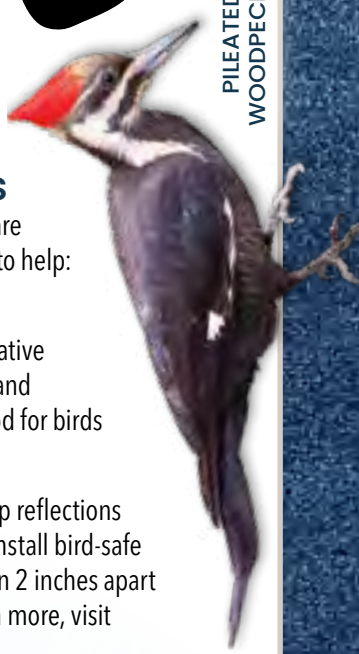
MISSOURI CONSERVATIONIST

VOLUME 87, ISSUE 12, DECEMBER 2026
SERVING NATURE & YOU





BIRDING IS AWESOME



In Your Yard

Get started by putting out a backyard feeder and heated water source when natural foods are tougher to find. This is especially helpful with snow cover or very low temperatures. Add a bird guide or online tool, such as the Merlin phone app, to help identify birds and learn more about their habitat.

On a Walk or Hike

Bundle up and head outside. Birds don't hibernate, and less foliage means you may see more birds and hear more sounds, from chirping to woodpeckers drumming. Remember to wear proper footwear, layer clothes, and take a snack, water, and binoculars for a better view. For a place to go, check out **mdc.mo.gov/MissouriBirdingTrail**.



Care About Birds

North American bird populations are declining. Here's what you can do to help:

Plant native plants, shrubs, and trees. Native plants attract native insects and have nutritious seeds and berries, which provide the best food for birds and their young.

Make windows safer to break up reflections and cut down on window strikes. Install bird-safe stickers, lines, or dots no more than 2 inches apart to the outside of windows. To learn more, visit **short.mdc.mo.gov/oMZ**.

Be a citizen scientist. Record sightings on eBird or join monitoring efforts like the annual Audubon Society's Christmas Bird Count. Learn more about how to get involved with this early winter bird census by visiting **tinyurl.com/ybropbvq**.

MISSOURI
CONSERVATIONIST



ON THE COVER

An American mink at Loess Bluffs National Wildlife Refuge.

DAN STAPLES
Reader photo, submitted via email

GOVERNOR Mike Kehoe

THE CONSERVATION COMMISSION

CHAIR Raymond T. Wagner Jr.
VICE CHAIR Frank H.B. Kruse
SECRETARY Edward C. Clausen
MEMBER Margaret F. Eckelkamp

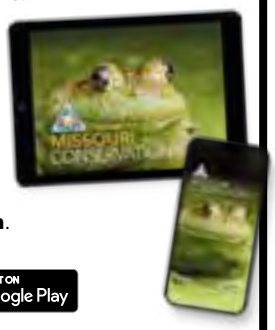
DIRECTOR Jason A. Sumners

DEPUTY DIRECTORS
Andrew Bond, Laura Conlee, Aaron Jeffries

MAGAZINE STAFF

MAGAZINE MANAGER Stephanie Thurber
EDITOR Angie Daly Morfeld
ASSOCIATE EDITOR Larry Archer
PHOTOGRAPHY EDITOR Ben Nickelson
STAFF WRITERS
Kristie Hilgedick, Joe Jerek, Dianne Van Dien
DESIGNERS
Kate Morrow, Marci Porter
PHOTOGRAPHERS
Noppadol Paothong, David Stonner
ARTIST Matt Byrde
CIRCULATION Marcia Hale

Made for people, by people.
No generative AI is used
in *Missouri Conservationist*.



Download this issue to your phone or tablet at **mdc.mo.gov/mocon**.

Download on the App Store | GET IT ON Google Play

Contents

DECEMBER 2026
VOLUME 87, ISSUE 12

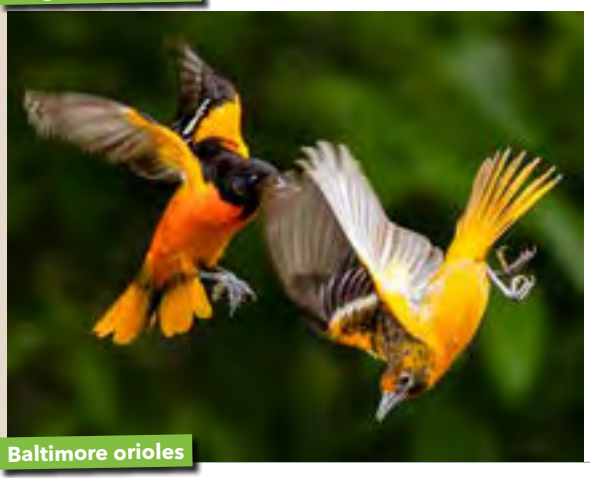


Spicebush swallowtail caterpillar

10



Ring-necked duck



Baltimore orioles

FEATURE

10
Nature, You, and a Camera
Move through the outdoors at a shutter speed.

DEPARTMENTS

2 Inbox
3 Up Front
4 Nature Lab at Work
5 In Brief
28 Get Outside
30 Places To Go
32 Wild Guide
33 Outdoor Calendar

Caterpillar | Kate Boysen
Duck | David French
Orioles | Dean Specker

Missouri Conservationist (ISSN 0026-6515) is the official monthly publication of the Missouri Department of Conservation, 2901 West Truman Boulevard, Jefferson City, MO (Mailing address: PO Box 180, Jefferson City, MO 65102.) 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, religion, national origin, sex, ancestry, age, sexual orientation, veteran status, 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 Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C Street, NW, Washington, D.C. 20240

Copyright © 2026 by the Conservation Commission of the State of Missouri. Reproduction in whole or in part without permission is prohibited.

SUBSCRIPTIONS: Print subscriptions are free to adult Missouri residents (limit one per household); out of state $13 per year; out of country $19 per year. Visit mdc.mo.gov/conmag, email subscriptions@mdc.mo.gov, or call 573-522-4115, ext. 3856.

Personal information is not sold to third parties, but it may be used for magazine reader surveys or provided pursuant to a lawful request for information. Notification of address change must include both old and new address with 60-day notice. Preferred periodical postage paid at Jefferson City, Missouri, and at additional entry offices.

POSTMASTER: Send correspondence to Circulation, PO Box 180, Jefferson City, MO 65102-0180.

