

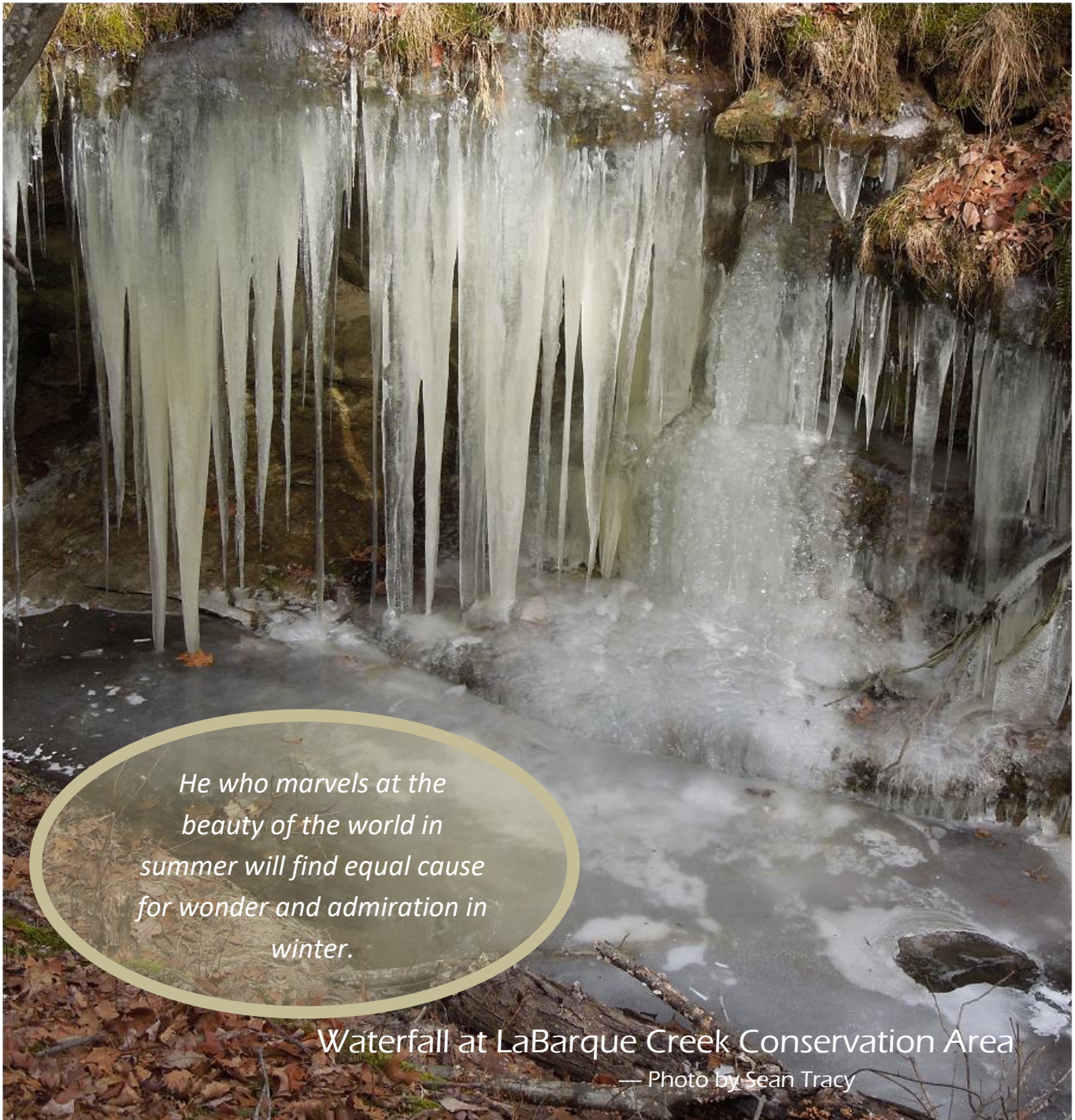


Missouri Master Naturalist



Winter Issue 2017

Volume 7 Number 1



*He who marvels at the
beauty of the world in
summer will find equal cause
for wonder and admiration in
winter.*

Waterfall at LaBarque Creek Conservation Area

— Photo by Sean Tracy

Great Rivers Gazette

Winter 2017

Vol.7 No. 1

Published by the Great Rivers Chapter of Missouri Master Naturalists

Editor: Pam Wilcox

Layout: Bob Virag

Contents

	<u>Page</u>
The Presidents Corner <i>Rachel Becknell</i>	2
Welcome New Members!....and Request For Mentors	3
Great Rivers Holiday Party	4
Member Spotlight	6
Member Milestones	9
Advanced Training Speakers for 2017	12
Bellfontaine Cemetery Tour	13
Kirkwood Parks Tree & Shrub Class	14
New Partners and Organizations	15
Bi-State Wildlife Hotline	15
Ozark Land Trust-Schulze Nature Preserve	16
Projects	17
Mary Meacham Visitor Center Garden Planting Project	17
UME Honeysuckle Hack with Kirkwood students	19
UME Project Learning Landscape	20
Seibert Park Native Flower Bed	21
Shaw Nature Reserve Invasives Removal	22
Keysor Elementary School - Outdoor Education	24
Eagle Days	25
Honeysuckle Coasters!	26
Forest Releaf Tree Planting at Mark Twain School "Ballerina Jean"	28
McDonnell Park Update	29
Chain of Rocks Project	31
Garden Glow at MoBot	32
Stream Team - Winter Chloride Study	33
Putting the Nursery to Bed	35
Green Center volunteer opportunities	36
Forest Park Forever Herbarium	38
Planthopper Parasite Moth	39
LITTLE BUCK	40
Aldo Leopold Biography	41

The Missouri Master Naturalist™ program is a community-based natural resource education and volunteer service program for adults, sponsored by the Missouri Department of Conservation and the University of Missouri Extension.



