

MISSOURI. Conservationist

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Planning for Success

Conservation planning, prioritization, and goals are critical to future natural resource successes. Just like each of you, the Department of Conservation plans for the future. Setting goals, measuring

accomplishments, and planning for the future are just a few of the methods we use to increase our accountability to you, the citizens of Missouri.

February is often a planning and preparation month for me. Getting outdoor gear cleaned up and organized is one of my late-winter goals. It is also a great time to plan future outdoor activities.

Planning can help make things happen — such as going fishing. Plan to take a youngster fishing. It's hard to top the excitement when you match a kid with a bobber, some worms, and bluegill. Plan a trout-fishing trip or a cat-fishing excursion, sample Missouri's excellent spring crappie fishing, or chase Missouri's quality bass.

Participate in educational programs at the Department's nature centers and shooting ranges, plan a trip to a shotgun or rifle range, go antler-shed hunting with your family, explore Missouri's waterways for bald eagles in late winter, observe the spring bird migration, visit a conservation area, or practice nature photography. Get active and help your local school get involved with the Missouri National Archery in the Schools Program, or visit the peregrine falcon webcam later in March at mdc.mo.gov/node/16934.

So what are the Department's plans and priorities to help you enjoy the outdoors in the future?

We begin by living our values:

- Excellent public service is essential — we work to deliver more than is expected.
- All citizens are important — we treat citizens the way we would want to be treated.
- Missourians are our partners in conservation — we communicate openly and look for ways to make it easier to partner.
- Fairness, objectivity, sound science, integrity, accountability, and transparency guide our actions.

The Department has identified five major goals to help direct Missouri's conservation future.

- Goal 1, Healthy Forests, Fish, and Wildlife: Ensure healthy and sustainable forests, fish, and wildlife resources throughout the state.



- Goal 2, Manage Public Lands: Manage land held in public trust and associated infrastructure to ensure continued benefit to citizens and to forest, fish, and wildlife resources.
- Goal 3, Sound Business and Workplace Practices: Ensure sound financial accountability and transparency in all areas of operations.

- Goal 4, Citizen Involvement and Education: Provide opportunities for active citizen involvement in services and conservation education in both rural and urban areas.
- Goal 5, Engage Partners: Engage partners at all levels, individuals, communities, conservation organizations, state, and federal to enhance natural resources and effective delivery of conservation service.

Under each of those five goals are strategies that the Department is implementing to achieve conservation success on the ground throughout the state. Every Missouri citizen is a valued partner as we chart our state's conservation future, and we need your help. Whether it's the new online e-Permits system, the new website for mobile devices at mdc.mo.gov, or providing your community group a program, our goal is to provide the best conservation service possible to Missouri citizens. We want to hear from you every step of the way. We want you to roll up your sleeves and partner with us to make the Department better with each passing year. We want to produce the best conservation product possible for each of you.

I encourage you to sit down this month and do a little personal conservation planning. Set some time aside to enjoy your conservation passion, to learn new skills, and to improve Missouri's forest, fish, and wildlife resources through your involvement and commitment to Missouri's outdoors.

Continue your commitment to lifelong learning with a fishing rod in your hand, a pair of binoculars around your neck, looking through the lens of a camera, or over the sight of a rifle or shotgun. Enjoy Missouri's waterways by going for a canoe or boat ride or simply appreciating nature by taking a walk.

Tim Ripperger, deputy director

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Following the elusive short-eared owl.

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by Frances Main, photos by Noppadol Paothong

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COVER: A short-eared owl stays on alert in Plattsburg, Mo., by Noppadol Paothong. Read more about this unique bird starting on Page 10.

📷 **500mm lens +1.4x teleconverter**
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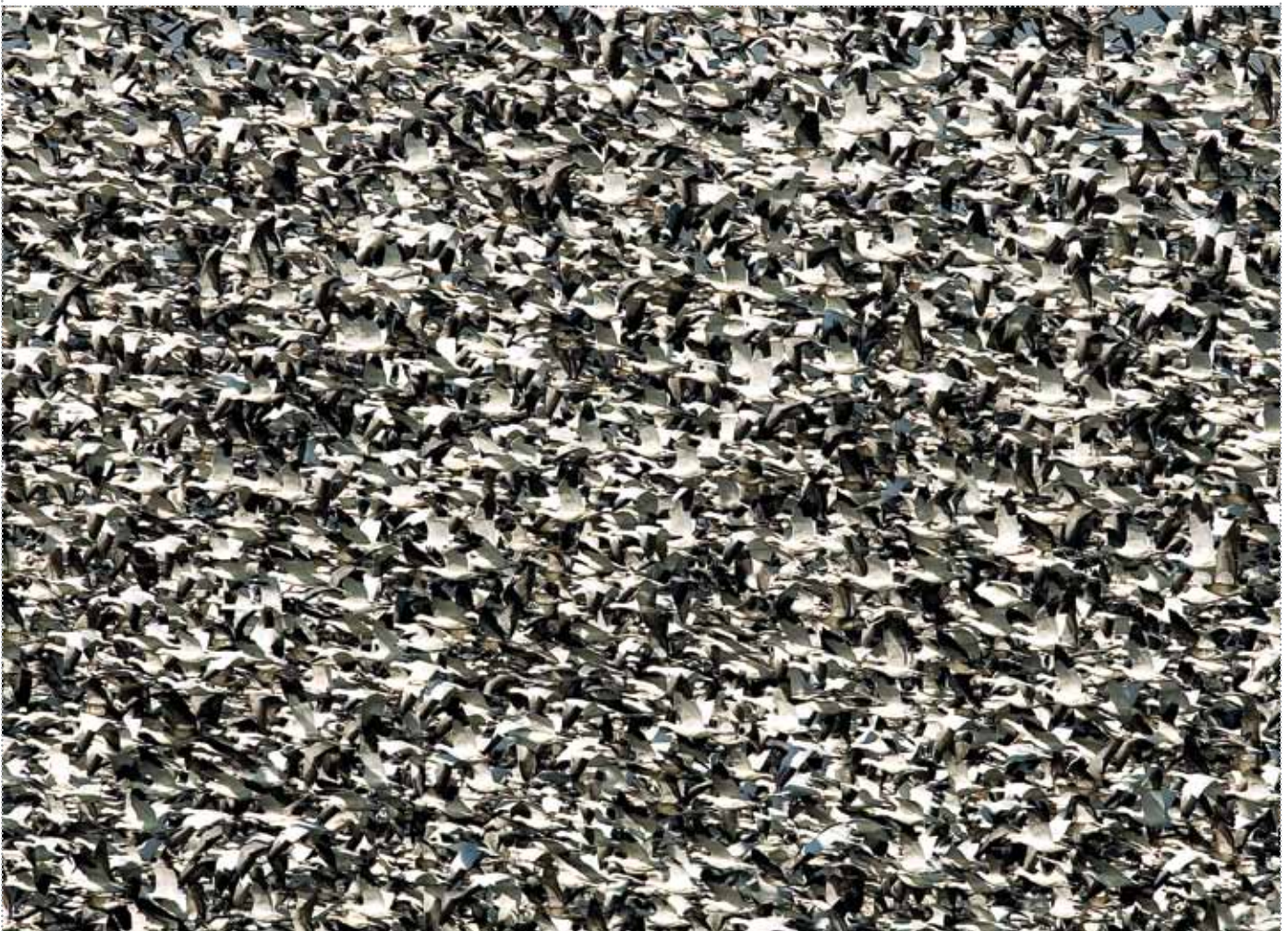
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WHAT IS IT?

Our photographers have been busy exploring the intricacies of the Missouri outdoors. See if you can guess this month's natural wonder. The answer is revealed on Page 7.



NOPPADOL PAOTHONG

MISSION IMPOSSIBLE?

