



Your key to discovering the *Natural Missouri*



From Our President

Spring is winding up and we're edging into summer which means that there are many active projects needing volunteers.

There is no better way for new members to connect with other members and connect with the Chapter than participating in our projects. I know that when I first joined the Chapter I was overwhelmed with the variety of activities, but soon found my niche by just diving into one of them.

There is a wealth of knowledge and experience in our Chapter members and they are all delighted to share it. We've also been blessed with several highly significant projects so, if you want to give something back

by enriching our state's natural beauty, you have several options from which to choose.

We look forward to a productive summer and some wonderful camaraderie.

Cliff Parmer
President,
Confluence Chapter

*Coming together is a beginning,
staying together is progress, and
working together is success.*

—Henry Ford

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Orangethroat Darter
2013 Certification Pin

Etheostoma spectabile

A moderately stout darter with 6-10 indistinct dark brown crossbars on the back. Overall color mottled yellow-brown on back; sides lighter brown, often with several vertical blue bars or brown horizontal streaks. This darter is variable, with different subspecies occurring in the state.

Size: Length: 1 1/4 to 2 inches; maximum about 2 1/2 inches

Habitat and conservation: Slow-moving riffles in streams with gravel and rock bottoms and clear to moderately clear water. Most active in daytime.

Foods: Midge larvae, aquatic sowbugs and other aquatic insects and small crustaceans.

Distribution in Missouri: Occur throughout Ozarks and in tributaries of the lower Missouri and upper Mississippi rivers.

Status: One of the most frequently encountered darters over much of the Ozarks and in prairie tributaries of the lower Missouri and upper Mississippi rivers. Lifespan is usually 4 to 5 years. Shortly after hatching, orangethroat darter fry sometimes inhabit the nests of smallmouth bass. It is believed that they benefit from the protection of the male bass guarding its nest; the full-grown bass will not feed on such "small fry."

<http://xplor.mdc.mo.gov/discover-nature/field-guide/orangethroat-darter>





⊕ Bob Coffing who has initiated projects at Castlewood State Park, Cuivre River State Park, Don Robinson State Park & Matson Hill-Boone Hays. Man, can he operate a chain saw! In fact, we heard he saws logs in his sleep.

⊕ Thanks to Jennifer Moore, volunteer emeritus with kids! Jennifer hauls out a carload of props for countless school programs on nature related topics. Thanks for your dedication Jennifer

⊕ Thanks to Connie Campbell for managing our Nature Explore Classroom sessions with sometimes-disorganized schools and terrible weather. Thanks Connie

⊕ Thanks to Dayle Barrett for her creative attitude, finding her way back on a wayward, not well-marked nature walk with kids. Got compass?

⊕ Thanks to our Forest ReLeaf Volunteers who have put up with cold, wet weather planting precious baby trees.

Certification Pins

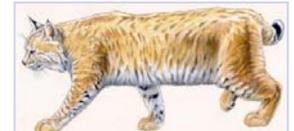
Spadefoot Toad - 2006



Great Blue Heron- 2008



Bobcat – 2010



Dogwood Blossom - 2007



Crayfish – 2009



Shortleaf Pine – 2011



Regal Fritillary – 2012



Milestone Pins

Left to right, top to bottom:
 Initial Certification pin;
 250 hours pin (bronze);
 500 hours pin (pewter);
 1,000 hours pin (gold);
 2,500 hours pin (silver);
 5,000 hours pin
 (polished gold with diamond).



Honorary Master Naturalist pin – copper dragonfly



Jennifer Moore received her Bronze Dragonfly pin.

Annual 2013 pins were given to Connie Campbell, Kay LaBanca, Larry Berglund, Tom Nagle, and Steve Thomas



April — 2013 Certification: Glenn Bish and Jerry Delbruegge

2013 Annual Pins: Leslie Limberg, Ann Finklang, Cliff Parmer, Bob Coffing, Bill Brighoff, Rob Merriman, Sam Hodge, Bob Lee, Jim Morrison, Glenn Bish, Mindy Batsch, and Carol Morgan

Milestone Pins: Cliff Parmer and Mindy Batsch – 500 hours (Pewter)

Larry Markley and Jim Morrison – 100 hours (Bronze)

Tom Nagle, Sam Hodge – 1,000 hours (Gold)

Bob Coffing 2,500 hours (Silver)





2013 STREAM TEAM # 3612 ACTIVITIES

Following are the scheduled dates for our Stream Team water quality monitoring activities for 2013. No training is necessary to participate in many of the monitoring activities and new volunteers are welcomed.

