

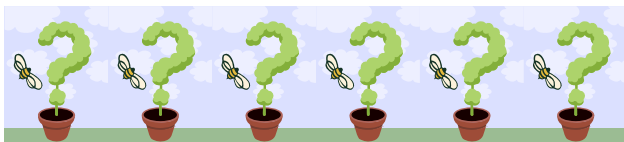


JUNE MEETING

The Boone's Lick Chapter of Missouri Master Naturalists will meet at 6:30 p.m. on Thursday, June 14 for a picnic at the home of Sally and Bobb Swanson (9250 E. Hwy. WW). Sally and Bobb will provide meat and mushrooms on the grill along with paper products, silverware, iced tea, bottled water, chips, cheese, Craisins, and lemonade, plus plenty of bug spray (not for consumption). Just bring a side dish or dessert and a lawn chair. Sally has also promised a rousing scavenger hunt for the assemblage.

To get there, take WW east (Broadway) from Columbia and travel about 8 miles from the spot where you cross 63. Go past the Olivette Church and when you cross Rangeline, which is the next crossroads, put on your right blinker. Their driveway is the second on the right (9250 E. Hwy. WW), and you don't want a crazy person to run into your back bumper.

This will be a fantastic time! See you there.



PRESIDENTIAL PONDERINGS

Suzanne Wright

Many wonderful things have been said about the Boone's Lick Chapter and the fantastic job we did hosting the 2007 MMN State Conference. We should all be very proud of ourselves. I'm certainly proud of everyone in the Chapter. I hope all that attended felt like they learned as much as I did and had a great time in the process.

It was rather anti-climatic for me as my last session ran long and when we emerged from the Missouri Room the hospitality room was cleaned out, the hotel cleared out and the parking lot empty.

Upon arriving at home, I must confess, I took a little nap. Then my husband persuaded me to join him kayaking at Overton Bottoms South on the receding flood waters. We spent as much time floating and bird watching as paddling but it was the perfect way to end a hectic weekend that had required months of preparation. For me, it helped put perspective on the conference, the Missouri Master Naturalist program, my position as president of the Boone's Lick Chapter, and myself as a volunteer.

I'm hoping I can use some of the ideas and knowledge I gained at the conference to become a more effective president and improve our chapter for everyone involved. Now I am looking forward to the June meeting and the picnic at the Swanson's as a time of celebration. It will be party for us and our families for a job well done and a chance to build on the friendships created by working together.

The kayaking was wonderful. I could imagine being on any inter-coastal waterway anywhere in the world. The cottonwoods and willows were sparked with bright flashes of color from yellow warblers and orioles that mimicked lightening bugs in a darkened sky. The blue hole was transformed into a lake, the bridge inhabited with swallows and their fanciful Anasazi style architecture, the smell of the swamp as old as time.

This is the best part of living in Missouri, despite the ticks, poison ivy and voracious mosquitoes. It is one of the reasons we moved to Missouri and why we stayed. It's why I work to preserve the natural resources for my children and their children. However as one person you can feel pretty helpless and hopeless at times when the tides seem to run against you. That's why it's good to belong to an organization of like-minded people, because together we can bring change.



Jeff Brigglers Herptile session at the conference snags a salamander



MEETING MINUTES

The May meeting of the Boone's Lick chapter of Missouri Master Naturalists took place on May 10, from 6:30 – 8:30 PM. Dorie Draper provided advanced training on botanical drawing. Training was followed by a business meeting, and a meeting of the state conference committee.