In the January issue [Page 12] there was an article regarding the Ozark chinquapin. My wife and I could not relate the picture of the nut to the acorn we see on the chinquapin. It was only after my wife researched the name "Ozark chinquapin" that we found out it was different from the common oak chinquapin we are familiar with. I guess it has become so rare that we were unfamiliar with the tree you were writing about. A reference should have been made in the article indicating that it was different. Otherwise, great article, as usual.

Charles Morrow, Holts Summit

Ombudsman's Note: Your point is well taken. Due to the similarity of the leaf shape of chinquapin oak and Ozark chinquapin, I can see why you were confused. Both species are in the oak family (Fagaceae) but in different

genera — Quercus for oaks and Castanea for chestnuts, which includes Ozark chinquapin. The Ozark chinquapin has never been documented from central Missouri, so you would not be familiar with it unless you had observed it in southwest or southern Missouri counties or other states (Ark. and Okla.).

I read on Page 15 of the January issue that Steve Bost says his group [Ozark Chinquapin Foundation] will make chinquapin seeds available to anyone who wants to help reestablish them. I am one of them. Can you let me know how to get them? Also instructions, etc.

Delamar Fisher, Lamonte

Ombudsman's Note: The Ozark Chinquapin Foundation may be able to assist you in obtaining seeds

of that species for planting. They have a website at ozarkchinquapin.com. Or, you can contact them at stvbost@yahoo.com or by writing to Ozark Chinquapin Foundation, PO Box 1133, Salem, MO 65560.

GLAD THE BIRDS KNOW

On Page 25 of the January issue, the paragraph about the peregrine falcon Web camera says that Ameren's Sioux Plant is in Franklin County. It is actually in St. Charles County.

Dave Hollabaugh, Fulton

GIVE US AN HOUR....

Thank you for providing such an outstanding magazine. Each month, I take an hour break from the world to see the Missouri outdoors. I really like the various columns and stories and the pictures are great. I nearly always get ideas of things to do or places to go as I am very much an outdoorsman. What a great magazine!

Joey Rich, Saint James

Just when I think the photography can't get any better, along comes your January issue with the wildly spectacular eagle cover photo by Nopadol Paothong. Unbelievable! From his other great work in the *Conservationist*, I can tell he obviously has the patience and determination to do whatever it takes to achieve excellence.

Tom Anderson, Brentwood

TROUT AMONGST US

I am confused by your January article on new 2012 state fishing records. It states that, on June 22, Brodrick Glessner caught a 1-pound 14-ounce brook trout from Lake of the Ozarks. As far as I know, there are no trout, period, in the Lake of the Ozarks.

Mark Menos, St. Louis

Editors' Note: Trout are not usually found in the Lake of the Ozarks. While anglers do catch the occasional brown or rainbow trout, they have almost certainly come into the lake from elsewhere. The brook trout are assumed to be escapees from a now-closed trout park and are considered extremely rare.



Reader Photo

SNOWY SNACK

Kathy Melton of Pacific captured this image of an opossum eating corn at the Pacific Palisades Conservation Area while out on a winter walk with her husband. Food plots such as this are grown on many conservation areas for the benefit of wildlife. The bounty of corn was apparently tempting enough to persuade the opossum to stay put as the couple walked by, says Melton. "I took a few shots and we left him to his meal," says Melton. Kathy and her husband frequent many of the conservation areas and state and city parks in the area. "My husband and I enjoy all that Missouri has to offer: hunting, fishing, hiking, parks, rivers, and lakes," says Melton. "We have it all."



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Discover more about nature and the outdoors through these sites.

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Kids' site: XplorMo.org
Missouri Conservationist: mdc.mo.gov/node/83

Missouri Department of Conservation: mdc.mo.gov
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HUNTING AND FISHING CALENDAR

FISHING	OPEN	CLOSE
Black Bass from Ozark streams	5/26/12	2/28/13

HUNTING	OPEN	CLOSE
Coyote	5/07/12	3/31/13
Crow	11/01/12	3/3/13

Deer		
Firearms		
Urban	10/11/13	10/14/13
Early youth	11/02/13	11/03/13
November	11/16/13	11/26/13
Antlerless (open areas only)	11/27/13	12/08/13
Alternative Methods	12/21/13	12/31/13
Late Youth	1/04/14	1/05/14

Rabbit	10/01/12	2/15/13
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Squirrel	5/26/12	2/15/13
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Turkey		
Firearms		
Youth	4/06/13	4/07/13
Spring	4/15/13	5/05/13
Fall	10/01/13	10/31/13

Waterfowl	please see the <i>Waterfowl Hunting Digest</i> or see mdc.mo.gov/node/3830	
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TRAPPING	OPEN	CLOSE
Beaver and Nutria	11/15/12	3/31/13
Otters and Muskrats	11/15/12	2/20/13

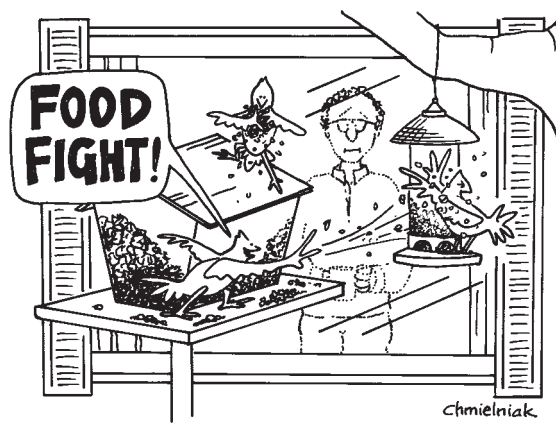
For complete information about seasons, limits, methods, and restrictions, consult the *Wildlife Code* or the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, *The Spring Turkey Hunting Regulations and Information*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest*, and the *Migratory Bird Hunting Digest*. For more information visit mdc.mo.gov/node/130 or permit vendors.

Operation Game Thief

Help put game thieves out of business. If you see a possible violation in progress, call your county conservation agent immediately or dial the toll-free number below:

1-800-392-1111

All information is kept in strict confidence. Desirable information includes names of violators, vehicle description and license number, as well as the violation location.



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Shawn Cunningham

ASK
THE

Ombudsman



Q: Why are there so many dead hawks and owls on the highways at this time of year?

A: We host large populations of hawks and owls in the state each winter due to the influx of migrant birds that nest further north. Most of the dead predatory birds on roadsides were killed by vehicles while pursuing prey species to eat. Their full concentration on a roadside rodent while swooping for the kill makes them vulnerable to oncoming vehicles. Even if there is no collision with a vehicle, the air turbulence from passing trucks can be strong enough to slam the flying birds to the ground. Highway rights of way can be particularly good areas for birds of prey to find food. They provide open, grassy areas with nearby perches. Spilled grains and salts used for de-icing can attract small

mammals that are prey for hawks and owls. Bird carcasses don't decay quickly in cold weather, so the cumulative effect of weeks of fatalities is especially noticeable by late winter.

Q: Why can't I buy my spring turkey permits earlier in the year? It's inconvenient to have to renew my hunting and fishing permits by the end of February and then go back to get the spring turkey permit a few weeks later.

A: That used to be the case, but, as of last year, you can now purchase your spring turkey hunting permit as early as Jan. 1. The Conservation Commission typically sets the regulations and season dates for

the upcoming spring turkey season in late December. That allows them to use the latest population surveys and recent harvest data in their decision making, but it prevents the spring turkey hunting regulations and information booklet from being available on Jan. 1. The booklet will be available at permit vendors by March 1 and can be found on our website several weeks earlier. Each year's booklet is tailored to that year's season. It highlights any new regulation changes and includes a hunting forecast for the spring season.

Q: Would you recommend some areas where I can hunt feral hogs and have a reasonable chance of success?