Well-behaved children are also welcome. The macro-invertebrate monitoring sessions are usually a big hit.

Contact Cliff Parmer at ClfHanc@aol.com if you are interested in attending an activity.

August 24: Chemistry and macro-invertebrate monitoring

October 26: Chemistry monitoring



L to R: Ann Finklang, Jim Morrison, Carol Cross, Rob Merriman and Cliff Parmer

April 13, 2013— Chemistry and Macro-invertebrate Monitoring



L to R: Rob Merriman, Carol Cross, and Jim Morrison

L to R: Ann Finklang, Carol Cross, Cliff Parmer, Jim Morrison and Rob Merriman



Daniel Boone Hays Seeding & Brush Pile Building

The brush pile is a protective habitat for small animals like mice, lizards, salamanders, and small birds.



Rob Merriman building on the animal habitat near the edge of the woods



Rob, Bob Coffing and Sam at the finished animal habitat after



Seeding on the edge of the prairie area

STRANGE BUT TRUE



Although perfect for predator protection, an **armadillo's** armor is heavy. To cross wide rivers, armadillo's gulp air until their stomachs blow up like balloons, then they float across. To ford narrow streams, they simply walk along the bottom.

Meadow Jumping Mice are the kings of spring. When startled, the gerbil-sized rodents can leap 12 feet in a single bound. If you had the same spring in your step, you wouldn't have problems jumping over two school buses parked end to end.



Great Backyard Bird Count

Did You Know?

—Missouri Had

The Most Popular Flock Sighting?

Jerry Lindhorst

Yep, old MO ranked first in flock sighting in the result summary of the 2013 Great Bird Count put together by scientists from the National Audubon Society, Cornell Lab of Ornithology, and Bird Studies Canada.

FYI: A few highlights from the report underscore the magnitude of this first-ever global GBBC. In four days, observations were collected from 111 countries, on more 134,000 checklists. Even more amazing is that bird watchers reported 4,004 species, which is 39 percent of all species in the world!

The largest flock was reported from Mark Youngdahl Urban Conservation Area in St. Joseph, Missouri, where observers saw an estimated 5 million Red-winged Blackbirds.



And did you know our Cardinals ranked first place too? (Oppps, I got too excited when reading the summary, as its too early in the season to predict our baseball team's out come for 2013). But the top species reported for the entire count were the Northern Cardinal, Dark-eyed Junco, and Mourning Dove, reflecting the high participation in the United States and Canada, where the GBBC has been established for more than a decade.

White-winged Crossbills were reported in 20 states, with large numbers in Maryland, Pennsylvania, and New Jersey, and southerly sightings in Arkansas, Kansas, and Kentucky.

Cedar Waxwings were reported in surprisingly low numbers in the north-east quadrant of North America, likely because there was not enough winter fruit crop to sustain birds in the region.

GBBC data show more insect-eating birds, such as swallows, are now spending the winter months farther north than in the past.

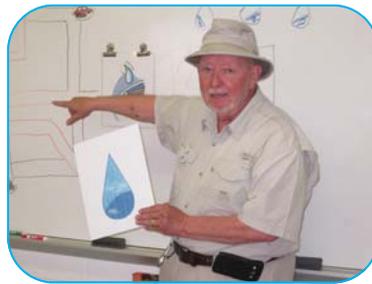


Conservation Day

Connie Campbell

On Thursday, May 1, seven of our Confluence members traveled to Wentzville Heritage Intermediate School to lead sessions for Conservation Day for the 190 third graders at that school. Tom Nagle had the awesome idea of giving a seedling, provided by Mark Gruber's group, to each child. He rounded out his half hour session by talking about trees and planting a bush with each class. The school has a Nature Habitat and the bushes were planted in that area. Our wet and cool spring has provided good weather for planting bushes and trees.

Jim Morrison enlightened the



third graders about water quality, while Cliff Parmer talked about native plants and why we should grow native. Leslie Limberg helped the students know how to attract birds to their backyards. From what I saw she was attracting more than birds... maybe the birds were attracted to the creepy crawlies that I saw displayed.

