

# MISSOURI. Conservationist

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# Call Before You Cut

**A**s forestry division chief, I spend a lot of time thinking about healthy and sustainable forests for Missouri. And when I look out my window or drive down the road, I see trees, lots of them!

So what's the problem with Missouri's forests? If trees are abundant in our state, why should I be worried?

The truth is I, like most Missourians, take trees and forests for granted because of their seeming abundance. I also take for granted things such as clean water, fresh air, diverse wildlife habitat, wood products and scenic beauty that our forests produce. With our forests providing so many benefits for what seems like "free," again, what's the problem with the forests in Missouri? The biggest problem with them is that while they seem abundant, most are not well-managed or managed at all, and this is simply not sustainable in the long run. Most of our woodland has been mismanaged by a harvesting practice called "high-grading" (cutting the best and leaving the rest).

The good news is that professional foresters are available to help you harvest your woods while improving the health and quality of the remaining trees.

A professional forester can tell you many things about your trees. They can tell you what type of trees you have, how many trees there are per acre, whether they are too crowded, too thin or just right, if your trees are young or old (you can't always tell from their size), if they are sick or healthy, if they are growing

fast or slow, if they are valuable or not, and what type of wildlife they support. The forester can then advise you of the proper way to harvest trees to improve the quality and health of your woodland while meeting your management objectives and enhancing

your timber sale revenue. In addition, a professional forester can help you find the best logger for the job; develop a harvest contract to protect you and your woodland, soil and water resources; and even show you how to save money on taxes.

To contact a professional forester, contact the Missouri Consulting Foresters Association at [www.missouriforesters.com](http://www.missouriforesters.com), or contact your regional Department of Conservation office to receive a list of Missouri Consultant Foresters (see Page 3 for phone numbers). So, the next time you think about harvesting a few trees from your woods for income or habitat improvement,

or a local logger knocks on your door and offers you money for your trees, remember to call a professional forester before you cut. You can contribute to improving Missouri's forest for future generations!



Lisa G. Allen, forestry division chief

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**OUR MISSION:** *To protect and manage the fish, forest and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy and learn about fish, forest and wildlife resources.*

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**On the cover and left:** Photographer David Stonner captured the cover image of Mina Sauk Falls near Ironton. He used a 16–35/f2.8 lens at 16 mm f/22. Noppadol Paothong captured the image to the left of pine and sumac at Hawn State Park near Farmington. He used a 70–200/2.8 lens at 100 mm f/8. To view more images of Missouri’s beautiful and diverse landscape by MDC photographers, see the article *State of Grace* starting on page 14.

### NextGEN

This section reports on goals established in *The Next Generation of Conservation*. To read more about this plan, visit [www.MissouriConservation.org/12843](http://www.MissouriConservation.org/12843).

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DEAR DEECÉE  
In the July issue I was struck by the “Note to Our Readers” by DeeCee Darrow. Something made me want to read it over the second time, and during the second read

I quickly found what it was. It was several phrases: “... a great time scouting and retrieving ... fondest memories ... a wonderful adventure ... shaped my interest ... exciting projects ... loved the outdoors ... learn the lessons of life ... fishes regularly ... teaching them ... I learned ... a helping hand ... discover the wonders of nature ... not complete until we teach another ... passion

for all the things we call fish, forest, and wildlife conservation ... memories to last a long time ...”

Even though my occupation has nothing to do with wildlife conservation as DeeCee’s does, I still saw myself so very clearly through the many phrases she used that dealt with the wonderful natural world around us. Each and every one of them fit a particular time, moment or special memory that I treasure. Thank you, DeeCee. Your words brought back a flood of pleasure for me.

Greg “Rudi” Rudroff, Farmington

I just read DeeCee Darrow’s editorial about her fond outdoor memories with her grandparents. I, too, was introduced to those same wonderful experiences by my grandpa (Claude Cloninger of California, Mo.), who passed some years ago.

We no longer have family farms, but we take every opportunity to mentor our grandchildren and teach them to love the outdoors. They are all “city kids,” and their lives are filled with Little League, dance recitals and soccer; but somehow we manage to get them some precious time at our Truman Lake house to fish, plink with a .22 or simply hike through Corps land. Hopefully, as

they grow older, those memories will bring as much joy to them as they have to us.

V. Dean Barry, Independence

TOUGH LOVE FOR STINKY

The July issue brought back pleasant memories of a summer spent in the company of a skunk [Skunk Sense]. Probably not many would make that statement. However, several years ago I moved two horses into a boarding stable for the summer and found a surprising companion.

The stalls were in a barn that had been vacant for some time. A couple of days after unloading my feed and tack into a storage area, I noticed a little face peering up at me from under the pallets that formed the floor—a skunk! I stopped what I was doing and spoke to it for a while. I know it may sound strange, but I offered a deal ... I would provide cat food and it was not to spray either me or my tack (most importantly, my tack). I DO know you aren’t supposed to feed, but I couldn’t help it. We spent the summer quite harmoniously and before the end it was even sitting on top of the pallets watching me, scooting under if I came too close. I always hoped the barn remained vacant until my little friend moved to a different home. Others might not have been so appreciative of the company.

LeAnne Newby, Olean

Editor’s note: You’re probably right—especially with his new begging habit! Please don’t feed because an assertive, fearless skunk might be mistaken for rabid.

FLY FISHING

Your July reader photo [Page 3] brought back a very funny incident I had with an owl. In the mid-1980s, a buddy and myself were fishing out of my boat in Minnesota. I was throwing a lifelike plastic topwater frog toward shore, when all of a sudden a large owl flew out of the trees and grabbed the lure out of the water. Realizing I would have a big problem if the hooks got caught in his feet, my buddy and I started to scream at the top of our lungs until he dropped the lure just short of his perch in the tree. I still have that lure and show it every time I tell this story. Most people don’t believe me.

Steve Werner, St. Louis

# MISSOURI Conservationist

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## Reader Photo FIELD OF GOLD

Reader Robin Herron submitted this photo of her dog, Bella, surrounded by a field of black-eyed Susan wildflowers. Herron said she and her husband were surprised by the field on a trip to their weekend farm, near Belle, earlier this summer. "My husband planted the field in corn last summer for the deer and turkey," she said. "When we came up to the farm earlier this summer, this is what we found!"





## Species of Concern **Auriculate False Foxglove**



**Common name:** Auriculate false foxglove

**Scientific names:** *Agalinis auriculata*

**Range:** Primarily northern and western Missouri

**Classification:** Vulnerable

**To learn more about endangered species:** [www.MissouriConservation.org/8227](http://www.MissouriConservation.org/8227)

CLOSELY RELATED TO cultivated varieties of foxglove, this attractive annual wildflower lives free, eking out an existence in remnant prairie and glade sites such as old fields, abandoned roadbeds and forest edges. The uppermost leaves of the plant have lobes—called auricles—at their bases. It flowers from mid-August through early October, sometimes topping 30 inches tall. Auriculate false foxglove is known to occur in 15 Missouri counties. Most of these are in the northwestern part of the state. Its range also includes parts of Kansas, Iowa and Illinois. Small remnant populations are scattered as far west as Oklahoma and as far east as Pennsylvania. Auriculate false foxglove is a prairie plant, and its decline is related to the conversion of fertile prairie land to agriculture in the 20th century. For more information, visit [www.MissouriConservation.org/82](http://www.MissouriConservation.org/82).

PHOTO: JIM RATHER; ART: MARK RAITHEL

## Coin Honors Bald Eagle

*Commemorative piece is 90 percent gold and silver.*

Eagle admirers will be thrilled to learn that the United States Mint is issuing three commemorative coins, all bearing the images of America's national symbol. The mint is issuing 100,000 gold \$5 coins featuring two young eagles on the obverse, or "head" of the coin. It is producing 500,000 silver dollars depicting a mature bald eagle in flight. Finally, the mint is issuing 750,000 clad half-dollar coins showing a pair of 2-day-old eaglets. Visit [www.usmint.gov](http://www.usmint.gov), or call 800-872-6468 to order.



## The Three Ps of Wild Cuisine

*Persimmons, pawpaws and puffballs*

This month, check out the three Ps. Pawpaw trees are small, sometimes little more than shrubs, that grow in moist, fertile, shaded areas. Their fruits can weigh as much as a pound each. The flesh resembles custard in color and consistency and has a heady aroma reminiscent of tropical fruit.

Persimmon trees are bigger and grow in more open, sunny locations. Their fruit is not ready to eat until after the first hard frost. Persimmons are good straight from the tree or in sweet bread recipes.

Puffballs appear in meadows when the nights turn cool. These globe-shaped fungi can grow as large as bowling balls. Their white, fluffy flesh is fantastic sautéed in butter.



For more information, visit [www.MissouriConservation.org/15894](http://www.MissouriConservation.org/15894), [www.MissouriConservation.org/15901](http://www.MissouriConservation.org/15901) or [www.MissouriConservation.org/17996](http://www.MissouriConservation.org/17996).



NextGEN

## Flatwoods Conservation Area

Visit this versatile shooting range in Wayne County.

Hunters in Wayne County have a great resource in Flatwoods Conservation Area. This 907-acre area three miles east of Piedmont has firearms and archery ranges that are made to order for sighting in rifles, sharpening shotgun skills, and tuning up bows and muscles for upcoming hunting seasons. The firearms range is wheelchair accessible. This wooded area also has good squirrel, turkey and deer hunting. There are no designated trails, but nearly 2 miles of unimproved trail provides access to the area's interior. For more information, call 573-223-4525.



## Be a Ranger!

On National Hunting and Fishing Day

Sept. 27 is National Hunting and Fishing Day, and Missourians who want to learn new outdoor skills or prepare for hunting season have their choice of five modern, supervised shooting ranges operated by the Conservation Department. Each range has facilities for rifle, pistol, shotgun and archery shooting and offers ongoing outdoor skills classes. Persons with mobility impairments will

find provisions for their needs, too. Special events will vary at these ranges Sept. 27, but might include free instruction in archery, muzzle-loading rifle, pistol, and canoeing, fishing clinics, fly-tying and fly-fishing instruction, tree identification, deer, turkey and small-game management workshops, cave tours, backpacking, trapping, outdoor cooking demonstrations and more. For details, contact: Andy Dalton Shooting Range, Bois D'arc, 417-742-4361; Lake City Range, Grain Valley, 816-229-4448; Parma Woods Shooting Range, Parkville, 816-891-9941; Busch Memorial Range, Defiance, 636-300-1953 ext. 251; or Jay Henges Shooting Range, High Ridge, 636-938-9548, or visit [www.MissouriConservation.org/2337](http://www.MissouriConservation.org/2337).