Printed on recycled paper with soy ink

Inbox





Photography: It's All About the Light

by David Stonner

One of my favorite issues of the *Missouri Conservationist* is this one — the reader photos edition. Seeing the remarkable wildlife and landscape photography that our readers capture around the state is invigorating and spurs fellow readers to do some hiking and take a few photos of their own.

My fellow MDC photographer Noppadol Paothong and I have have an extensive amount of photographic equipment at our fingertips, and I'd venture a guess that quite a few readers featured in this issue do as well. But what if you have a more modest gear collection or none at all?

I'll bet that most people reading this have a smartphone. They have become quite sophisticated with multiple lenses and extremely high-resolution chips, paired with powerful image processors. At this point, I consider smartphones to be excellent cameras that can also make phone calls and scroll the web. An argument could be made that the quality isn't up to snuff, but renowned photographer Jim Richardson put that idea to rest over a decade ago with a *National Geographic* article he shot exclusively with an iPhone 5S.

Don't have a big zoom lens? Nop is fond of saying that the cheapest zoom lens you can find is your feet. No macro? Change your focus a bit and find a still life at your feet that you would otherwise walk past. Just the one lens that came with your camera kit? Try to isolate an element that drew your eye to a scene and focus on capturing that. Sometimes having limitations of a minimal setup can be freeing and force you to experiment to make a photographic idea come to fruition.

Exploring new locations is fun, but don't hesitate to go back to old haunts. Becoming intimately familiar with an area can help you learn animal patterns and how the light changes through the seasons, resulting in better photos.

Ultimately, great photos are not about the equipment. They are all about the light. That's what photography literally means — light drawing. From poignant animal portraits, peak action shots, vibrant blooms, and sweeping vistas, the thread that runs through this issue is a sublime quality of light. Above all else, pay attention to the light when you are taking photos no matter what kind of camera you have.

Now get out there and explore.

Want to see your photos in the *Missouri Conservationist*?

Submit your photos online via mdc.mo.gov/magazine-reader-photos, or by emailing readerphoto@mdc.mo.gov

Missouri Conservationist does not accept AI-generated photos.

→ We plan to feature more great reader photos in 2027. Use the submission methods, detailed in the box at left, to send us your best year-round pictures of native Missouri wildlife, flora, natural scenery, and friends and family engaged in outdoor activities. Please include where the photo was taken and what it depicts.



Lapland longspur by David French

PHOTO OF PHOTOGRAPHER: THOMAS MITCHELL; TURTLE: DAVID STONNER

Letters to the Editor

Submissions reflect readers' opinions and may be edited for length and clarity. Email Magazine@mdc.mo.gov or write to:
MISSOURI CONSERVATIONIST
PO BOX 180
JEFFERSON CITY, MO 65102

PLANTING SEEDS



I want to tell you what an impact you have had on us and our son, Adam. When he came home from school on Arbor Day as a fourth grader, he had a small bur oak sapling, provided by MDC. We planted that tree together 30 years ago. It is the best tree in our yard.

With it being a mast year of acorns, I'll be planting them and giving them away for others to plant, as well. We will also leave plenty for the wildlife.

Adam went on to get his degree in biology and works for the California Native Plant Society and loves the work he does.

We love reading your magazine and thank you for the impact you make in all of our lives.

Beverly Hoeft Washington

I have been a subscriber to the *Missouri Conservationist* for decades. When you introduced *Xplor*, I subscribed for my children. I enjoyed reading it every other month as much as they did. I think your magazines helped influence one of my daughters to get a degree from the University of Missouri in animal sciences. She is currently employed at the Endangered Wolf Center in Eureka.

Congratulations on your recent milestone of 100 issues of *Xplor* [September/October 2026]. Keep up the excellent work on both magazines.

Chris Fassler via email

Up Front



Conservation is personally experienced in many different ways. There is something special about seeing the outdoors through someone else's eyes. This can take many shapes, whether it's an expression of awe on a child's face, seeing something spectacular in nature for the first time, or a photo captured through a camera's lens by someone with a deep love of nature. This month's *Missouri Conservationist* celebrates the amazing creatures, the special places, and incredible moments submitted by people who share a special connection with Missouri.

Moments memorialized in time via photos, sketches, and paintings that capture the essence of nature, or cartoons connecting to real world issues, have always played an important role in telling the story of conservation. Last month, while spending time in Iowa, I was reminded of the influence of one of conservation's most iconic artists, Jay "Ding" Darling. Through drawings, he used his Pulitzer Prize-winning abilities to bring attention to declining wildlife populations, loss of prairie and wetland habitats, and the need for wise use of our natural resources. Darling understood the power of images to shape public opinion.

He is directly connected to Missouri's conservation history. Darling was among those in attendance at the Tiger Hotel in 1935 when a group of concerned individuals rallied together to form what we know today as the Conservation Federation of Missouri. His work helped launch the Federal Duck Stamp Program, National Wildlife Refuge System, the Cooperative Fish and Wildlife Research Units, and much more.

Photography continues the tradition of telling the stories of conservation, which is more than managing fish, forest, and wildlife. It is about connecting people to nature and the reasons we all work to protect it. This month's photos offer a snapshot of that connection. I hope you enjoy seeing Missouri through the eyes of others and find some inspiration to capture your own conservation story.



JASON SUMNERS, DIRECTOR
JASON.SUMNERS@MDC.MO.GOV

Missouri Conservation Commissioners

Have a Question for a Commissioner?
Send a note using our online contact form at **mdc.mo.gov/commissioners**.



Raymond T. WAGNER JR.



Frank H.B. KRUSE



Edward C. CLAUSEN



Margaret F. ECKELKAMP

Nature LAB at WORK

by Angie Daly Morfeld







The Missouri Department of Conservation team is diverse and dedicated to conserving, protecting, and improving our fish, forest, and wildlife resources.

Tracey Prenger

FIRE ECOLOGIST

As a fire ecologist, Tracey Prenger develops and provides science-based information on prescribed fire for MDC staff and external partners. MDC encourages the use of prescribed fire as a tool for land management.

A TYPICAL DAY

Prenger says her days are varied, but the seasons tend to dictate her schedule. During the growing season, she assists area managers, evaluating burn units or assisting with vegetative sampling and surveying. Burn season is on her schedule during the fall and winter, when Prenger often helps teams across the state with their prescribed burn operations. Throughout the year, she works with MDC staff and external partners, reviewing past burns and providing guidance, tools, and resources to assist with future burn operations.

"This position is very much statewide, and I try to make myself available to department staff and partnering agencies," Prenger said. "Collaboration is imperative to the success of my position and the science behind implementation of fire."