A: We don't promote feral hog hunting in Missouri or provide hog numbers or locations to hog hunters. However, we do encourage hunters and landowners to shoot feral hogs on sight when pursuing other wildlife. States that become known for feral hog hunting tend to have more difficulties reducing their wild herds, because it leads to more illegal releases of feral hogs for hunting purposes. Additionally, our staff efforts to trap and kill hogs in areas where they are concentrated can be confounded by hunters who disturb the trap site and cause hogs to move out of the area. We continue to look for effective ways to reduce our feral hog population. Unfortunately, feral hog hunting has proven to be ineffective in controlling their numbers.

Ombudsman Tim Smith will respond to your questions, suggestions, or complaints concerning Department of Conservation programs. Write him at PO Box 180, Jefferson City, MO 65102-0180, call him at 573-522-4115, ext. 3848, or email him at Ombudsman@mdc.mo.gov.



Largemouth bass

Fishing Could Become an Intermural Sport

Missouri schools will have the opportunity this spring to decide whether bass fishing should become a school activity sanctioned by the Missouri State High School Activities Association (MSHSAA).

MSHSAA has announced bass fishing will be included on MSHSAA's annual ballot to start as

an emerging activity. The ballot will be posted on the association's website on April 1 and will be available for principals or superintendents to vote on until May 1.

"If 50 percent plus one school of the schools voting on the ballot vote yes to approve bass

fishing as an emerging activity, then it will be recognized by MSHSAA," says MSHSAA Executive Director Kerwin Urhahn. "If it passes then the schools will be able to sign up for bass fishing for the 2013–14 school year. If we have two years of 50 or more schools signed up to participate, then we will have a state series for bass fishing beginning during the 2015–16 school year."

Urhahn says MSHSAA would then begin working with participating schools and fishing experts to formulate the rules and guidelines for the series.

Illinois completed its fourth year of sanctioned bass fishing this year and Kentucky has sanctioned bass fishing as an activity for 2013.

For more information about the proposed high school fishing program in Missouri, visit missourihighschoolanglers.org.

Firearms Deer Harvest Report

Firearms deer hunters checked 257,307 deer last year. That is up 8 percent from 2011 and 13 percent more than the average of the 10 previous years. Harvest totals from the various segments of firearms deer season were:

- Urban, 1,108
- Early Youth, 19,277
- November, 204,668
- Antlerless, 15,136
- Alternative Methods, 14,921
- Late Youth, 2,197

Missouri has more than 511,000 deer hunters, who spend about \$690 million in the state each year on related activities. This has an overall economic impact of \$1.1 billion in Missouri each year and supports almost 12,000 jobs.

Tree Seedlings Still Available

With winter setting in, there's plenty of time to curl up on the couch and strategize about what trees and shrubs to plant from George O. White State Forest Nursery. The catalog and order form are easy to find at mdc.mo.gov/node/4011. This year's selections include 14 oak species, seven evergreens, black walnut, pecan, tulip poplar, bald cypress, black cherry, persimmon, pawpaw, dogwoods, deciduous holly, hazelnut, plum, ninebark, witch hazel, mulberry, elderberry, and much more. Several are offered in regular or extra-large sizes. Prices



range from 16 cents to \$1.60 each, depending on species, size, and quantity. In the past, the nursery has offered special bundles with assortments of different species. This year, buyers

will be encouraged to create their own bundles by combining seedlings that fit their needs. To make this easier, the nursery has reduced the minimum order from 25 seedlings per species to 10. At least 10 seedlings of each species must be ordered.

Deer, Turkey Season Dates Set

At its December meeting, the Conservation Commission set the following dates for 2013 turkey- and deer-hunting seasons.

- Youth turkey season, April 6–7
- Regular spring turkey season, April 15–May 5
- Fall firearms turkey season, Oct. 1–31

Turkey bag limits and shooting hours remain the same as last year. Additional details, including spring managed turkey hunts and regulations for spring turkey hunting on conservation areas, will be published in the spring turkey hunting regulation guide in March.

- Urban portion of deer season, Oct. 11–14
- Early youth portion, Nov. 2–3

- November portion, Nov. 16–26
- Antlerless portion, Nov. 27–Dec. 8
- Alternative methods portion, Dec. 21–31
- Late youth portion, Jan. 4–5

Other deer-hunting regulations will be set this spring. Details will be published online and in the fall deer hunting regulation guide.

Managed Turkey Hunt Applications

Hunters have until Feb. 28 to apply for managed spring turkey hunts. This year's offerings include managed hunts for archers, youths, and people with disabilities. Managed turkey hunts are listed in the *2013 Spring Turkey Hunting Regulations and Information* booklet, which is available at mdc.mo.gov/7498. A print version will be available from hunting permit vendors statewide later this month.

Visit a Champion This Month

Winter, when leaves are on the ground, is the best time to see Missouri's champion trees and look for new ones. You might find one near home.



WHAT IS IT?

Snow Geese

Chen caerulescens

These medium-sized geese are common in marshes, rivers, lakes, and crop fields during early spring as they migrate north. Their large, calling chevrons flying overhead during migration are a timeless symbol of the changing seasons. Snow geese overwinter in the southern part of their range, including Missouri, and return north to the arctic tundra to nest. Pairs form during each bird's second spring migration and the couples stay together for life. To read more about snow geese, listen to audio of their calls, or to watch a video of snow geese, visit mdc.mo.gov/node/2908. —Photo by David Stonner

(continued from Page 7)

Missouri has more than 100 champion trees scattered across every region of the state. The St. Louis area is the champion-tree champion, with 14 records on the list in either St. Louis city or county.

Six Missouri champion trees are national champions: a burr oak in Boone County with a score of 410 points, a pumpkin ash in Mississippi County with 357, a basswood in St. Louis with 272, an eastern wahoo in St. Louis County with 156, an Ozark chinkapin in Barry County with 107, and a prairie crabapple in Callaway County with 70.

A tree's score is the sum of its height in feet, its trunk circumference in inches, and one-quarter of its average spread in feet. Since precise measurements of height and spread are difficult to obtain, trees that score within a few points of one another are counted as co-champions. An example is the hop hornbeam, for which Missouri has three champions, all within two points of each other.

Missouri's biggest champion tree is an American sycamore in Polk County that stands 94 feet tall, has a circumference of 333 inches, and

an average spread of 120 feet for a total score of 457. That tree also holds Missouri's record for trunk circumference. The tree with the widest average spread is Boone County's burr oak at 130 feet. Two trees — a pumpkin ash in Mississippi County and a shumard oak in Cape Girardeau County, are tied for tallest at 150 feet.

Many state-champion trees are on private property, but dozens more are on conservation areas, state parks, and other land open to the public. For a list of champion trees, visit mdc.mo.gov/294. For more about the program, visit mdc.mo.gov/node/6583.



Trout opening day at Bennett Spring State Park

Friday Opener Means Busy Trout Parks

March 1, opening day for catch-and-keep season at Missouri's four trout parks, falls on Friday this year, which means the parks will be extra busy. Attendance always is greater when the opener falls on a weekend, but throngs of cheerful, excited anglers and spectators are part of the event's charm. It also doesn't hurt that MDC stocks tens of thousands of 12-inch rainbow trout in four trout streams to ensure good fishing. Opening morning finds anglers lining the banks of Bennett Spring State Park (SP) near Lebanon, Roaring River SP near Cassville, Montauk SP near Salem, and Maramec Spring Park near St. James. They also line up at park stores to buy fishing permits, trout tags, bait, and other fishing essentials. Daily trout tags are sold only at the parks, but you can shorten time standing in line by purchasing your fishing permit ahead of time from any permit vendor statewide or online at mdc.mo.gov/node/9258. For trout park information, visit mdc.mo.gov/2852.

Be Bear Aware

Spring might seem a long way off, but black bears start getting more active at this time of year, and their empty stomachs put them at risk. You can help keep bears safe by not encouraging them to form dangerous food habits.