## Trail Guide

### SHOREBIRD-WATCHING MECCA



Semipalmated sandpiper



SHOREBIRDS FOLLOWING THE broad ribbon of the Missouri River south to their winter haunts stop to rest and eat at high-quality wetland areas, such as Diana Bend Conservation Area west of Rocheport. The Conserva-

tion Department has returned much of this 1,016-acre area adjacent to the Missouri River to its former, wet condition. When holding water, these wetlands draw the attention of migrating birds, including pectoral sandpipers, semipalmated sandpipers, least sandpipers and lesser yellowlegs. Less common but still possible sightings include American avocets, black-necked stilts and black-bellied plovers. You also have a good chance of spotting green-winged and blue-winged teal, wood ducks, northern harriers, ospreys and bald eagles. Take along a field guide to birds to help identify different species and binoculars to help you see distinguishing marks. A spotting scope is useful for getting a good look at shy birds.

**Area name:** Diana Bend Conservation Area  
**Facilities:** Disabled-accessible boardwalk trail and bluff-top overlook  
**Unique features:** Seasonal wetlands for viewing wading birds  
**For more information:** Call 660-248-3358 ext. 119 or visit [www.MissouriConservation.org/a9710](http://www.MissouriConservation.org/a9710).

TRAIL GUIDE: NOPPADOL PAOTHONG; RANGE: CLIFF WHITE



## TAKING ACTION

*Missouri Bluebird Society***“Haunted Habitats” is Back***Venture into Nature’s Night Shift at Runge CNC.*

What goes bump in the night might surprise you. That eerie rustling, that ominous crunching, the monster you imagine in the trees. Oh, it’s there. But steady yourself and look closer, and you might recognize the fearsome predator—a wide-eyed flying squirrel searching for breakfast. He’s so cute it’s almost . . . scary.

There’s no room for ghouls on nature’s busy night shift, but you won’t be disappointed by the other characters you’ll meet.

A jack-o’-lantern-lit nature trail and knowledgeable guides await your family’s visit to the Runge Conservation Nature Center in Jefferson City on Friday, Oct. 24, from 6–9 p.m. (Rain date is Saturday, Oct. 25, also 6–9 p.m.) The trail is designed for children ages 3–9, but the Haunted Habitats event offers an exciting and educational evening for all ages.

Try your skill in the outdoor obstacle maze before you venture inside for more games and activities. Check out the interpretive activities in the lobby/exhibit area that reveal the hidden lives of nocturnal animals. Then take a break with complementary cider and hot chocolate

to look through the fun gifts and prizes you’ve collected along the way.

It promises to be an enchanted evening. And don’t worry about frightful parking, shuttle service will be available from the Conservation Department’s main office parking lot.

Call the Runge Conservation Nature Center at 573-526-5544 for more information.



**T**HE MISSOURI BLUEBIRD Society will hold its third annual conference Sept. 13 at the Hilton Garden Inn in Independence. Keynote speaker will be Sandy Siebert, president of Bluebirds Across Nebraska and a passionate advocate for bluebird conservation. Practical seminars and presentations, a silent auction/raffle and a field trip to the Conservation Department’s nearby Burr Oak Woods Nature Center are planned. Registration begins at 8 a.m. and the conference will complete around 5 p.m.

The Society was founded to enhance the welfare and broaden public awareness of the eastern bluebird, Missouri’s state bird. The group also seeks to improve habitat and nesting opportunities for other native cavity-nesting birds. All native hole-dwelling species are challenged by competition with aggressive, introduced house sparrows and European starlings.

Visit [www.missouribluebird.org](http://www.missouribluebird.org) or call 573-638-2473 or 816-803-2632 for more information.—by Jim Rathert



NextGEN

## Shooting at Doves

*Bring lots of shells. It's rare to bag a limit with one box.*

No matter how many spinning clay targets you reduce to dust at the practice range, it's tough to prepare yourself adequately for dove hunting. Unlike clay pigeons, doves juke, feint and change direction as if they had traction, often leaving hunters shooting at air. Three birds per box of 25 shells is average. Even boastful shooters brag of one bird for every three shells.

Expect to miss, and you'll be happier when you hit one. It sometimes helps dove hunters to allow themselves to shoot more instinctively. Instead of tracking a bird with your gun, wait until it is in range, lift your shotgun quickly, aim at the bird's nose and pull the trigger. Use light loads. They work well for doves, and your shoulder won't suffer as much from all the shooting.

Many hunters wear camouflage and sit (buckets are common) or stand near or under vegetation that breaks up their silhouette. The best places to set up are usually near the cleared fringes of fields. Stay still and the birds will come in closer. The birds are active all day, but feeding peaks in the morning and late afternoon.

If you hunt with a dog, bring extra water for it. If you set out decoys on open ground, fences or branches, face them into the wind. That's how doves take off and land.



## Dove Hunting

## Scout it Out



**Name:** Grand Pass Conservation Area

**Location:** In Saline County, 8 miles west of Marshall on Highway 65, then 5 miles north on Route N.

**For more info:** [www.MissouriConservation.org/a8010](http://www.MissouriConservation.org/a8010)



ONE OF MISSOURI'S best waterfowl areas also provides great dove-hunting opportunities. Grand Pass Conservation Area, located five miles southwest of Miami, has five fields of sunflowers prepared especially for dove hunters. Two fields are right next to a road. The others require a short walk.

Hunters can pursue doves on 100 different conservation areas, including 800 fields totaling 2,800 acres, managed specifically for doves. Go to [www.MissouriConservation.org/18183](http://www.MissouriConservation.org/18183). Three-star areas have the best hunting. For maps of dove fields, click "Dove Fields" after selecting an area, or obtain them from regional offices or area headquarters. Some areas require reservations and have special regulations.

Dove hunters age 16–64 not hunting on their own property need a small game-hunting permit. All dove hunters 16 and older on both public and private land need a Missouri Migratory Bird Hunting Permit. Many areas require you to check in before the hunt and report your harvest after the hunt. Nontoxic shot is required on many areas, including Grand Pass. Expect other hunters, especially on weekends. Pay extra attention to hunter safety.

PHOTO: DAVID STONNER; ART: MARK RAITHEL



## Watch for Deer

*A few tips to help avoid close encounters*

Summer's move into fall makes deer move, too, and their activities often bring them near roadsides. Motorists should remain especially alert for deer at night and near dusk and dawn.

Make a habit of scanning ahead and to the sides of the road as you drive. Don't divert your attention by talking on a cell phone. Use your bright lights when there is no oncoming traffic; they'll help you spot deer silhouettes or reflections from deer eyes. Be especially alert near creek bottoms or where the road interrupts tree lines or narrow fingers of forest. If you see a deer, slow down immediately. Deer can avoid a slow vehicle, and you will be better able to avoid them.

Avoid panic moves that would bring you into the path of oncoming traffic or cause you to leave the road. It's better to hit a deer than to risk a more serious accident.



If you hit a deer, please report it. If you wish to keep the carcass, you are required to contact a conservation agent or local law enforcement. Reporting helps the Highway Department and the Conservation Department track vehicle/deer collisions.

## BIRDS OF A FEATHER

### Blue-Winged Teal

IT'S STARTLING IN an enjoyable way when a whoosh of blue-winged teal upsets the quiet of a lake or stream. You look up, and the speedy, twisting flock is already past. You've had your treat, and you never saw it coming.

Blue-winged teal—stocky little birds with a blue patch on each shoulder—are among the earliest migrating waterfowl. Flocks generally pass through Missouri during September, on their way to wintering grounds in Central and South America. The earliest travelers are mostly males, identifiable by a distinct white crescent behind the bill. Female blue-wings and immature birds generally migrate later. You can also distinguish males from females by their calls. Males whistle; females quack.

Blue-wings also are one of the last species to arrive at the breeding grounds, giving them a short time to accomplish nesting, incubation and fledging. They usually breed in late May, and the young might not be able to fly until they are 6 weeks old. Many young birds become food for predators.

Female blue-wings molt after the young are fledged, but males don't wait that long. They seem to disappear a few weeks after incubation. Flightless and vulnerable for about four weeks, they mostly feed at night and hide during the day.

Blue-wings are omnivores. Their diet ranges from seeds to snails. They usually feed in water less than 8 inches deep.



TEAL: JIM RATHER; DEER: NOPPADOL PAOTHONG



NextGEN

## Protect Your Stormwater

*With spray paint and a stencil*

Tackling a big problem like water pollution can be daunting. However, you might be surprised how easy it is to make a difference. One example is the enormous problem of pollution from storm sewers.

Many people think the water inlets along city streets take whatever goes into them to wastewater treatment plants, where toxic chemicals are removed. This is not true. Storm sewers are designed to take rainwater, snowmelt and other naturally-occurring runoff out of roadways and deliver it to the nearest stream. Paint thinner, pesticides, antifreeze, motor oil and other toxic materials that are poured down storm sewers go straight into our streams, and that is a serious problem.

Because pollution from storm sewers cannot be traced to a single source, it is classified as “non-point” pollution, along with runoff from



fields and other hard-to-trace pollution. Non-point pollution is one of the biggest contributors to stream pollution.

Unlike some problems, there are things you can do to prevent pollution from entering Missouri streams through storm drains. One is to dispose of toxic materials properly. The other is to alert others to the danger of using storm drains as toxic-waste dumps. You can do this by stenciling storm drains in your area with the message “Dump

no waste. Drains to stream.”

Kits with ready-made stencils and detailed instructions about how to use them are available through the Missouri Stream Team. To get your kit, visit [www.MissouriConservation.org/47](http://www.MissouriConservation.org/47) to download a PDF of the order form, or contact Missouri Stream Team, PO Box 180, Jefferson City, MO 65102-0180, phone 573-751-4115, ext. 3169, e-mail [streamteam@mdc.mo.gov](mailto:streamteam@mdc.mo.gov).