NOTABLE PROJECTS

"I've been in this position for a little over a year and I've made a commitment to meeting staff across the state during that time," Prenger said. "Through these discussions, I've been fortunate to identify opportunities that align with area managers and their burn needs."

Prenger is suggesting a Go-No-Go Framework for burn practitioners. Under this new framework, burns would consider seasonal and observational cues alongside calendar dates. This framework requires collaborative discussions that include wildlife and natural community experts and burn practitioners to implement safe and effective prescribed fire.

Another notable project is an upcoming study between MDC, Missouri Department of Natural Resources' Division of State Parks, Mark Twain National Forest, National Park Services, and the University of Missouri regarding prescribed fire seasonality and its effects across several natural communities.

Finally, Prenger explained they are merging two long-term projects — the Missouri Ozark Forest Ecosystem Project and the Chilton Creek Prescribed Burning Project — to study the effects of prescribed fire and forest management practices.

"A lot of our area managers use both management tools for restoration efforts and having a better understanding of how the two work together across large landscapes is huge," Prenger said.

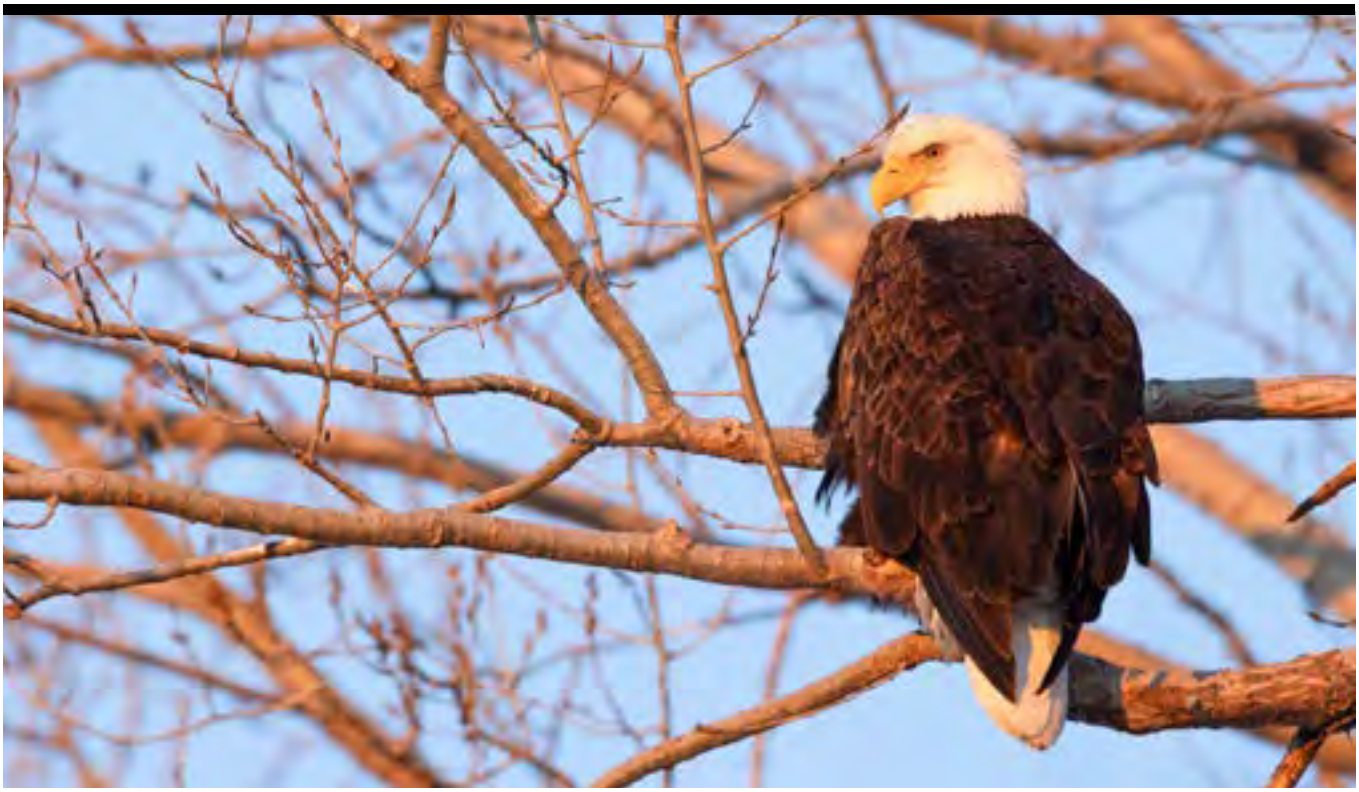
Her Education

- Bachelor's degree, University of Central Missouri: biology, emphasis in ecology and evolution
- Master's degree, University of Florida: forest resources and conservation, emphasis in ecological restoration

DAVID STONNER

Explore career opportunities at MDC at **jobs.mdc.mo.gov**

In Brief



MISSOURI OFFERS SPECTACULAR EAGLE WATCHING

DISCOVER NATURE THROUGH EAGLE-VIEWING OPPORTUNITIES, LOCATED AROUND THE STATE



NOPPADOL PAOTHONG

From December through February, Missouri's winter eagle watching is amazing. Because of our big rivers, many lakes, and abundant wetlands, the Show-Me State is one of the leading lower 48 states for bald eagle viewing.

Each fall, thousands of these great birds migrate south from their nesting range in Canada and the Great Lakes region to hunt in Missouri. Eagles take up residence wherever they find open water and plentiful food. More than 2,000 bald eagles are typically reported in Missouri during the winter.

Watch for eagles perched in large trees along the water's edge. Early in the morning you can see them soaring and trying to catch fish. Be sure to dress for winter weather and don't forget cameras and binoculars.

Here is list of the best places to catch a glimpse of an eagle:

- Lake of the Ozarks at Bagnell Dam Access, east of Bagnell
- Eagle Bluffs Conservation Area on Route K, southwest of Columbia
- Lock & Dam 24 at Clarksville
- Lock & Dam 25, east of Winfield
- Mingo National Wildlife Refuge, northwest of Puxico
- Old Chain of Rocks Bridge south of I-270, off Riverview Drive, St. Louis
- Riverlands Migratory Bird Sanctuary, east of West Alton
- Schell-Osage Conservation Area, north of El Dorado Springs
- Smithville Lake, north of Kansas City
- Loess Bluffs National Wildlife Refuge, south of Mound City
- Swan Lake National Wildlife Refuge, south of Sumner
- Table Rock Lake and Shepherd of the Hills Fish Hatchery, southwest of Branson
- Truman Reservoir, west of Warsaw

For more information, visit **short.mdc.mo.gov/Zt6**.