The Master Naturalist name and dragonfly logo are trademarks of Texas Cooperative Extension and the Texas Parks and Wildlife Department, used with permission for the Missouri Master Naturalist program."

The President's Corner



Dear Chapter Members,

In the summer of 2012, I realized that studying to become a veterinarian was not the correct path for me. I had just switched my focus over to ecological studies at The University of Missouri – St. Louis when I learned about this organization through a professor. The training and the community came to me at the perfect time, and allowed me to begin to explore my passion for the

Missouri outdoors and the intricate and amazing ecological interactions that hold it all together. Five years later, I am now a second-year PhD student in the Evolution, Ecology, and Population Biology Program at Washington University in St. Louis. I never could have imagined that I would be capable of switching from a liberal arts background to becoming a scientist, but in doing so it has shown me that everyone has the capacity to learn and become so much more than they could possibly believe. Working with Missouri Master Naturalist and Wash U's Young Scientist Program gives me the opportunity to teach our community's youth about the importance of becoming stewards of the environment and that we all are capable of great and important things. My hope for the future is to not only be a research scientist with a focus on restoring damaged and degraded ecosystems, but to also continue working with and educating the public. Being your president gives me the valuable opportunity to work with the chapter and the public in a capacity that would otherwise not be available to me as a graduate student. Thank you so much for all your support and generosity over the past few months. I look forward to growing and learning with you all over the next two years.

Rachel Becknell – President, Great Rivers Chapter

Front Cover

Waterfall at LaBarque Creek Conservation Area-photo by Sean Tracy

Back Cover

Winter Sunset-photo by Sean Tracy

Great Rivers Chapter Officers

President ----- Rachel Becknell
Vice President----- Shawn Thomason
Secretary ----- Diana Miller
Treasurer ----- Vaughn Meister

Board Member-at-Large ----- William Hoss
Board Member-at-Large ----- Sherri Schmidt
Board Member-at-Large ----- Bob Virag



Welcome New Members!

Transferring from
MMN Confluence Chapter.
Claire Meyners, class of 2006

Class of 2016

- Rachel Bourneuf
- Sandy Brooks
- Sally Carpenter
- Shirley Cirio
- Mary Dueren
- Ann Eggebrecht
- Jerry Esselman
- Deborah Frank
- Don Frank
- Stephen Brett Heath
- Jennifer Holder
- Amy Kilpatric
- Renee Marver
- Mike Nations



Attention Great Rivers Members and Great Rivers Interns

To current Great Rivers members.

Would you like to share the wisdom gained through your experience within the Master Naturalist program with a new intern? Do you remember having questions about procedures, service hours, where to plant your new Nine Bark bush? Being a new intern can be frustrating as well as rewarding. Think about offering your time and talent to a new member to get them started on their journey.

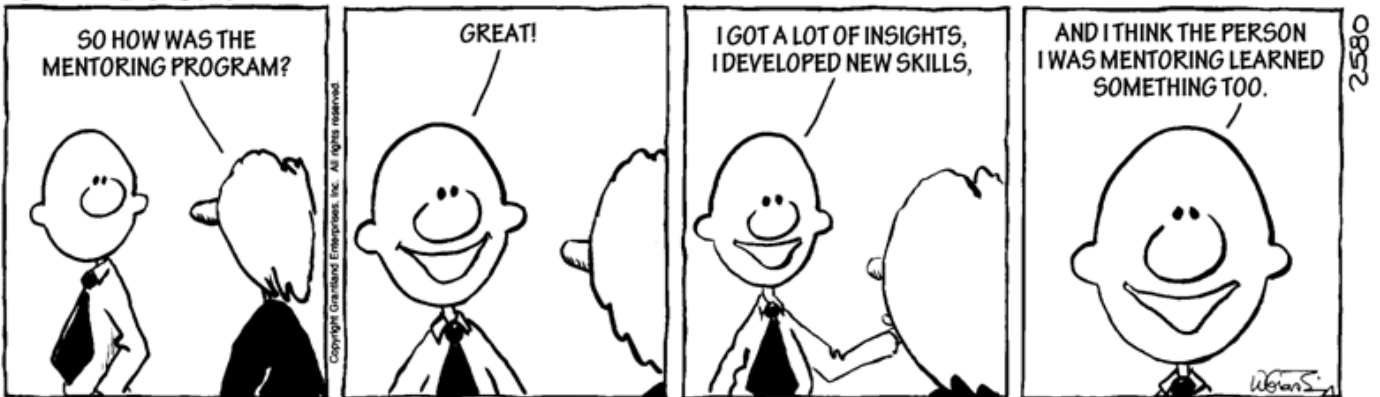
Sherry Schmidt requests that **current members** sign up to become a mentor for the new interns who recently joined the chapter. Provide a list of your special interests, or areas of expertise to better enable a match up with like-minded interns. For example, Sherry's areas of interest would include creating and monitoring butterfly habitats, especially for Monarch Butterflies, Claire Gempp Davidson Conservation Area, plant and wildlife surveys, and Missouri Butterfly Monitoring Network.

To our newest Great Rivers members

Do you have questions about the chapter? Do you wish you had someone to contact that had all the answers or knew who to contact to get them? Please sign up to receive a mentor who will guide you through the beginning stages of your membership. Provide a list of your interests and what projects you would like to work on.

Sherry's email is: sgschmidt@prodigy.net

GRANTLAND®



With permission - Grantland Cartoon, www.grantland.net



Great Rivers Holiday Party

The Great Rivers annual Holiday Party was a fun and festive affair. We had a good turnout of about 40 people, including spouses and friends. While the venue was small, the food was excellent, with a variety of pizzas, appetizers and delicious pasta. It's always nice to have time to socialize with fellow members in a casual atmosphere.