RECOMMENDED READING

"The Worst Hard Time", Timothy Egan, 2006, ISBN # 0-618-77347-9 (paper).
by Celeste Mazzacano

This book is subtitled "The Untold Story of Those Who Survived the Great American Dust Bowl", and once you read it, you'll never take the phrase "soil conservation district" lightly again. John Steinbeck related the plight of Okies who fled the Dust Bowl for the doubtful

relief of California orange fields—but what happened to the people too stubborn, desperate, hopeful, proud, or poor to leave? You'll find out, in an enthralling mix of journal entries, historical data, compelling storytelling, and interviews with hardy survivors still living when this book was written. The sheer horror and grinding hardship of their daily existence is hard to imagine, especially at a time when America prided itself on being an up-and-coming nation full of technological advances. Cattle went blind from grit blowing endlessly against their eyes, dying with their stomachs stuffed full of sand; children died of "dust pneumonia"; static electricity in the air burned what plants would grow in the sullen ground black; thriving cities became grim ghost towns.

The story of the Great American Dust Bowl is relevant to Master Naturalists because it details the gruesome train wreck of a 100 million acre ecological disaster that gained speed across the years due to arrogance, exuberance, honest ignorance, greed, and short memories—and it doesn't seem as if we've learned many lasting lessons.

Egan places the dust disaster in its larger historical framework, giving the ecological and social history of Texas and Oklahoma from the 1700's onwards. Seeds of disaster were sowed for a long time, from genocide that drove the Comanche, Kiowa and Apache from their bison-rich High Plains home, to hunters who demolished the bison, ranchers who grazed cattle on the rich bluestem, buffalo turf, and grama, and farmers who tore out grass to plant wheat in the tenuous soil beneath. By the 1920's, the "immensity of grass" that Coronado marveled at in 1541 was converted to rolling waves of grain. Ranchers warned that wheat's shallow root system was no match for native grasses when it came to keeping Plains soil on the ground, but wheat prices were so high that nobody listened. From 1910-1915, wheat prices rose from 80 cents to 2 dollars a bushel; in 1916, the Federal Bureau of Soils proclaimed the soil to be "the one resource that cannot be exhausted, that cannot be used up." But by 1929, a wheat boom had glutted the market, and piles of grain rotted

along rail lines as prices nosedived. Frantic farmers, used to making a relative fortune in wheat, desperately tore out what little grass was left to plant even more wheat, and the plains were peeled naked when the rains left—or more accurately, returned to their normal low levels after an unusually wet period—and the winds rose, generating black dusters that carried off tons of soil with them.

It isn't often that I describe a book as "moving", but this is quintessential American history—environmental, economic, and social—and should be read by everyone in this country who has ever eaten a slice of bread.

MEET A MASTER NATURALIST!

Our chapter is growing, and we don't all know one another any more. But fear not—this issue debuts the inaugural "Meet a Master Naturalist" feature. One Boone's Lick member will be selected at random each month and subjected to a short series of deeply revealing questions. Many thanks to Steffanie Abel for her willingness to be the first person to have the flying fickle finger of fate pointed at her (and to be so susceptible to bribes of cupcakes).

Celeste Mazzacano

MEET...Steffanie Abel, class of 2007

Reason you become a Master Naturalist: I spend a lot of time in a lab, and wanted to do more things outside with lots of different animals.

Most amazing, bizarre, disgusting, odd, or awe-inspiring thing you have ever seen or experienced in the course of Master Naturalist-type activities: Catching butterflies with Troy (Gordon) encompasses all but the disgusting. Watching Troy run through a forested area at high speed—correction, watching Troy's net travel through a forested area at top speed—was the was the strangest thing I have ever seen. And to see Troy jump off a hill and fall into an old chute of the MO River was awe-inspiring, and amazing that he got back up to the road without any broken bones.

Favorite service project: Those that don't involve getting covered with lots and lots of ticks.

Favorite natural history-related book: *The Voyage of the Beagle* by Charles Darwin, because now everyone watches programs about animals on The Discovery Channel and Animal Planet, so reading about when some of those animals were first found and their behavior, it is really interesting to me.

Favorite Missouri native: The White-Tailed deer. They are pretty when they are in the woods, and not on the highways. Plus they taste good.

One thing that people who know you would NEVER guess about you: I have always wanted to be in a musical, preferably the old Disney musicals.

