



Missouri Master Naturalist

Winter Issue 2018 Volume 8 Number 1



It was one of those March days
when the sun shines hot and the wind blows cold.
When it is summer in the light, and winter in the shade
Charles Dickens

Photo by © Sandy Brooks

Great Rivers Gazette

Winter 2018

Volume.8 Number 1

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Front Cover

North American Cardinal – Photo by Sandy Brooks

Back Cover

Bluebirds at the Backyard Feeder – by Tessa Wasserman

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The President's Corner



Dear Chapter Members,

The Great Rivers Chapter Board would like to acknowledge UM - Extension Office Chapter Advisor Nathan Brandt for his ten years of service to the chapter and with University of Missouri-Extension.

I personally do not know what I would have done without Nathan's steady and calm guidance over the past year and a half as I transitioned into the role of our chapter's president. The board sent Nathan and his family a \$100 gift card for Stacked Burgers and a card thanking him for everything that he has done for us. Nathan, we will miss you and wish you well in your new career!



Rachel Becknell
– **President,**
Great Rivers Chapter



Great Rivers Citizen Science – Winter 2018

Bird Monitoring at Claire Gempp Davidson Conservation Area *By Shawn Tracy*

Over the past three months four knowledgeable birders from the St. Louis chapter of the Audubon club have been conducting bird surveys of the Missouri Department of Conservation's Claire Gempp Davidson Memorial Conservation Area's 15 acres of woodlands, prairies, and pond. Once a week, either Mary Dueren, Sue Gustafson, Karen Meyer, and Mike Thelen lead the walks through the area identifying any bird within the confines of the conservation area or the adjacent properties.

As a novice who is willing to learn more about bird identification, calls, and their habits, I have accompanied the four birders for seven of their 12 walks. We have endured temperatures from 5 above to 50 or so degrees. With spring and summer approaching, the temps ought to be much more reasonable for a leisurely stroll through the area.

So far, we have identified over 30 species of birds. The following species have been seen or heard on our rambles through the area (listing is not definitive):

American Crow	European Starling
American Goldfinch	Fox Sparrow
American Robin	Golden-crowned Kinglet
Barred Owl	House Finch
Blue Jay	Mourning Dove
Brown Headed Cowbird	Northern Cardinal
Canada Goose	Northern Flicker
Carolina/Black-capped Chickadee	Red-shouldered Hawk
Common Grackle	Red-bellied Woodpecker
Cooper's Hawk	Rusty Blackbird
Dark-eyed Junco	Tufted Titmouse
Downy Woodpecker	White-breasted Nuthatch
Eastern Bluebird	White-throated Sparrow
Eastern Phoebe	Yellow-rumped Warbler
Eurasian Tree Sparrow	Yellow bellied Sapsucker

There will be 36 more opportunities to participate in these surveys from now through the end of December. The walks normally take place on Wednesdays, Thursdays, or Saturdays from either 8-10 am or 1-3 pm. One does not have to be an expert to join. All one needs is a pair of binoculars and a willingness to learn. You'll be surprised what you can learn in just two hours.

*Citizen Science (continued)*

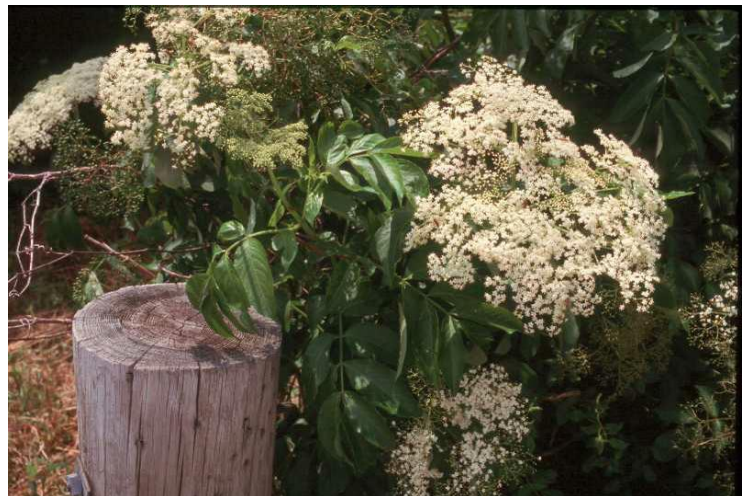
American Black Elderberry Survey --- by Josh Neely

At the Great Rivers meeting in March, we were visited by Josh Neely of Lindenwood College. Jeff will be conducting research on the phenology of the American Black Elderberry plant, *Sambucus Canadensis*. Jeff is looking for information on the date of first flower and a list of insects which visit the plant while in bloom.

If you have an American Black Elderberry plant and wish to participate in this study, please contact Josh @ jneely@lindenwood.com.

MISSOURI BOTANICAL GARDEN *PLANT FINDER*

[Sambucus canadensis, commonly called American elder](#), is native to eastern North America. It is a deciduous, somewhat sprawling, suckering shrub that typically grows to 5-12' tall. It typically occurs on streambanks, moist woodlands, thickets, fence rows and roadsides throughout the State of Missouri. Tiny lemon-scented white flowers appear in large flat-topped clusters (cymes to 10" across) in June. Flowers give way to clusters of black elderberry fruits (drupes) in late summer. Fruits of species plants are sometimes used to make jams, jellies, pie fillings and elderberry wine. Fruits are attractive to wildlife. American elder (*Sambucus canadensis*) and European elder (*Sambucus nigra*) are closely related plants.





Citizen Science (continued)

Great Rivers Trumpeter Swan Watch 2017-2018 Summary and Results

--- by Pat Lueders, Audubon Center at Riverlands



Adult Trumpeter Swans with 3 cygnets

Introduction

The 2017-2018 Great Rivers Trumpeter Swan Watch was the sixth watch conducted by community science volunteers at Riverlands Migratory Bird Sanctuary (RMBS). The watch is a partnership of these agencies: The Audubon Center at Riverlands, the Audubon Society of Missouri (ASM), St. Louis Audubon Society (SLAS), and the U.S. Army Corps of Engineers River Project Office at RMBS.

Since 1991, every winter around November 1st, Trumpeter Swans have been arriving at the RMBS area to feed and roost until the end of January. At dawn, on six selected dates two weeks apart during their 2017-2018 winter residency, over twenty volunteers counted the swans roosting in the sanctuary.

The dates for the 2017-2018 counts were:

- November 21, 2017
- December 5, 2017
- December 19, 2017
- January 2, 2018
- January 16, 2018
- January 30, 2018

When Trumpeter Swans were reintroduced in 2002 in Wisconsin, many cygnets were “collared” with black neckbands containing yellow codes with one letter and two numbers. Volunteers have identified 88 collars over the last six seasons, with four new collars registered this season.

Thirteen swans previously sighted returned, the oldest three being collared in 2003 in Wisconsin. (Collar report attached).

RMBS has recorded the highest number of wintering Trumpeter Swans in the interior United States for the last few years. Swans mate for life and return in family units containing the adults and anywhere from one to five cygnets.

Weather

Weather was typical for the RMBS location for the first three watch dates. Until the end of December, the majority of the swans had fed and roosted in the Heron Pond area. The temperatures ranged from 34’-41’ at dawn.

However, the weather did become a factor near the end of December. The temperature for the January 2, 2018 count was -6’, and the lengthy cold span before this had provided the swans with only two small areas of open water, both in Ellis Bay. This long period of below 0’ weather in the Midwest limited the availability of open water throughout the area resulting in the highest count of Trumpeter Swans yet reported in the RMBS area.

The weather remained around 0’; and the count for the next watch remained high resulting in the third largest total of swans ever registered. For the last count, the temperatures had returned to normal for the area and the majority of water was open.

Results

The previously reported record of 1022 swans on December 20, 2016 was broken twice in the 2017-2018 season! The number of swans counted on November 19, 2017 numbered 1089. However, probably as a result of the harsh temperatures at the end of December, the number of swans counted on January 2, 2018 was 1377.

