

Winter 2011

Missouri

Department of Natural Resources

From the Naturalist



Even if it is cold outside, winter can be a great time to get out and enjoy a hike on one of our trails. Even if it is a trail you've walked before, it will look different in the winter. Many animals are active even in the winter months. Just last week. I was out on a trail and walked up on an armadillo rooting around in the leaves for food. Deer, fox, squirrels and birds are all out and about during the winter months. Beautiful scenery abounds too, with frozen waterfalls and icicle seeps around every corner.

Before heading out on the trail in the winter, there are a few things to know to keep yourself safe and warm.

Dress in layers. Wear breathable fabrics that

you can shed if you get too hot. A pair of long johns under your pants will help keep your legs warm.

- Most of the body's heat is lost through the head. Make sure to wear a stocking hat or balaclava that will cover the ears and face.
- Protect your eyes by wearing sunglasses.
 Wear polarized lenses, especially when there is snow on the ground.
- Wear sturdy insulated hiking boots that are waterproof. Don't wear leather-it will freeze in the cold.
 Wool socks will help keep your feet warm and dry.



With the right gear, a winter hike can be enjoyable and full of wildlife viewing opportunities.

Finally, bring appropriate gear -- food,
 water a map and compass. Pack a flashlight
 just in case. Always be
 prepared for the worst
 case scenario.

Winter doesn't mean no more hiking. It just means a little extra preparation time

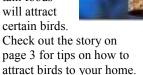
This Issue Is For the Birds!

Wildlife watching is fun in any season, but winter can be a perfect time to observe wildlife. Without leaves on the trees and brush to block your view, you are more likely to catch a glimpse of animals as they are out and about. The only downside is that it is often cold, very

cold outside.

If you want to stay inside and still watch wildlife, birdwatching is the perfect opportunity. This issue is all about birds!

By placing feeders outside your window, you can watch the many species of songbirds that call Missouri home in winter. Certain foods will attract certain birds.



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Missouri State Park Mission

- To preserve and interpret the finest examples of Missouri's natural landscapes
- To preserve and interpret the finest examples of Missouri's cultural landmarks.
- To provide healthy and enjoyable outdoor recreation experiences to Missourians and visitors to the state.

State Parks Youth Corps Program-More Than Just a Summer Job

Last year was a time of change and new ideas for the Missouri state park system. Coming off the heels of budget cuts and staff reductions, the leadership in the Missouri state park system along with Governor Jay Nixon created the Missouri State Parks Youth Corps (SPYC).

Somewhat reminiscent of the Civilian Conservation Corps of the 1930s, the State Parks Youth Corps gave 1,000 youth between the ages of 17 and 24 valuable job experience while helping to enhance the Missouri state park system.



SPYC workers Stephanie Shaner, Brittney Ford and Amanda Christian assist with the Wild Edible Buffet program.

The program ran from May 1-Sept. 31, and the youth assisted with various park improvement projects.

The Missouri State Parks Youth Corps is a partnership between the Missouri Division of Workforce Development and the Missouri Division of State Parks. Funding for the program was made possible by the federal Workforce Investment Act and the American Recovery and Reinvestment Act.

St. Francois State Park had 23 participants in the SPYC program. Two of them were assigned to help with interpretive programs. Stephanie Shaner of Farmington and Amanda Christian of Old Mines spent the summer preparing and presenting programs in the campground and helping with special events.

When asked how the program benefitted her, Stephanie said, "It helped me come out of my shell more, and I got to meet a lot of new wonderful people!"



When asked about her experience with the State Parks Youth Corps program, Amanda said, "My time at St. Francois State Park gave my life meaning and direction during a time when I could easily have

lost my way. I learned so much about nature, the history of our state and also about myself. Plus, I built friendships with people from all over the state that I know will last a lifetime. It truly was a summer that I will never forget and I will always be thankful that I had such an amazing opportunity,"

For more information about the State Park Youth Corps program, or to apply for the 2011 SPYC team (for ages 17-21), visit https://thinkoutside.mo.gov

Photos courtesy of Aaron Smith

Hard-headed or Thick-skulled?

Ever feel like banging your head against a hard object? In moments of frustration, we may feel that way, but it wouldn't do much for us except give us a headache. For a woodpecker, head-banging is a matter of survival.

Woodpeckers drum on trees for many reasons: to find food, to excavate a nest cavity or to announce their territory. Some scientists estimate that a woodpecker will drum between 8,000 and 12,000 times per day! Imagine the last



time you bonked your head on something just once. No doubt it was unpleasant and not something you would do again in rapid succession!

Woodpeckers have amazing adaptations to allow them to do all this noggin-knocking without causing damage to their brains.

When it comes to being hard-headed, the woodpecker takes the cake. It has a relatively thick skull with relatively small brain that is tightly packed inside the skull. This keeps the brain from "bouncing around" inside the skull during drumming, thus avoiding concussions.

