUESTION YOU'VE RECEIVED?

3 %

A: I once got a photo that was taken from an airplane. It looked like aliens had cut snowflake patterns into a forest. I found out — after lots of detective work — that it was a biology experiment. Scientists were trying to learn which shape was best for cutting down trees in an overgrown glade so that wildflowers would grow back.

#### Q: WHAT'S THE BEST PART OF YOUR JOB?

A: I get to learn new things about nature every day. Some things that most people see only once in their lives — like albino deer or rare birds — I get to see photos of on a regular basis. I also get to work with lots of smart, helpful conservation department employees. And, I get to make folks happy by answering their questions.





YOUR GUIDE TO ALL THE STUFF THAT GOES ON IN NATURE

#### WHITE BASS

hunt together in large, tight schools. The bass swim fast, chasing scads of shad to the surface. where the water boils with shad jumping to avoid being chomped. Unfortunately for shad, what goes up, must come down.

#### AMERICAN KESTRELS.

like many birds, can see ultraviolet light. Voles — small rodents that kestrels love to gobble — mark their

grassy trails with urine. To humans, the urine is invisible. But because a kestrel can see ultraviolet light, the urine glows like a neon sign pointing to dinner.

#### BADGERS and COYOTES sometimes

hunt together. These toothy teammates spell trouble for ground squirrels. If a squirrel scurries from its burrow. the crafty coyote pounces on it. If a squirrel stays put, the burly badger digs it up for dinner.



#### FLOWER MITES are too

tiny to travel far by walking. So how do they get from flower to flower? They ride the beak bus. When a hummingbird sticks its snoot in a flower, the mites make a mad dash up the bird's beak and hunker down in the hummer's nostril.



of eating one.

Spin cycle: BLACK-AND-YELLOW GARDEN SPIDERS usually eat their webs at night and re-spin new ones before morning. This is no easy feat. Large webs may contain 60 feet of silk.

CATTLE EGRETS often follow herds of cattle to snap up insects stirred up by the lumbering livestock.

Plucky egrets occasionally perch on top of a cow to pick yummy ticks off the cow's back.

To a hungry frog, a baby COPPERHEAD'S wiggling green tail looks like a tasty caterpillar. But when the frog approaches, the sneaky snake strikes, and the frog becomes a meal instead

It's never too late to see how much nature you can pack on your plate. We've put together two wild bucket lists: one for daytime and one for after dark. How many items can you check off?

#### SPOT A SWOOPING SWALLOW

Six kinds of swallows visit Missouri. Learn what they look like at allaboutbirds.org/ guide/browse.

SPOT AN ANIMAL

Humans don't count.

# WITH 2,4,6, AND 8 LEGS

#### SPOT AN ANIMAL'S TRACKS +

To identify who left the footprints, make tracks to mdc.mo.gov/node/4210.



For a list of what to look for, visit mdc.mo.gov and search "fall wildflowers."

# HUMMINGBIRD REFUEL

Stake out hummingbird feeders or tubeshaped flowers, especially red ones.

#### GET SCOLDED BY A SQUIRREL

Squirrels hate being bothered when they're gathering nuts. Listen for a grumpy cherk-cherkif you interrupt one.

#### RUN YOUR HAND OVER SOFT, GREEN MOSS

Mosses don't absorb water like other plants. So, most grow in moist, shady places.

#### HEAR A WOODPECKER HAMMERING

Woodpeckers have spongy skulls to cushion their brains.

# ORB WEAVER'S WEB

Harmless orb-weaving spiders build large, round webs in gardens, meadows, and under roofs.

#### COLLECT DIFFERENT KINDS OF LEAVES

This one shouldn't be hard. More than 150 kinds of trees grow in Missouri.

#### FIND A CREEPY-CRAWLY HIDING UNDER LEAVES

Rake through fallen leaves to find pillbugs, millipedes, small lizards, and salamanders.





To learn hoo's hooting, swoop over to xplormo.org/node/10548.

## SPOT A

Shine a flashlight over your lawn. The eyes of wolf spiders will glow green in the light.

# SPOT A BAGGING BUGS

Bats hunt where insects swarm. Look under street lights and over lakes and streams.

#### FIND A LUNA MOTH

Look around porch lights and stay up late. Luna moths flutter out after midnight.

#### GET SERENADED BY A SINGING KATYDID

Missouri is home to many kinds of katydids. To learn which one's singing, visit **xplormo.org/node/9029**.

# HEAR A

Coyotes yip and howl to say "I'm lonely," "Stay away," or "Let's find some rabbits to eat."

#### FIND The BIS Dipper

Look in the northern sky for seven stars arranged in the shape of a soup ladle.

#### SPOT A SHOOTING STAR

The Perseid meteor shower peaks on August 11–13.

# SPOT A SWOOPING

Look above street lights and listen for the bird's buzzy call: peent.

#### SPOT A MAMMAL OUT FOR A SNACK

Even in cities, raccoons, opossums, foxes, and deer come out after dark to feed.

# HEAR A MOCKINGBIRD SING

Mockingbirds sing — a lot. To hear one, visit allaboutbirds.org/guide/northern\_mockingbird.

# WHAT 15?

— FROM PAGE 1 —

Bur oaks produce the largest acorns of any tree in Missouri. The nuts, which are covered by fuzzy "caps," drop in the fall to the delight of squirrels and other animals. Uneaten acorns can grow into

massive trees. Missouri's largest bur oak is 90 feet tall, with limbs that spread 150 feet and a trunk 8 feet wide. The tree has been living near the Missouri River south of Columbia for about 400 years.



#### SUBSCRIBE ONLINE

xplormo.org/node/2618

FREE TO MISSOURI HOUSEHOLDS



Let's ditch this pad! When startled, bullfrogs squeak out short, high-pitched yelps as they hop to safety. When they're looking for mates, male bullfrogs make calls that sound like deep, rumbling burps. The calls can be heard more than half a mile away. Males battle for the best calling spots, pushing and shoving each other like slippery, green sumo wrestlers.