Below are the counts for each date:

NOVEMBER 21, 2017:

Trumpeter Swans: 1089	Adults: 936	Cygnets: 153
Tundra Swans: 21		
Mute Swans: 2		

DECEMBER 5, 2017

Trumpeter Swans: 604	Adults: 520	Cygnets: 84
Tundra Swans: 32		

DECEMBER 19, 2017:

Trumpeter Swans: 428	Adults: 381	Cygnets: 47
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JANUARY 2, 2018: NEW SWAN WATCH RECORD

Trumpeter Swans: 1377	Adults: 1199	Cygnets: 178
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JANUARY 19, 2018:

Trumpeter Swans: 1023	Adults: 931	Cygnets: 92
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JANUARY 30, 2018:

Trumpeter Swans: 82	Adults: 54	Cygnets: 28
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Great Rivers Trumpeter Swan Watch (continued)



Heron Pond with hundreds of swans, November 25, 2017

SUMMARY

A number of interesting deductions can be made from the results of the Great Rivers Trumpeter Swan Watch for the 2017-2018 season.

The population of swans is increasing at a yearly rate of around 10% if the number of cygnets is a reliable indicator. The population wintering in the RMBS area continues to increase, close to a 50% increase over the average of those counted during the 2013-2016 seasons.

When the weather was normal, and there was sufficient open water for roosting, the swans utilized the many available water areas. However, when open water became scarce, they gathered in large numbers in what little water was available in order to survive. It isn't clear what they did for food sources since many did not leave the water during the day to fly to the agricultural fields.

The swans continue to leave the RMBS area before the end of January each year.

We are unable to determine if the swans counted after the end of January are migrants using the area on their way north, or if they are part of the Wintering population.

Another interesting phenomena this season was the large variety of rare species for the Midwest area that were sighted on watch dates, including at least two Snowy Owls, one an immature female and one an immature male.

The list of rarities is below:

- Black-bellied Whistling Ducks-7
Red-necked Grebe
Juvenile Mute Swan
White-winged Scoter
Red-throated Loon-2
Snowy Owl-2
Short-eared Owl
Sandhill Crane



The swan watch was featured on the front page of the St. Louis Post-Dispatch newspaper November 27, 2017

NUMBERS OF TRUMPETER SWANS SOAR

Once nearly extinct in the U.S., the birds with an eight-foot wingspan were reintroduced to the area and are returning in record numbers.

St. Louis Post-Dispatch, USA Nov 27, 2017 A1 BY BRUCE GRAY



Trumpeter swans roost in Heron Pond. More than 1,000 of the migratory birds have been spotted here. They were once near extinction in the United States.

Against a horizon broken by transmission lines and the occasional smokestack, amid the steady buzz of 60-mph traffic



Bird expert Pat Lueders (second from right) counts a large flock of trumpeter swans with volunteer counters Paul Moffett (right) and Joel Rurik (left) on Tuesday at Heron Pond.

along U.S. Highway 67, the bottomlands near the confluence of the Mississippi and Missouri rivers may not seem like a sought-after natural oasis — especially



Trumpeter swans take flight from Heron Pond near the confluence of the Mississippi and Missouri rivers in the West Alton area on Tuesday.

during gray, winter months.

But things look differently if you're a trumpeter swan, or a devoted birdwatcher drawn to observe the species, beginning this time of year.

A record 1,089 of the birds have already returned to the area's marshy expanses for the winter, migrating from their northern habitat ranges in places such as Wisconsin, Minnesota or even Canada, based on a count completed last week.

That tops last year's record of 1,022 counted at the Riverlands Migratory Bird Sanctuary in West Alton, helping cement



A trumpeter swan with a numbered collar takes flight from Heron Pond near the confluence of the Mississippi and Missouri rivers in West Alton on Nov. 21.

the site's status as home of the largest number of wintering trumpeters in the interior of the United States. The numbers represent a striking turnaround for a species that was once nearly hunted to extinction across the U.S.

With wingspans approaching eight feet, trumpeters rank as North America's largest waterfowl. That majestic size makes them a favorite of regional birders.

"The bigger the birds are, the more fun they are," said Pat Lueders, a retiree who, since 2011, has led the Great Rivers Trumpeter

THANK YOU!

The commitment from our reliable group of community science volunteers allows this important program to continue. We thank them for their devotion and willingness to be at RMBS before dawn during extreme weather conditions to continue this effort on behalf of our magnificent swans!

The ability to view the swans in January during the extreme weather from the Audubon Center resulted in a very accurate count for this record-breaking season. Thanks to our partner, Missouri Audubon, and their staff, especially Jean Favara, for opening the warm center early and having hot coffee available!

Pat Lueders, Project Coordinator



Great Rivers Stewardship Projects – Winter 2018

Shaw Nature Reserve @ShawNature Jan 23, 2018

Our Restoration and Horticulture teams collected 815 lbs of native seeds between 2016 and 2017! Pictured is SNR Restoration Ecologist, Mike Saxton, with the massive seed collection. They will be stored for future restoration and horticulture projects here at SNR!



*Stewardship – (continued)*

Don Robinson State Park Restoration

By Rick Schweitzer

Photo courtesy Missouri Park

Rick Sweitzer, of the Miramiguoa Chapter, writes eloquently about the restoration work occurring at Don Robinson State Park. Everyone who volunteered their time should be proud of the fact that this area has been transformed into a truly beautiful site for all. Watch our chapter calendar and emails for upcoming work days at DRSP

Don Robinson State Park has completed one full year of operation.

It opened its trails to hikers on Jan 1, 2017 and in the short span of one year has charmed over 65,000 nature lovers, many coming from the nearby metropolitan area of St. Louis. It is located atop the LaBarque Creek watershed which flows east and north to the Meremec River. Along part of the eastern boundary and in bits of the the southernmost section of the park the creeks and runoff flow into the nearby Big River. LaBarque Creek and Don Robinson State Park offer a rich but fragile environment. LaBarque Creek flows through three Missouri Department of Conservation (MDC) areas, LaBarque Creek CA, Hilda Young CA, and Glassberg CA. Don Robinson State Park is run by the Missouri Department of Natural Resources (DNR). The LaBarque Creek Natural Area is comprised of 639 acres from the original LaBarque Creek CA plus an expansion of 631 acres in the CA and 711 acres in the State Park. The creek hosts 42 species of fish while the State Park has 650 species of plants including the native short-leaf pine, vascular plants, moss, ferns, and several state listed plant species of conservation concern. These public lands attract a variety of migratory songbirds. The sandstone box canyons that filter through the state park offer spectacular views of lichen covered rock cliffs, deep cut shelter caves, and tumbling streams and waterfalls. As you walk along the two loop trails located on either side of Don Robinson's house, the overlook pavilion, and parking area you will pass through restored glades and dry dolomite woodland communities, view gnarly chinkapin oaks, and cross over a natural stone bridge. You will climb in and out of sandstone

canyons, hop across narrow streams, brush past intricately fashioned drip-stone ledges, and wind through a rock strewn hillside. You will pause and wonder at the beauty of an upland woodland that unfolds below you, sloping down into the distant valley. Along the trails you may also note evidence of man-made ruins such as breached boulder dams, old hunting stands, crumbling stone foundations, and disappearing homesteads. These are the signs that may stimulate and occupy your thoughts as you walk along the trails.

Don Robinson, an entrepreneur, philanthropist, and nature lover, died in 2012 and left his 812 acres to the Missouri Department of Natural Resources for the purpose of sharing his vision.

Then the DNR using public open houses and comment cards, and natural and cultural resource plans formed a conceptual development planning committee to create a state park for all. For five years the DNR has labored on the property attempting to create a space that attracts outdoor enthusiasts yet preserves the fragile eco-system. A new paved entry road was constructed that runs up to Don Robinson's old house site. The unique house structure was preserved but fenced off for future renovation. A stone patio and picnic shelter with a dramatic overlook of the western side of the park was erected. Parking areas and a modern toilet facility were developed. A paved ADA trail for handicapped nature lovers was constructed for the first 0.6 mile of the Sandstone Canyon Trail. A trail building machine (a Ditch Witch) was brought in to rough in most of the 6.4 miles of the two new hiking trails



Stewardship (continued)

Don Robinson State Park Restoration Program (continued)



Photo courtesy Missouri Department of Natural Resources

With the guidance of park interpretive resource coordinator, Erik Otto, the new state park has also brought in a variety of volunteers to participate on several projects.