One of the highlights of the evening was a surprise book give away courtesy of member Sean Tracy. Not only did everyone receive a nature themed book, but each one was gift wrapped by Sean. Thanks Sean for the nice surprise.

The second highlight was Tessa Wasserman's adorable honeysuckle candles and reindeer. Everyone fell in love with them, and they sold out in a matter of minutes. Not only did Tessa follow the reuse, recycle theory by using cut honeysuckle, but all the profits from the sale went towards a new tool kit for the chapter, with everything we need for the next honeysuckle hack. Thanks Tessa for sharing your creativity and your creations for the benefit of the chapter. --- Pam Wilcox

Many thanks to Cindy Lueder and the entire Hospitality Committee for their outstanding work.

And a special thanks to Kathleen Evans-Kapayou for finding and coordinating the location at Frank & Helen's. She has such a gracious spirit!

Really wonderful team effort



Sean Tracy was a big hit at the party when he handed out wrapped vintage nature books to the attendees. How fun, generous and thoughtful!



Tess and Steve Wasserman admiring her holiday creations. Thank you for making the great reindeer and candle holders out of honeysuckle and then donating the money from their sale to our chapter tool kit!



Glen Horton, Michael & Sue Meredith having a serious discussion



Mike & Sherri Schmidt "feeling festive".



"The Red Shirt Gang". Michael Smith, Mike Schmidt, Carolyn Devaney, Bob Virag, Pam Wilcox, Maxine Stone, Sean Tracy, Barbra Stephenson, Renee Benage.



Emily Horton shows off her "Field Guide to the Birds"



Al and Jean Koebbe with Vaughn Meister and Ed Schrader. "Who wants that last piece of pizza".?



Maxine Stone shows off her new book "Field Guide To The Wildflowers".





Member Spotlight *Sharing members accomplishments*

Debbie Croghan

In a recent article in the Post Dispatch, a daughter of member Debbie Croghan was mentioned. The article was from the Beehive Buzz (Salt Lake City). It read:

“Allison Croghan, a reporter and meteorologist for Fox affiliate KSTU in Salt Lake City, has been named one of the “20 in Their 20’s” by Utah Magazine. Allison is a 2007 graduate of Cor Jesu high school in St Louis. She earned a journalism degree at the University of Mississippi and studied atmospheric science at Mississippi State University. “

Congratulations Debbie. It’s always special when our children succeed.

Sandy Brooks

New member Sandy Brooks is the Director of the **Academy of Nature and Wildlife Arts**. Below is information about the classes offered, for all you budding artists.

Art AND Science - - - Conserving Nature and Wildlife

The **Academy of Nature and Wildlife** provides opportunities to explore the art AND science of ecology in the same class. One can choose individual classes or participate in the certification program. Each class will provide information about the nature and wildlife included in the class to develop a meaningful expression of the information through the art projects in the class. The certification program has a list of core classes and electives culminating in a portfolio review and exhibition.

Historically, art and science were multiple methods to address the same big questions. They are two different ways of thinking about the same phenomenon. Both art and scientific inquiry were based upon recording observations of phenomenon with measurements and drawings. Think Da Vinci, John James Audubon, Benjamin Franklin, Isaac Newton, among many, many others.

For example, John Maeda notes in Scientific America (2013) that both are dedicated to asking the big questions placed before us: “What is true? Why does it matter? How can we move society forward?” Both search deeply, and often wanderingly, for these answers. We know that the scientist’s laboratory and the artist’s studio are two of the last places reserved for open-ended inquiry, for failure to be a welcome part of the process, for learning to occur by a continuous feedback loop between thinking and doing.

Scientists are the ones who bring objective measurement to the creative thinking while, as Maeda notes, “Artists and designers are the ones who help bring humanity front and center, make us care, and create answers that resonate with our values.”

Mission

Understanding the interconnections of life produces an appreciation and desire to conserve life in all of its forms. The Academy fosters the complex multilevel appreciation, and ultimately conservation, of nature and wildlife.



Purpose

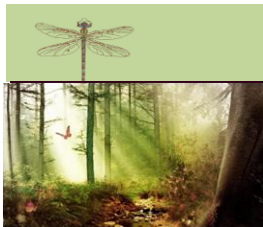
The Academy reintroduces traditional science to traditional arts to restore the multilevel appreciation and understanding of the complex system of nature consistent with the approaches used by artists and scientists in the past.

We provide opportunities to explore nature and wildlife through the lens of both science and the arts, increasing the complexity of understanding of chosen topics with focus on Midwest ecological systems.

Goals

- Experience nature and wildlife on multiple levels from the perspective of both the sciences and the arts.
- Develop understanding of and actions that support conservation
- Express these experiences and understanding through individual class projects including education, exhibitions and volunteer activities.

For more information, view the Academy of Nature and Wildlife website here: academyofnatureandwildlifearts.weebly.com



Member Spotlight *Sharing members accomplishments*



Mark Glenshaw | Forest Park Owls

Member Mark Glenshaw shares his love of the Forest Park Owls with NPR's Don Marsh on the show "St Louis on the Air". Nice job Mark.

More drama than 'The Bachelor:' Amateur naturalist Mark Glenshaw on the habits of Forest Park owls | St. Louis Public Radio By KELLY MOFFITT • JAN 5, 2017



Charles and Samantha, the new "it" couple from the community of Great Horned Owls in Forest Park ---photo by Mark Glenshaw

"The Bachelor" has returned to the airwaves this week but even that reality television show would be hard pressed to measure up to the level of drama, intrigue and flirtation found among a community of [Great Horned Owls that make their home in Forest Park](#).