UPCOMING EVENTS

ONES, a local alliance of Outdoor, Nature, Environment & Sustainability groups, will meet Friday June 8 at 7:30 am at Uprise Bakery (816 E. Broadway). Folks from Master Naturalists, Friends of Rock Bridge, Audubon, Sierra Club, Missouri River Communities, Native Plant Society, Hinkson Creek Restoration Project, Greenbelt Land Trust, Friends of Big Muddy, and related organizations are invited to attend. For more information, contact Celeste Mazzacano at 573-239-4267.

CACHE and SPARKS Field Trips, sponsored by Columbia Audubon Society. Join Bill Clark as he heads out to different Conservation Areas or State Parks around central Missouri. The destination is determined the morning of the field trip. Dates for June are the 6th, 12th, 20th, and 27th. Meet Bill at the southwest corner of the Parkade Center parking lot at 7:30 am, and don't be late. Contact Vanessa Melton at 573-864-3905 or vanndawn@hotmail.com.



CONSERVATION
CORNER

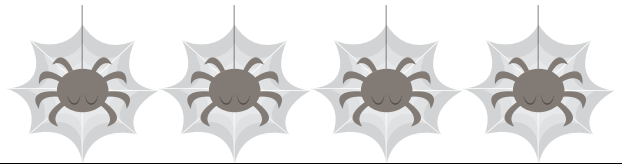
submitted by Celeste Mazzacano

The Niangua darter (*Etheostoma nianguae*) is a colorful little fish that is listed as endangered in Missouri, and threatened federally. Niangua darters are slender and small, only 3-4 inches long, but beautifully colored and marked. They have yellow-olive bodies with 8 dark bars along the back, and orange spots on the upper sides. Breeding males are quite flashy, with an orange-red belly and iridescent blue-green bars along their sides. Niangua darters live about two years on average, though they may live as long as four, and become sexually mature after 1 year, breeding in April.

This little guy is on the skids for the same reason as its main claim to fame—it is found only in the Osage River basin, which limits its range to 12 counties in south-central Missouri. They're also picky about habitat, preferring small to medium sized rivers with moderate currents, continuous flow, and silt-free gravel and rock bottoms. Populations have declined for the past 30 years, for most of the usual reasons that plague stream health—channelization, decreasing water quality, habitat loss from reservoir and bridge construction, removal of riparian vegetation, and sand and gravel mining. Some of the darter's problems are purely physical—reservoir construction, for example, has isolated darter populations and restricted them from moving between suitable habitats. Some are biological—Niangua darters show negative effects from changes in habitat such as increased sedimentation, altered nutrient loads, or excess algae growth more rapidly than their piscine brethren in the streams they inhabit.

Can anything be done to save the Niangua darter? Recovery steps encouraged by the MDC include following state guidelines for

sand and gravel removal from streams, restoring riparian zone vegetation, and discouraging cattle from using streams that are home to the darters as watering holes. And if you happen to spot one of these flashy little darters, be sure to report it to the Niangua darter Recovery Team at 573-346-2210.



WEB RESOURCES FOR MASTER NATURALISTS

If you do much outreach with the under-18 crowd, stop by **Green Hour** at www.greenhour.org. The site supports a new program launched by the National Wildlife Federation aimed at helping adults find ways to connect children with nature. NWF recommends that parents give kids a “green hour” every day for unstructured play and interaction with the natural world. The web site provides resources for parents and caretakers to get outside with children in their backyard, a garden, or a park. Green Hour got rained out? Not to worry, they also provide ideas for indoor play that helps kids learn about nature. The site includes an on-line nature journal, user blog, activity list, nature-related crafts, and resource guide for parents. This being the brainchild of NWF, the site is heavily weighted with ads for Ranger Rick subscriptions, but it could be a good resource to keep parents outside with their children long after they go home from your program or activity.

"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts."