Natural foods are scarce right now, so bears are more prone to ignore their natural fear of humans and seek nourishment in trash cans, livestock feed bins, or even bird feeders. Bears that get used to mooching from humans often get in trouble. Some have to be destroyed.

Bears can turn up almost anywhere in Missouri, but they are most common south of I-44. If you live in southern Missouri, take the following precautions to avoid tempting bears.

- Never intentionally feed bears.
- Do not feed pets outdoors.
- Keep garbage, livestock feed, and other potential attractants in outbuildings or bear-proof containers.
- Clean up feed spills completely.
- Put out garbage as near to pick-up time as possible.
- If a bear visits your bird feeders, take them down for two or three months to avoid becoming a regular stop on its foraging rounds.
- Clean outdoor grills after each use and store them in sheds.
- Don't place meat or sweet food scraps in your compost pile.
- Never cook, eat, or store food in tents or sleeping areas when camping.
- Keep camp food locked inside vehicles when not in use.

- If a bear enters your campsite, get inside your vehicle and stay there until the bear leaves.

If you see a bear, please report it to the nearest Conservation Department office (see Page 3) or call 573-751-4115.

Community Foresters Conference

The Missouri Community Forestry Council's annual conference is set for March 5 through 7 in Joplin, and will revolve around the theme of preparing urban forests for storms and other natural disasters.

In addition to the usual selection of speakers, discussions, and networking opportunities, the 2013 conference also will feature Ed Gilman, PhD, of the University of Florida. Gillman is a respected expert on urban trees and landscaping. He will lead a pre-conference workshop, speak at two sessions during the conference, and contribute his expertise on storm damage in urban forests.

This conference brings together tree experts working in urban areas around the state to make community forests safe, healthy, and resilient. To register, visit mocommunitytrees.com/mcfc/conference2013.html.

Elk Trapping Resumes

Missouri's elk-restoration program entered its third year in December when Kentucky Department of Fish and Wildlife Resources staff began baiting corral-type traps in the Bluegrass State. Kentucky and MDC staff began active trapping in January, after free-roaming elk had grown accustomed to entering the enclosures. With favorable weather, MDC hopes



NOPPADOL PAOTHONG

to trap 50 elk this year. Fifteen of these are to go to Virginia, which has partnered with Missouri and Kentucky in the trapping effort. The other 35 are earmarked for transportation to Missouri in May. To date, MDC has brought 69 elk from the Appalachian Mountains of eastern

Kentucky to Missouri. MDC continues to work with public and private partners to create and enhance habitat within the 221,440-acre elk-restoration zone and is monitoring the health and reproduction of the Show-Me State's growing elk herd.

DID YOU KNOW?

We work with you and for you to sustain healthy forests.

Missouri Forests and Forests Products Industry

» **Missouri has 15.4 million acres** of forestland (1/3 of the state).

MDC manages about 601,510 acres of forest land.

» **The majority of the forestland is privately owned** (83 percent). Only 17 percent of Missouri's forestland is held in public trust (12 percent federal and 5 percent state).

» **In 2009, 592 million board feet were harvested** in Missouri.

The average volume harvested on MDC forestland is about 16 million board feet.

» **MDC conducts timber harvest** on conservation areas to enhance natural plant communities, wildlife habitat, and forest health. Under these objectives, forest management decisions are based on forest inventory data, land capabilities, existing vegetation, and surrounding land uses.

» **Forest management is a long term commitment** that spans decades and involves forest management practices beyond timber harvest.

» **The key to maintaining** the health of Missouri's forests is sustainable management of private forestland because 83 percent of the forestland and 91 percent of the timber volume comes from private land.

» **Opinion surveys indicate** that 51 percent of Missourians approve of cutting down trees to make lumber, furniture, or other wood products. Two-thirds of Missourians approve of cutting trees to improve wildlife habitat and more than 91 percent of Missouri citizens agree with cutting trees to maintain forest health.

» **The forest products industry contributes** \$7.3 billion to Missouri's economy and supports 41,200 jobs (2011 data). MDC timber sales return average revenue of \$2.4 million.

» **MDC partners with** the Missouri Forest Products Association to conduct Professional Timber Harvester Training. Professional Timber Harvester training is required to purchase MDC timber sales.

» **MDC is working with** the Missouri Forest Products Association and the Missouri Loggers Council to improve the image of the forest products industry through the support of the Missouri Master Logger Certification and the Logger of the Year programs.



► Snow Day

Short-eared owls are generally nocturnal, but they are often active at dusk or 30 minutes to an hour before sunset. Some may be active even during the day, especially during the severe winter months.

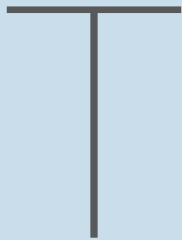
📷 500mm lens +1.4x teleconverter • f/5.6 • 1/1600 sec • ISO 200

Following the elusive
short-eared owl

On Silent Wings

story and photos by NOPPADOL PAOTHONG





he sun set over the horizon, and the last daylight slowly disappeared. A winter breeze blew across the prairie. I waited patiently, eyes fixed upward, scanning the dim horizon.

I had been here many times, but always left empty-handed. I was anxious, but there wasn't anything I could do but wait and hope for a glimpse of, and possibly a shot at photographing, the night acrobats.

Then, without a sound of warning, a shadow passed overhead. It was a medium-sized short-eared owl — a bird

that has eluded me many times before.

The owl beat its wings a few times as it circled and then glided to the open grassland. It looked magnificent against the backdrop of the sunset. If only I had gotten that shot! But I was caught off-guard.

Short-eared owls (*Asio flammeus*) are medium-sized owls with small ear tufts on the top of their heads. They are the most diurnal (active in daytime) of all the northeastern owls. Often, they can be observed in the late afternoon and at dawn or dusk.

These birds migrate to Missouri during winter and can be found on grasslands, prairie, and agricultural fields, especially. A similar species, the long-eared owl, prefers densely wooded areas and has more pronounced ear tufts.

Short-eared owls have large eyes, round faces, and broad wings. During the flight, they beat their wings irregularly, similar to those of moths in flight. They tend to fly low while listening for the sound of their favorite prey, which include voles, mice, ground squirrels, and rats. The owls will swoop down upon their prey feet-first and snatch it with their powerful talons.

Like most owl species, short-eared owls' wings have soft, fringed edges to the flight feathers that minimize sound during flight, allowing them to effectively hunt mice and voles. Short-eared owls forage during twilight hours when the larger owls, such as barred and great horned owls, usually are not active. (The northern hawk owl is a daytime hunter and has stiff feathers without the soft edges.)

The breeding season in the northern hemisphere is March to June, with a peak in April. The owls prefer to nest in concealed low vegetation on prairies and open fields. They typically lay four to seven whitish eggs.

To observe short-eared owls, you will need binoculars, knowledge of where they are during the migration season, and a lot of patience. Fortunately, the Missouri Department of Conservation, with help from staff and volunteer naturalists, offers evening group owl hikes and other owl-related programs. For more information, visit mdc.mo.gov/events to find activities near you.

Since my lost opportunity with that owl, I've learned more about the birds' habitat and behaviors and am better able to anticipate the shots. Sure, I can be lucky, but almost always I have to make my own luck when it comes to photographing wildlife. I was finally able to successfully capture the birds in flight as I had envisioned.

Whether you are a photographer, birder, or naturalist, observing this unique migratory bird as it prowls over the open prairie is a rewarding and worthwhile challenge — and a great excuse to get out this winter.

Noppadol Paothong a wildlife photographer for MDC. He lives in Boone County.





◀ On the Hunt

Short-eared owls prefer to hunt in open fields and grasslands. During the winter months, if food supplies such as voles are in the vicinity, you might find several owls flying around or perching on a tree in an open field.