Mindy Batsch used some of her zoo docent knowledge to help the students learn about wildlife. Jennifer Moore brought many bird mounts and provided a lesson on why birds have the kinds of beaks that they do. The children had a chance to practice gathering food using similar tools to the birds' beaks.

Connie Campbell talked about the great service that our Missouri



bats pay us by eating so many mosquitoes! The students left the bat session knowing more about the caves and bats of Missouri.

The students were exceptionally well behaved and were happy to spend a day learning about the marvels of nature in Missouri. Hopefully, they will be careful the rest of their lives with birds, bats, trees, native plants, and all of the wildlife we have in this state!

Wolves in Missouri



Last fall, a hunter in Howard County shot what has been recently confirmed by the Missouri Department of Conservation (MDC) to be a wolf. Tissue samples from the 81-pound male animal, mistaken as a coyote by the hunter, were sent to the U.S. Fish and Wildlife Service (USFWS) for genetic testing. Recently received DNA test results confirm that the animal was a gray wolf from the Great Lakes states of Minnesota, Wisconsin or Michigan. The animal did not have ear tags, tattoos, other identification or physical signs that indicated it was a captive animal.

Also known as timber wolves, gray wolves once inhabited northern Missouri but were gone from the state by the late 1800s due to hunting and habitat loss.

There is no evidence of a breeding population in the state, but wolves occasionally wander into Missouri from northern states. MDC has never stocked wolves and has no plans to restore this once-native species.

A previous case of mistaken identity happened in late 2010 with the shooting of what also appeared to be an unusually large coyote in Carroll County. DNA test results of the 104-pound canine linked the animal to timber wolves from Great Lakes states.

For more information on wolves, visit MDC's online Field Guide at mdc.mo.gov/node/19615.

More Fire!

March
2013



Prescribed Burn at Quail Ridge Park
Wentzville, MO

Naturalists Break Another Record
Forest ReLeaf of Missouri
Saturday, 23 March, Creve Coeur Park

Blitz. This spring we set a brand new
one-day record of 2,850!



Mike Walsh and his gang of tree thugs has topped last year's records. Thanks to some last minute Kentucky Coffee trees, our "rugged get-ter done attitude," and thanks to our fearless & compassionate leaders, Mike Walsh and Rob Merriman, we had a major participation event.



Great Rivers Chapter also participated, as did Patsy from Miramiguoa. Last year we planted 2700 trees on our Seedling



Black Bears

For many years, Missouri's black bears have been elusive to biologists wanting to learn more about them. Now, thanks to data being gleaned from a research study that began in 2010, hunches are beginning to be replaced with hard facts. Information collected from live-trapping, radio collars and hair snaring is taking away much of the mystery that has surrounded black bears in Missouri.

The goal of Missouri Department of Conservation (MDC) biologists is to use this information to better manage one of the state's largest wild mammals. MDC's

black-bear research study is a joint effort of the Conservation Department, the University of Missouri-Columbia and Mississippi State University. Safari Club International Foundation is providing funding assistance.

To date, MDC biologists have fitted 61 adult bears with radio collars. They have also set 785 hair snares in 11 counties in the southern part of the state. These snares are small wire enclosures that collect small tufts of fur from bears crossing the wire to get to the bait in the center. These tufts of fur, and the tiny skin follicles attached to them, can reveal valuable genetic information about the bears. Hair samples have been collected from 141 bears.

MDC Resource Scientist Jeff Beringer is the project leader of the research study. He said that information gathered so far has led to a state-wide population estimate of approximately 225 black bears, although much work remains to validate this preliminary estimate.

Home ranges of female bears show that most are in four separate reproducing populations ranging over 10 counties in south-central Missouri.

DNA evidence suggests the largest of these populations, located in Webster and Douglas counties, may be a remnant of Missouri's original black bear population. Those elsewhere in the state are presumably descended from bears brought to Arkansas from 1958 through the late 1960s as part of a re-introduction program and later dispersed into Missouri. Beringer

believes that the other populations in Missouri developed when female bears brought to Arkansas travelled north after being released in an effort to return to their birth areas in the upper Midwest.