## Stream Team



### Twin River Rangers



THE TWIN RIVER Rangers originally focused on the Meramec and Big rivers. However, their efforts have expanded. They still conduct stream cleanups every year and participate in Earth Day at Forest Park, bringing

buckets of crayfish to delight urbanites who have never seen, let alone held, a “lobster.” But they also are leading the formation of Stream Team associations to multiply the power of individual teams. Rangers spokesman Larry Cain is president of the Missouri Stream Team Watershed Coalition, an umbrella group for Stream Team associations statewide. “Our goal is to be a voice for Stream Teams and to help guide the future of the Stream Team program,” he said. Anheuser-Busch has underwritten much of Stream Team accomplishments. Cain, who works for the brewer said, “I am really proud of my employer for the way they have supported the Missouri Stream Team and other stream conservation programs.”

**Stream Team Number:** 1008

**Date formed:** Sept. 15, 1997

**Location:** Jefferson County

**For more info about Stream Teams:** [www.mostreamteam.org](http://www.mostreamteam.org)

PHOTOS: DAVID STONNER



## Our Glorious Forests

BALTIMORE BEND CA



**Size of area:** 1,202 acres

**Location:** 3 miles west of Waverly on Highway 24

**Highlights:** Diverse, riverside woodland provides hiking along interior access trails, seasonal viewing of neotropical songbirds and opportunities to pursue a variety of game in season.

**Call for more info:** Baltimore Bend CA: 816-228-3766. Baltimore Bottom Unit of the Big Muddy National Fish and Wildlife Refuge: 573-876-1826.



THIS AREA ALONG the Missouri River gets its name from the 1800s riverboat “Baltimore,” which found its final resting place against an island in the bend of the river. The north half of the area consists of steep, wooded slopes with narrow ridges, and its drainages are broad and flat. Open fields lie in the area’s southern portion. Most of the area is forested with oaks, hickory, basswood and black walnut. This diverse wildlife habitat, sustained by forest management activities such as grain crops and native grass and tree plantings, make the area a great place to hunt fall bushy-tails. In 2002, the U.S. Fish and Wildlife Service acquired the Baltimore Bottom Unit, which is managed as part of Big Muddy National Fish and Wildlife Refuge. State conservation area and federal wildlife refuge operations differ, so call the numbers listed above before visiting.

## Get Your Smokey On!

*Beloved bear is online with updated message for kids.*

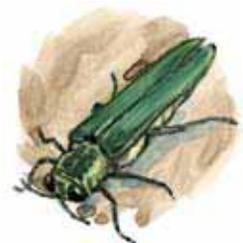
Created in 1944, Smokey Bear is the longest running public service campaign in United States history. Recently, the Ad Council launched “Get Your Smokey On,” a Web site featuring a hip new Smokey, as well as videos, games and stories encouraging young people to take personal responsibility for fire safety. A resource page offers classroom and promotional materials. Visit [www.smokeybear.com](http://www.smokeybear.com) for a tour down memory lane and a glimpse of the next generation of wildfire prevention.



## We All Live in a Forest

*Protect Missouri’s ash trees—don’t move firewood!*

It’s here. Scientists detected the half-inch-long, metallic-green beetle known as the emerald ash borer (EAB) at Wappapello Lake on July 23. The discovery of this highly destructive pest at a campground is a strong indication that it probably arrived in firewood, said MDC Forest Entomologist Rob Lawrence. If people knew how devastating this insect can be, they would never consider bringing firewood from out of state. The non-native emerald ash borer has killed more than 50 million ash trees in the Midwest since the 1990s. It hides and travels in firewood. To help contain Missouri’s EAB infestation, cut or buy firewood from local sources and use it as close to its point of origin as possible. Learn more about efforts to control EAB. Visit [www.MissouriConservation.org/18410](http://www.MissouriConservation.org/18410).





NextGEN

## Evaluate Your Quail Success

*New Web page shows you how to do fall covey counts.*

Want to know if quail are responding to your habitat management? Set up listening stations, and count calling coveys the last three weeks in October. The Private Land Services Division's new Web page explains how to conduct a successful count. Including audio files of quail calls and a handy datasheet, the page details the process of establishing permanent listening stations on your land, so you can collect and track data



year after year. Find the Web site at [www.MissouriConservation.org/18009](http://www.MissouriConservation.org/18009).

## Sign Up for CRP-SAFE

*Program pays to enhance high-value habitat.*

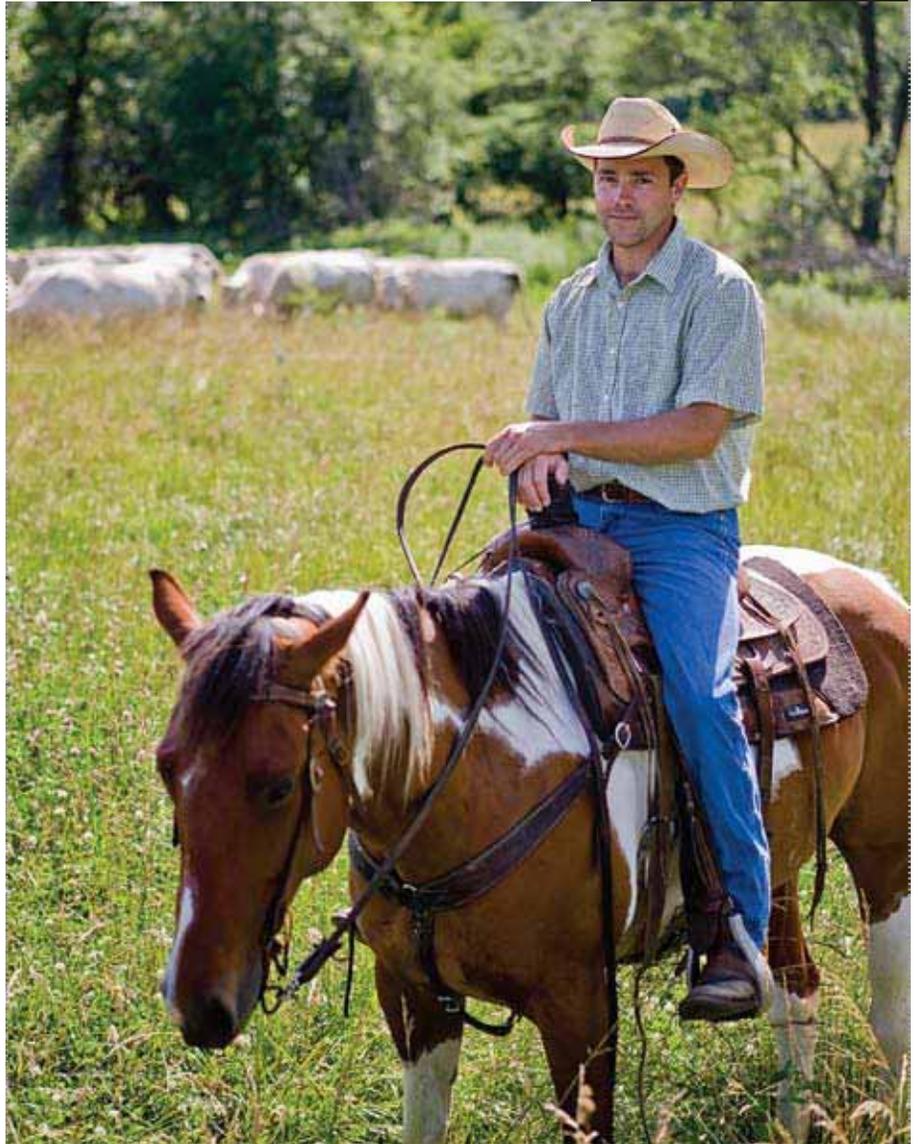
If you have eligible cropland, State Acres for Wildlife Enhancement (SAFE) of the USDA's Conservation Reserve Program (CRP) can help you enhance it for quail, prairie chickens and other declining wildlife. Eligible producers may enter into new CRP-SAFE contracts with their local Farm Service Agency. For their efforts, participants will receive an annual rental payment equivalent to the county's soil rental rates, plus an annual maintenance payment. Also, participating producers are eligible for cost-share assistance of up to 50 percent of eligible practice installation costs. Incentives of \$100 per acre and additional cost-share



are also offered. To find out if your land qualifies for CRP-SAFE, call your local USDA Farm Service Agency.

## Manage Fescue for Good Quail Habitat and Fat Cows

## On the Ground



WHO SAYS COWS and quail don't mix? Cole County cattleman, Jeremia Markway, reports four quail coveys on his 180-acres of fescue. What's his secret? He uses 1- to 3-acre paddocks and frequent rotation to keep his cattle bunched up and moving across the grass. "I try to manage my cattle not only to make a profit, but to improve the habitat and ecosystem sustainability as a whole," Jeremia says. With rapid rotation (he moves his cows to a new paddock almost every day), he produces the range of short-to-high vegetation quail chicks need. A combination of portable and semi-permanent electric fencing creates an ever-changing number of paddocks, and each paddock generally gets 60 to 90 days of rest before cows reenter it. That's adequate time for quail and songbirds to nest successfully. For more on managing fescue for fat cows and good habitat, visit [www.MissouriConservation.org/18449](http://www.MissouriConservation.org/18449).

PHOTO: DAVID STONNER; ART: MARK RAITHEL



## Family Fun in Nature

*Free events this month offer safe, fun activities outside.*

The last week of September features two national efforts to get more people into the outdoors. Take a Child Outside Week, Sept. 24–30, encourages families to help their children discover the natural world. Similarly, National Hunting and Fishing Day, observed on Sept. 27 this year, builds public support for outdoor lifestyles. Celebrate both with a trip to your local Department nature or interpretive center. There you can attend programs led by trained naturalists, view exhibits, hike trails and borrow tools to help you and your family discover and explore nature together. Some centers lend visitors daypacks filled with gear, such as guides, binoculars and magnifiers. For example, the Cape Girardeau Conservation Campus Nature Center offers different packs to help you explore six different topics—birds, insects, trees, aquatic life, art and naturalist skills. There's a conservation nature or interpretive center in every region. To find the one nearest your family, visit [www.MissouriConservation.org/18163](http://www.MissouriConservation.org/18163)



## Archery in the Schools

*Program changes students' lives, one arrow at a time.*

Whether you're an educator or school administrator, Missouri National Archery in the Schools Program can help you build more confident and accomplished kids. Archery is a sport at which nearly every child can succeed. Statistics show that school archery programs engage more students in the educational process, improve classroom performance and reduce dropout rates. MoNASP (via the Department of Conservation and the Conservation Federation of Missouri) provides free teacher training and funding opportunities for equipment. Check out this new and growing program at [www.MissouriConservation.org/16066](http://www.MissouriConservation.org/16066).