He also has special neck muscles that allow him to drum very rapidly. They have a clear membrane that covers their eyes to keep wood chips out, and bristles of feathers around their nostrils to keep debris out. Probably the most amazing adaptation the woodpecker has is its tongue. The tongue is hard and pointed at the tip, which it uses to skewer insects that it finds after drumming on the tree. The tongue itself is long, VERY long, up to three times its bill length! The tongue is so long, that it wraps around the back of the head under the skin, where it forks and then comes together again and attaches in the nostrils. (see photo below). That amazing tongue



can probe deep into galleries created by wood-boring insects in trees.

So next time someone accuses you of being hard-headed, just remember there is at least one creature that has you beat!

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Winter Bird Feeding Tips

One way to experience nature even on the coldest winter days is to have a bird feeder outside your window. From there, you can stay warm but enjoy the antics of some beautiful songbirds.

Birds that you are most likely to attract to a feeder in the winter are chickadees, dark-eyed juncos, goldfinches, cardinals, tufted titmice, mourning doves and sparrows. Hang a suet feeder, and you will also attract woodpeckers!

Different foods will attract different birds, and some are more nutritious for the birds than others. Here are a few suggestions for attracting winter birds to your feeder:

- Black oil sunflower seeds: These are a favorite! They will attract cardinals, chickadees, woodpeckers, titmice and nuthatches.
- Safflower Seeds: This small white seed will attract chickadees, titmice,

and downy woodpeckers. A bonus is that squirrels don't like them. Neither do grackles, starlings or blue jays.



Photo courtesy of Aaron Smith

- Suet: Birds absolutely love suet.
 Made from animal fat, this is a quick source of energy for birds trying to keep warm. Put suet in wire cage and watch the birds go nuts!
- Peanut butter: There is a myth that it is harmful to birds, but its high fat content makes it a perfect winter snack choice.

Common Winter Birds



Dark-eyed junco



Tufted titmouse



Carolina chickadee



Downy woodpecker (at suet feeder)

Where do the Birds Go?



When the cold chill of winter sets in, many birds choose to fly south in the winter. Many of us wish we could do the same. There are, however, many bird species that stick around through the winter months. If your family has a bird feeder, chickadees, juncos, cardinals and goldfinches are familiar faces to you.

So you may wonder where these birds go when the weather gets downright nasty.

Many of our winter residents are cavity

nesters. They either make their own cavities in trees (woodpeckers) or find cavities not being occupied by said cavity builders. The eastern bluebird, tufted titmouse, and Carolina chickadee are all cavity nesters. They will huddle up inside a cavity in order to share body warmth when it gets really cold.

Woodpeckers will naturally create their own cavity in order to escape.

Other birds will find evergreen trees such as eastern red cedars in order to huddle and get protection from the elements.

Sometimes, these birds go to extremes to find relief from the elements. Some bluebirds have been found huddled inside nest boxes. Sometimes up to 12 bluebirds squeeze into one nest box!

It is amazing to think that these small creatures can survive the deep cold that can settle across the Missouri landscape in the winter,

but birds are perfectly adapted to do so. Having feathers is a big help. Feathers are a great insulator. Watch a bird in the winter and you may notice



they seem "puffy." The birds puff out their feathers to create more surface area to trap heat.

Their circulatory system is also unique. The artery that carries blood from the heart to the legs runs right by the vein that takes blood away from the feet. This means the warm blood coming from the heart heats the cold blood leaving the feet.

Birdwatching is a fun winter pastime. See the article above for tips on attracting birds to feeders at your home.

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ST. FRANCIOS STATE PARK

8920 U.S. Highway 67 North Bonne Terre, MO 63628

Phone: 573-358-2173 www.mostateparks.com/stfrancois.htm





Camping Rates for the 2011 Off season (November 1-March 31)

Basic Campsite- \$12.00

Electric Campsite- \$19.00

Electric/Water- \$19.00

Sewer/Electric/Water- \$22.00



*Note that at St. Francois State Park, we only have BASIC and ELECTRIC campsites. To make a reservation, call 1-877-422-6766.

Farmington Takes on Children in Nature Challenge

Earlier this year, Governor Jay Nixon and First Lady Georganne Nixon announced the Missouri Children in Nature Challenge. This initiative is aimed at helping communities provide outdoor opportunities for local families.

Community leaders from the city of Farmington have taken up the challenge. The list of requirements to complete the challenge includes providing activities and events that help children connect with nature, enhancing play spaces and increasing awareness of the importance of getting children outside. Once completed, Governor Nixon will officially recognize Farmington as a "Children in Nature Community". The city will receive a sign that can be placed for all to see their accomplishment.

If your family or community is interested in taking the Children in Nature Challenge, visit

http://childreninnature.mo.gov

Creature Feature

Red Fox
(Vulpes Vulpes)



The red fox is the largest of Missouri's two foxes (the other being the grey fox). It is playful and curious in nature, and lives in family groups.

Did you know...

- The young foxes will remain with the parents to help care for their younger siblings.
 - The female is called a vixen.
- They are crepuscular, meaning they like to come out and hunt before sunrise and then again in the late evening.
 - They communicate with each other using 12 different types of vocalizations.