Research data has also revealed valuable information about the annual life cycle of a Missouri bear. Bears in Missouri spend nearly all their time in forested areas



and use wooded corridors when moving cross-country. Adult bears can consume as much as 20,000 calories per day – mostly in the form of acorns – in preparation for winter dormancy. Females den earlier than males and males emerge from winter dormancy earlier than females. The exact timing of this emergence depends on weather and on how much fat they are able to accumulate before denning.

June is the peak month for breeding. This is also the peak month for dispersal of young male bears. Young females tend to remain near or even with their mothers in their home ranges.

As a way of reducing the number of bear-human conflicts occurring in Missouri, one of the outcomes of Missouri's bear study might be the institution of a limited bear-hunting season. If the data supports a hunting opportunity, Beringer said it would be a highly regulated season favoring the harvest of males and would take place in the winter when females are in their dens. However, before recommending a hunting season, Beringer said he needs enough information to predict how an annual harvest will affect the overall population.

In the meantime, Missourians should keep in mind that early spring is the time of year when bear activity increases in Missouri. This period, which begins in spring and stretches into early summer, is when black bears may appear around farms and rural outbuildings in search of food. Black bears are inquisitive and intelligent and that's what can get them into

trouble.

Like any wild animal, black bears are constantly searching for their next meal. When they are successful at finding food, they remember where it came from. Most problems people have with bears come from them raiding campgrounds, garbage bins, bird feeders, orchards and beehives. If a bear visits an area and is rewarded with food, it will very likely return. Though they are generally not aggressive, they are powerful and can cause substantial damage to buildings, trailers, vehicles, and just about anything else that they view as an obstruction in their search for food.

"We have had an increase in bear/human conflicts in recent years," Beringer said. "Most conflicts can be prevented if folks do not give bears access to food or garbage."

For more information on black bears in Missouri, including the research project, sightings, and preventing and dealing with black bears around potential food sources, visit MDC online at mdc.mo.gov and search "black bear."

<http://mdc.mo.gov/node/21465>



This drawing depicts 26th president Theodore Roosevelt's failed 1902 Louisiana bear hunt on which he famously refused to shoot a bear tethered to a tree under "true sportsmen's code." The Washington Post documented in the editorial cartoon, "Drawing the Line in Mississippi."

Soon after, Brooklyn toy owners started marketing stuffed animals as Teddy Bears.

BEE HOTEL

Solitary bees are excellent pollinators, but they can struggle to find nesting sites. A home-made nest looks attractive and provides them with a home, as well as ensuring bumper harvests.

Cut Lengths of Bamboo. Use sharp clippers to cut short lengths of bamboo canes that will fit into your pot. The natural variation in diameter will attract different bee species.

Push Them Into a Pot. Fill the base of a terra-cotta pot with modeling clay, or putty or even glue them in and push the cut bamboo canes firmly into it. Continue doing this until the pot is packed tightly.



Hang Your Hotel. Tie raffia or string firmly around the pot and suspend it from a hook or attach it to a wall. Choose a sheltered, sunny site, and angle the open end of the pot downward so that the bamboo canes do not fill up with water when it rains.



Did you know?



Any time volunteers spend serving on committees, working on newsletters, assisting with training, etc. counts for service on a one to one basis. If you spend two hours at a committee meeting, you may log two hours.

Volunteers may also count one hour of service for attending a chapter meeting. Travel time related to chapter administration and meetings may also be counted. These hours should all be recorded under program support.

Kids Fun ...

Wetlands for Kids, held April 6 with close to 3,000 people in attendance



History and education at Towne Park.
The Nature Explore Classroom on chilly April 19, 2013.



WASHINGTON HAWTHORN

A few years ago I was “plant-shopping” and saw this pathetic little tree. It was on sale for four dollars. I figured for four dollars it was worth the risk. I brought the tree home and for a few years nursed it. For a while it just stood there looking at me and saying, “well what do you expect?” I did not give up on the tree. This year I was rewarded by the most beautiful white blooms I have ever seen. I was so in awe, that every morning I went outside to visit the small tree. And then a catbird decided to visit the tree—a real treat! Now I cannot wait for this fall when all the flowers will become berries.