Rachel Carson

NOTEWORTHY NATURAL HISTORY

Flooding on the Big Muddy

Submitted by Troy Gordon

Mid-May saw extensive flooding on the Missouri River, and Missouri Master Naturalists were fortunate to get a first hand look at changes on the river during a field trip at our annual conference.

Our 2007 class had a field trip on the Missouri River on April 14th. We decided to repeat the field trip for the annual conference, not realizing the river would experience a major flood in between.

The week before the annual conference was pretty frantic, as I worked with Refuge personnel to make plans for the field trip, then cancel them and re-plan, responding to the changing river levels. In three days, our plans went from a discussion of river issues overlooking the river on a bluff, to a canoe trip on the backwater areas that were flooded, to a return to our original plan of taking participants out on boats to see the flooding first-hand.

The evening before the trip, we made the final decision to take participants out in boats—although even that final decision could be rescinded if the boat drivers decided it wasn't safe on Saturday.

Fortunately, we were able to put the boats on the river, and participants got the opportunity to be on the river while it was still at flood stage—even if just barely. We put in at the Franklin Island Conservation Area and went downstream to the Overton Bottoms North Unit of the Big Muddy Refuge. The highlight of the trip was boating up the chute that had been constructed to develop wildlife habitat on the refuge and re-connect the river with the floodplain.

We had been able to go up the chute on the field trip for the 2007 class in April, but now we had the chance to see what changes the flood had caused. The results were dramatic! In

April, we had talked about the need for a major flood to erode the sides and allow the chute to develop more naturally. Now, it had happened! The dirt that had been piled on the sides when the chute was constructed had eroded, and water was draining from the floodplain back into the chute through gaps in the dirt walls in places. Edges were no longer the straight, smooth walls we saw in April, but instead were scalloped with gaps and soil slumping into the water. The chute had changed from the ditch we saw in April to an active waterway that will continue to evolve and change, providing habitat to the aquatic species of the river.

While the flood had been a destructive event for many people who had property damaged along the river in places, it had also been a positive event for many of the natural areas on the river that had evolved with the rising and falling of the water. Our annual conference field trip participants were fortunate to get to see it first hand.



JUNE VOLUNTEER OPPORTUNITIES

Volunteer opportunities for June and ongoing projects are listed below. Additional info is at: <http://extension.missouri.edu/masternaturalist/columbia/VolunteerOpportunities/June%20volunteer%20opportunities.pdf>. Please contact the person indicated for more detailed information on any project. If a project is listed as “not yet approved,” you will need to fill out a Service Project Form (at <http://extension.missouri.edu/masternaturalist/columbia/Projectapproval.htm>). You will be notified via e-mail of the project's approval or if there are any questions. Once approval is granted for any person, it is approved for everyone, so it is only necessary to submit one form per project.

Help Staff Booths at Local Festivals, Saturdays, June 2, June 16, June 23

Sponsored by Friends of Big Muddy. Help with a number of festivals in the local area. Volunteers will be paired with others who have done it before and will have a written script to use as a guide for what to say. Times vary depending on the festival. Contact Troy Gordon, 573-424-9051 or friends@friendsofbigmuddy.org. Project is approved.

Bird Banding at Eagle Bluffs, Mon. June 4; Sat. June 16; Wed. June 20; Sat., June 30

Sponsored by Audubon Missouri. Andy Forbes, ornithologist with MDC and Audubon Missouri, will conduct bird banding activities at Eagle Bluffs CA. Volunteers should dress for the field (hiking boots or sturdy shoes, long pants, sunblock, etc.). Reservations required. Contact Andy Forbes at Andrew.Forbes@mdc.mo.gov or 573-447-2249 for more information. Project is approved.