## NATURE ACTIVITY



### Burr Oak Woods Prairie Day



TAG MONARCH BUTTERFLIES, collect prairie seeds, make rope from prairie grasses, eat bison burgers and enjoy the sweet sounds of music at Burr Oak Woods' Prairie Day on Sept. 20. Held at the Jerry Smith Park in

southeast Kansas City, this event is a partnership between Burr Oak Woods, Kansas City Wildlands, Kansas City Parks and Recreation, Kansas City Power and Light, Bridging the Gap and the Missouri Prairie Foundation. To help celebrate the Kansas City region's collaborative efforts to restore local prairies, friends, families and kids can join prairie restoration workday activities, purchase native plants, take a bird walk, and see live prairie animals, including snakes, birds, lizards and amphibians. The event will end with a concert at sunset, so bring a chair and settle in to enjoy the music after a full afternoon of prairie fun.

**When:** Sept. 20—Activities from 2–6 p.m. Concert from 6–7 p.m.

**Where:** Jerry Smith Park. Take I-435 south to Holmes Road exit, south on Holmes Road to 139th Street, then left (east) onto 139th Street. The park entrance is a short distance on the left.

**Who should attend:** All are welcome.

**Call for more info:** 816-228-3766





# S *tate* of G *race*

As staff photographers for the Missouri Department of Conservation, we travel all over the state on assignments. We experience firsthand the diversity and beauty of Missouri.

From prairies to caves, woodlands to rivers, if Missouri doesn't have it all, it's got an ample share. All of the images on the following pages were photographed within the past few years and include just some of the breathtaking landscapes, beautiful flowers and amazing critters that can be found in Missouri.

While we hope you spend some quality time with these pictures, enjoying the scenes as much as we do, our larger hope is that these images will inspire you to get outside and find your own wonderful views of nature.

— David Stonner and Noppadol Paothong

t SHOAL CREEK *Noppadol Paothong*

During the fall of 2007, I visited Shoal Creek early in the morning before sunrise. As I waited for the sun to rise, I spotted a group of Canada geese swimming in the creek. I used a mid-range telephoto lens (70–200mm f/2.8) and a slow shutter speed to get a movement of flowing water. Then I carefully waited until geese came into my frame.

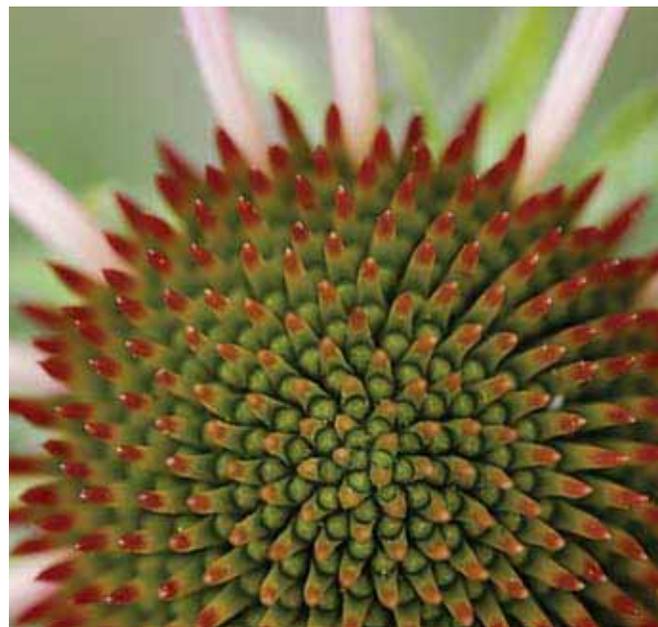


ρ PAINTED ROCK FOREST *Noppadol Paothong*

During a late winter snowstorm, I took a hike at the Painted Rock Conservation Area in central Missouri. The forest was covered with fresh snow, and I found the sugar maple leaves to be a nice contrast with the trees. Instead of using a wide-angle lens to cover the entire forest scene, I decided to use a mid-range telephoto lens (70–200mm f/2.8) to capture the details of trees.

∪ GLADE CONEFLOWER *Noppadol Paothong*

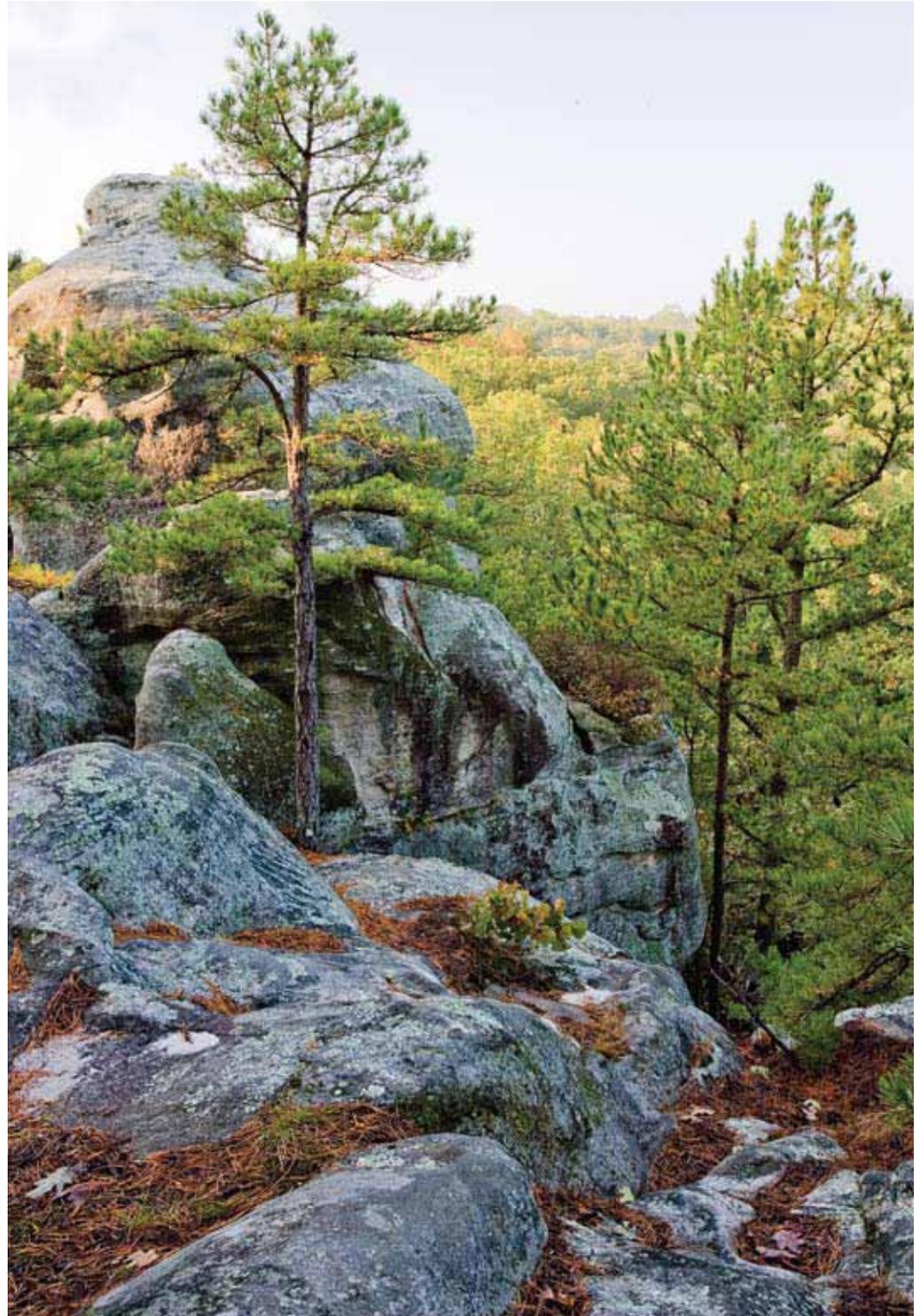
In the spring, I found a patch of glade purple coneflowers at Valley View Glades Conservation Area near Hillsboro. I tried to emphasize the texture of the flowers from the top view. With a macro lens set at 100mm f/2.8, I was able to get as close as I wanted and achieved that effect.





Q PICKLE SPRINGS PINES *David Stonner*

I arrived at Pickle Springs before sunrise one chilly morning last October, and I headed out on the 2-mile trail to see what the fall morning held in store. The sandstone arches, rugged boulders and rock falls along the path were interesting, but I decided to press on to the top of a bluff. Emerging from the woods onto the edge of the breathtaking precipice, the first rays of sunshine slipped over the tops of the pines, and the forest began to glow. I used a 24–70mm f/2.8 zoom lens on a tripod for this photo.



□ DUCK CREEK SUNRISE *David Stonner*

I was working on some photos about the bottomland forests at Duck Creek, and the images I got from a canoe in the swamp just weren't capturing the grandeur of being there in person. I hoped that some aerial photos would pay off, so I coordinated with MDC pilot John Westenbroek to pick me up in nearby Poplar Bluff for a sunrise helicopter flight over the area. I wasn't sure how the combination of low early morning light levels and aircraft vibration would affect the images, possibly rendering the photos unusable due to camera shake. All of the variables came together for several photos as the orange sunrise reflected in the pool of water with the misty Ozark hills in the background to lend a sense of depth to the images. I used a 24–70mm f/2.8 hand-held zoom lens.





␣ MOONRISE OVER STEGALL MOUNTAIN *David Stonner*

My good friend, hiking buddy and photography teacher from college, Tom Mitchell, and I were hiking the Ozark Trail through Shannon County last October. After a long day on the trail we found a beautiful glade on the summit of Stegall Mountain at Peck Ranch Conservation Area. It is a photographer and nature-lover's playground with sweeping vistas, rugged ridge lines, towering pines and big sky. We photographed the glade and the surrounding landscape all evening, and I decided to wait until nightfall to try some star photography with the full moon just barely illuminating the glade. The trees swayed and the clouds streaked through the frame in a stiff autumn breeze for the 30-second exposure taken with a 16–35mm zoom lens.