MDC AND MCFC HONOR MISSOURIANS FOR MAKING TREES WORK

MDC and the Missouri Community Forestry Council (MCFC) congratulate Bekki Galloway of Fayette, the City of Carthage, Brown Bear Tree Care of Springfield, and the Benton Park Neighborhood Association on being outstanding stewards of community trees. Russell Hinnah, MDC's community forestry coordinator, recently presented Missouri Arbor Awards of Excellence to each of the four honorees at the annual Missouri Community Forestry Council Conference in Springfield.

"For more than 30 years, MDC and MCFC have recognized Missourians who prove themselves to be outstanding stewards of community trees," said Hinnah. "The Missouri Arbor Awards of Excellence highlight the people and organizations working to provide sustainable, long-term efforts to care for trees. Their work is extremely important to ensure the many economic, social, and environmental benefits of a healthy community forest."

Hinnah added that no matter what size the community, trees are visible and valuable assets that contribute greatly to the appearance and character of the town.

"They are also part of the public infrastructure and play an essential role in the community, similar to streets, sewers, and utilities," he said.

The awards were presented to recipients in four categories: Individual, Municipalities/Governments, Business/Institution, and Organization. Nominations for this year's awards were evaluated based on sustainability, innovation, use of sound tree management principles, contribution made to the community, and the effectiveness of the tree care work, event, or program.

Individual Category — Bekki Galloway

Bekki Galloway is the driving force behind the City of Fayette's urban forestry program. She maintains the city's Tree City USA designation, secures crucial grants, collaborates with arborists, and dedicates countless hours to hands-on tree care, planting, mulching, and watering.

Municipal Category — City of Carthage

Following a major spring storm in 2024 that caused severe damage, Carthage leveraged the MDC Landowner and Community Assistance Program and community support to rebuild its urban tree canopy. The city also took advantage of the opportunity to remove ash trees threatened by the emerald ash borer.

Business/Institution Category — Brown Bear Tree Care

Founded by certified arborist Dakoda Reynolds, Brown Bear Tree Care emerged to support the greater Springfield metro area after devastating storms struck in April and June 2025. Demonstrating deep community commitment, Reynolds helped launch emergency debris-clearing efforts ahead of Springfield's July citywide cleanup day, aiding residents struggling with heavy storm damage.

Organization Category — Benton Park Neighborhood Association

The Benton Park Neighborhood Association formed the Friends of Benton Park committee to support municipal efforts in maintaining one of St. Louis's historic parks. By leveraging partnerships with groups like Missouri Master Naturalists and Brightside St. Louis, volunteers have revitalized native gardens and removed invasive species.



Eastern cottontail

Ask **MDC**

Got a Question for Ask MDC?
Visit mdc.mo.gov/contact-us



Yellow-bellied sapsucker damage

Q: This was on my pine tree. These markings are 4 feet from the ground and encircle the trunk. Can you tell me what caused them?

→ This damage was likely caused by a yellow-bellied sapsucker. They drill small, often evenly and closely spaced holes in trees to extract the sweet sap. In the process of drilling, they eat the inner bark, drink the sap, and catch insects, such as ants, that are attracted to the sap. Other animals are also known to use these sap wells, including the ruby-throated hummingbird.

When sapsuckers drill too many holes in any one tree, especially in small ones, they can girdle it, cutting off the flow of sap to the branches, possibly killing the tree. In most cases, these woodpeckers do not cause serious damage to mature trees. But it can be a problem when it happens to trees valued by humans.

Q: How can I create better habitat for eastern cottontail rabbits?

→ One of the best means of improving habitat for cottontails

YELLOW-BELLIED SAPSUCKER DAMAGE: JEAN HOLTGREWE; COTTONTAIL & HAIRY WOODPECKER: JIM RATHERT; DOWNY WOODPECKER: NOPPADOL PAOTHONG

is to provide plenty of cover — for nesting, escape, and shelter from the weather — interspersed with desirable feeding areas, according to *The Wild Mammals of Missouri*.

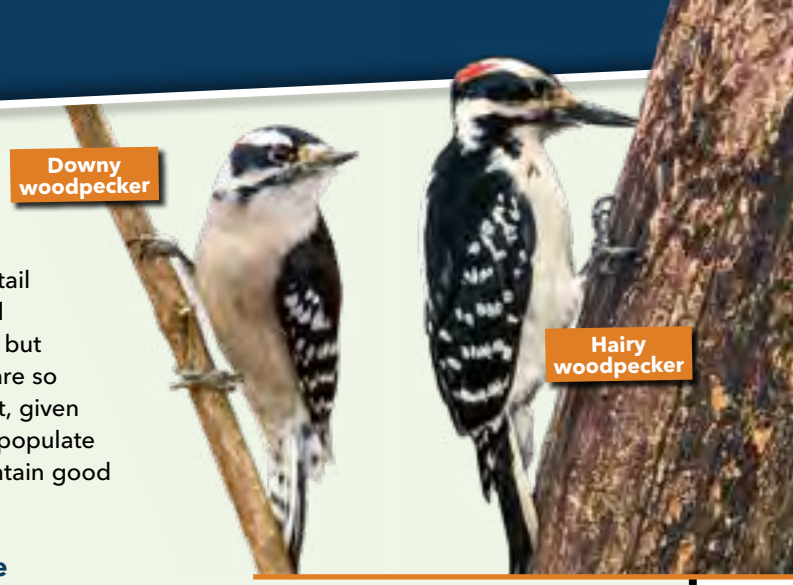
Cottontails are highly adaptable and are found in practically all types of cover. However, they prefer an open brushy or forest-border habitat. While they may venture out into the open, they usually do not go far from the sanctuary of some good cover, such as brushy and herbaceous fencerows, hedge fences, thickets, dense high grass, weedy growth, or brush piles.

During most of the year, the cottontail's home is a "form" or concealed resting place. A form consists of a well-worn or slightly scratched-out depression, usually with a single opening that the rabbit faces. Sometimes forms are owned by a specific rabbit, but mostly they're used by all the cottontail residents. In times of heavy snow, rabbits will use the dens of other mammals, particularly groundhogs, for temporary homes.

For her young, the mother digs a cavity in the ground about 3.5 inches deep. The nest is lined and covered with grass and with fur plucked from her belly. She usually selects a well-drained spot.