These volunteers worked through the cooperative efforts of the Missouri Master Naturalists, the Sierra Club, friends of these two groups, and nearby park neighbors and their friends. Even a local bank provided volunteers one day as part of a service project program. Many individuals have come together to preserve and open up this wonderful park. By December of 2017 there have been over 120 volunteers giving 544 volunteer hours on trail building alone. With back-breaking labor, volunteers used hand tools to refine the machine built portions of the two trails. They also were required to do hand-line work to carve out and complete certain sections that were not accessible to the trail building machine. Another particularly arduous task was to remove the ruins of a once magnificent tree house that had collapsed along with its supporting tree. The rubble was located next to the new trail and created a hazard of broken panes of glass and rotting lumber with nails protruding underfoot. Volunteers carried the remains, board by board, up a quarter mile steep hillside to a location where a trailer could cart it away to a landfill.

Volunteers from the three nearby chapters of the Missouri Master Naturalists have spearheaded other projects. Woodland restoration has been a major volunteer effort beginning in 2010 while Don Robinson still lived.

The restoration work includes cutting down invasive cedar and maple trees and removing exotic plant species such as honeysuckle and autumn olive. 490 volunteer hours were recorded in this area in 2017. A landscaping project to grow native grasses, shrubs, and flowers near the overlook pavilion and water them during the dry summer months was also completed by volunteers in 2017. 145 volunteer hours were tallied for this project. Even before the park was opened volunteers have helped out on prescribed burns throughout the park in order to open up the forest understory to new growth.

In 2018 forest restoration, trail maintenance, and trail building, and a new glade restoration project are under consideration. Also a special use area for overnight camping for non-profit groups will need volunteer help. Don Robinson State Park is truly the result of the largesse of Don Robinson, and the cooperation of the Department of Natural Resources using individual volunteers and agencies. Future volunteer work will be required in restoration, preservation, operation, and maintenance of the park.



Great Rivers Outreach and Education – Winter 2018

EAGLE DAYS at the Chain-of-Rocks Bridge

Is it cold? Is it January? Then it must be time for Eagle Days on the Chain of Rocks Bridge.

As in years past, the weather was a factor at this year's event. We experienced icy temperatures, strong winds, and some fog. Once the fog lifted the students were thrilled to see several Eagles flying overhead, sitting in trees, or even floating on the ice. Eagle sightings make the weather seem almost bearable and the students were good sports during their time on the bridge.

The Great Rivers chapter was very well represented this year, with a record number of volunteers.

Extra kudos to those members who braved the temps and the wind while on the spotting scopes. That is one tough job.

Braving the weather were the following volunteers:

Evelyn Tullos, Bob Virag, Kathleen Kapayou, Michael Meredith, Tess Wassermann, Peggy Morrison, Barbra Stephenson, Dennis Honkomp, Vaughn Meister, Barb Cerutti, Larry Conant, Ton Fasl, Debra Maurer, Donna Scott, Eileen Hall, Brett Heath, Peggy Parr, Kari Pratt, and Pam Wilcox



Eagle in the Chain of Rocks Tent



MMN Eaglets (left to right)
Bob Virag, Kathleen Kapayou, Pam Wilcox, Tessa Wasserman, Michael Meredith



Michael Meredith working the St. Louis Audubon "Touch Table"



Bob Virag and Eagle Days visitors at the scopes



Michael Meredith at the scopes



Even this mature eagle and sub-adult eagle were chilly on the ice floes.



EAGLE DAYS at the Chain-of-Rocks Bridge 2018 (continued)

Good afternoon, Eagle Days Volunteers,

I would like to thank you all, again, for helping ensure another successful Eagle Days event at the Old Chain of Rocks Bridge! Our event would not be nearly as successful (or fun!) without all of you – who so generously give your time and expertise to the event. We all are grateful for you.

For the 2018 Eagle Days on The Old Chain of Rocks Bridge, we topped just over 3,000 visitors on January 13th and 14th and had 715 students from 21 schools attend the event throughout the week. Every student and most visitors had the opportunity to view eagles firsthand at The Old Chain of Rocks Bridge. To help each of these visitors observe eagles and learn about nature along the Mississippi River, we had 105 trained individual volunteers provide over 550 volunteer hours to the program!

Additional kudos are due for braving all of the various weather this past week brought – rain, freezing rain, snow, high winds, fog, sunshine that brought temperatures into the 60's and then clouds with a North wind bringing the temperatures down into the single digits. Each day brought its unique challenges but we overcame them all and provided a memorable experience for everyone attending the event on each day.

Thank you and I hope to see you all soon!

Matthew Magoc

Conservation Education Consultant

Powder Valley Conservation Nature Center



Maple Sugar Festival at Rockwoods Reservation



On a cold February day hundreds of visitors came to hear the story of how maple sugar is made and the many legends handed down by the Native Americans. This is a big event for MDC and is well received by the public.

A big shout out to the numerous Great Rivers members who volunteered at the festival and helped make it a success.

Larry Conant, Carl Davis, Tom Fasl, Diane Goulis, Eileen Hall, Dennis Honkomp, Debra Maurer, Vaughn Meister, Michael Meredith, Mike Nations, Robert Ochs, Kari Pratt, Anene Tressler-Hauschultz.



Hidden Gems in St. Louis County Parks

In case you missed it, you should check out the wonderful work of Great Rivers chapter member Sandy Brooks and her talented team of volunteer photographer naturalists for the St. Louis County Parks and Recreation department. Sandy developed “Hidden Gems”, a natural events calendar for the St. Louis County Parks that provides artists, photographers and nature lovers ideas of what is happening and where in the 71 park system, including where and when to find all sorts of flora and fauna. Nearly every day of every month on the calendar is filled with fun nature facts and links to photographs, paintings, and educational websites on the nature topics.



Follow these links to access the calendar. You can even add the Google Calendar to your own account to get real-time up-to-the-minute information:

[Academy of Nature and Wildlife Arts – HIDDEN GEMS](#)

[Hidden Gems Google Calendar](#)

[Facebook – Hidden Gems of St. Louis County Parks](#)



Hidden Gems Scavenger Hunt in St Louis County Parks

Nature surprises us with hidden gems all year long if we know where to look. Check the [Hidden Gems Calendar](#) for natural events happening in the parks near you. Then take your camera or you sketch pad and find them! Submit your images to the Hidden Gems [Facebook](#) page and [Flickr](#) pages to be entered into the monthly people's choice award. Schiller's Camera will be providing monthly print prizes to the winner. The Hidden Gems Calendar will provide a link to the photos. In October of 2018, we will have a physical exhibit of some of the top submissions. More prizes will be awarded. Free and open to all ages!

Call for volunteer Master Naturalist photographers!

The weather is definitely improving, flowers are pushing up and soon trees will be budding. The birds are very active this month! Does anyone have or perhaps would be willing to get some volunteer time in taking pictures of eagles nesting, bluebirds at their boxes, redwinged blackbirds, spring peepers, purple martins (will be returning later this month) or bats (will be leaving hibernation at the end of the month). I have a few but really need more to add to the posts. Remember, you get volunteer hours credit for this! Please send photos to me to include in the posts. Remember to tell me where they were taken.

Thanks

Sandy Brooks

academyofnatureandwildlifearts@gmail.com



Outreach and Education (continued)

World Bird Sanctuary Promotes Dawn Griffard to Executive Director

The Board of Directors of World Bird Sanctuary is pleased to announce that Dawn Griffard is now the organization's Executive Director.

"We are delighted and enthused to have Dawn assume the ultimate role of leadership for World Bird Sanctuary," said John Kemper, Chair of World Bird Sanctuary Board of Directors. "She has an abundant passion for birds, great knowledge of how the organization operates, and is a consummate leader of people."

Born & raised in Buffalo, NY, Dawn earned her degree in Photography and Fine Arts at Villa Maria College, which she used to work as a freelance photographer for 12 years in the Buffalo area. She then segued into freelance work as an Operations Producer for ESPN Productions, traveling the country to help organize and produce remote sporting events including NFL, NHL, MLB, PGA, NCAA, and Winter and Summer X Games events.