📷 800mm lens +1.4x teleconverter • f/8 • 1/500 sec • ISO 800

▼ In Flight

Although their hunting occurs mostly at night, short-eared owls are the most diurnal of all the northeastern owls. They are often observed in the late afternoon and at dawn or dusk.

📷 500mm lens • f/5.6 • 1/125 sec • ISO 800



► Barred Owl

Though the barred owl is not often seen, its classic series of hoots is commonly heard and easily identifiable: “hoo hoo hoo hoo, hoo hoo hoo hoo ahh,” also described as “Who cooks for you, who cooks for you all?”

📷 500mm lens • f/4.0 • 1/125 sec • ISO 400



▲ Great Horned Owls

One of the largest owls in North America, a great horned owl is also known as a “tiger owl.” They are the most widely distributed owls in North America.

📷 600mm lens +2.0x teleconverter • f/8 • 1/200 sec • ISO 1250



◀ Short-Eared Owl

The short-eared owls are medium-sized owls with small ear tufts on the top of the head. The tuft feathers are not visible during flight.

📷 500mm lens +2.0x
teleconverter • f/8
1/250 sec • ISO 400



▲ Long-Eared Owl

Long-eared owls are similar to short-eared owls but have much more distinguished, longer ear tufts and are also darker in color overall. The long-eared owls also prefer wooded areas as opposed to open fields and grasslands that the short-eared owls prefer.

📷 500mm lens • f/10
1/125 sec • ISO 400



▲ Moth-Like Beats

The short-eared owl's flight is often described as "moth-like" wing beats. When hunting, they dive from perches or fly low over the ground and pounce on prey from above, sometimes hovering briefly before they drop.

📷 500mm lens • f/5.6 • 1/1250 sec • ISO 400





▲ Territorial Combat

During the hunt, some owls may start a territorial combat to drive out a competitor. This is much more common in areas where large numbers of owls congregate.

📷 500mm lens • f/5.6 • 1/640 sec • ISO 800

◀ Taking Cover

During severe weather, short-eared owls may take shelter from trees to escape snow and wind.

📷 500mm lens +1.4x teleconverter • f/8 • 1/320 sec • ISO 200

SELLING WALNUT TIMBER

**An introduction to grading,
selling, and logging your trees.**

by FRANCES MAIN • *photos by* NOPPADOL PAOTHONG



Walnut trees grown in a forest generally make higher-quality logs, which earns the owner more profit. The lack of limbs, straightness, and length of trunk make these high-value trees.

EVERYBODY KNOWS A WALNUT TREE IS worth a thousand dollars or more, right? Unfortunately, that isn't true as often as landowners might hope. However, walnut trees do produce high-end lumber, and you should work to get the best price, even if your trees aren't veneer quality.

Missouri has an abundance of walnut trees. In fact, we have more than twice as many walnut trees than any other state. If you have walnut trees on your property and are looking to sell them, there are some things you should know before you make that first cut.

MAKING THE GRADE

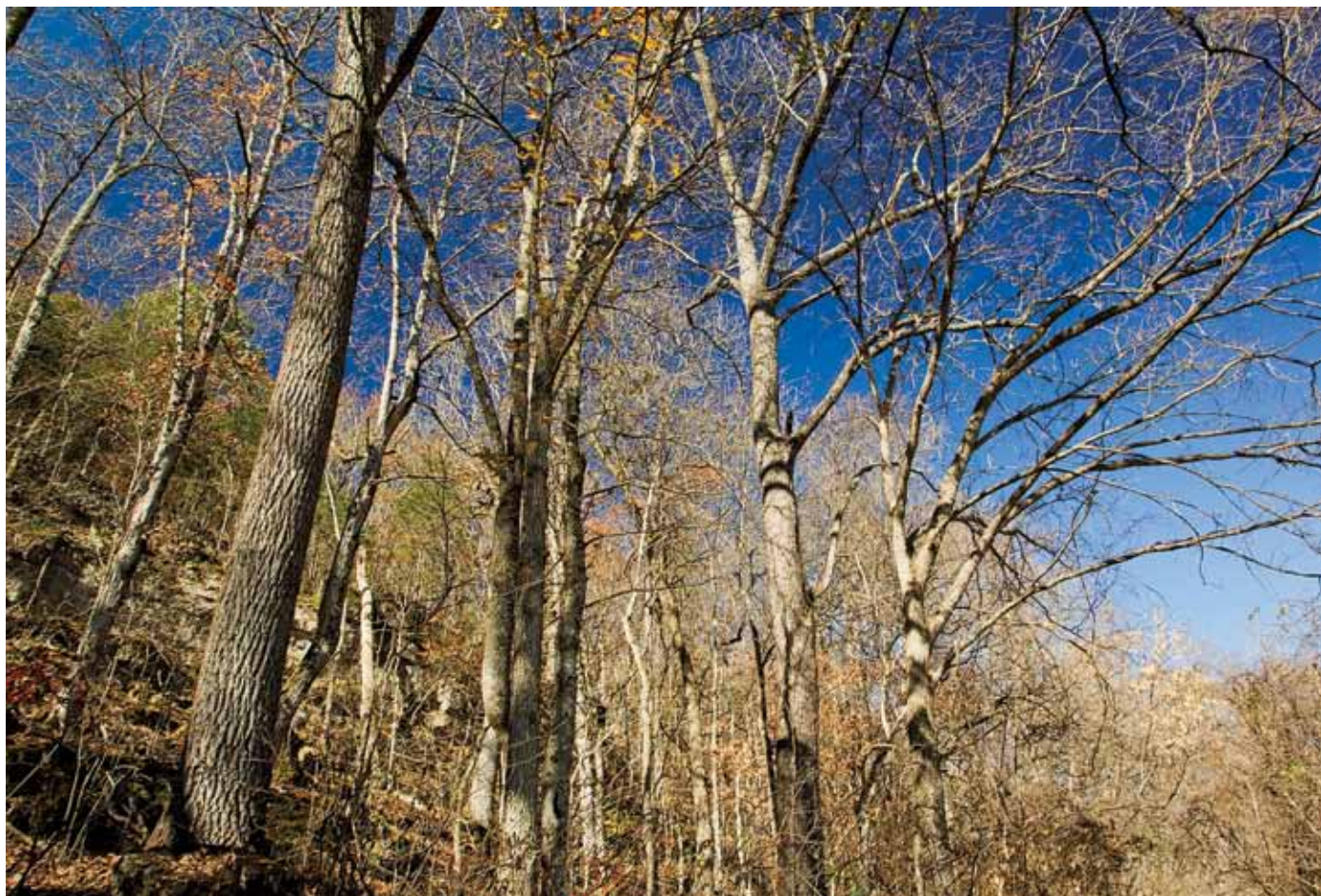
There are two basic levels of wood quality when dealing with black walnut — lumber grade and veneer. There are several lumber-grade trees for every veneer-grade tree. That's why the veneer trees are worth so much — they are rare. You may be able to determine if your tree is lumber or veneer grade by examining the diameter of

the tree, the height of the trunk before there is a limb, and the number of defects on the trunk.

The standard for measuring the diameter of a tree is at 4½ feet above the ground, on the uphill side of the tree. To qualify for Grade A veneer, the tree would need to be at least 19 inches in diameter, or 60 inches in circumference. Although it is possible to sell a tree at this size, it is a wiser financial move to keep the tree until it gains more diameter. For example, a black walnut tree that is Grade A veneer at 19 inches diameter is only going to bring the owner \$700–\$800. If the owner allows the tree to add another 6 inches of diameter, he or she can easily double that income.

FIELD OR FOREST

A black walnut tree grown in a field or pasture is usually similar in value to a nice oak tree grown in the forest. One reason for this is that the length of clear log (trunk with no limbs or defects) is very important to the value of the tree.