† DIANA BEND TREE *Noppadol Paothong*

I spend a lot of time searching for various areas in the fall, looking for subjects to shoot. At the Diana Bend Conservation Area near Rocheport, I set my goal to focus on one tree only. I decided that a unique way to photograph the tree was by pointing my camera up to the tree from below. I laid down on my back while pointing my camera upward and carefully framed the tree as to lead eyes to the top. A 17–40mm f/4.0 lens was used.





⊗ HOAR FROST, SPRING CREEK GAP *David Stonner*

The heavy fog I encountered while driving to Spring Creek Gap near Vichy one February day had me feeling that it wouldn't be a very productive morning. I decided to press on, my best bet for good photos coming from the top of a fire lookout tower on the area. Shivering in the dark with my camera tucked into my down parka to keep the batteries warm, the fog started to clear, revealing a beautiful layer of frost on everything in sight. The contrasts—light and dark, warmth and cold, color and monochrome, the cusp between spring and winter—evoke strong feelings for me. I used a 70–200mm f/2.8 lens on a heavy tripod.

⊔ DIAMOND GROVE *Noppadol Paothong*

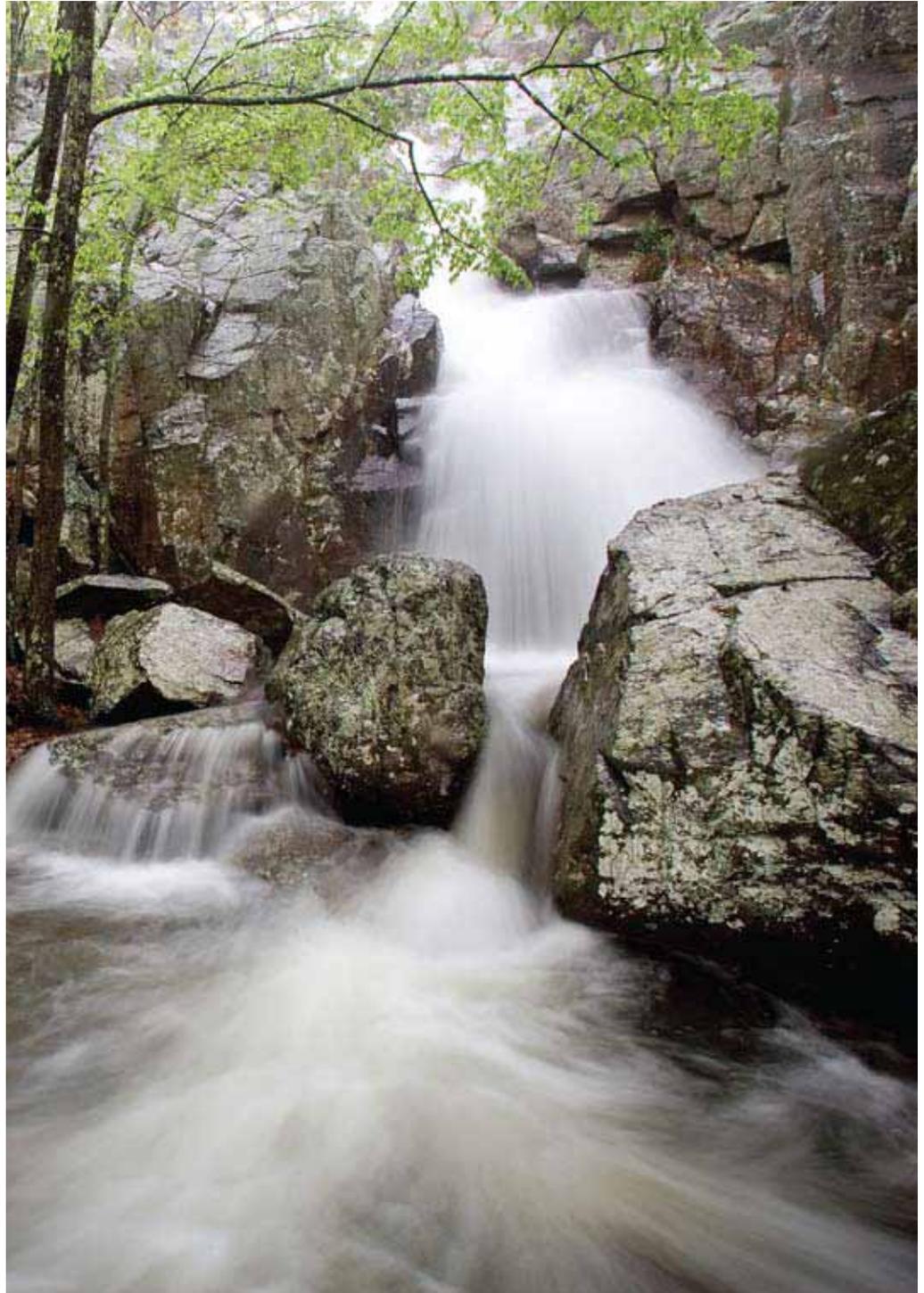
One summer I visited Diamond Grove Prairie near Joplin when it had been raining all day. Finally, the rain stopped, giving me a brief window to photograph. I found these big bluestems to be quite beautiful against the sunset sky. I only had a few minutes to search for the foreground subject and set up my tripod. I used a wide-angle lens (17–40mm f/4.0) and a polarizer filter to increase the contrast of the clouds.





Q MINA SAUK FALLS *David Stonner*

This was my first photo assignment after joining MDC last year. Noppadol and I set out to capture the water and wildflowers of the rugged Ozark hills in May. High tech rain gear and waterproof boots were no match for the pounding rain we received while on the trail; of course it didn't help keep me dry when I decided that the perfect vantage point was from a waist-deep pool of water at the base of the falls. In between wiping rain drops from the front of my lens, I managed to make several 15-second exposures using a 16–35mm f/2.8 lens on a tripod to give the water a silky, flowing look.





Feral hogs tend to have longer hair, straighter tails and longer tusks than commercial hogs.

# feral hogs:

**bad for missouri**

Feral hogs, now established in more than 20 counties, are a growing concern for Missourians.

BY REX MARTENSEN  
PHOTOS BY NOPPADOL PAOTHONG

Usually, when the subject of feral hogs is brought up, I get two questions: “Do we have them in Missouri?” and “Are they a problem?”

The answer to both questions is, “Yes!”

Right now we know that feral hogs are established in more than 20 of Missouri’s 114 counties. These counties are predominantly in the southern half of the state with at least one pocket of pigs north of the Missouri River. Hogs are considered feral (or wild) when they are not marked to show ownership and are roaming freely.

## WHERE DID THEY COME FROM?

Missouri’s feral hogs have originated from a variety of sources such as escapes from “on-the-ground” hog operations, released pets (potbellied pigs) and accidental escapes from licensed shooting preserves that offer hog hunts. Today most hog operators are considered commercial and keep all of their hogs in confinement buildings.

Feral hogs in Missouri are not exactly late-breaking news; a few counties in the south central and southwest Ozarks have had free-roaming hogs for a number of years. Those populations were small, isolated and kept in check by hunters and local hog trappers.

It wasn’t until the 1990s that the feral hog situation in Missouri began to change. Hog hunting as a form of recreation began gaining in popularity, and the intentional illegal release of hogs to provide more hunting opportunity on public land spread feral hog populations to new areas. Because feral hogs are very adaptable and prolific, it didn’t take long until their numbers started growing at an

alarming rate, and we started getting numerous damage complaints from private landowners.

## FERAL HOG PROBLEMS

Feral hogs cause a wide variety of problems and are a serious concern for private landowners, fish and wildlife managers, and nature enthusiasts of all kinds. They are very destructive to sensitive natural areas such as glades, fens and springs. Their tendency to wallow in wet areas can destroy these types of important habitats. The rooting and feeding behavior of feral hogs also contributes to soil erosion and reduces water quality.

They are omnivorous and will consume reptiles and amphibians. They have even been known to kill and eat deer fawns. They also relish the eggs of ground-nesting birds. Basically anything that lives on the ground is a potential meal for a feral hog.

Feral hogs also forage heavily on acorns. Because many wildlife species in the Ozarks depend on acorns for their main food source, any acorns consumed by feral hogs come at the expense of Missouri’s native wildlife.

## AGRICULTURAL CONCERNS

Feral hogs are also a major concern to Missouri’s agriculture community. They damage and destroy row crops, root up hay and pasture land and damage tree plantings and other types of agriculture.

One of the biggest threats to agriculture is the potential transfer of disease from infected feral hogs to domestic swine herds. Feral hogs in other states are known to carry

swine brucellosis and pseudorabies. Both of these diseases cause abortions in sows and high mortality in piglets.

Missouri's domestic swine are considered disease-free and a good source for safe, healthy pork products. However, an outbreak of swine brucellosis or pseudorabies from feral hogs into domestic swine could severely cripple Missouri's pork industry, creating a negative economic impact that would affect the entire state.

## HOGS AND DISEASE

The spread of disease to people, pets and other livestock is another concern. Brucellosis, when contracted by humans, is known as undulant fever. Pseudorabies is not transferable to humans and is not related to rabies. Feral hogs have been documented in various studies to carry 30 significant viral and bacterial diseases and 37 parasites.

Feral hogs in Missouri are currently being tested for

**MDC Conservation Agent Billy Barton and MDC employee Jeremy Pulley work on a hog that has been captured in a snare.**

pseudorabies, brucellosis, tularemia and classical swine fever. Blood test kits are available at regional conservation offices at no charge to collect blood samples for disease testing.

We are fortunate not to have had an outbreak or serious issues with diseases from feral hogs. However, four cases of pseudorabies and brucellosis have been discovered in feral hogs in Missouri. In at least two of those cases, infected feral hogs were brought into the state for the purpose of hunting. Quick action from the Missouri Department of Agriculture helped stop these animals from spreading disease.

## ERADICATION EFFORTS

Feral hogs are simply considered an invasive, exotic species. They are not wildlife and are not, therefore, under the control of the Conservation Department. Because they are not owned or confined, they also escape the regulations of the Missouri Department of Agriculture. This has complicated feral hog control and eradication efforts.