A lifelong lover of all animals, and having served as a docent at the Buffalo Zoo, Dawn accepted a position as Practice Manager for Board-Certified Avian Veterinarian, Dr. Laura Wade. Here she helped Dr. Wade build her new specialized Avian/Exotic practice literally from the ground up. She learned as much as she could from Dr. Wade and continuing education courses about bird species, their care and husbandry, so she could serve as an assistant in examinations and surgeries while simultaneously performing managerial duties for the clinic. With this training, Dawn then became a licensed New York State Wildlife Rehabilitator with mentor Marianne Hites, and then began assisting Dr. Kurt Volle at the Buffalo Zoo Veterinary Hospital. At the Buffalo Zoo, she continued her work and learning by taking part in daily examinations, procedures and surgeries with species ranging from vampire bats to Asian elephants – including birds, of course.

Having developed a clear passion for birds of all kinds, Dawn set her sites on World Bird Sanctuary when she moved to St. Louis in August of 2014. Starting as a volunteer in the Nature Center, she was then hired by Walter C. Crawford Jr, and worked many jobs within the next 3 years throughout the sanctuary, including Special Events and Volunteer Coordinator, Director of Development and now, Executive Director.



Last summer, Dawn was proud to become a Missouri Master Naturalist. This year, she will begin work towards a Masters in Public Policy Administration at the University of Missouri at St. Louis.

About World Bird Sanctuary

World Bird Sanctuary, founded in 1977, has been a leader in the successful battle to save the peregrine falcon, the American barn owl, and bald eagle from extinction. One of the largest institutions of its kind in the United States, World Bird Sanctuary is a unique blend of a beloved St. Louis destination, respected conservation organization, and successful education and rehabilitation facility.

The agency carries out its mission through operation of four programs: education, rehabilitation, propagation, and field studies:

Education programs that foster an understanding, appreciation and respect for bird of prey species are delivered to nearly 300,000 annually.

Our Wildlife Hospital rehabilitates an average of 400 birds of prey every year, of which 43% are released back into the wild.

Propagation efforts have been pivotal in the preservation of many endangered species.

The field studies program provides in-depth research into the secret lives of many bird species in order to better understand them and possibly intercept any present or future danger to their ability to flourish.



Great Rivers Photo Contest

Once again, with the change of every season, Great River chapter members have the opportunity to present their prized photos for display on the home page of the chapter website. Cori Westcott organized the event which is curated by a panel of esteemed judges. Six photographs are selected for the website. These can be seen at www.greatrivers.org and are shown below. Please congratulate our Great Rivers photographers. Their outstanding work helps to further the Master Naturalist mission to improve public understanding of natural resource ecology and management by enhancing natural resource *outreach and education* activities.

Website Photographs



Mayapples by Glen Horton



Morels by Glen Horton



Stonefly by Glen Horton



Blue-eyed Mary by Renee Benage



Dinner Time by Mark H.X. Glenshaw



Rare white Wild Sweet William by Glen Horton



Outreach and Education (continued)

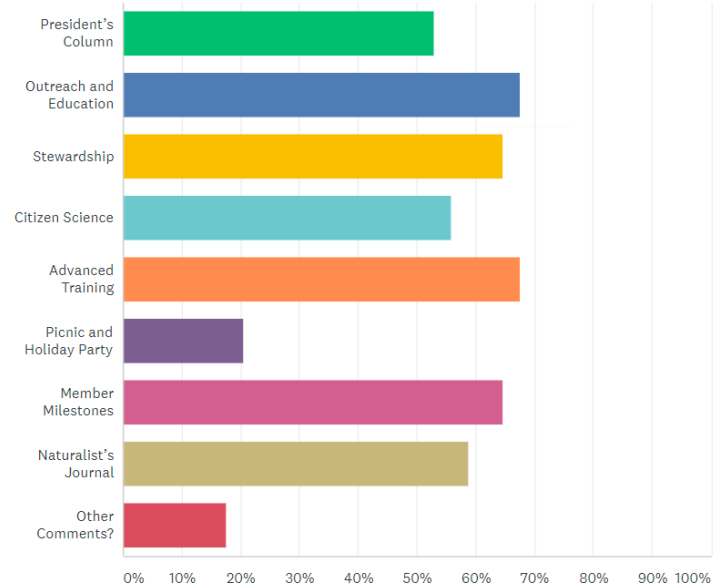
Gazette Feedback Survey

Many thanks for the 34 chapter members who took the time to participate in the Gazette Feedback Survey .

This response rate represents approximately 32% of active chapter membership. According to Survey Monkey, the survey host, this response rate is nearly double the average rate for non-profit volunteer organizations.

Overall the feedback was very positive. We have taken the comments to heart and hopefully you will see several of the suggestions implemented in this edition of gazette as we strive to make it better.

Here is a summary of the results for the 10 questions in the survey:



1. What were your favorite Gazette topics? by percent of total respondents

1. What were your favorite topics?

Feedback for 7 of the 8 categories ranged tightly between 53-68% of respondents. Interest in the Picnic and Holiday was lowest, at 21 % Other Comments included

- A request for links to other information,
- More advanced training information,
- Two strongly favor the photos,
- One preferring fewer photos.

2. What topics do you wish were included, but weren't?

Of the 34 comments, 14 couldn't think of additional topics and an additional 4 said good work! the remaining 16 comments included

- 5 comments asking for upcoming volunteer and training opportunities
- 4 comments asking for more articles on native plant, food plants, and wildlife
- Specific comments asking for:
 - Natural events calendar
 - General info about naturalist topics, not necessarily about our chapter
 - Article on meaning of nature to humans
 - More summaries of scientific research
 - Tri chapter news
 - "Meet your board "

3. How readable and understandable were the articles?

94% of commenters (32 of 34) were very positive; 6% (2 commenters) said some articles were too long.

4. How useful are the photos?

88% (30 comments) were very positive. The remaining 12% (4 respondents) submitted the following comments:

- None, I agree with Rachel, put them on the website.
- Some are good, but perhaps too many on certain events.
- One of the best things about this edition!! but we don't need 13 photos of party.
- Not always useful, but enjoyable - to a limit. Maybe 3-4 of a holiday party is enough

5. How easy was the file to download and use?

100% of the comments (34) were positive, with the following 2 suggestions:

- On PC its better than other devices
- Very easy. I prefer the link to the website rather than an attached large file.



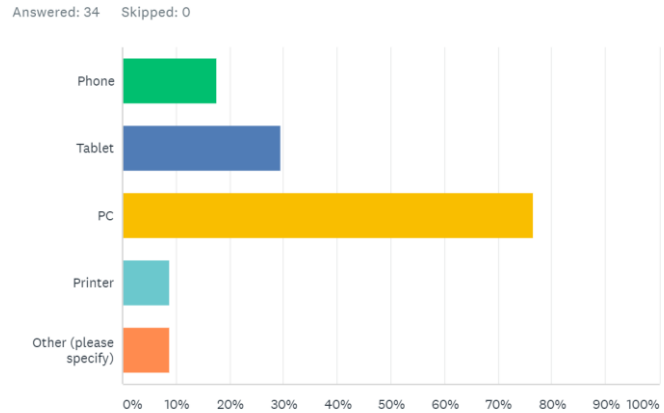
Outreach and Education (continued)
Gazette Feedback Survey (continued)

6. What type of device do you use to read the Gazette? Check all that apply.

Table with 3 columns: ANSWER CHOICES, RESPONSES, and Total Respondents. Rows include Phone, Tablet, PC, Printer, and Other.