Walnut trees grown in an open space have no competition from other trees, so they produce many low limbs in all directions. This decreases the timber value. Attaching signs, bird houses, or decor to a tree also decreases its value.

At least 9 feet of clear trunk is required to make the good veneer grades. Many trees grown in open spaces will produce limbs low and in all directions from the trunk. This may look nice for a yard tree, but it decreases the timber value. If the tree forks into more than one trunk, or has limbs within 9 feet of ground level, it no longer qualifies as high-grade veneer.

The second problem with most field-grown black walnut trees is the number of defects on the tree. Any blemishes on a tree are considered defects. Each defect reduces the value of the tree. High value black walnut trees typically have large diameters, are straight, and have no defects for a long way up the trunk. One hit with the brush hog will take the tree out of the most valuable veneer category. The wound created by the injury causes the tree to produce callous wood in an effort to seal the wound. That is a defect. Livestock around field-grown walnut trees also produce defects. Not only can they cause direct damage to the trunk, but their hooves can break the feeder roots of the trees and cause a stain in the wood. Other common defects are bird peck and cat face. Bird peck is, as the name implies, caused by sapsuckers or other woodpeckers making small holes in the trunk. Cat face generally results from a limb dying. The tree creates callous wood around that old limb site that resembles a cat's face.

To learn more about caring for young walnut trees to get the best timber prices, go to mdc.mo.gov/node/4188.

SELLING YOUR TIMBER

If you are fortunate enough to have several walnut trees on your property that have reached their economic and physiological maturity, then it's time to sell them. With a little planning, this task does not have to be a stressful event. The easiest way to get top dollar for your trees and be satisfied with the process and outcome is to hire a consulting forester to assist you. Consulting foresters are professional foresters who work for



Any damage to the base of a walnut tree, such as this hit from a brushhog, decreases the value of the trunk, the most valuable log on the tree.

themselves or a private company. For a fee, usually a percentage of what the sale brings, they can handle the sale and protect your interests during the harvest. You can find someone to assist you at the Missouri Consulting Foresters Association website at missouriforesters.com.

If you decide to handle the timber sale, a little work before you cut will help ensure that you receive the most from your trees. First, you need to decide which trees need to be harvested. Mark, count, and measure the trees so you know exactly what you are selling. Guides to help you measure and grade walnut logs can be found in MDC's publication *Forest Management for Missouri Landowners*, available at mdc4.mdc.

mo.gov/Documents/318.pdf, on the University of Missouri Extension website at extension.missouri.edu/p/G5055, by contacting an MDC forester, or by calling your regional office to have one mailed to you (see Page 3). Once you know what you are selling, you can estimate the value of that timber in the *Missouri Timber Price Trends*. This publication, found on the MDC website at mdc.mo.gov/node/9320, or available from your regional office, provides the prices given for timber based on species, grade, location, and season. This will give you an idea of what your timber is worth — similar to looking up the *Kelley Blue Book* value if you were selling a car.


FIND A LOGGER

Now you need to find someone to purchase and harvest your trees. A list of potential bidders is available by contacting your local MDC forester or consulting forester. Local foresters often have experience working with the loggers in your area. Master loggers are available in Missouri. Master Loggers are professional, trained, and meet the highest standards placed on the industry. There are also many loggers that have completed Professional Timber Harvester Training (PTH). Loggers that have completed the PTH training have the knowledge necessary to safely harvest your trees while taking care of the residual forest and soil. Your local forester or the Missouri Forest Products Association website, moforest.org, has a list of both Master Loggers and PTH trained loggers.

Sending out a request for bids to prospective loggers will let them know that you have trees to sell. The bid sheet should include your contact information, the location, details about the estimated number, size, and grade of the trees, and the deadline to receive their bid. Samples of bid sheets and contracts are available in the previously mentioned *Forest Management for Missouri Landowners* publication. Competition generally results in increased revenue. You should solicit bids from several potential bidders. A list of loggers who work in your area can be obtained through your local MDC forester.

Higher volumes and quality usually result in more interested bidders. Most perspective bidders will want to come look at the trees for sale (a good reason to have them marked) before they submit a bid for your trees. Meet





Once you know what you have to sell, you can look up the estimated value of that timber in *Missouri Timber Price Trends*. This publication will give you an idea of what your timber is worth based on species, grade, location, and season.



Logs at a sawmill show the difference between desirable walnut lumber (top left log) and those with defects (top right log).

with them so you get an idea of which loggers you feel comfortable with, ask for — and check — references. Make sure you both understand what is expected during the harvest process. This will help you make the final decision of who you want harvesting your trees.

Economics may limit the number of loggers interested in bidding. Loggers must consider distance, time, equipment costs, value of the wood, and any risks they may be taking. Risk is one of the reasons a tree near a home generally can't be sold. Within city limits a city business license is often required (which a logger prob-

ably does not have). The large amount of risk associated with harvesting the tree seldom outweighs the profit. Even if the tree is worth a few hundred dollars, it may not be worth the risk if the tree might damage a house or powerline. The potential for the tree to have metal, or some other blade-damaging item, in it also increases in trees located near a house.

CREATE A CONTRACT

Once you have decided on a logger, you need a written contract. A contract will protect both you and the logger from any misunder-



These are just some of many products made from Missouri walnut timber.



ings. One of the primary components of the contract is how and when you are to receive the money for your trees.

The safest and easiest way to get your money is called a “lump sum.” This method of payment requires the logger to pay you the full price he offered for the timber — generally received before any trees are cut. Many loggers will want to harvest your timber on “shares” because it guarantees he will not lose money on the sale. Cutting on shares means you have agreed on a percentage split of the profits. The profit is determined by the payment the logger receives

at the sawmill. Although it is common for oak sales to be split 50/50, a walnut sale should have a higher percentage going to the landowner. That percentage will increase with the increase in quality of the timber. Sixty percent to the landowner and 40 for the logger is common in lower-quality timber sales. Percentages can go up to 80 percent to the landowner and 20 percent to the logger on really high-value timber sales. Timber sales should be supervised by both the landowner and a forester. Periodically checking the progress of a sale will help ensure the contract is being followed. It also conveys that you are concerned about your remaining forest, soil, and property.

Not every black walnut tree is worth thousands of dollars, but they are still an important part of our forest industry and valuable to landowners. Knowing more about the sale of timber can make a big difference in your profit and how satisfied you are after the harvest. ▲