The Missouri departments of Conservation and Natural Resources, the U.S. Forest Service, and the U.S. Army



Corps of Engineers are actively eradicating feral hogs on their respective properties and the properties of adjoining landowners. The U.S. Department of Agriculture/Animal and Plant Health Inspection Service–Wildlife Services staff are assisting those efforts, in addition to helping private landowners eradicate hogs.

Hunters are also helping control Missouri’s feral hog numbers. However, hunting alone has not proven to be sufficient to eradicate feral hogs.

Trapping and snaring are the most common and effective methods for catching hogs. By using corral-type traps with a one-way door, multiple hogs can be caught at one time. If trapping is not an option, then shooting hogs that come to bait is effective. Because feral hogs are often active at night, this method is enhanced when state and federal employees use night-vision equipment.

Another control method involves using a “Judas pig,” or a pig that betrays the others. By catching and placing a radio transmitter on a juvenile pig and releasing it back to the wild, it gives away the location of other hogs, and eradication efforts can then be focused on the whole group. Specially trained bay dogs are sometimes used to catch the Judas pig and its comrades. Bay dogs can also be effective for removing small pockets of hogs or hogs that are “trap shy.”

Aerial gunning (shooting pigs from a helicopter) has also proven to be very effective under the right circumstances. USDA / APHIS–Wildlife Services have used this method extensively in Kansas and Texas.

Such aggressive and seemingly extreme methods must be used to effectively reduce feral hog numbers. Because of their large reproductive potential, 70 percent of a feral hog population must be removed annually to keep it from growing.

## ILLEGAL RELEASE OF FERAL HOGS

With all of the negative affects associated with feral hogs, it seems elementary that everyone would support their complete eradication. Unfortunately, some individuals have contributed to the spread of feral hogs by intentionally releasing them for the purpose of recreational hunting.

While some might argue the recreational value of hunting feral hogs in Missouri, the detrimental effects of feral hogs far outweigh any benefits. Releasing feral hogs is illegal and should be reported directly to law enforcement agencies, or by calling the Operation Game Thief Hotline at 800-392-1111.

## HUNTING FOR HOGS

When people ask me where the best places are to hunt feral hogs, I usually tell them to go to Texas, Oklahoma or Arkansas!

## GOVERNOR’S TASK FORCE

In the fall of 2007, Governor Blunt formed the Feral Hog Task Force to help elevate awareness of the negative impacts of feral hogs. The task force made the following recommendations.

- A statewide, cooperative effort among various governmental and non-governmental agencies, private landowners and Missouri citizens is needed to control feral hogs in the state.
- Key members of the public, legislators and the judiciary need to be informed of the consequences of feral hogs so they can make appropriate decisions concerning the animals.
- Current laws and penalties need to be reviewed to evaluate their effectiveness at stopping feral hog releases.
- Public land managers and private landowners need to work cooperatively at eradicating feral hogs from their respective properties.
- Funding sources need to be identified and pursued to support feral hog control efforts.
- Disease monitoring needs to be continued and prompt reporting of feral hogs needs to be encouraged to help eradication efforts. To report feral hogs or to request blood test kits call the Conservation Department at 573-751-4115, or the USDA at 573-449-3033.

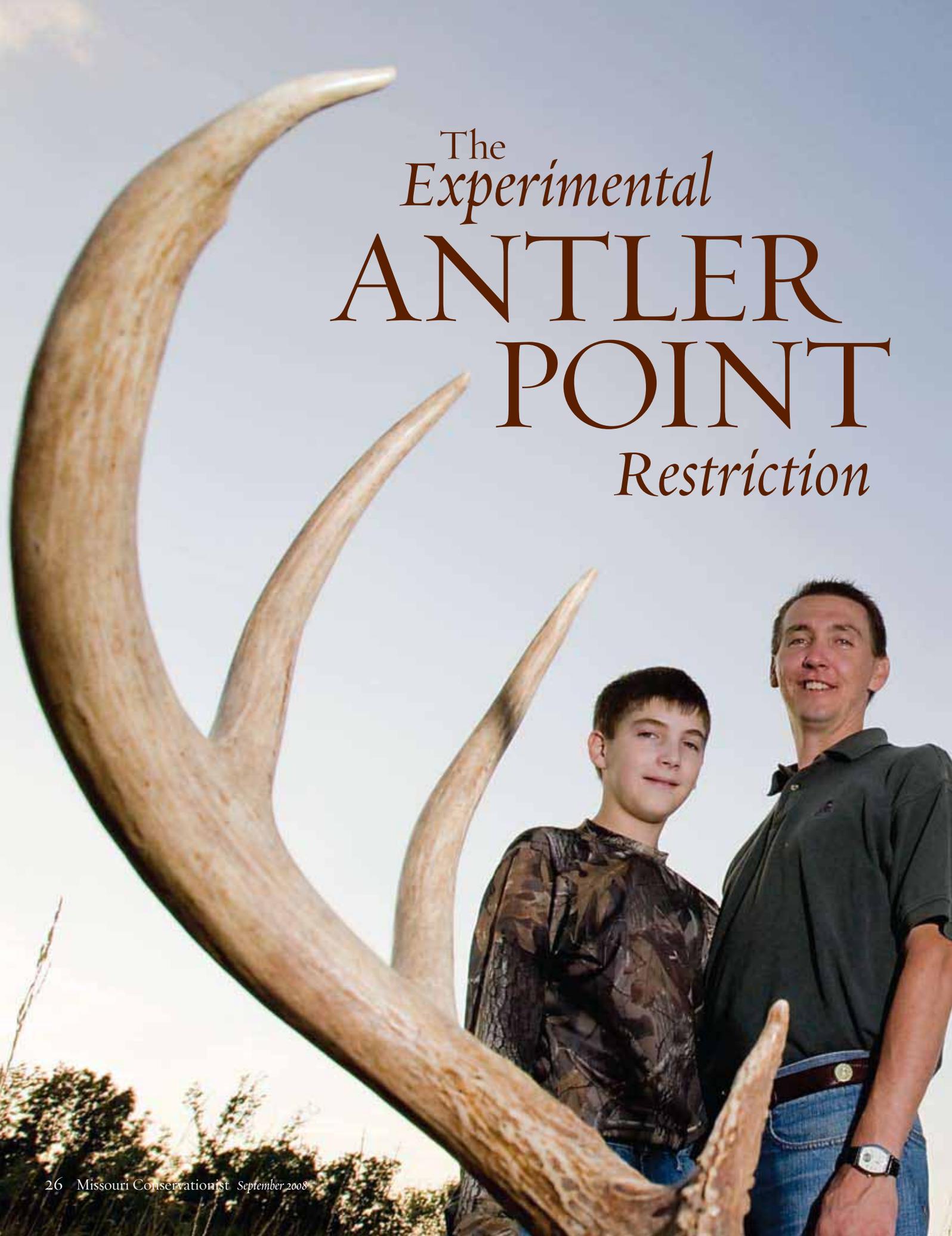
The Feral Hog Task Force included representatives from a wide variety of resource, agricultural and citizen interests. For more information, visit the task force's Web site, [governor.mo.gov/eo/2007/eo07\\_026.htm](http://governor.mo.gov/eo/2007/eo07_026.htm)

Targeting feral hogs to hunt in Missouri is extremely difficult and not recommended for the casual hunter. Populations are typically scattered over large expanses of rugged Ozark real estate that includes public and private land. Trying to locate feral hogs in Missouri is like looking for a needle in a haystack.

Private landowners who have feral hogs on their property tend to take care of the problem themselves or enlist the help of USDA/APHIS–Wildlife Services. Some local hunters who live in hog country are having success killing feral hogs because they have a better chance of knowing where the hogs are from day to day. The best chance for non-local hunters is to opportunistically kill hogs while hunting deer or other species of wildlife.

The regulations make it easy for hunters to take hogs when opportunities arise. During most of the year no permit is required to take feral hogs, and any legal hunting method is allowed. There are some restrictions during the firearms deer and turkey seasons. Details of these can be found in the *Wildlife Code* or at the Missouri Department of Conservation’s Web site.

Feral hogs are bad for Missouri, and they are everyone’s problem. Eradicating feral hogs will be an ongoing process that will require long-term dedication and wide support. ▲



The  
*Experimental*  
ANTLER  
POINT  
*Restriction*

A large set of deer antlers is the central focus of the image, set against a clear, bright blue sky. The antlers are light-colored with some darker, textured areas near the base. They curve upwards and outwards, with the largest point at the top right. The background is a solid, clear blue sky. In the bottom right corner, there are some thin, dark lines representing grass or trees.

Based on the biological results from the APR experiment and public support, the APR will be expanded to include 65 counties in 2008.

BY LONNIE HANSEN

Gasconade County resident Jerod Gross and his son, Logan, are in favor of the restriction. "We've definitely seen more large bucks on our farm since the APR," said Jerod. "I think it's working."

**T**he 475,000 Missourians who hunt white-tailed deer and the many Missourians who enjoy the thrill of seeing the graceful animals in the wild believe that as far as Missouri's deer herd goes, "the more the better."

On the other hand, landowners who see deer feeding in their fields and motorists who worry about deer on the roadsides might say Missouri has too many deer.

Balancing the interests of these groups with opposing viewpoints is a challenge the Conservation Department continually addresses.

Our most effective tool for managing deer numbers is hunting. Surveys tell us, however, that this tool might not be as reliable in the future as it has been in the past because the average age of deer hunters in Missouri is slowly increasing, which suggests declines in the number of deer hunters might occur.

The Conservation Department has been testing various regulations that might enable us to manage deer populations with fewer hunters. Studies clearly tell us that the best way to control deer numbers is to balance the ratio of bucks to does in the population. If two out of three deer are does, for example, you're more likely to have population bulges than if the numbers of does and bucks were closer to equal. The proportion of does in the total population is one key to manageable deer numbers.

Since 2004 we have been testing an Antler Point Restriction in 29 Missouri counties to see if it would reduce the percentage of does in the deer population. The APR requires a buck to have at least 4 points on one side to be legal. The restriction applied to the archery season and all portions of the firearms season except the youth portion. The expectation was that restricting the bucks that could be taken would promote a larger doe harvest. An additional benefit of this restriction would be that more bucks survive longer and grow antlers large enough to be considered trophies by hunters.