3 Other comments:

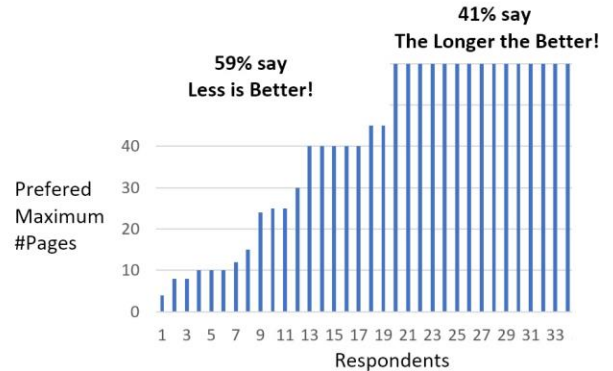
- Laptop
- Apple desktop computer
- Laptop - a Mac, not a PC



7. What is your preference on the length of the Gazette?

59% of respondents (20 of 34) prefer fewer pages. 41% of respondents (14 of 34) are happy with the current length or say 'the longer the better'

Preferred Gazette Length - Maximum #Pages



8. What is your preference on the publication frequency of the Gazette?

88% of respondents (30 of 34) prefer the current quarterly publications
6% of respondents (2 of 34) prefer publication monthly
3% of respondents (1 of 34) prefer publication every 2 months
3% of respondents (1 of 34) had no preference.

9. After reading the Gazette, how well do you feel that it improved your understanding of chapter activities?

91% of respondents (31 of 34) answered positively. 9% (3 respondents) answered with the following comments:

- None, just told me what has happened and what's going to happen.
-- A little
-- Pretty well...but I think we get more current info in between the issues

10. Are there any other thoughts you would like to share with us?

35% (12 of 34) respondents had no further comments.
50% (17 of 34) respondents made positive remarks with no further comments.
15% (5 of 34) respondents provided the following comments:

- I think it looks awesome and very professional! Everything is too much. Every article and section should be less.
- I would suggest that there be a limitation of one printed submission per person. They can still submit multiple articles, however choose only one for publication.
- Certain members seem to "overpopulate" the gazette each time. Maybe limiting articles to one per quarter would help?
- I like including a few member's photos of nature



Great Rivers Advanced Training

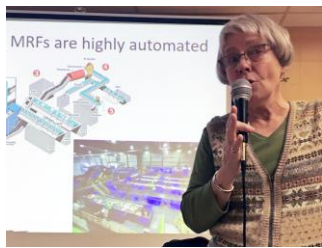
Advanced Training Speaker Series – Winter 2018



January 16, 2018

Owls of Missouri by Brenda Hente

Fascinating presentation by Brenda Hente on the owls of Missouri. Brenda speaks with passion, and shares that passion with her audience, concerning her knowledge of owls. We learned the identity, characteristics and calls of the four native owls; Great Horned, Barn, Barred, Eastern Screech, and the four non-native, Short-Eared, Long-Eared, Northern Saw Wet, and Snowy. We viewed a well put-together video featuring filming done by Brenda and Mark Glenshaw. *Review by Evelyn Tullos*



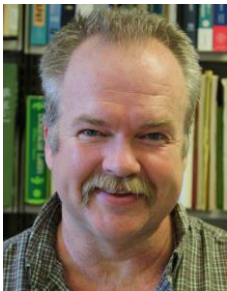
February 20, 2018

Home Recycling –by Jean Ponzi

Green Resources Manager, EarthWays Center, Missouri Botanical Garden

Useful, interesting, and entertaining presentation by Jean Ponzi on the subject of recycling in St. Louis. Jean carefully explained the importance and usefulness of recycling from our homes; how recycling has become an important part of global economy. It is the feed stock for manufacturing new products. She suggested we visit the St. Peters Recycling Facility to help understand the process of how the various items are sorted. Jean also defined the necessity of being mindful when placing inappropriate items in recycling drop stations. It is important to learn the numbering system of identification for plastics and where hazardous items can be recycled. A great deal of really good information was provided at this training session.

--- Review by Evelyn Tullos



March 20, 2018 Animal, Vegetable, or Mineral? –by J. Richard Abbott, Ph.D.

Interesting and enlightening talk by Richard Abbott, PhD: “An Introduction to Modern Botany.” We learned that so many items used in our everyday lives are plant based. He spoke of the DNA shared by humans, plants and bacteria. Also, the major importance of understanding the evolution and biodiversity of plants. There was a great deal of information shared by Dr. Abbott in this Botany 101 lecture. His studies have taken him all over the world. Plants were the basis of food, medicine, clothing and existence in early civilization. Dr. Abbott was able to cover only a small portion of it in the one hour allotted for this educational talk. Very complex topic, but grateful for what we did glean from it. ----Review by Evelyn Tullos



Advanced Training Speaker Series 2018 Calendar

01/16/2018	Brenda Hente	Owls of Missouri
02/20/2018	Jean Ponzi	Home Recycling
03/20/2018	J. Richard Abbott, PhD:	An Introduction to Modern Botany.
04/17/2018	Malinda Walter Slagle	Pollinators
05/15/2018	Simon Warren	Bokashi Method of Recycling
06/19/2018	no speaker	Picnic
07/17/2018	David Bruns	Spiders of Missouri
08/21/2018	Ned Siegel	Rain Gardens
09/18/2018	Kevin Meneau, MDC	Fish of Missouri
10/16/2018	Steve McMurray	Introduction to Mussels
11/20/2018	no speaker	Volunteer Fair
12/18/2018	no speaker	Holiday Party



Advanced Training (continued)

Tri-Chapter Advanced Training Event

Is There a Change in the Air?

--- by Angie and Aaron Jungbluth, MDC Volunteer Naturalists



MDC Volunteer Naturalists and
Certified Interpretive Guides,
Aaron and Angie Jungbluth

*The well attended MDC interactive climate change interpretative workshop at Powder Valley included over 14 Great Rivers chapter members. Missouri Master Naturalist **Barb Cerutti** contributed the following review.*

Did you know that research shows that 69% of Americans believe that global warming is happening but only 33% of Americans actually talk about it, and when they do, they talk about it an average of twice a year? A wonderful presentation on Climate Change was given on March 3rd by Angie and Aaron Jungbluth, both Volunteer Naturalists at Busch and Rockwoods. Critical new research and creative participatory activities helped us to explore our own knowledge, opinions, and beliefs concerning the past, present, and our fragile future. There was an emphasis on creating our opinions based on facts and forming a plan for the future. Hence, here are a few suggestions how we all can help and continue the hope for our future:

1. Calculate your **carbon footprint** and do some of the tips from <https://www.nature.org/greenliving/carboncalculator/index.htm>
2. **Carpool** to our meetings. Use mass transit, walk, bike or even roller skate to get around.
3. Use **green power**. Ask your local utility company about options.
4. **Caulk, weatherstrip, insulate, and replace windows** when you are not cutting honeysuckle.
5. Make some of those suggested changes after you get a **home energy audit**.
6. **Unplug** energy sucking appliances when not in use.
7. Buy less, or buy recycled, make more **energy and environmentally friendly purchases**. Consider the **packaging** your items come in, buy if recyclable or reusable.
8. Eat less meat. Meat production uses more energy and produces more carbon than vegetable, fruit or grain production. **Meatless Mondays**.
9. Buying **water-saving** appliances and low flow toilets and shower heads.
10. Use **LED bulbs**.

Consider expanding your wealth of knowledge by visiting some of the following sites:

- ✚ Earth to Sky Project Partners: NASA, NPS, and USFWS at <https://earthtosky.org/>
- ✚ National Academy for Atmospheric Research, Climate and Global Dynamics at <http://www.cgd.ucar.edu/>
- ✚ NASA Global Climate Change at <https://climate.nasa.gov/>
- ✚ Digital Earth Watch Network (citizen scientist program taking photographs) at <https://picturepost.unh.edu>



Great Rivers Member Milestones

The Great Rivers chapter appreciates the hard work and consistent dedication to our mission of the following Members.



Great Rivers Service Milestone Awardees are fledging!
Six awardees earned their wings in the past three months!
Congratulations to all for their well-deserved honor!



500-Hour Milestone Pin

Claire Meyners
Geoff Stillwell
Carolyn DeVaney



250-Hour Milestone Pin

Mary Dueren
Laura Belarbi
Barb Cerutti



Geoff Stillwell

Congratulations to Geoff Stillwell on earning his 500 hour milestone award.



Hi All!

I wanted everyone to know how happy I am to be in Great Rivers. It's been a couple of rough years and I sincerely appreciate everyone's patience. In the near future I hope to work on some of the Chapter's education projects, cover some remote stream sites, and start a project with the USGS. In the meantime, I hope to get to know everyone better and help The Great Rivers community.