The tree is a Washington Hawthorn (*Crataegus phaenopyrum*). It is native to Missouri where it is primarily found in open ground, thickets and wood margins in the Ozark region of the state. It is noted for its attractive flowers and foliage, bright red fruits, and fall color. It is a small, low-branching, deciduous tree that typically grows 25-30' tall with a rounded crown. Thorny stems are clad with shallowly lobed, serrate, glossy dark green leaves. Leaves turn attractive shades of orange and red in fall. Fragrant, 5-petal, white flowers in clusters (corymbs) bloom in late spring. Flowers



are followed in fall by bright red 1/4" diameter globose fruits (pomes) that persist throughout the winter. The small red berry-like fruit grow closely together in large clusters and are food for squirrels and birds.

They have a mild flavor and can be eaten raw or cooked. The fruit is sometimes called a haw. The word haw also means hedge, the hawthorn thus being a thorny hedge.

Phaenopyrum comes from Greek meaning resembling a pear, in probable reference to the flowers. Washington Hawthorn reportedly was first grown commercially near Washington, D.C. in the late 1700s, hence the common name.



Legend claims that the hawthorn tree's thorny branches were what formed the crown of thorns worn by Jesus. The hawthorn tree is commonly known as the “mayflower” in Europe, so it was this name that was bestowed on the boat that transported the pilgrims to the new land.

Some Europeans believed fairies lived with the hawthorn tree. Fairies or no fairies, I am in looove...

The Gray Catbird

(*Dumetella carolinensis*), also spelled Grey Catbird, is a medium-sized northern American perching bird.

Gray Catbirds are one of the most common species that non-birders in their range are likely to have never seen nor identified. The catbird's rather bland coloration – slate gray with a black cap and chestnut under the tail – doesn't attract attention, and unlike their cousins, the mockingbirds, catbirds prefer to sing their jumbled songs from cover. And it is the sounds that catbirds make that give them their name and makes it at all likely that their presence will be noted.

Gray Catbirds, to put it simply, have a call note that sounds like a cat with a scratchy and short meow. This sound emanating from a tangle of brush can easily fool those not in the know. The song of the Gray Catbird, however, is nothing like a cat meowing: like the mockingbird and thrasher the catbird often mimics other birds and sounds but it tends not to repeat itself. The rule of thumb is that if a phrase is repeated three times in a row it is a mockingbird, if it is repeated twice a thrasher is singing, and if each phrase of the song is sang just once, one is dealing with a catbird.

Because the little-known catbird lives in dense parts of thickets, it is sometimes difficult to see.

The Gray Catbird deserves our

admiration for being most adaptable. Its presence in our own backyards helps us connect with the natural world and reminds us that for most songbirds, the loss of natural habitats imperils them. The catbird's adaptability is the exception not the rule.



Our Leadership

President—Cliff Parmer
 Vice President—Alberta McGilligan
 Secretary—Connie Campbell
 Treasurer—Ann Finklang
 Advanced Training—Steven Thomas
 Volunteer Coordinator—Rob Merriman
 Membership Services—Carol Morgan
 Fun Committee—Cathy Dedecker
 Communications—Jerry Lindhorst
 Web Site—Rick Gray
 Photography—Joe Adamo
 Newsletter—Carmen Santos
 and Bill Brighoff
 Advisors—Scott Killpack, University of Missouri Extension,
 and Kevin McCarthy, MDC

Project Leaders:

- Daniel Boone Hays—Bob Coffing
- Castlewood State Park—Bob Coffing
- Cuivre River State Park—Bob Coffing
- Confluence Chapter Stream Team #3612—Cliff Parmer
- Babler State Park—Alberta McGilligan
- Lewis & Clark Boathouse & Nature Center - Leslie Limberg
- Weldon springs prairie demo garden - Leslie Limberg
- Quail Ridge Prairie Demo & Rain Garden - Carmen Santos
- Bluebird monitoring - Mindy Batsch
- Nature Explore Classroom Education—Connie Campbell
- Nature Explore Classroom Construction—

The Confluence Chapter was founded in 2005 as the fifth Master Naturalist chapter in Missouri. The chapter was formed by 24 individuals from St. Charles County, St. Louis County, and St. Louis City after completing the Missouri Master Naturalist™ training program. We share a common interest in nature and in volunteering to help protect, preserve and restore Missouri's natural heritage. Most of our members live in the region West of the Missouri-Mississippi Confluence and from both north and south of the Missouri River.

We operate according to the bylaws and operating handbook of the Missouri Master Naturalist Program developed by the Missouri Department of Conservation and University of Missouri Extension.

Visit us at <http://www.mmnconfluence.org/>