Mark Glenshaw has been observing the lotharios and seductresses of the owl community for the past 11 years in Forest Park. He describes this year's owl happenings as more dramatic than most.

For starters, Charles, an owl that Glenshaw named and has followed closely for the past years has split from Olivia — an owl he mated with during the winter of 2015-2016 after his long-time mate, Sarah, died in July 2015.

According to Glenshaw, even though Olivia and Charles mated for 14 weeks (far outpacing the normal season of 4-6 weeks), they never produced owlets or proceeded to the nesting stage of the relationship.



Mark Glenshaw has been observing the owls of Forest Park for the past 11 years.

*Credit Kelly Moffitt
| St. Louis Public Radio*

In April 2016, Samantha (a name Glenshaw gave the owl based on the adventurous character from "Sex and the City") pushed her way into Olivia's territory: she perched on Olivia and Charles' perches.

"Imagine going home tonight and someone's sitting in your living room and twirling your glass saying 'can I get some more ice for my drink?' that's how she did it," said Glenshaw. "They had a massive territorial standoff."

Charles and Olivia attempted to push her out, but eventually Olivia gave up on the match and hasn't been seen since. Ten days after she left, Charles started to court Samantha, hooting a flirtatious tune, showing off acrobatic sky dives and bringing her food.

But all was not well in the world of the owls! All through the fall and winter, Charles and Samantha courted but never sealed the deal. Glenshaw was certain the two would have a falling out.

And then, last night, the two finally mated. An official relationship is born.

As far as Glenshaw can tell, Charles and Samantha make up two of a population of 8-12 Great Horned Owls and Barred Owls in Forest Park. Renowned for their adaptability, you can find Great Horned Owls across the St. Louis area during all seasons. Glenshaw is most concerned about cars when it comes to owls' safety because they are also remarkably adaptable to human activity.

They are also renowned for having the widest range of prey: anything from ground insects to raccoons, swans and wild turkeys.

Glenshaw observes the owls anywhere from five to six nights a week and says it started as a way to get to know the park he lived next to much better. Last year, he led over 70 "Owl Prowls" through the park and frequently updates his blog about the comings and goings of the owls in Forest Park. You can find that blog and information on upcoming "owl prowls" [here](#).

Glenshaw also leads [introductory birding walks on the first Saturday morning of each month in Forest Park](#). Birding, or bird watching, is an observatory sport that is gaining popularity, he said.

"Some people have taken it in a competitive way," Glenshaw said. "Other people are really just coming to realize 'hey, this is quite interesting.' One thing, as I reflect on my own work and see its impact on others, I think we all want to connect more with nature. It is in our nature."



Member Spotlight *Sharing members accomplishments*

Pamela Wilcox

Pam discovered the Missouri Master Naturalist program in an unusual way. Upon retiring, she discovered life at home was not as attractive as she once imagined. She knew she had to do something. In 2005, she answered an ad in a suburban journal for volunteers posted by the Missouri Conservation Department. Although MDC in partnership with University of Missouri, Extension sponsors our program, MDC has long had its own need of volunteers across the state. Pam took their training class. That led to an extensive library she has formed of books all of which are nature related.

She began doing public programs, mostly educating young children in the joys of nature. She felt she had found her calling. Watching the faces of children who are never outdoors move from bored, some even frightened, to engaged and focused makes it all worth it to her. It was through her volunteering at MDC that she learned of the Missouri Master Naturalist program. Her initial training in 2007 was taught by an array of knowledgeable people who added to her increasing storehouse of information. "The program is so very worthwhile especially if you care at all about the planet, about our impact on wildlife and restoring lost habitats. It's great to meet people who share your passion and are willing to take time from their busy schedules to work hard, and see positive results at the end of the project."

Pam divides her MMN time between leading nature classes at The Green Center and for the St. Louis Audubon Society's Education division. She also enjoys manning tables at public events and attending Eagle Days. In July, 2014, Pam earned her 1,000 hour Milestone Award, the third Great Rivers Chapter member to do so at the time. She completed serving our chapter as a secretary for four years. Now, Pam chairs the Projects and Partners and the Communications committees.

The Missouri Master Naturalist program "...has provided me with a renewed sense of responsibility to the environment. It has been one of the most rewarding experiences of my life."

Your service to our community and to our chapter has been rewarding to us as well, Pam. Congratulations and thank you!



Pam Wilcox volunteered recently for the St. Louis Audubon Society's booth at the St. Louis Art Museum "Degas, Impressionism, and the Paris Millinery Trade educational event. Here she is displaying the fashion of the era that caused slaughter and extinction of millions of birds for hat feathers leading to the creation of the Audubon Society.





Member Milestones

Awards and Recognition

Congratulations to all!

2016 was a banner year for the chapter!

- Twenty major milestone pins awarded!
- Eighteen Initial Certification pins earned.
- Sixty two Great Rivers Chapter members recertified.



**Gold Dragonfly
1,000 Hour Milestone Pin**

James Christ
 Brenda Christ
 Emily Horton
 William Hoss
 Michael Meredith
 Susan Orr



**Pewter Dragonfly
500 Hour Milestone Pin**

Nancy Burgess
 Dennis Honkomp
 Jeanne Koebbe
 Cindy Lueder
 Mary Mierkowski
 Michael Smith
 Barb Stephenson
 Bob Virag
 Al Westcott



**Bronze Dragonfly
250 Hour Milestone Pin**

Rita Buckley
 Ann Earley
 Kathy O'Neill
 Donna Scott
 Tessa Wasserman



**Initial Dragonfly
Certification Pin**

Sharon Baldassare
 Laura Belarbi
 Linda Cook
 Debbie Croghan
 Mary Dueren
 Jerry Esselman
 Anene Tressler-Hauschultz
 Sel Jenkins
 Pam Klump
 Linda Lesh
 Kathee Morgeson
 Joan Park
 Peggy Parr
 Cynthia Rill
 Janice Thomas
 Sean Tracy
 Evelyn Tullos
 Tessa Wasserman



**Collared Lizard
2016 Annual
Recertification Pin**

Sixty-two members earned their recertifications in 2016



Member Milestones



Bill Hoss

Bill Hoss receives his 1,000-hour milestone pin.