Butterfly Inventory at Overton Bottoms North (2007 Capstone), Tues. June 12, 1:30 PM; Fri. June 15, 8:30 PM; Sat. June 30, 10:00 AM

Sponsored by Big Muddy National Fish & Wildlife Refuge and Friends of Big Muddy. Master Naturalists will capture butterfly and moth specimens to continue the inventory begun in 2006. Dress for field work (sturdy shoes/boots, long pants, and head covering). Insect repellent, sun block, and water bottles are suggested. Contact: Troy Gordon at friends@friendsofbigmuddy.org or , 573-424-9051, or Wedge Watkins, 573-441-2788, Wedge.Watkins@fws.gov. Project is approved.

Refuge Clean-up Day, Thurs. June 14th & Sat., June 23rd

Sponsored by Big Muddy National Fish & Wildlife Refuge and Friends of Big Muddy. All-day work days to clean up refuge units that were damaged by flooding. Bring sack lunch and dress for field work (sturdy shoes/boots, long pants, and head covering). Contact Troy Gordon, 573-424-9051; friends@friendsofbigmuddy.org. Project is approved.

Work Day at Albert Area, Sat., June 23, probably at 9:00 AM

Sponsored by Columbia Audubon Society. They will be treating invasives in the grassland area. Contact Vanessa Melton at 573-864-3905 or vanndawn@hotmail.com. Project is approved.

Ongoing Opportunities

Project Seeds- Students, the Environment, and Endangered Species; ongoing starting in fall with training this summer

Sponsored by U.S. Fish & Wildlife Service, Ecological Services Columbia Office. Volunteers lead presentations in Columbia schools (5th grades) on Boone County endangered species. Follow up presentations by installing and maintaining an aquarium in the school and hosting a book fair to purchase wildlife books for the school libraries. Contact Ashley Spratt at ashley_spratt@fws.gov or Charlie Scott at Charlie.scott@fws.gov Phone: 573-234-2132. Project is approved.

Hummingbird Banding in Central Missouri, Flexible hours throughout the summer on Monday evenings and Wednesday mornings

Assistance needed with hummingbird banding project in Columbia area. Trainees begin with assisting in catching birds and removing them from traps and are gradually trained to do actual banding over time. Contact Troy Gordon at 573-424-9051 or tgordon@friendsofbigmuddy.org . Project is approved

Columbia Fishery Resources Office, ongoing, typically weekdays throughout the year

Sponsored by U.S. Fish & Wildlife Service. Join fishery staff for day long trips to the field to collect, tag, and measure fish, and assess fish habitat quality. Volunteers may also work in the lab to aid in fish identification and analysis of field data. Contact Joanne Grady at Joanne_Grady@fws.gov or 573-234-2132, ext. 101. Project is not yet approved.

Fish Study at Eagle Bluffs Conservation Area, ongoing in spring and summer

Sponsored by University of Missouri-Columbia. Study fish use of two passage structures and wetland pools at Eagle Bluffs with UMC graduate student. Volunteers will help sample and identify fish. Contact: Meagan Montgomery at mdm01a@mizzou.edu or 417-619-6460. Project is approved.

Wood Duck Box Monitoring, Eagle Bluffs Conservation Area, late April through mid-May

Sponsored by MDC. There are ~150 wood duck nesting boxes on Eagle Bluffs CA and it would be nice to know how many are being used: is box being used? by what kind of critter? How many eggs are in the box? How many hatched? Contact

Tim James at Tim.James@mdc.mo.gov. Project is approved.

Prairie Seed Collection for Prairie Restoration at Charles Green Conservation Area, ongoing May until November, yearly for 6-10 years

Sponsored by MDC. Volunteers maintain and collect seed from established forb plots at Charles A. Green Conservation Area (little guesswork, as plants are in rows). They can also collect on other areas of choice, if species and/or area have been approved. Contact: John George at John.George@mdc.mo.gov or 573-882-8388 ext 224. You may also contact Jody Stotsky at 573-874-0642 to learn about her work on the forb plots at the Green Area in summer and fall of 2006. Project is approved.