Eastern cottontails feed almost entirely on plants, preferring succulent green vegetation. The three most preferred foods during all seasons are bluegrass, wheat, and white clover. Other foods include red clover, Korean lespedeza, crabgrass, timothy, and common chess.

Many of Missouri's grassland areas have been encroached upon by trees. Restoring native grassland habitat can result in improved rabbit numbers. Rabbits can be trickier to hunt in grasslands, but ultimately, they support more rabbits and rabbit production. Cottontail populations have declined in some parts of Missouri, but fortunately these rabbits are so prolific and adaptable that, given the opportunity, they will populate suitable habitats and maintain good numbers.



Q: How can you tell the difference between a downy woodpecker and a hairy woodpecker?

→ The main difference is size. Hairy woodpeckers are about the size of a robin, and they average 9.25 inches long. Downy woodpeckers are smaller; they tend to be about 6.5 inches long. The size of the bill also is the most helpful visual clue. A downy woodpecker's bill is short and dainty, about half the length of its head. A hairy woodpecker's bill is about the same length as its head.

These birds' neck markings also offer clues. Downy woodpeckers usually have whitish feathers on the front and sides of the necks; hairy woodpeckers have a comma-shaped black line on their necks extending from their shoulders toward their throats. Downy woodpeckers also have black spots on their white outer tail feathers; hairy woodpeckers do not.

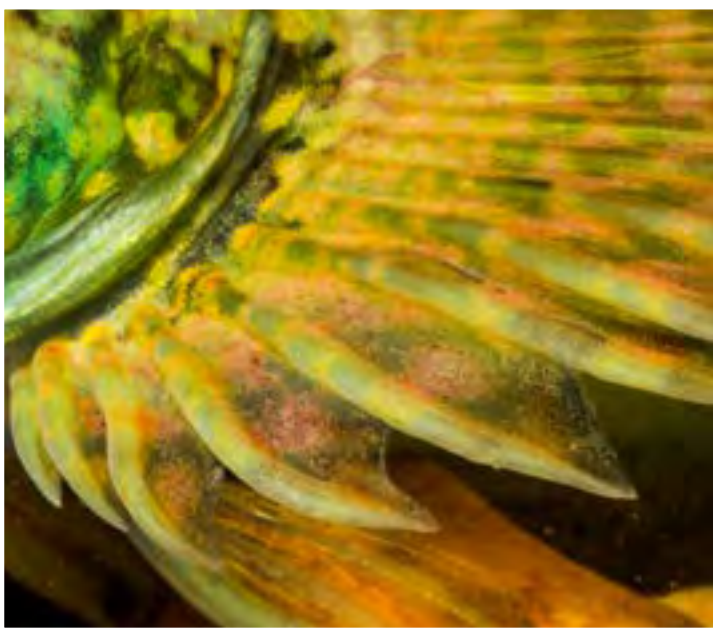
The vocalizations are different, too. A downy woodpecker's call is a high-pitched rattle that descends at the end. A hairy woodpecker's rattle is similar but doesn't fall at the end.

But the primary clue is the birds' size, which can be challenging to distinguish in the field if you don't see its bill clearly. For that reason, some observant birders mark their feeders with measuring tape or a ruler to better gauge the length of visiting birds.

What IS it?

Can you guess this month's natural wonder?

The answer is on Page 9.



PECAN-ORANGE GRANOLA

You may look at this recipe and think, that's a lot of granola! But you will be surprised how fast you go through it. It's great as a morning cereal with milk or yogurt. It's the perfect grab-and-go snack. And it's sure to keep you fueled on those nature hikes you promised you'd take as part of your New Year's resolution.

Makes about 5 pounds (a generous gallon) of granola

INGREDIENTS:
8 cups rolled oats
2 cups coarsely chopped pecans
2 cups raw sunflower seeds
1 cup sesame seeds
1 cup shredded unsweetened coconut
1 teaspoon salt
1 cup honey
¾ cup vegetable oil
1 teaspoon almond extract
Juice and zest (chopped) of 4 oranges
2 cups chopped dried fruit

PREHEAT oven to 350 degrees. In a large mixing bowl, toss together the oats, nuts, seeds, coconut, and salt. Over low heat, warm the honey and oil in a medium saucepan, stirring until well combined. Remove from heat and stir in almond extract and orange juice. Pour over the dry ingredients and stir well with a wooden spoon. Work the mixture with your hands if needed, until everything is damp.

SPREAD mixture no deeper than ½ inch on large, rimmed baking sheets. Bake for 30 to 40 minutes, stirring several times, until crispy and golden. When the granola has cooled, stir in the zest and dried fruit. Store granola in jars.



This recipe is from *Cooking Wild in Missouri* by Bernadette Dryden, available for $16 at most MDC nature centers and online at mdcnatureshop.com.



Call Before You Cut

Learn if harvesting is right for your woods.

5 REASONS TO CALL BEFORE YOU CUT

- ✔ Improve wildlife habitat
- ✔ Protect water quality
- ✔ Enhance air quality
- ✔ Harvest the proper trees to keep the forest healthy
- ✔ Ensure your overall satisfaction with the timber harvest

Request a free informational packet about working with a professional forester to take care of your woods.

callb4ucut.com
877-564-7483

WHAT IS IT?