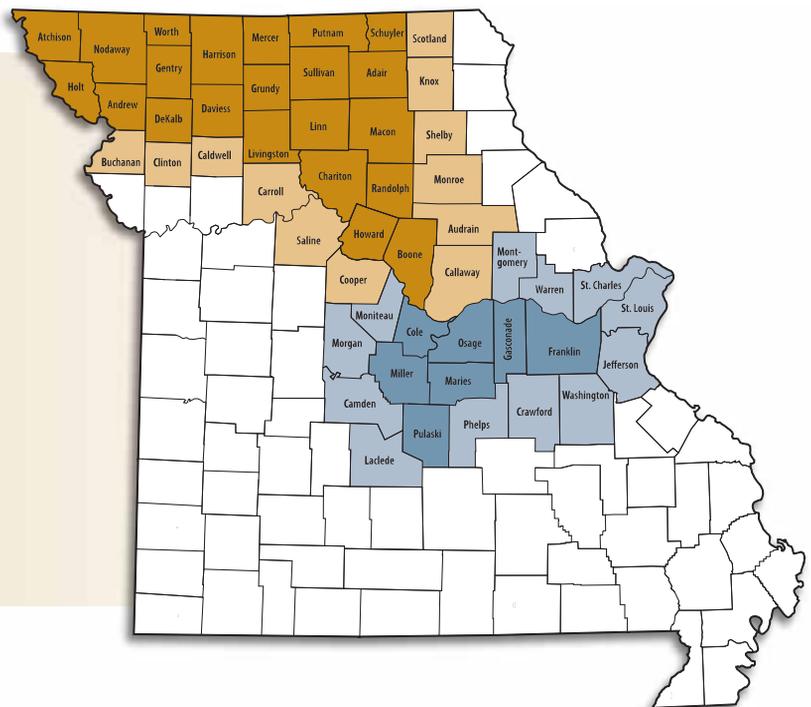
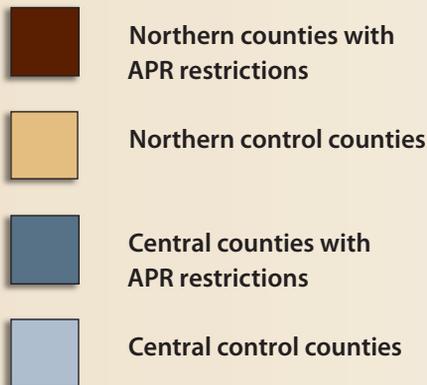
We selected two groups of counties for the APR—a northern and a central group. The northern group of counties was mostly agricultural land with generally high deer densities. The central group of APR counties was Ozark fringe, where deer densities are moderate. We separated the northern and central APR counties when evaluating the effects of the APR.

Originally, we planned to evaluate the biological effects of the APR and hunter and landowner attitudes toward deer management and the APR for three to five years. We decided after the 2007 season (four years) that we had adequate information to determine how well the APR worked and to make decisions on how it should be applied in the future.

We determined sex and age of harvested deer from 2003, before the APR was implemented, through 2007, the last year of the study.

**Two groups of counties were selected for the APR. The northern group, mostly agricultural land with high deer densities, and the central group, with moderate deer densities. Data collected from adjacent control counties helped gauge the effect of APR.**

**Counties involved in the 4-year study from 2003–2007 on Antler Point Restrictions.**



To better gauge the effect of the APR we compared information collected in APR counties with information from adjacent “control” counties without the APR.

Data collected for analysis included checked deer (classified as button buck, doe or antlered buck) and deer sampled at biological data collection sites (check stations in 2003; meat processors in 2004–2007). We collected two incisor teeth from deer at least 2.5 years old to obtain more precise age information. For antlered deer we recorded the number of points at least 1 inch long on each beam, the length of the right beam, and the circumference of the right beam 1 inch above the base.

To determine the impact of the APR on harvest we assumed that any annual changes we saw in deer harvest would be the same in the APR counties as it was in the control counties. For example, if we saw a 10 percent annual increase in the doe harvest in the control counties, we expected the same increase in the APR counties. We attributed any differences between the actual doe harvest in the APR counties and the expected harvest to the APR.

Our assessment of public attitudes included random surveys of hunters and production landowners, written and Web-based comments, and comments offered at 16 public meetings held during January and February 2008. About 24,000 Missourians provided opinions about the APR and other deer management issues.

## BIOLOGICAL EFFECTS

The Antler Point Restriction had little effect on the doe harvest in the northern counties, but in the central APR counties the doe harvest increased an average of 13 percent over the four-year study period.

The APR reduced the harvest of antlered deer in both the northern and central APR counties. The reduction ranged from 35 percent in 2004 to 14 percent in 2007 in the northern APR counties, and from 37 percent to 19 percent in the central APR counties. The reduction consisted mostly of yearling bucks, because the majority of bucks in this age class did not qualify as legal deer under the APR.

Harvest of adult bucks was slightly lower in the APR counties in 2004, but increased in all



**The main purpose of an Antler Point Restriction is to increase the harvest of does. Hunters are more likely to take does if many of the bucks are restricted from harvest.**

## Public Input on Attitudes Toward an Antler Point Restriction



Random Survey of Hunters Statewide



Random Survey of Hunters In Counties With APR



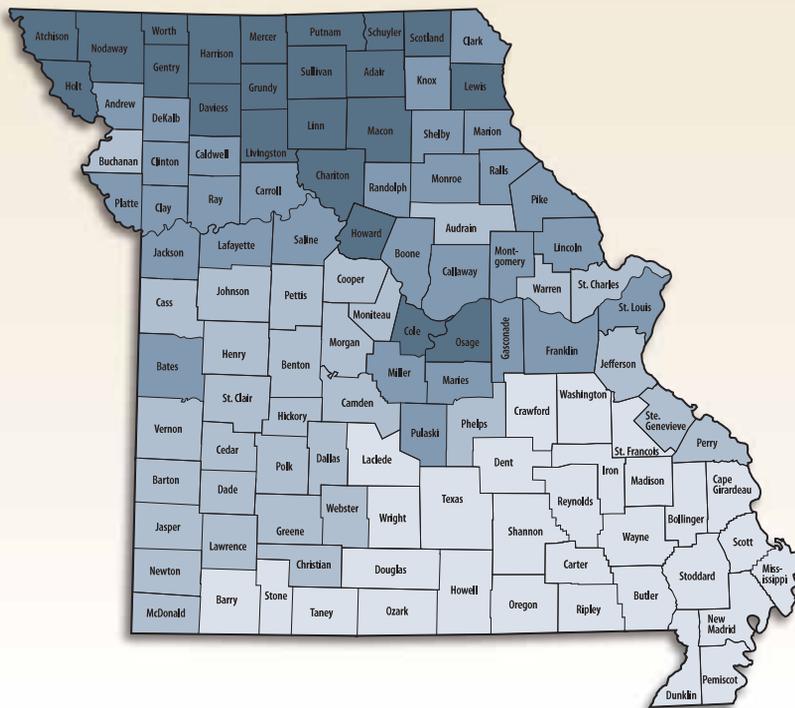
Random Survey of Production Landowners Statewide



Random Survey of Production Landowners In Counties With APR



## Antler Point Restriction Support (percent in favor of the 4-point rule)



of the following years. By 2007, the number of adult bucks harvested in the northern APR counties increased by 55 percent, and in the central pilot counties by 62 percent. Because the number of adult bucks taken in the northern and central control counties also increased, the adjusted change was to 16 percent and 32 percent in the northern and central APR counties, respectively.

The increase in the number of adult bucks taken in the control counties might have been a result of an increasing number of hunters deciding not to shoot young bucks even though doing so was legal. We suspect the APR regulation might have prompted and accelerated this voluntarily restrictive harvest, producing higher adult buck harvests.

Total harvest declines in the northern APR counties ranged from 14 percent in 2004 to 8 percent in 2007, and from 3 percent in 2004 to no change in the central APR counties. Continuation of the APR likely will result in 5–10 percent fewer deer harvested annually in the northern APR counties and will have no effect in the central APR counties. That's because the increased harvest of does and adult bucks in the northern counties did not offset the decrease in the yearling buck harvest, as it did in the southern counties.

## SOCIAL EFFECTS

The Antler Point Restriction was popular in both the northern and central APR counties. The restriction became increasingly favored in the APR counties during the course of the study, but there was no change in acceptance of it in the control counties.

Although popular overall, acceptance of the APR varied throughout the state. The percentage of surveyed deer hunters in favor of the APR was greatest in northern Missouri. We found much less support for the restriction in the south, particularly the southeast part of the state.

## STUDY CONCLUSIONS

Although we did not achieve all of our biological objectives, the APR increased the harvest of adult bucks, increased doe harvest in central APR counties and was generally popular and well supported where implemented. In

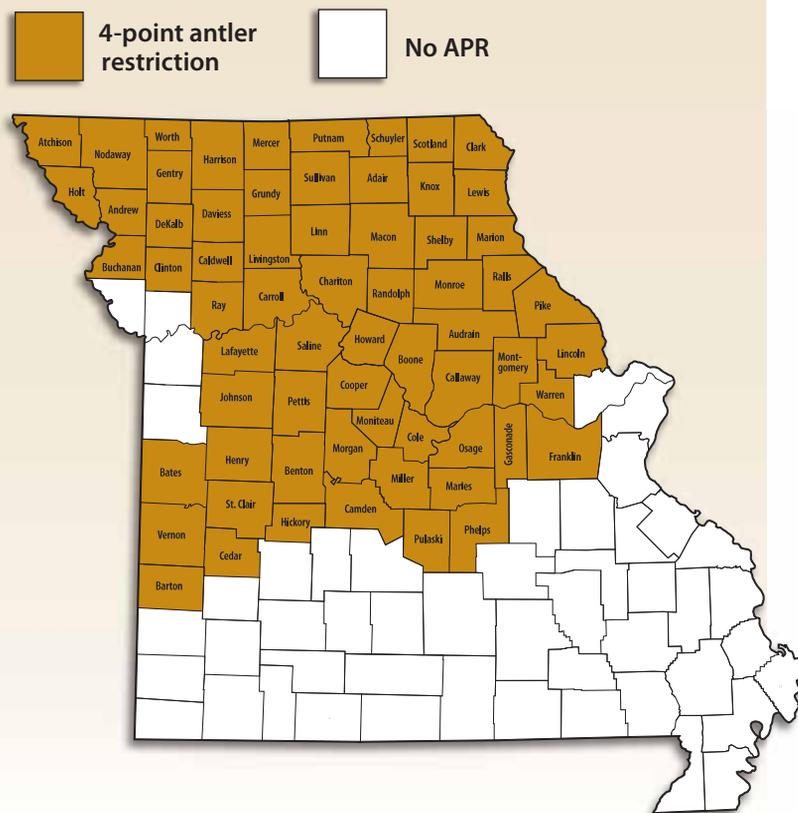
other words, we consider the APR a helpful management tool.