Great Rivers Member Milestones *(continued)*



Mary Dueren

Congratulations to Mary Dueren on earning her 250 hour milestone award.



Mary Dueren and Michael Meredith with their scopes at a early morning Trumpeter Swan survey at Audubon Center at Riverlands

Should you visit the Audubon Center at Riverlands, you're likely to see trumpeter swans. You're just as likely to see Mary Dueren, too! That's how much time she volunteers at Riverlands leading beginner bird walks, Swan Counts, Christmas Bird Counts, Climate Watch Monitoring, Clair Gempp Davidson Bird Survey, and working on a couple of committees with St. Louis Audubon Society.

When she supports science, particularly the citizen science data gathering, she feels like she's a part of a larger community, a community of knowledge and of stewardship. "I have found the Christmas and Swan counts enlightening and fun." Of her studies getting her BS in Biology, Animal

Behavior was her favorite. "MMN instruction has added so much to my understanding of nature, ecology, ornithology and more."

"I have been impressed by the numbers of people that are now participating in MMN. It gives me great hope for the future of conservation. Volunteering is easy. But that said, it may be hard for a newcomer to find his or her passion. If I can assist someone that has an interest in birds, I'm available!"

Congratulations, Mary and thank you for your first 250 hours of service. Now, our members interested in the birds will "flock" to you for assistance!





Great Rivers Member Milestones (continued)



INITIAL CERTIFICATIONS

Congratulations to recent MMN interns on earning their Certification Awards

Pictured:

Karen Zelle

Don Frank

Tom Fasl

Brenda Switzer

Jack Hambene

Not pictured

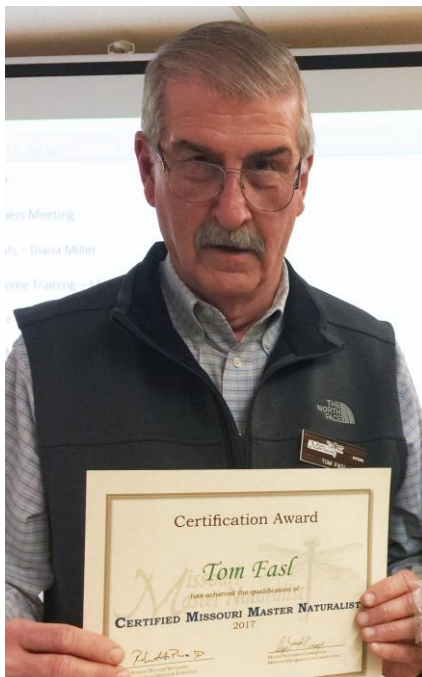
Jake Ronecker

Colleen Corbett

Rachel Bourneuf

Larry Conant

Sally Carpenter





Great Rivers Member Milestones (continued)

SPECIAL RECOGNITION

Ann Earley and Bob Siemer

Congratulations to Ann Earley, Great Rivers member, and Bob Siemer, Confluence member, for being added to the board of the Missouri Bluebird Society.

Both chapters appreciate their continued stewardship of plants, frogs, butterflies, dragonflies, and birds.

*Newly elected MOBS Board members
and officers. Thank you for your
willingness to serve!*



Bob Siemer (second from the left) and Ann Earley (third from the left)
at the Missouri Bluebird Society Conference in 2017

For more information on the [Missouri Bluebird Society](https://missouribluebird.files.wordpress.com/2018/02/mobs-0218winterfledg.pdf), see their winter newsletter, at <https://missouribluebird.files.wordpress.com/2018/02/mobs-0218winterfledg.pdf>



Naturalist's Journal

Dream Jobs Available - *by Rich Lesage*



Great Rivers chapter member Rich Lesage at the Great Sand Dunes National Park and Preserve visitor center explaining the local ecology and geology.

Have you ever thought of working as a Park Ranger at a National Park, Monument, or the Bureau of Land Management? How about a Wildlife Biologist working for the National Wildlife Service or a Fisheries Biologist working for the Fish and Wildlife Service? Did you ever wish to work as a Ranger or Forester for the United States Forest Service? Are you retired or in a job that is not quite the dream job you might have had in mind when you first graduated from high school or College?

Did you join the Missouri Master Naturalist Program in search of opportunities that might fulfill those lost dreams? Have you wanted to experience a bigger picture of the outdoors than your own backyard? Is this a bait and switch sell job or, worse yet, an evil way to tease with opportunities long lost on us old folks? No, not at all, and by entering one web site you can find reality in your dreams and find these opportunities and many more.

Opportunities are also available for state agencies including Missouri.

For three years I have worked as a Volunteer Ranger (VIP) at the Great Sand Dunes National Park and Preserve. I have worked both a 40 hour week and more recently a 32 hour week with as many as three days off. For the most part, I have been allowed to work the same jobs as a paid (Interpretive) ranger. These include roving patrol, visitor center and interpretive talks.

Every job listed on the web site has a job description and job requirements. Like any other job, a resume and two or three references are usually required. Today, there is also a security check requirement.

Housing varies, with many jobs preferring those who can commute locally. However, for all remote locations, agencies will often provide housing and / or RV pads.

I am retired and every winter and early spring I enjoy spending time on the below website looking for the dream job I missed out on in my youth. For those of a much younger age this could be another way to gain job experience for that future (paid) dream job.

For more information, see: <https://www.volunteer.gov>

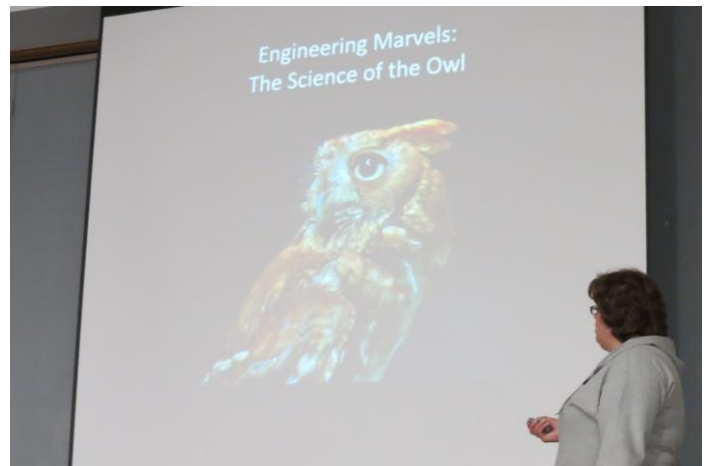


Naturalist's Journal

International Festival of Owls – Houston, Minnesota

--- By Brenda Hente

On March 2-4, our very own Brenda Hente was the main presenter at the 16th annual International Festival of Owls in Houston, Minnesota. She gave four presentations to over 2,500 guests who visited the event from all over the world. One of her presentations was titled, "There Must Be Some Myth-Understanding" which touched on the mythology and folklore of owls, from prehistoric times to present day, and what we can do to help people understand owls better. The other presentation was titled, "The Science Behind the Owl". This topic gave people a deeper understanding of how the owl uses every aspect of its body and anatomy to function at maximum capacity in order to survive. Each presentation was given twice throughout the weekend event. She was also able to bring a Eurasian Eagle Owl, a Spectacled Owl, a Barred Owl, and an American Barn owl with her from World Bird Sanctuary to show and fly at her presentations!





Naturalist's Journal

Backyard Visitors --- *by Tessa Wasserman*

Thought I'd share this photo taken at my parents' house in Ballwin right after we hung up the honeysuckle feeder I made for them. A pair of Carolina wrens, nuthatch, pine siskin, goldfinches, downy woodpecker, and yellow-bellied woodpecker also visited within the hour, but mostly enjoyed by a flock of 7 female and male bluebirds!

See the Back Cover
for the rest of the story!