*Frances Main is a forester for MDC.
She lives in Greene County.*

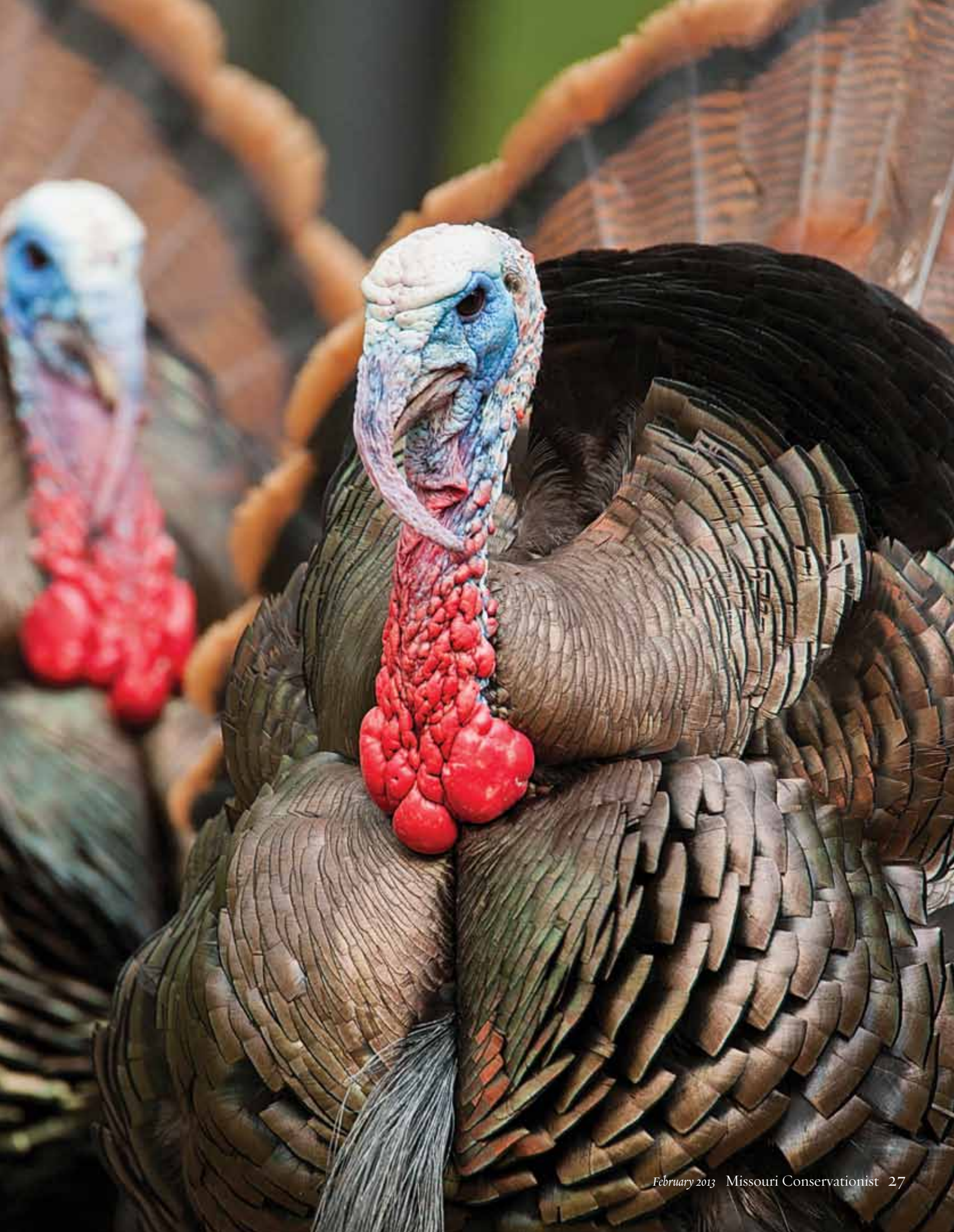
Regulations 2013 Update

MISSOURIANS CARE DEEPLY about our state's forests, fish, and wildlife. To ensure these resources are protected, the Conservation Department's Regulations Committee reviews the *Wildlife Code of Missouri* each year. In doing so, the Committee considers hundreds of suggestions from hunters, anglers, and other citizens. Although every suggestion cannot be adopted, all are carefully reviewed. The following is a summary of key changes to the *Wildlife Code*. For a complete listing of *Wildlife Code* regulations, visit mdc.mo.gov/node/4871. Each regulation reflects the Department's commitment to sustain healthy plant and animal communities, increase opportunities for Missourians to experience nature, and promote public safety.

Tagging deer and turkeys soon will be more convenient. Beginning with the 2013 deer season, hunters will no longer need to attach permits to harvested deer or turkeys.



NOPPADOL PAOTHONG



Missouri is a world-class place to hunt, fish, and experience nature. The following changes increase opportunities to engage in outdoor activities, simplify or clarify existing regulations, and promote safety afield.

- Following numerous requests from the public and careful consideration by area managers, pets — as long as they're leashed — are now permitted at Rockwoods Reservation in St. Louis County.


- To better reflect additional hunting methods allowed during the muzzleloader portion of firearms deer season, the name of the portion was changed to "alternative methods portion."

- Turkey hunters no longer need to affix a "Be Safe" sticker to their shotguns. Evidence shows "Be Safe" stickers have little, if any, effect on hunter safety. In contrast, Missouri's hunter education program, which is mandatory for firearms hunters 16 and older, has substantially reduced hunting incidents. Given the growing popularity of buying e-Permits at home, the Regulations Committee decided it was unnecessary to make turkey hunters travel to permit vendors just to pick up "Be Safe" stickers.

- Tagging deer and turkeys soon will be more convenient. Beginning with the 2013 deer season, hunters will no longer need to attach permits to harvested deer or turkeys. Hunters must stay with their harvested game until it is Telechecked so they can identify their harvest and produce a notched permit when requested to do so by a conservation agent. If hunters leave their harvest before it is Telechecked, they must attach their notched permit to the animal.

- In cooperation with the Arkansas Game and Fish Commission, MDC is working to establish



 The name of the muzzleloader portion of firearms deer season was changed to "alternative methods portion."

a world-class striped bass fishery at Bull Shoals Lake. To ensure the fishery is sustainable and to provide consistent striped bass regulations on lakes that straddle the state line, regulations for Bull Shoals and Norfolk lakes and their tributaries have been updated. On these waters beginning March 1, 2013, only three striped bass may be included in the daily limit, and all striped bass less than 20 inches must be returned to the water unharmed.

- Didymo, or "rock snot," is an algae that quickly blankets cold-water streams, reducing habitat for aquatic organisms and degrading water quality. To keep didymo at bay, in 2012 the Department banned porous-soled waders at trout parks and in certain trout streams. The rule has since been rewritten to clarify that all stretches of those streams — not just portions managed by the Conservation Department — fall under the rule.

Chronic Wasting Disease (CWD) infects deer, elk, and moose, causing neurological damage that eventually leads to death. The disease was found in a small number of captive and free-ranging deer in north-central Missouri. To slow the spread of CWD, the following regulations went into effect on Oct. 30, 2012.

- The counties of Adair, Chariton, Linn, Macon, Randolph, and Sullivan now make up a six-county CWD Containment Zone.

- In the CWD Containment Zone, grain, salt, minerals, and other consumable products used to attract deer are prohibited. These substances artificially concentrate many deer in a small area, increasing the chance for CWD to spread. Feed, such as birdseed, is allowed as long as it's placed within 100 feet of an occupied building or in a manner that excludes access to deer. Substances used solely for agricultural, forest management, or food plot production practices also are allowed.

- Biologists believe one of the primary ways CWD spreads is when yearling bucks travel from their birthplaces to search for home territories and mates. To limit this potential means of infection, the antler-point restriction (four-point rule) has been lifted for the six counties in the Containment Zone so that more young male deer will be harvested. ▲



To limit potential means of CWD infection, the antler-point restriction has been lifted for the Containment Zone so that more young male deer will be harvested.

JIM RATHERT

How Regulations Are Set

Each year, the Conservation Department's Regulations Committee reviews the *Wildlife Code* to ensure Missouri's forests, fish, and wildlife are protected. Here's how the process works.

1. Changes proposed by the public and Department staff are brought to the Committee to review.
2. The Committee researches the effects of the proposed regulation changes. Information reviewed may include costs to taxpayers, effects on wildlife populations, user group surveys, public comments, and feasibility studies.
3. When research shows a change would improve a natural resource or provide more opportunities for Missourians to enjoy nature, a proposed regulation change is sent to the Conservation Department's director.
4. If the director approves the change, the proposal is submitted to the Conservation Commission, a group of four citizens who are appointed by the governor.
5. If passed by the Conservation Commission, the proposed changes are filed with the secretary of state and published in the *Missouri Register*. A link to the *Register* can be found at mdc.mo.gov/node/4871.
6. Publication of proposed changes in the *Missouri Register* begins a 30-day public comment period. If no comments are received, the final regulation is filed and becomes effective on the date specified in the proposal or 30 days after publication in the *Missouri Code of State Regulations*.
7. When comments are received, the proposal is reviewed. Based on the public's comments, the Commission may decide to drop, modify, or implement the regulation.