Bulletin Board Update at Rock Bridge Memorial State Park, flexible scheduling

Volunteers needed to drive to the park's 4 bulletin boards, open and close them with a power drill, add/remove flyers and posters. Work can be done on your own time if you have a power drill and vehicle or between 8 a.m. and 4:30 p.m. if you use park equipment/vehicle. Updates usually needed 2-3 times/month in busy seasons (April-October), and once a month in slower seasons (November-March). Contact: Kathryn DiFoxfire at rock.bridge.memorial.state.park@dnr.mo.gov or Roxie Campbell at roxie.campbell@dnr.mo.gov 573-449-7402. Project is approved.

Bats on Parade, Summer 2007 Program

Sponsored by Friends of Rock Bridge Memorial State Park. Help needed for award-winning Bats on Parade Program. Volunteers needed for the summer programs June - August. There will be opportunities to help with a variety of interpretive programs. Estimated 4 - 8 hours per month. Contact: Meredith Donaldson at Mjdonlsn@aol.com or 815-9255. Project is approved

Raptor Rehabilitation Project, ongoing

Sponsored by Raptor Rehabilitation Project. Care for sick or injured raptors; feed and provide activities to captive wild animals; create and deliver presentations. Contact: Erin West, President at eewd76@mizzou.edu for details and training. Project is approved.

Prescribed Burns at Rock Bridge Memorial State Park, Select weekdays between 8 a.m. and 3:30 p.m. (call for specific dates)

Volunteers assist in prescribed burns in restored native grassland or woodland units within park.

Exact dates determined by weather, wind direction and staff and volunteer availability. Contact Kathryn DiFoxfire at rock.bridge.memorial.state.park@dnr.mo.gov or Roxie Campbell at roxie.campbell@dnr.mo.gov 573-449-7402. Project is approved.

Prairie Fork Conservation Area Field Trip Naturalists

Sponsored by Missouri Dept. of Conservation, University of Missouri, Prairie Fork Trust. Prairie Fork CA needs naturalists to staff environmental education stations during school field trips. Most programs take place M - F from 9 am to 2 pm, with 3 small group activities from 9am till noon with children rotating through stations and one large group activity after lunch. Help is most needed during morning activities. Contact Benedict Nagy at 573-254-3262 or benedict62@yahoo.com. Project is approved.

Friends of Rock Bridge Memorial State Park Explore Rock Bridge, 3rd Saturday each month

Sponsored by Friends of Rock Bride Memorial State Park. Explore Rock Bridge provides opportunities for the public to explore different park resources and participate in service projects. Volunteers needed to assist trip leader with hike each month and to plan future programs. Contact: Meredith Donaldson at Mjdonlsn@aol.com or 815-9255. Project is approved.

Landowner Contacts Database, Flexible hours until completed.

Sponsored by MDC. Volunteer will log landowner contact folders by location. Files date back to the 1940s and recording assistance provided on specific properties in the past will provide an account of historical management allowing MDC to better assess property needs. Location: Fulton. Contact Josh Stevens at 573-592-1412 or Josh.Stevens@mdc.mo.gov. Project is approved.

Friends of Big Muddy Activities, throughout the year.

Sponsored by Friends of Big Muddy. Most opportunities are on units of the Big Muddy National Fish & Wildlife Refuge. Check <http://www.friendsofbigmuddy.org> for current opportunities or sign up for list serve announcements by e-mailing FriendsOfBigMuddy-subscribe@yahoogroups.com. Contact Troy Gordon at friends@friendsofbigmuddy.org or call 573-424-9051. Projects are approved.

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NEXT MEETING

**Thursday, June 14, 6:30 p.m. - ?
At the home of Sally & Bobb Swanson
9250 E. Hwy. WW**

Potluck picnic:

**Sally & Bobb will provide grilled meat and mushrooms, chips & salsa,
insect repellent; everyone should bring a side dish or dessert and lawn
chair.**

Please bring anything needed to serve your dish. Paper plates and picnic utensils will be provided.



*To promote awareness and citizen
stewardship of natural resources
through science-based education and
community service*