For 2008 the Antler Point Restriction will be expanded to include 65 counties, mostly in northern and central Missouri. Some counties in southwestern Missouri were excluded because of concerns about deer population declines that have occurred there over the last few years, even though there was public support for the APR. We also excluded urban counties in the St. Louis and Kansas City areas because of the need to harvest as many deer as possible—bucks and does—to reduce conflicts with human activities.

Deer populations in southeastern Missouri are low. We do not need to increase doe harvests there, and a restriction that prohibits hunters from taking a yearling buck would significantly reduce harvest opportunities for some hunters.

We will annually review the results of the APR and may add or remove counties depending on biological issues and public interest. Missouri deer hunters can expect that we will continue to strive to manage deer populations in a way that ensures a healthy deer herd in line with the desires of hunters, landowners and the general public. ▲

### Counties to be included under a 4-point antler restriction in 2008.



Around 475,000 Missourians enjoy hunting white-tailed deer, making it the most popular game species in the state.

CLIFF WHITE

# Hunting and Fishing Calendar

## FISHING

	OPEN	CLOSE
Black Bass (certain Ozark streams, see the <i>Wildlife Code</i> )	5/24/08	2/28/09
impoundments and other streams year-round		
Bullfrogs and Green Frogs	Sunset	Midnight
	6/30/08	10/31/08
Gigging Nongame Fish	9/15/08	1/31/09
Trout Parks	3/1/08	10/31/08

## HUNTING

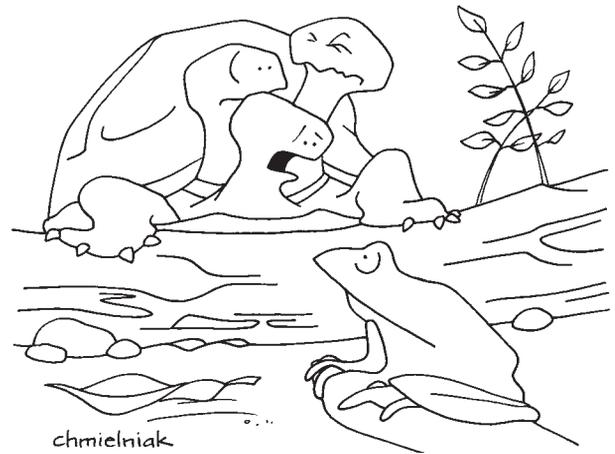
	OPEN	CLOSE
Coyotes	5/12/08	3/31/09
Crow	11/1/08	3/3/09
Deer		
Archery	9/15/08	11/14/08
	11/26/08	1/15/09
Firearms		
Urban	10/3/08	10/6/08
Youth	11/1/08	11/2/08
	1/3/09	1/4/09
November	11/15/08	11/25/08
Muzzleloader	11/28/08	12/7/08
Antlerless	12/13/08	12/21/08
Dove	9/1/08	11/9/08
Furbearers	11/15/08	1/31/09
Groundhog	5/12/08	12/15/08
Pheasants		
North Zone	11/1/08	1/15/09
South Zone	12/1/08	12/12/08
Youth (north zone only)	10/25/08	10/26/08
Quail	11/1/08	1/15/09
Youth (statewide)	10/25/08	10/26/08
Rabbits	10/1/08	2/15/09
Ruffed Grouse	10/15/08	1/15/09
Sora and Virginia Rails	9/1/08	11/9/08
Squirrels	5/24/08	2/15/09
Teal	9/6/08	9/21/08
Turkey		
Archery	9/15/08	11/14/08
	11/26/08	1/15/09
Firearms	10/1/08	10/31/08
Waterfowl	please see the <i>Waterfowl Hunting Digest</i> or see <a href="http://www.missouriconservation.org/7573">www.missouriconservation.org/7573</a>	
Wilson's (common) Snipe	9/1/08	12/16/08
Woodcock	10/15/08	11/28/08

## TRAPPING

	OPEN	CLOSE
Beaver and Nutria	11/15/08	3/31/09
Furbearers	11/15/08	1/31/09
Otters and Muskrats	11/15/08	see <i>Wildlife Code</i>

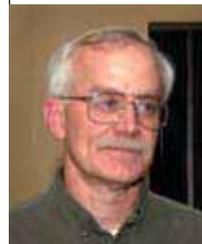
For complete information about seasons, limits, methods and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest* and the *Migratory Bird Hunting Digest*. For more information visit [www.MissouriConservation.org/8707](http://www.MissouriConservation.org/8707) or permit vendors.

The Department of Conservation's computerized point-of-sale system allows you to purchase or replace your permits through local vendors or by phone. The toll-free number is 800-392-4115. Allow 10 days for delivery of telephone purchases. To purchase permits online go to [www.wildlifelicense.com/mo/](http://www.wildlifelicense.com/mo/).



"Gas prices are so bad, we're carpooling."

## Contributors



LONNIE HANSEN, a resource scientist with the Department, has studied deer and been involved in their management for more than 25 years. He enjoys fishing and hunting with family and friends and managing the flora and fauna on his property north of Columbia.

REX MARTENSEN is a 16-year Department employee who worked in Fisheries and Protection divisions before filling his current role as field program supervisor for the Private Land Services Division. Rex and his family reside in Moniteau County. He enjoys fishing and all types of hunting.



NOPPADOL PAOTHONG discovered his passion for wildlife photography in college in 1995. Born in Thailand, he came to the U.S. in 1993 to study graphic arts before switching to journalism. When not traveling and photographing, he enjoys time at home cooking. He, his wife, and their two golden retrievers live in Columbia.

Nature photographer DAVID STONNER lives in Jefferson City with his wife, Angela, daughter, Maggie, and son, Sam. Since joining the Department of Conservation in 2007, he has made his favorite photographs while on the beautiful trails of southern Missouri, where he backpacks every chance he can get.



## TIME CAPSULE

### September 1958

*Farm Foresters—County Agents of the Woods* was written by Edwin H. Glaser about farm forestry. This group started in 1940 with the help of the U.S. Forest Service. Their mission was “to serve the private woodland owner.” There were

then 14 professional foresters established in districts. They worked with private farmers educating them on timber management. The majority of the farmers knew little about forest management and learned to get the most out of their timber. They learned how to pick out the ripe trees for cutting, how to contract on timber sale, work with mill operators for timber supplies, and identify insects that could be controlled. —Contributed by the Circulation staff



## AGENT NOTES

*MDC makes it easy for you to know the hunting and fishing regulations.*

JUST AS DRIVERS must know the rules of the road, hunters and anglers need to be aware of the regulations governing their activities. The Missouri *Wildlife Code* covers all hunting, fishing and trapping regulations in our state. It also includes special regulations for conservation areas. The *Wildlife Code* book—a pocket-size, 200-plus page softcover volume—is published annually and is available from any permit vendor or Conservation Department office. It reproduces portions of the *Wildlife Code* that recreational and commercial users of outdoor resources would find most relevant to their activities. The full text of the *Wildlife Code* is available from the Conservation Department’s main headquarters or the Secretary of State’s office. View the complete *Wildlife Code* at [www.sos.mo.gov/adrules/csr/current/3csr/3csr.asp](http://www.sos.mo.gov/adrules/csr/current/3csr/3csr.asp).

The Department also publishes annual summaries of both hunting and trapping regulations and fishing regulations.

The summaries, which are free and widely available, are written in a user-friendly language. Deer and turkey season regulations and migratory bird regulations are published separately because those seasons are not approved until later in the year.

The *Wildlife Code* varies little from year to year, but changes do occur. An easy way to keep abreast of regulation changes is to check the front pages of the summary pamphlets. All changes for the current year are highlighted there.

Tim McDaniel is the conservation agent for Lincoln County, which is in the St. Louis region. If you would like to contact the agent for your county, phone your regional Conservation office listed on Page 3.



## behind the CODE

*Baiting deer or turkeys violates the principle of fair chase.*

BY TOM Cwynar

Hunters can use bait to attract some animals, such as fish and furbearers, but not others. The *Wildlife Code* prohibits using bait to attract deer and turkeys to prevent hunters from having too much of an advantage over their quarry, or over other hunters.

This concept of “fair chase” is rigorously enforced.

Hunters are prohibited from using bait, such as



grain or other feed placed or scattered so as to attract deer or turkeys. They also may not hunt areas that are baited or have contained bait, unless the bait was removed at least 10 days before. Hunters are in violation even if they don’t know an area is or was baited. Those who place bait and cause others to be in violation of the baiting regulation can also be prosecuted.

Scents and minerals, including salt, are allowed. However, a mineral block may not contain grain or food additives. The rules allow hunters to hunt near food plots grown for the benefit of wildlife, as long as normal agricultural practices are followed. A departure from these practices, such as brushhogging or knocking the grain out or putting it on the ground, turns a food plot into a baited site for deer and turkey.

Federal rules prevent hunters from using bait to attract waterfowl and govern the use of bait for other migratory birds.

People who feed or bait deer and turkey for wildlife viewing should be aware that drawing animals into unusual concentrations raises the likelihood of diseases spreading through the population.

# “I AM CONSERVATION”

Brian Bernskoetter of Columbia started dove hunting two years ago, but has been a hunter of other game since he was 10 years old. “I think the best part of dove hunting is anticipating where the doves are going to come from next,” said Bernskoetter. “They keep you guessing so you have to be prepared for any shot. And, when the hunting is really good, you don’t have enough time to reload between birds!” Bernskoetter will usually try to go hunting three or four times a season. “We usually just go to conservation land because they do a good job of attracting doves.” To learn more about conservation activities, visit [www.MissouriConservation.org](http://www.MissouriConservation.org).—PHOTO BY DAVID STONNER



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[www.MissouriConservation.org/15287](http://www.MissouriConservation.org/15287)

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Missouri households*