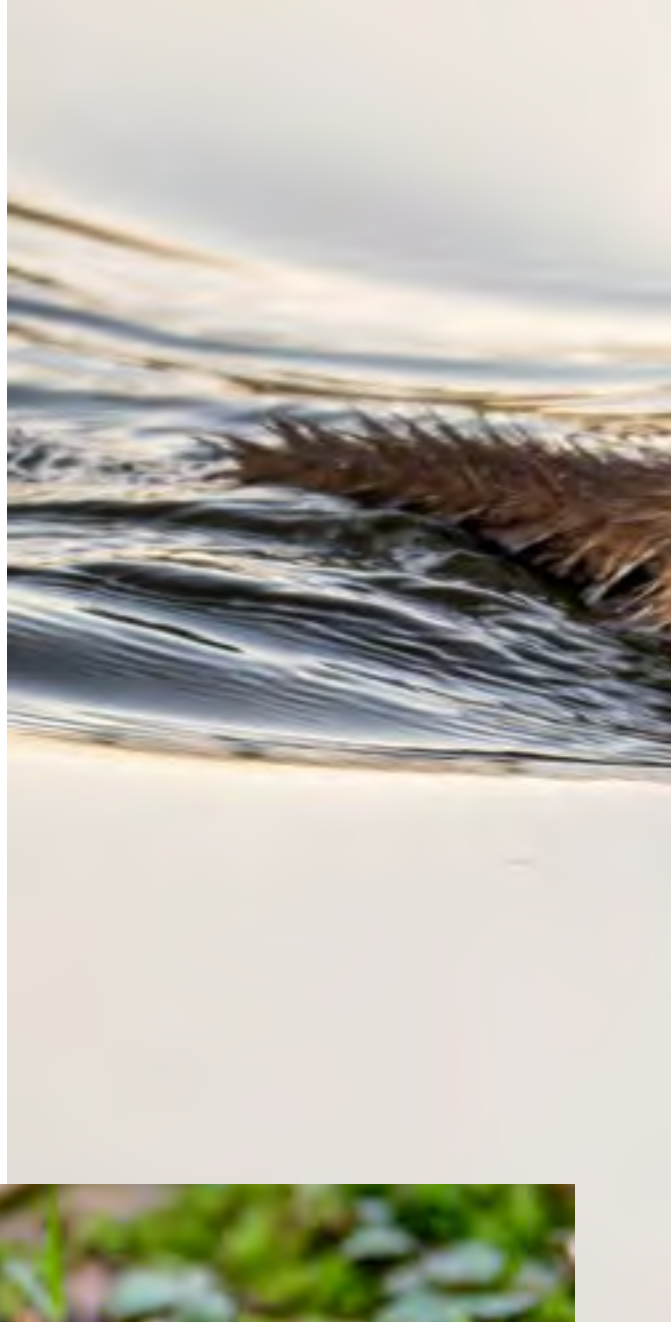
OZARK SCULPIN

Ozark sculpins occur only in the Osage, Gasconade, and Black river systems and in the Ozarks of southern Missouri and northern Arkansas. These bottom-dwelling fish use their flattened bodies and enlarged pectoral fins to anchor their positions in strong stream currents. Ozark sculpins have large mouths, which allow them to swallow prey as large as themselves, including other sculpin. Spawning begins as early as mid-December.



SCULPIN: JIM RATHERT, GRANOLA: BERNADETTE DRYDEN

Nature, You, *and a Camera*



MOVE THROUGH THE OUTDOORS AT A SHUTTER SPEED

Since its invention in the early 1800s, the camera, and the technology that makes it click, has come a long way. Through this evolution, photography has become an attainable and accessible hobby. Today nearly everyone has a camera right at their fingertips — whether it be through a point-and-shoot camera or through a smartphone. And even these pocket-sized cameras are remarkably sophisticated, capable of producing top-notch, quality photos.

In the next several pages, you will get a glimpse of nature through the camera lens of your fellow *Missouri Conservationist* readers. This is the fifth December issue we have turned over to you, our readers. Since 2022, you have taken us on your journeys, hikes, hunts, fishing trips, and much more, equipped with a sense of adventure and armed with a camera. And we couldn't be more thrilled with the results.

In the new year, make a resolution to get out into nature with a camera, even if it is just the one on your smartphone. You may be surprised at what you will discover. ▲



Prairie ring-necked snake | ZACKARY SNYDER



American mink at Loess Bluffs National Wildlife Refuge | DAN STAPLES



Snow geese at Loess Bluffs National Wildlife Refuge | CINDY TODD

Little blue heron | JACK BACKS





Pileated woodpecker | JOE FASIG

Bald cypress at sunrise | TOM STRUTZ



Great blue heron eats trout | JOHN MONTRE



Bufflehead in flight | MICHEAL WOODS





White-tailed doe and fawns | ROBERT CHARITY



Eastern gartersnake eats North American bullfrog | JACK BACKS





"The best thing about nature photography is that it forces you to slow down and appreciate the world around you."

— **DAVID HEMMINGS**, *THE MINDS JOURNAL*

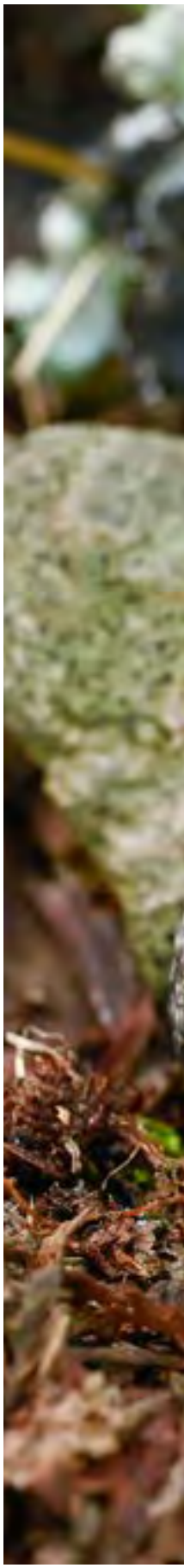
Eastern coachwhip | CHAD WALLIS



Wild turkey | ERIC WILHOIT



Eastern whip-poor-will | CHRISTIAN GOTT





Western pygmy rattlesnake | AARON HAMPTON



Green cone-headed planthopper | BRYAN HUNT



Jumping spider | COLLIN WELLS



Spring peeper | STEVEN HADDIX



White-tailed deer | ASHLEY BRYANT



Snow geese | DAN PEAK



Wood ducks | MARK RAMSEY



Cypress trees at August A. Busch Memorial Conservation Area | MARK PUTNAM



Bald eagle | FREDERICK EMCH



Snow on The Pinnacles Natural Area | ROBERT CHARITY



Ruby-throated hummingbird | STEVEN HADDIX



Barn swallow | STEVEN HADDIX





Virginia opossum | JAN BERNDTSON

Get Outside in DECEMBER



Ways to connect with nature

Holiday Cheer from Nature

Eastern red cedars are a great choice for indoor and outdoor holiday decorating. They have a beautiful natural juniper scent, boughs of female trees are decorated with blue, berrylike fruits, and they are abundant. Although many Missourians today purchase pines and spruces from Christmas tree farms or use artificial Christmas trees, red cedar used to be the traditional favorite in many homes. Plus, when the season is over, you can return red cedar to nature to be used as cover for wildlife.



Christmas ferns are one of the most common ferns in Missouri woodlands. This perennial fern's leathery leaves are evergreen, and pioneers used them for making Christmas wreaths, hence the name.



Bird Bonanza



Winter is a great time for birding! Whether you are experienced or just beginning, there is something for everyone. So, grab those binoculars and a bird ID book and let's get started!