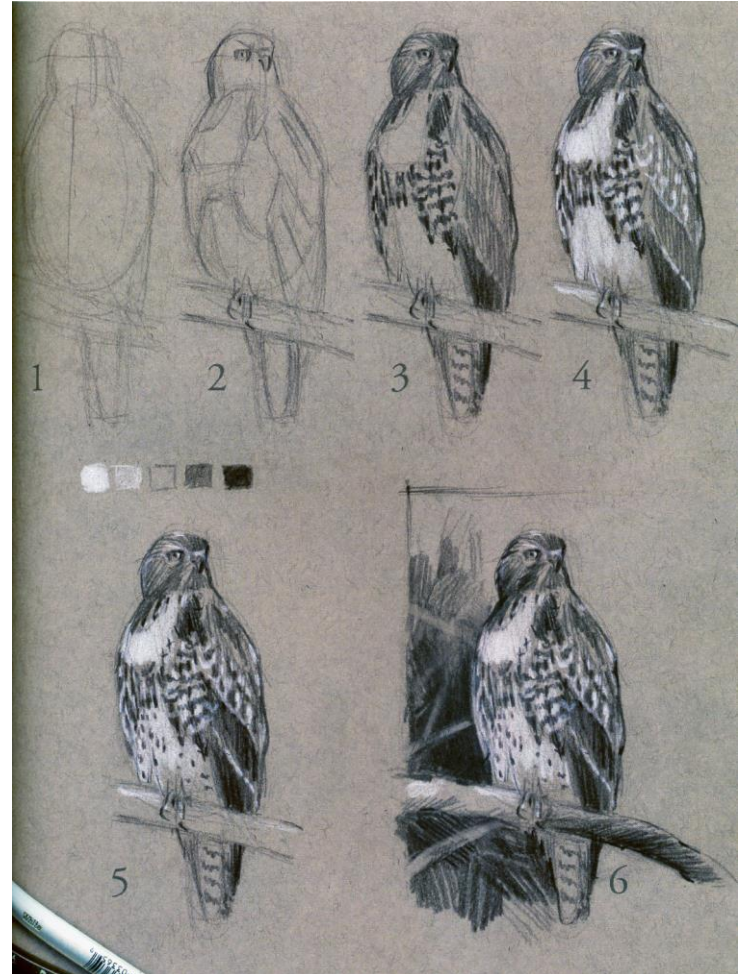
Naturalist's Journal

You Are the Camera...or...Why Keep a Nature Journal?

By Anene Tressler-Hauschultz

In a world of “been there, done that” and selfies-for-everyone, I want to propose a different approach. But first: some background. I write. That is to say, I’m a writer by profession. And I’ve kept journals intermittently for decades. For the most part, these journals served as records of my thoughts and impressions. Sometimes I added photographs, postcards, or other mementos to the text. Over the years, these journals have taken many forms: page-a-day datebooks, Moleskines of various sizes, interesting books I’d find in shops on my travels, and, eventually, blank books I learned to make myself. When I re-read these journals now, I’m often surprised by the immediacy of the memories they evoke—and the surprising detail—even when the events happened years earlier. These journals serve as a portal to places and experiences I thought I had forgotten. Additionally, they offer a view of **who I was** at the time I wrote my entries. And when I come across a photograph or memento pasted into my book, the memories seem richer still. I am grateful to have them.

While my journals contained mostly written descriptions, I’d often wanted to do more with images. But I’m no artist. And I didn’t know where to begin. In June 2016, I got my answer. Two volunteer naturalists from the Missouri Department of Conservation, **Angie Jungbluth** and **Pat Burrell-Standley**, organized a nature journaling experience at Shaw Nature Center. Artists of all levels were invited to participate in the 2-day, 1-night event. A friend and I signed up at once. Angie and Pat were a terrific, knowledgeable team—and impressive artists as well. Our group had fun. We learned. And we



Red Tailed Hawk

“The Laws Guide to Nature Drawing and Journaling”

Written and Illustrated by John Muir Laws

were inspired. Angie and Pat also led half-day journaling outings at Shaw later that summer. Taken together, these experiences convinced me of the value of keeping a nature journal. I don’t know that similar events are on the calendar for 2018, but if they are, I urge you to sign up. And in the interim, I highly recommend a book that Pat and Angie introduced me to: [The Laws Guide to Nature Drawing and Journaling](#) (source of the attached illustration).



You Are the Camera...or...Why Keep a Nature Journal? (continued)

Because however you begin, I hope you'll explore nature journaling for yourself. Here's why:

When we take a photograph, we stop for a moment, snap the picture, and then move on...knowing that we've 'captured' the image. It's passive, superficial. We haven't really allowed ourselves to **experience** anything. But keeping a nature journal is different. It takes more time. We have to slow down. It's an approach that's gaining traction. For example, there's a museum in Amsterdam that recently banned cameras. Instead, patrons are encouraged to sketch the artwork themselves. Museum officials believe that whether accomplished artists, or novices, museumgoers that spend time in with a painting really **see** what's in front of them. They are **present** to the experience.... more open to how they respond. And in the process, they come to a deeper appreciation of the art.

I've already said that I'm no artist. True enough. But I'm getting better. Every time I try to draw the world in front of me, I become a keener observer. I am more able to focus my awareness...to pay attention to the colors and shapes...and the small details that I might have overlooked. Time and again, I find that the longer, and more carefully I look at something, the more I see. For example, once, when drawing a rocky landscape in New Mexico, I discovered—some 20 minutes into my sketch—a band of purple running through the rocks that I really hadn't noticed. It seemed incredible that I could have missed it. But until I

looked—really looked—I hadn't seen what was right in front of me.

And let's not forget that drawing can be fun. I've experimented with pencils, watercolors, and inks. Each has something to offer. And as I've learned about nature journaling, I've also learned about these materials. Some of my drawings are very detailed. Others really tell more about the 'feeling' I have about a place. In both instances, I am making choices. And in doing so, I am putting myself onto the page as much as the objects that I see.

A nature journal is also a great place to celebrate curiosity about the world. When sketching a flower, for example, you might jot down questions to research later: What are the plant associates? What birds or insects are attracted to this plant? What is its growing season? These and other questions can spur us to discover more, and appreciate more deeply, the world around us. And asking questions invites us to engage all of our senses as we register our environment.

A nature journal helps us to enhance our visual thinking. It is a place where science, nature, and art come together to deepen our understanding and appreciation of the natural world. So whether you consider nature journaling to be retro or radical, I encourage you to give it a try. Because, in our ever-changing world, what you see and what you experience are yours alone



Missouri Department of Conservation

*Throughout the year, the Missouri Dept. of Conservation produces many timely and informative articles.
Below are a few examples.*

MDC encourages celebrating trees during April Arbor Days

Plant native trees and practice proper tree care.

JEFFERSON CITY, Mo. – The Missouri Department of Conservation (MDC) encourages Missourians to celebrate the value of Missouri trees and forests during Arbor Days in April by planting native trees and practicing proper tree care.

Missouri Arbor Day is Friday, April 6. Missouri has been observing the state's official Arbor Day on the first Friday in April since 1886 when the General Assembly declared that day be set aside for the appreciation and planting of trees.

National Arbor Day is recognized on the last Friday of April, which is April 27 for 2018.

Get information from MDC on backyard tree care – including types of trees for urban and other landscapes, selecting the right tree for the right place, planting tips, watering and pruning info, and more -- at mdc.mo.gov/tree-health.

MDC's George O. White State Forest Nursery near Licking offers Missouri residents a variety of low-cost native tree and shrub seedlings for reforestation, windbreaks, erosion control, and wildlife food and cover. Orders are accepted from Nov. 1 to April 15 every year. For more information, visit mdc.mo.gov/seedlings.

Communities around the state also hold local Arbor Day activities. For more information on Arbor Day and Missouri's Tree City USA communities, visit the Arbor Day Foundation at arborday.org.

***DID YOU KNOW?** Missouri forests cover about one-third of the state and provide outdoor recreation, wildlife habitat, natural beauty, and watersheds for stream and rivers. Missouri forests also provide employment for more than 44,000 people who convert trees into essential products. Get more information at mdc.mo.gov/forest.*

MEDIA CONTACT:

Joe Jerek

Statewide News Services Coordinator

573-522-4115, ext. 3362

[*Joe.Jerek@mdc.mo.gov*](mailto:Joe.Jerek@mdc.mo.gov)



Missouri Department of Conservation

INVASIVE SPECIES AWARENESS WEEK

Invasive plants (like the Callery Pear –right) and animals harm our native fish and other wildlife, native plants and habitats, our economy, and our quality of life. Help halt the invasion and join the fight! Learn more about invasive species in Missouri and HOW YOU CAN HELP at <https://nature.mdc.mo.gov/status/invasive>. -- Lucas@MDC

THORNY -INVASIVE

Family: Rosaceae (roses)

Description: Callery pear is a small to medium-sized tree with a compact, symmetrical, pyramidal or columnar shape that spreads to become oval with age. Many cultivars exist with slightly different characteristics; all contribute to the species' invasiveness.