Upon completion of the course, you will see the natural world differently. No longer do I just see the trees, grasses and flowers as I drive our highways. Now I see wetlands, forest, glades, savannas and woodlands....I also see Callery Pears, Honeysuckle, Autumn Olive, Sweet Clover and Wintercreeper among others that are now growing throughout our area. In the approximately seven years I've been a member I've spent most of my time removing these invasives in public areas. I find it satisfying work. Unfortunately, I also realize that it is work that will never be finished."

Portions of our planet Bill has awakened from slumber induced by the shroud of the invasive plants are Manchester and Webster Groves parks, Creve Coeur Park, Uthoff Valley Elementary and Steger 6th Grade and Parkway Middle schools. Following the battles against invading non-native vegetation, Bill often is involved in the native plant "reconstruction" by planting trees and shrubs in the newly formed spaces.

Beyond his restoration work, Bill enjoys participating in bird surveys. He's taught many county residents how to build habitat on their own properties in St. Louis Audubon Society's Bring Conservation Home program. Bill collects plant specimen for Forest Park Forever's herbarium (more on this service to follow). Our chapter has benefitted by his service as a board member-at-large.

Bill enjoys wildlife photography even while at home. He has been cultivating Missouri native plant gardens on his home space since the 1950s. He's active in the St. Louis chapter of the Wild Ones as well as serving on the Webster Groves Green Space Advisory Commission. Read more of Bill's home space in a Wild Ones blog at <http://stlwildones.org/follow-bill-hoss-into-his-backyard-wildlife-refuge/>.

Bill advises, "Find something you feel strongly about, learn all you can about it and do your best. Missouri is a beautiful state and we should do all we can to preserve her natural beauty."



Hats off to Bill Hoss for his beautiful native plant garden.



Member Milestones



Michael Meredith

Michael Meredith receives his 1,000-hour milestone pin!

Michael read about the Missouri Master Naturalist program’s inception in the Missouri Conservationist. He somehow knew with its limited introduction that it was for him. He wasted no time registering and completed his initial training in the first year. That was 2005. Of all the activities Michael participates in, he’s most involved in Eagle Days, invasive plant eradication and native plantings with St. Louis Audubon in Creve Coeur Park, counting swans at Riverlands, and “...anywhere there is honeysuckle to hack.”

“As odd as it sounds, I really love killing honeysuckle. I find it to be very therapeutic.”

Michael served as our chapter’s second president from 2009 to 2011. He was a great leader. He had a knack for diplomacy. Michael also served in the pilot year of St. Louis Audubon Society’s Bring Conservation Home program. He has encouraged and advised many St. Louis residents how to build habitat in their own landscapes.

He wanted to add, “I hate to sound overly sentimental, but this program has become a far more important part of my life than I would have ever suspected. The work we do, the camaraderie of working in the field and simply the friendship between us enrich me. I can't tell you how proud I am to be a member of this organization. “

Congratulations, Michael! We are grateful for your service.



The selfie shows Michael climbing a tree. It appears to be Missouri’s dogwood in bloom behind him.

MEMBER MILESTONES



Mary Mierkowski

Mary Mierkowski just received her 500-hour milestone pin!



Mary likes to practice diversity even in her choice of projects. She volunteers for a frog breeding survey every spring. With the exception of our Ann Earley, it’s hard to think of another member who is well versed in frog songs. She’s our project leader for native plant landscaping at Boys Hope Girls Hope. “It’s fulfilling to see a native landscape where there was mowed fescue.” Another project rarely mentioned is her work teaching boating safety with the Mississippi River Water Trail Association during river floats. Mary adds, “It’s fun introducing people to new things like kayaking on a large river for the first time.” As if all that’s not enough, she has recently found a half-day a week to spend at Forest ReLeaf!

“I must add that one of the best things about being a Missouri Master Naturalist is all the great people you meet and spend time with.”



Advanced Training Committee 2017 Speaker Calendar

January 17, 2017	Soils -- Ross Braun, MMN and CPESC
February 21, 2017	Black Bears in Missouri -- Tom Meister MDC
March 21, 2017	Earthquake Geology -- Boot Pierce, Missouri Geologic Survey
April 18, 2017 Program	Frog Watch -- Michael Dawson, St. Louis Zoo FrogWatch
May 16, 2017	Water Treatment -- Tim Ganz and Tom Simmons, Missouri American Water
June 20, 2017	PICNIC
July 18, 2017	Astronomy -- Steve Boerner, Astronomical Society of Eastern Missouri (ASEM)
August 15, 2017	Prairie Burns -- Eric Pool
September 19, 2017	Soil Microbes: The Role of Fungi on Plant Coexistence .." Rachel Becknell
October 17, 2017	Thinking like a River Valley", Jay Fish, UMSL
November 17, 2017	ORIENTATION
December 21, 2017	HOLIDAY PARTY



ADVANCED TRAINING

Bellfontaine Cemetery Tour -- by Michael Meredith

Saturday, January 21 Great Rivers Chapter members Shawn Thomason and Michael Meredith joined a large group of naturalists, including members from Confluence and Miramigoua chapters and were treated to a tour of Bellefontaine Cemetery by the Missouri Prairie Foundation. As one of the oldest cemeteries west of the Mississippi, Bellefontaine boasts a great history along with some truly noteworthy efforts in native landscaping.