You don't have to go far to bird. Start in your own backyard! With cold weather setting in, put up a bird-feeding station. You will be amazed at some of the common winter birds you will attract, including dark-eyed juncos, house finches, northern cardinals, and black-capped chickadees. For tips on getting a feeder set up, visit **mdc.mo.gov/wildlife/birds**.

If you want to venture away from home, visit a wetland or a local lake, pond, or river and look for ducks and other waterfowl, including **mallards**, **green-winged teals**, **common mergansers**, and **buffleheads**.

EASTERN RED CEDAR: JOHN RUTER, UNIVERSITY OF GEORGIA, BUGWOOD.ORG; CHRISTMAS FERN: REBEKAH D. WALLACE, UNIVERSITY OF GEORGIA, BUGWOOD.ORG; RACCOON: SURPYART, STOCK.ADOBE.COM

Natural Events to See This Month

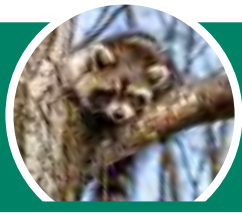
Here's what's going on in the natural world.



Oyster mushrooms, choice edibles, appear in winter.



Trumpeter swans visit marshes, lakes, and rivers.



Raccoons may lie on limbs or other high spots on warm sunny days.

Put Your Coat On!

Moms the world over have yelled this a time or two hundred at their little ones ready to play in the snow but can't be bothered to stop long enough to put on the proper paraphernalia.

Moms in the wild don't have this same struggle. Mammals are already equipped with a coat, so they're all set for winter, right? Wrong!

Mammals grow thicker, longer coats in preparation for winter, insulating them from the cold and preventing loss of body heat. Here are some examples:



- An elk's long, dark, shaggy mane, which hangs from the neck to the chest, is heaviest during winter.
- A deer trades in its reddish-brown to tan coat for its winter coat, which is grayish to grayish-brown. The back hairs are black tipped, giving a darker appearance, but the black chin patch is less sharply defined. The winter coat is long and heavy and easily repels cold rain and wet snow.
- Eastern gray squirrels are more silvery gray in winter and their fur is much longer. In addition, their ears have a noticeable fringe of white fur.

VIRTUAL

WILD GAME COOKING: Recipes and Wrap-Up

Thursday • Dec. 17 • 5:30–6:30 p.m.
Online only
Registration required by Dec. 17. For more information, call 888-283-0364 or visit short.mdc.mo.gov/oxV.
All ages

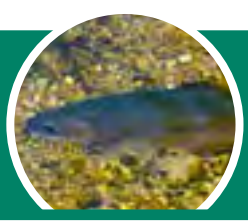
Join us for this beginner's class where we will cover deer and turkey recipes.

VIRTUAL

LEARN TO FISH: Fly Tying at Home

Thursday • Dec. 17 • 6–7 p.m.
Online only
Registration required by Dec. 17. For more information, call 888-283-0364 or visit short.mdc.mo.gov/ox9.
Ages 14 and older

Conservation Educator Ginger Miller will tie flies from the bargain store and showcase some 3D printed tools.



Rainbow trout spawn in Ozark streams.



Common buckeye butterflies appear on warm days.

→ CONSERVATION NEAR YOU

Craving more local conservation connections? Find events near you at **mdc.mo.gov/events**, or catch the latest on social media. Reach out to your closest regional office and learn about events from MDC staff. Outdoor fun awaits. Get out there!





Get Social

Join the conversation and connect with us on social media. Search "MO Conservation" to follow us on Twitter (X), Facebook, YouTube, Instagram, Pinterest, and Flickr.

Conservation Headquarters

573-751-4115
PO Box 180, Jefferson City, MO 65102-0180

Regional Offices



Central
573-815-7900
3500 E. Gans Rd.
Columbia, MO 65201

Kansas City
816-622-0900
12405 SE Ranson Rd.
Lees Summit, MO 64082

Northeast
660-785-2420
3500 S. Baltimore
Kirksville, MO 63501

Northwest
816-271-3100
701 James McCarthy Dr.
St. Joseph, MO 64507

Ozark
417-256-7161
551 Joe Jones Blvd.
West Plains, MO 65775

Southeast
573-290-5730
2302 County Park Dr.
Cape Girardeau, MO 63701

Southwest
417-895-6880
2630 N. Mayfair
Springfield, MO 65803

St. Louis
636-441-4554
2360 Hwy. D
St. Charles, MO 63304

Places to Go

KANSAS CITY REGION

Burr Oak Woods Conservation Area

Indoor-outdoor nature

by Larry Archer

Winter typically sends people hunkering down indoors, but hearty souls will also bundle up and head outdoors. For those looking for both, Burr Oak Woods Conservation Area (CA) can accommodate your needs.

Located on 1,071 acres in Jackson County, Burr Oak Woods CA offers nearly 17 miles of trails, service roads, and hikeable fire lines, but when the wind gets nippy, folks can also head indoors, said MDC Wildlife Biologist Brent Thee.

"Mainly in the winter, the nature center gets a lot of activity as a way to get away from the cold," Thee said.

Burr Oak Woods Nature Center includes displays and interactive and live exhibits, helping visitors stay warm while getting their dose of nature. But on the warmer days — or for those who enjoy the challenge of cold-weather activities — there's plenty of opportunities outdoors, Thee said.

"On the nicer winter days, we do have increased trail usage," he said.

Most of the maintained trails are in the area's lower two-thirds south of NW Pink Hill Road, but the upper third is also accessible through mowed service roads and fire lines.

"If you're wanting to get away from the people, there's good wildlife viewing up there, too," he said.





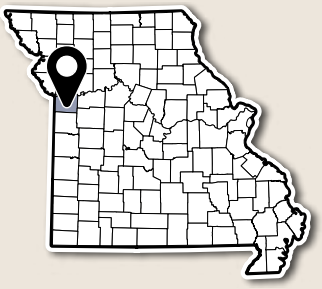
"The most distinct feature of the area is the limestone bluffs on the north side of the area. There are limestone bluffs and limestone outcroppings throughout the area. The best place to see those would probably be Bethany Falls Trail and the Wildlife Habitat Trail."

—MDC Wildlife Biologist Brent Thee

DAVID STONNER



Burr Oak Woods Conservation Nature Center provides indoor nature opportunities, but the more than 1,000 surrounding acres also offer winter hiking and nature viewing.



BURR OAK WOODS CONSERVATION AREA

consists of 1,071.4 acres in Jackson County. In Blue Springs, take Highway 7 north of I-70 for 1.10 miles, then west 1 mile on Park Road to the area.