Pirate Perch

Unremarkable in looks but fascinating in habit, this Bootheel resident is worth a second look.

IT WAS A beautiful morning on Isle du Bois Creek. My crew and I had just pulled up to a stream crossing in Jefferson County. We donned waders and prepared our gear for the day's work: fish sampling. I took in the clear, slow-moving stream and wondered, "What will we find today?" Electrofishing, we walked slowly upstream netting the stunned fish. We placed them in a holding net where they recovered and awaited identification. Later that morning my fellow biologist, Danny Brown, sorted fish and called out species names while I tallied them on a data sheet, "stoneroller, bleeding shiner, green sunfish," the usual customers for a stream in this area. Suddenly the sorting stopped. Danny held up a fish and looked at me. My eyes widened in surprise as we exclaimed in unison "pirate perch!"

The pirate perch (*Aphredoderus sayanus*) is a perch in name only. It is unrelated to fish in the perch family, such as walleye. In fact, the pirate perch has no relatives at all; it is the *only* species in its family. In Missouri, the pirate perch is most abundant in the Bootheel area. My excitement at finding a pirate perch is owed to the fact that one has never been found in Isle du Bois or any neighboring creeks. This news is probably not front-page material, but to a fish enthusiast it's pretty awesome.

Superficially, pirate perch seem unremarkable. They are a speckled purplish-black color and only grow to 4 or 5 inches in length. What really sets the pirate perch apart is its anus, specifically the location of its anus at the base of its gills. For decades biologists were puzzled by this odd feature. It was widely speculated that the anus (along with the reproductive opening) is close to the head because pirate perch are mouth brooders (a spawning behavior in which eggs are carried in the mouth until they hatch). Because of their secretive, nocturnal nature this theory was never confirmed. Happily, for curious people like me, recent research has unraveled the mystery — pirate perch are not mouth brooders. Their strangely placed urogenital opening is adapted for a method of reproduction that was completely unknown. Researchers actually had to make up a word for it: transbranchioral spawning. It works like this. The female noses her way into a dense mass of underwater roots. As she releases her eggs, they collect in her gill chamber. She then forces them out through her mouth. In this way the eggs are "injected" deep within the root mass where they are sheltered from strong current and predators. The female backs out of the roots, then the male enters and fertilizes the eggs using the same method.

After showing our unusual catch to the rest of the crew, we release him back to the creek and watch as he darts under a root wad. The unexpected discovery reminds me why I got into this field. The question "What will we find today?" sometimes has a fascinating answer.

—Story by Sarah Peper, photo by Danny Brown

📷 300mm lens • f/14 • 1/50 sec • ISO 800

*We help people discover nature through our online field guide.
Visit mdc.mo.gov/node/73 to learn more about Missouri's plants and animals.*





Bunch Hollow Conservation Area

This northwestern conservation area displays an effort to protect and celebrate Missouri's rich, natural history with woodland and habitat restoration.

CONSERVATION, NATURE, AND outdoor recreation go hand in hand. This essential partnership is apparent at Carroll County's Bunch Hollow Conservation Area (CA). This 3,294-acre area in northwestern Missouri features conservation practices designed to restore the land to its natural woodlands while offering numerous outdoor-recreation opportunities and providing great wildlife habitat.

Bunch Hollow CA's landscape displays distinctive features including rugged, rocky outcroppings and forests that offer a hint of Ozark appeal but have productive soils characteristic of northern Missouri.

Visitors can explore the area on foot, bicycle, or horseback using a 4.5-mile multiuse trail. Nine fishing lakes offer anglers a chance to lure bass, catfish, and bluegill, while deer, turkey, dove, quail, and small game draw hunters.

Bunch Hollow CA, currently a mixture of about 1,300 acres of forest along with grassland, savanna, cropland, and old fields, formerly featured a combination of prairie and woodlands. Woodlands and savannas accounted for 25 percent of the region, accompanied by vast prairies. Due to lack of fire, overgrazing, and land conversion, today's woodlands account for only 10 percent of the region while prairies are virtually nonexistent. Approximately 40 acres of natural prairie occur at Bunch Hollow CA today.

To return Bunch Hollow CA to its roots, 1,000 acres in the area's central portion are designated for prairie, woodland, and savanna restoration. Area



24–70mm lens • f/3.5 • 1/400 sec • ISO 800

managers use techniques such as prescribed burning to encourage development of a natural plant community like the one that existed on the land historically. Many native warm-season grasses and forbs, including blazing star, bluestem, compass plant, coneflower, Indian grass, and rattlesnake master, are responding to management efforts. Woodland thinning and timber stand improvement projects have opened up the woodlands and enhanced understory diversity.

Bunch Hollow CA is one of MDC's 19 quail emphasis areas managed especially to improve habitat for bobwhite quail and other grassland birds. Management practices including prescribed fire, woody cover renovation, planting food plots, and controlling invasive cool-season grasses and undesirable vegetation play a vital role in success for upland wildlife. Managers conduct spring grassland bird surveys and fall covey surveys to measure this success.

Bunch Hollow CA is located about 10 miles north of Carrollton off of Highway 65 and Route Z. For information, including an area map, visit the website listed below.

—Rebecca Maples, photo by David Stonner



Recreation opportunities: Bicycling, fishing, hiking, horseback riding, hunting, primitive camping, trapping with special-use permits

Unique features: This area features a 1,000-acre prairie/woodland-restoration project and is managed especially for quality bobwhite quail habitat.

For More Information Call 660-646-6122 or visit mdc.mo.gov/a8331.

Kids in Nature

Put out a bird feeder. Maintaining a bird feeder is an entertaining and relatively easy way to get to know some of the species that regularly nest in our state. Most hardware stores have all the supplies you will need.



Watch for boxelder bugs on warm days until April.

Take a walk in your neighborhood to see if you can spot a bright red male northern cardinal.



Look for animal tracks in the snow. See if you can identify the animal that made them.

Look for the full moon on Feb. 25.

Look high in the trees to see if you can spot a squirrel leaf nest.



Simple Ideas
for Family Fun

Make a tree-bark rubbing. Bark is the protective outer layer of a tree trunk. There are many different textures. To make the rubbing, take a white sheet of paper and a dark crayon or a pencil. While holding the paper against the tree, rub the crayon back and forth across the paper and watch the bark appear.

Kids in Nature Photo Contest!

Break out those cameras and send us your best images of you and your family enjoying the outdoors for our new photo contest. Once again, we will be accepting entries via the online photo sharing service, Flickr. If you are not a member of Flickr, it is easy and free to join. Once you are a member, just navigate to our kids in nature group page: [flickr.com/groups/mdc-kids-in-nature](https://www.flickr.com/groups/mdc-kids-in-nature) and submit your photos. MDC staff will select a winner every month and display it on our website. All of the monthly winners will appear in the January 2014 issue of the magazine.



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I Am Conservation

A logging crew from the East Perry Lumber Company in Frohna, Mo., were selected as the 2012 Loggers of the Year. The crew includes (from left) Ron Stelling, company owner and president Marvin Petzoldt, Tim Schmidt, Adam Hoehne, and Tommy Petzoldt. Every year MDC gives awards to Missouri loggers who have demonstrated good working relationships with landowners and foresters, caused minimal damage to remaining trees and resources on the harvest site, used best management practices to prevent soil erosion, have the desire to address wildlife management concerns, and used proper forest management techniques. Loggers can't apply for the award but must be nominated by professional foresters. "It started long before I was here, but East Perry has taken pride in doing the right thing in the woods since being formed in 1945," says Petzoldt. "We take pride in doing the best for the land as well as the landowners." Hoehne added, "It's about going above and beyond what is expected and it is an honor. It's not just one person, but the whole company working together to make sure all of our work is being done well." MDC is currently accepting nominations from professional foresters for the 2013 Logger of the Year —*Photo by David Stonner*