Leaves are alternate, simple, generally oval, to 3 inches long, with rounded teeth, glossy green, turning orange, gold, red, pink, and/or purple in fall. Some cultivars develop patterns of colored circles and spots in autumn. Leaves bob in the wind on long leaf stems.

Bark is gray-brown, smooth on young trees, splitting into scales with age.

Twigs are thornless in cultivated trees, but in wild types (including trees that develop from sprouts of a tree that was felled), the twigs end in thorns.

Flowers in early spring; abundant clusters of white flowers, 5-petaled, each to 3/4 inch wide, unpleasant-smelling.

Fruits like tiny, hard apples, round, to 1/2 inch in diameter, greenish-yellow flecked with whitish spots, inedible, with 2–4 black seeds. After freezes they soften, darken, wrinkle, and become palatable to birds.

Similar species: Several other trees bloom in spring with white, five-petaled flowers. Serviceberry has petals that are brighter white, strap-shaped, wavy, with a space between them (not rounded and close together). Native plums have stamens (threadlike stalks in the center of the flower) that are longer than the petals. Apple and crabapple flowers have a slightly pink hue, and apple tree branches are nearer to horizontal and less uniform, compared to the vertical, symmetrical branching of Callery pear.

Key Identifiers:

- Deciduous tree (drops its leaves in the fall), reaching up to 30 to 50 feet tall.
- Overall tree shape pyramidal, columnar, or egg-shaped.
- Wide-spreading branches fairly vertical, branching symmetrically.
- Branches sometimes thorny.
- Leaves shiny, dark green, leathery, with small-toothed margins.
- Leaves turn reddish purple in the fall.
- Flowers in spring before leaf-out.
- Flower petals white, rounded, close together (they touch/overlap at their bases).
- Flower stamens are not longer than the petals.
- Fruits in fall are small, round, hard, and brown.
- Size: Height: 30–50 feet ('Bradford' variety).



Callery Pear
James H. Miller, USDA Forest Service,
Bugwood.org

ALTERNATIVES TO INVASIVE PEARS from Grow Native!

- Possumhaw,
- Native Virburnum,
- Roughleaf Dogwood.

All three provide privacy and help to increase biodiversity and beauty to



Missouri Department of Conservation

St. Louis County and wildlife biologists launch assault on Asian carp



Local and state wildlife officials are using a new, complex tactic to remove the invasive Asian carp at Creve Coeur Lake in St. Louis County. Traditional netting methods have not been effective at eliminating the destructive species.

U.S. FISH AND WILDLIFE SERVICE

Originally published on January 16, 2018 12:22 pm

State and federal wildlife officials plan to pull out all the stops this month to eliminate Asian carp from Creve Coeur Lake in St. Louis County.

The invasive species are relentless bottom feeders that have damaged water quality, disrupted the food chain and driven down native fish populations in many Midwestern waterways.

St. Louis County Parks is working with the Missouri Department of Conservation, the U.S. Geological Survey and a number of other agencies to implement a tactic to remove Asian carp from the lake. The "unified method," involves using nets and electric barriers to create a grid-like system in the lake. The method has seen some success in China and Illinois.

"It's sort of like creating a big plastic comb with nets that would move from one end to another, actively pushing and herding the fish out of a section of lake and placing

nets across to not allow them access to the area you just cleared," said Kevin Meneau, a fisheries management biologist at the Missouri Department of Conservation.

Simply netting the fish has not been effective, he added.

"All of the traditional techniques that we use on native fishes don't work with Asian carp," Meneau said. "Their jumping ability tends to get them over nets that we traditionally use."

Originally brought over from Asia in the 1960s for aquaculture, Asian carp have entered bodies of water in Missouri and Illinois, mainly due to flooding. Missouri wildlife officials estimate the species first arrived at Creve Coeur Lake prior to 2009, likely due to flooding from the Missouri River.

In addition to hurting the lake's crappie population, a draw for recreational fishermen, the Asian carp's jumping behavior also pose a hazard to people who navigate on the lake.

"We have to [remove them] when it's cold outside otherwise the fish will jump more," said Duane Chapman, who leads Asian carp research at the U.S. Geological Survey.

Chapman had deployed the unified method in Morris, Illinois, and said the technique was able to remove about 70 percent of the Asian carp in the area. However, it requires a lot of coordination and "moving parts."

Meneau added that it would be costly.

"This method's going to take, on any given day, eight to 12 boats, thousands of feet of net and a custom-made live capture net, which we've never used before and is still being made," Meneau said.

The Asian carp that are taken from the lake will likely be disposed in a sanitary landfill, Meneau said. If the unified method is effective, the crappie fishery could recover in three to five years.



MESSAGE FROM A PARTNER

Below is Mitch Leachman's article from the [SLAS March Newsletter "Tale Feathers"](#). Like many of us, Mitch is trying to find hope in the often harsh world where good news is hard to find. Mitch shares many of the success stories of the St Louis Audubon Society.



Hope in the face of despair. That's what I need these days. Cat videos are great for a quick pick-me-up, but there's just too much bad news for that to last long. The big, global issues are SO scary, but often our own towns and neighborhoods can be just as bad...and more personal. From snow-white parking lots laden with rock salt soon to be washed into our local streams and killing much of the aquatic life to a neighbor's cat stalking the birds in our backyard nature sanctuary to magnificent walnut and pine trees being cut down because they were deemed unsightly by the new homeowner. We need GOOD news now!

Last December, the Maryland Heights City Council voted unanimously to endorse St. Louis Audubon's Bring Conservation Home program and become our 9th partner community! Native landscaping is catching on everywhere!

Audubon's Education Team has developed regular programming with the St. Louis County Library. Nearly every month, volunteers (including some of YOU) are sharing their passion about birds and other critters with an audience at a new branch.

On March 6th, we co-hosted a screening of "Hometown Habitat" at the St. Louis Zoo. The documentary tells stories from ordinary people across the country doing extraordinary things to improve their part of the planet. The showing drew nearly 250 people on a blustery, snowy night, and a number of groups are considering additional showings.

We have also initiated a partnership with Great Rivers Greenway to co-brand bird walks on or along a number of greenways in St. Louis City, County and St. Charles. It just might help us connect with a whole other group of outdoors types and connect them with the nature around them.

Finally, one of my heroes, oceanographer, author, diver, scientist Sylvia Earle, has spent a lifetime in and on our oceans, too often documenting human abuse and destruction of this life support system. Yet, she is "truly optimistic" about our ability to change our ways and learn to respect the planet. Also, she does not prescribe any particular action, but instead says, "Look in the mirror. Whoever it is you are, you have some kind of talent. Lawyer, artist, mom, dad, teacher, communicator. Use your power."

Wow! It's that simple! What is your power? How will you use it?



Missouri Master Naturalists Great Rivers Logo order: Spring 2018



50/50 fleece
(kelly green)
men or women \$33

microfleece no hood
(aqua green)
women \$35

women's bright green
tee \$15

khaki/hunter ball cap
\$17



Kiwi short sleeve tee
\$14.00

military green hoodie
\$23.00

tan long sleeve tee
\$16.00

expandable drawstring
backpack (blue/red/black) \$25

We can bring in our own items to be embroidered for \$8.50 each item.

Member's Name:

Phone Number:

Name of item	size (s/m/l/xl)	quantity	total

Contact: Kari S. Pratt

kpratt@lindberghschools.ws

636-391-2901



The first day of Spring is one thing,
and the first spring day is another.

The difference between them
is sometimes as great as a month.

Henry Van Dyke

Bluebirds at the
Backyard Feeder

Photo by © Tessa Wasserman