39.048, -94.2786

short.mdc.mo.gov/Z4K 816-228-3766

WHAT TO DO WHEN YOU VISIT

Birdwatching
Included in the Missouri Birding Trail (**short.mdc.mo.gov/oin**). The eBird list of birds recorded at Burr Oak Woods CA is available at **short.mdc.mo.gov/oSP**.

Hiking
Six trails totaling 5.7 miles, including two paved trails totaling 1.25 miles, one of which is ADA accessible. Also 11 miles of mowed service roads and fire lines open to hiking.

Hunting
Managed deer hunting only.

Tours
By appointment only.



Red-headed woodpecker

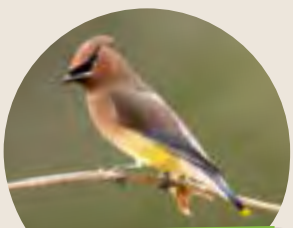
WHAT TO LOOK FOR WHEN YOU VISIT



Wild turkey



Carolina wren



Cedar waxwing



White-tailed deer

Wild Guide



Black-Capped Chickadee

Poecile atricapillus

Status	Size	Distribution
Common permanent resident	Length: 5¼ inches	Northern Missouri, moving southward in winter

Missouri is home to two chickadee species — the black-capped chickadee and the Carolina chickadee. The underparts are white, the sides buffy, and the throat and upper breast are black. The black-capped chickadee's song is a two- or three-syllable phrase with the first note slightly higher than the second — *fee-bee or fee-bee-bee*. The call is a slow *chick-a-dee-dee-dee*.

They are common permanent residents in forests, woodlands, forest edges, parks, and most areas with decaying trees where nesting cavities can be excavated.

Conservationist Aldo Leopold noticed that the chickadees in his forest "investigate every loud noise." He explained that for chickadees, nature's "dinner bell" was the crash of falling old trees full of thousands of insect eggs and pupae to be eaten.

LIFE CYCLE

Males and females excavate nesting sites in rotting trees, bird boxes, and old woodpecker cavities. Females build cup-shaped nests, lined with soft plant matter or animal hair. Eggs are incubated in less than two weeks, and the young are fledged in another two weeks. There is one brood a year.

HUMAN CONNECTIONS

In winter, chickadees travel in flocks with other species. But, these tiny, perky chickadees, with their bright voices and dapper black-and-white heads, stand out from the crowd. They delight humans with their energetic presence at backyard feeders — even on the coldest of winter days.
Aldo Leopold said of the chickadee, "Everyone laughs at so small a bundle of large enthusiasms."

NOPPADOL PAOTHONG

Outdoor Calendar

MISSOURI DEPARTMENT OF CONSERVATION

FISHING

Black Bass
Impounded waters and non-Ozark streams:
Open all year

Most streams south of the Missouri River:
- Catch-and-Keep:
  May 23, 2026–Feb. 28, 2027

Nongame Fish Gigging
Streams and impounded waters, sunrise to midnight:
Sept. 15. 2026–Feb. 15, 2027

Paddlefish
On the Mississippi River:
Sept. 15–Dec. 15, 2026

Trout Parks
During catch-and-release season, Maramec Spring Park is open daily; other state trout parks are open Friday–Monday.

Catch-and-Release:
Nov. 13, 2026–Feb. 8, 2027

TRAPPING

Badger, Gray Fox, Red Fox
Nov. 15, 2026–Jan. 31, 2027

Beaver, Nutria
Nov. 15, 2026–March 31, 2027

Bobcat, Coyote, Mink, Muskrat, Opossum, Raccoon, River Otter, Striped Skunk
Nov. 15, 2026–Feb. 28, 2027

Rabbits
Nov. 15, 2026–Jan. 31, 2027

Give the Gift of Hunting and Fishing this Holiday Season



Purchase hunting and fishing permits for hunters and anglers on your holiday gift list from vendors around the state or online at **mdc.mo.gov/buypermits**. Remember, lifetime permits also make excellent gifts and can be purchased by emailing lifetime.permit@mdc.mo.gov. For more information on lifetime permits, call 573-522-0107.

HUNTING

Badger, Gray Fox, Red Fox
Nov. 15, 2026–Jan. 31, 2027

Bobcat, Opossum, Raccoon, Striped Skunk
Nov. 15, 2026–Feb. 28, 2027

Coyote
Restrictions apply during April, spring turkey season, and firearms deer season.
Open all year

Crows
Nov. 1, 2026–March 3, 2027

Deer
Archery:
Nov. 25, 2026–Jan. 15, 2027

Firearms:
- Late Antlerless Portion (open areas only):
  Dec. 5–13, 2026
- Alternative Methods Portion:
  Dec. 26, 2026–Jan. 5, 2027

Elk
Only hunters selected through a random drawing may participate in this hunting season.

Firearms:
Dec. 12–20, 2026

Groundhog (Woodchuck)
May 11–Dec. 15, 2026

Pheasant
Regular:
Nov. 1, 2026–Jan. 15, 2027

Quail
Regular:
Nov. 1, 2026–Jan. 15, 2027

Rabbits
Oct. 1, 2026–Feb. 15, 2027

Squirrels
May 23, 2026–Feb. 15, 2027

Turkey
Fall:
- Archery Portion:
  Nov. 25, 2026–Jan. 15, 2027

Waterfowl
See the Migratory Bird and Waterfowl Hunting Digest *or visit* ***short.mdc.mo.gov/ZZx*** *for more information.*

Wilson's (Common) Snipe
Sept. 1–Dec. 16, 2026

Woodcock
Oct. 18–Dec. 1, 2026

For complete information about seasons, limits, methods, and restrictions, consult the *Wildlife Code of Missouri* at **short.mdc.mo.gov/Zib**. Current hunting, trapping, and fishing regulation booklets are available from local permit vendors or online at **short.mdc.mo.gov/ZZf**.

SHARE THE HARVEST. *Feed Families.* STRENGTHEN COMMUNITIES.

SHARE THE HARVEST



Your donation WILL HELP EXPAND THE PROGRAM'S REACH TO MANAGE DEER AND FEED FAMILIES.

$5

Learn more at mdc.mo.gov/share

Serving nature and you®

Our Mission

The Missouri Department of Conservation protects and manages the fish, forest, and wildlife of the state. We facilitate and provide opportunity for all citizens to use, enjoy, and learn about these resources.

Free to Missouri households

To subscribe, cancel your subscription, or update your address, visit **mdc.mo.gov/conmag**.

Follow us on Instagram

@moconservation



Snow settled on bare tree branches at Painted Rock Conservation Area.

by **David Stonner**