For the history, we visited the tombs of William Clark (of Lewis and...), Ellis Wainwright (commissioner of the first modern skyscraper, the Wainwright Building downtown), along with legendary beer barons from the Busch and Lemp families.

But let's face it; we were there for the landscaping. Over 200 distinct varieties of trees and shrubs populate the 314 acre arboretum, including three state champion trees including a shingle oak and red mulberry. But champion American elm, with its spread of 122 feet, 102 feet height and a trunk circumference of 16 feet is by far the most impressive. In all likelihood, this fantastic tree was casting shade long before the cemetery was even here. Trying to photograph it proved to be more difficult than I might have expected, so it took multiple shots that I later pieced together with some photo software.



*State Champion American Elm at Bellefontaine Cemetery with its classic fan-shape
---photo montage by Michael Meredith*

The horticultural staff takes great pride in their efforts, and the results are stunning. Native planting purists might be disappointed at the presence of any number of exotics; however that simply reflects the aesthetic demands that multiple old and new moneyed clients sometimes require.



ADVANCED TRAINING

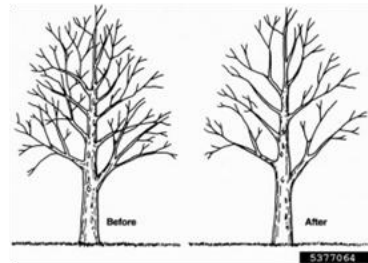
Tree & Shrub Class - Kirkwood Parks

Five members of the Great Rivers chapter attended the Jan 28th class on Pruning Trees and Shrubs.

Kylie Christanell, Volunteer Coordinator for Kirkwood Parks, Dave Richardson, S. Brett Heath, Pete Laufersweiller, Parks arborist and class instructor, Sean Tracy, Tessa Wasserman, and Pam Wilcox. Nice showing everyone. Thanks for supporting our partners.



Crown Thinning



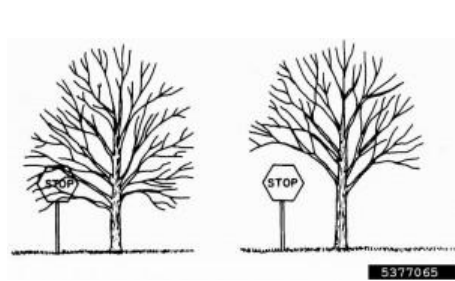
If you need to thin the crown of a tree, you should keep the following tips and techniques in mind:

Keep lateral branches as evenly spaced as possible, especially on young trees.

Prune away branches that cross other branches or run against them.

Never remove more than one-fourth of a living crown at once. If you need to remove more than that, spread it out over a number of years

Crown Raising

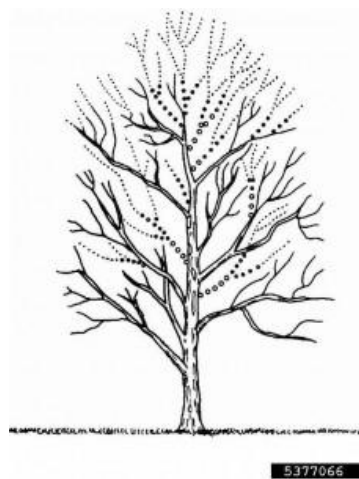
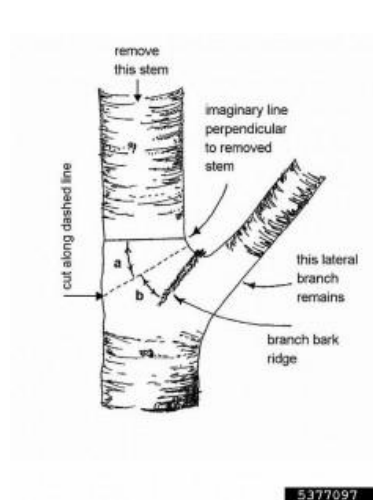


To provide clearance for pedestrians and for other reasons, you can raise the crown by carefully pruning the tree.

Maintain live branches on at least two-thirds of a tree's height.

If you remove too many branches near the bottom half, the tree may not be able to develop a strong stem.

Crown Reduction





Partners and Projects Committee New Partners and Organizations

The following new organizations have committed to provide service activities to member volunteers of the Great Rivers Chapter. **New Partner Organizations** further commit to support the chapter with many different project events and offer training, tools, equipment, or other forms of support. Please remember to support the opportunities provided by these wonderful groups. Many area parks departments have limited full time staff and depend on volunteers to assist in their various outdoor tasks.

— Pam Wilcox, Chair

NEW PARTNER ORGANIZATIONS

Ozark Regional Land Trust (ORLT) see next page for details
City of Webster Groves
City of Ellisville
City of Chesterfield
City of Kirkwood

NEW LOCAL ORGANIZATION

Bi-State Regional Hotline

The [Bi-State Wildlife Hotline, Inc.](#) is a new organization that provides volunteer service opportunities as easy as answering the hotline or as challenging as caring for an orphaned or injured animal in your own home. Most of the phone support can be performed using scripts for the animal species. Most of the time the volunteer will be called upon to try to calm a homeowner and advise them when they see scattered baby rabbits. Volunteer manning of the hotline frees up staff to care for the animals



Please visit the website to learn more.
Their contact information is:
Phone: 1-855-945-3435
Email: help@wildlifehotline.com
Website: www.wildlifehotline.com



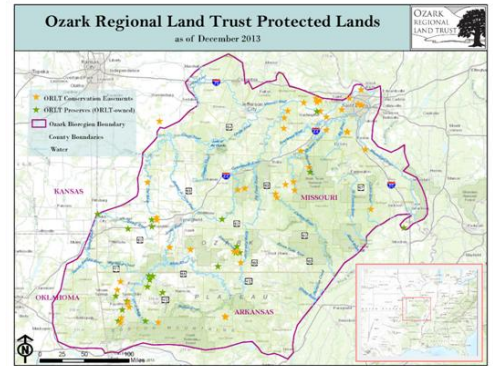
NEW PARTNER ORGANIZATION



Ozark Regional Land Trust – Schulze Nature Preserve Project

by J. Alexander Hayter

Our most recent Partner Organization, the [Ozark Regional Land Trust](http://orlt.org) (ORLT), is part of a rapidly expanding land conservation movement throughout the United States that now includes more than 1,700 land trusts. Land trusts are private, nonprofit, voluntary organizations dedicated to helping landowners protect land in perpetuity through various methods that include conservation easements, nature preserves, and partnerships with conservation organizations. For more



The Ozark Regional Land Trust protects over 125 sites throughout a three state area. ORLT has agreed to seek Great Rivers help in monitoring and preserving over a dozen "Conservation Easements" in the St. Louis region.



Trail blazing Great Rivers member Diana Miller with ORLT Conservation Projects Manager Kelly O'Mara and Confluence member and MMN project leader Ken Benson.

information as it becomes available, see orlt.org

The [Schulze Nature Preserve](http://orlt.org) Project is located in Washington, Missouri, and protects 22 acres of outstanding old growth oak-hickory forest that is bisected by a small creek. Wildflowers are abundant in the spring of the year.

The land was donated to ORLT in 2000 by the Schulze family who wanted to see this special portion of their historic family farm protected. ORLT manages this preserve to protect its natural values and is investigating options for providing public access. The site is located in For more information as it becomes available, see orlt.org/schulze



Great Rivers members Dennis Honkomp, Diana Miller, and Bob Virag helped Confluence members and ORLT staff clear approximately 4 miles of trail on Saturday February 18, 2017 on the ORLT owned 22 acre Schulze Nature Preserve near Washington, MO .

I wanted to follow-up on my presentation at the January 17, 2017 GR-MMN meeting about the Ozark Regional Land Trust Schulze Nature Preserve Project.

On behalf of the Ozark Regional Land Trust I want to thank Great Rivers and Confluence Chapter volunteers for making our first trail workday of 2017 a great success. Thanks to your hard work on Saturday, February 18, the southern trail on the property is now more than 90% cleared, and thanks to your insights we now have many locations marked for erosion control. This project depends on wonderful volunteers like all of you, and we could not do this without you.

We are now starting to schedule start dates for the Spring. The first planning meeting for the development of educational signage will be held on the **evening of March 15th**. Those who are interested in that aspect of the project should contact me directly. The first meeting regarding invasive education and erosion monitoring will be set in the next couple weeks - and I'll keep you posted on that. Also, while Schulze is closed to public at the moment, I can arrange to show the site to people if they are interested.

In the fall of 2017, ORLT Stewardship Specialist will be calling on Great Rivers Chapter volunteers for help to monitor and evaluate the Conservation Easements in the St. Louis City and County area.

Thanks again for your interest. We are all looking forward to working with the Master Naturalists.



PROJECTS

ORGANIZATION: Great Rivers Greenway

Mary Meacham Visitor Center Pollinator Garden Planting

The Mary Meachum Pollinator Garden project was presented to the chapter by member Michael Wohlstadter.



Great Rivers members who participated in this project were Tessa Wasserman, Colleen Corbett, Jake Ronecker, and Michael Wohlstadter.



Michael Wohlstadter leading the volunteers at the Mary Meacham Visitor Center Pollinator Garden

Pollinator Garden Planting at Mary Meachum Visitor Center. Additional work days will be scheduled this spring.

Help us Give Back to the Greenways at a district-wide volunteer blitz on Saturday, September 24, that coincides with National Public Lands Day. This is the nation's largest, single-day volunteer effort dedicated to the stewardship of public lands.

We will be planting a new pollinator garden at the Mary Meachum Visitor Center located along the Riverfront Trail of the Mississippi Greenway. This project is in partnership with Brightside St. Louis, City of St. Louis riverfront.



Mary Meacham Garden before the work began



Mary Meacham Visitor Center Pollinator Garden (continued)

The following is a summation by Angie Weber of Great Rivers Greenway.

1. Approximately 1,700 square feet of pollinator habitat planted with all native plants
2. The pollinator garden was planted on September 24 to coincide with National Public Lands Day (NPLD). NPLD is the nation’s largest, single-day volunteer effort dedicated to the stewardship of public lands. Great Rivers Greenway was pleased to support three volunteer projects for this initiative in the City of St. Louis and St. Louis County, one of which included the pollinator habitat planting at the Mary Meacham Visitor Center. Fifteen volunteers spent the morning with us to give back to the greenways and their communities and included Master Naturalists, Master Gardeners, Brightside St. Louis volunteers, along with a boy scout. 2 GRG staff and the Greenway Guides also helped with these efforts.
3. Ninety-nine photos were taken and shared with volunteers online.
4. The two attachments include the final plant list with quantities and a before picture at the site.
5. An additional 1,300 square feet of habitat is anticipated in 2017 and will be located to the south of the newly installed garden that includes planting shrubs and trees along the riparian corridor and seeding native prairie and/or woodland species



Tessa Wasserman planting in the Mary Meacham Garden

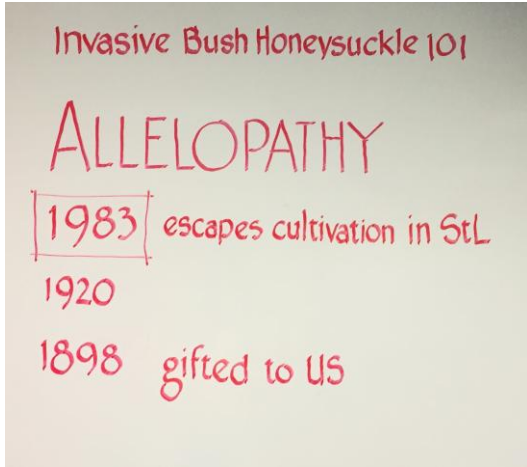
MARY MEACHUM BUTTERFLY GARDEN PLANT LIST (approx 1,700 SQ FT)			
Installed September 24, 2016			
SPECIES	BLOOM TIME	QUANTITY	SIZE
Forbs			
<i>Asclepias incarnata</i> (swamp milkweed)	Aug & Sept	40	quarts
<i>Asclepias tuberosa</i> (butterfly weed)	June & July	30	quarts
<i>Asclepias syriaca</i> (common milkweed)	June - Aug	20	quarts
<i>Baptisia australis</i> (blue false indigo)	May - June	13	quarts
<i>Coreopsis palmata</i> (Prairie coreopsis)	June - July	65	quarts
<i>Echinacea purpurea</i> (purple coneflower)	June - Aug	26	quarts
<i>Erigeron pulchellus</i> (Robin's plantain)	April - June	104	quarts
<i>Heuchera parviflora</i> (littleflower alumroot)	July - Sept	65	quarts
<i>Liatris scariosa</i> (Eastern blazing star)	Sept	104	quarts
<i>Monarda bradburiana</i> (Eastern beebalm)	May	40	quarts
<i>Pycnanthemum tenuifolium</i> (slender mountain mint)	July - Sept	65	quarts
<i>Solidago drummondii</i> (cliff goldenrod)	Sept - Oct	13	quarts
<i>Symphotrichum oblongifolium</i> (aromatic aster)	Aug - Sept	40	quarts
Sedges			
<i>Carex pennsylvanica</i> (Pennsylvania sedge)	May	250	quarts
Trees/Shrubs			
<i>Amelanchier canadensis</i> (serviceberry)	April - May	1	3-gallon
<i>Ribes odoratum</i> (clove current)	April - May	5	3 -gallon
<i>Lindera benzoin</i> (spicebush)	March	5	3 -gallon
TOTAL:		886	



PROJECTS

ORGANIZATION: University of Missouri Extension

Honeysuckle Hack at UME with Kirkwood students



Jay Doty's Honeysuckle Timeline



Newly inducted Kirkwood School District 6th Grade "Honeysuckle slayers"

On December 5, 2016 Great Rivers volunteers joined forces with twenty-five 6th grade students from the Kirkwood School District to remove invasive species at the new UME office in Kirkwood. The students and volunteers first enjoyed an excellent presentation by Jay Doty about the history and perils of invasive species. The students were eager and willing to dig and remove the unwanted vegetation. The volunteers assisted their efforts with patient instruction on cutting, spraying, and pulling the honeysuckle stumps. It was a great joint effort and much was accomplished. It was hard work for all but the students never complained and the volunteers left the site knowing that we did a great job.



Jay Doty, Nathan Brandt, and UME staffer Janie Lewis pace out the newly cleared woodland soon to become a "Learning Landscape"



Missouri Master Naturalists in attendance were: Pam Wilcox, Barb Cerutti, Bob Virag, Emily Horton, Jay Doty, Anene Tressler-Hauschultz, and Tess Wasserman. Also assisting but not shown were Nathan Brandt and Bill Ruppert.

The next phase of this project, the "Learning Landscape", is presented on the following page by Mary Pat Ehlmann who attended the first planning meeting.



PROJECTS

ORGANIZATION: University of Missouri Extension

Project Learning Landscape at UME Kirkwood

- by Marypat Ehlmann

On January 11, 2017 UME held a project team meeting for Project Learning Landscape. This is a collaborative effort to install and maintain several garden areas at the location of University of Missouri Extension at the corner of East Monroe and South Taylor in Kirkwood. Our GR-MMN Advisor, Nathan Brandt, serves as Horticulture Specialist for the Extension. He cited four purposes for this landscape that exemplify the goals of the Extension. They are: Education, Environment, Edible and Enticing. Signage and group/community participation will promote education regarding the gardens and plants. The environmental impact will be



to support native plants and pollinators as well as rain water management and reduction of invasive plants. The raised food beds will provide vegetables and herbs to be used in cooking classes. And, of course, the beauty of nature at work and well cared for will surely entice all living creatures that come to enjoy and be served by this landscape.

The collaborative partners assisting the St. Louis County Extension team include: the Landscape & Nursery Association, St. Louis Community College at Meramec, Grow Native, Gateway Greening, as well as both St. Louis Master Gardeners and Master Naturalists. Currently in the design and coordination phase, this project hopes to, in time, develop the landscape with entry gardens, a patio container garden, raised bed gardens, an Arbor Day tree garden and native woodland, a butterfly garden, and a pine/memorial garden. Big ideas with many partners to achieve purposeful goals is the story here. As time goes by Great Rivers chapter members will be invited to put some tools, time, and talent together to add to the Project Learning Landscape. I will keep you informed.



PROJECTS

ORGANIZATION: Great Rivers MMN

Seibert Park Native Flower Bed by Cori Westcott

Jerry Esselman is a new member who lives off of Sulphur Springs. He has determined he could come up to Seibert on his own if he knew what needed work. Today was his first day. He raked some irksome Bermuda grass from the butterfly garden. He's right. It will need to be sprayed this spring. Although I sprayed it last fall. It will probably take more treatments. He's cutting down the vegetation. Cosmetically, that's easier on the eyes of the public. He's leaving the vegetation in place. 1) for overwintering insects and 2) for enriching the soil.

From all I've read and experienced first-hand, native plant gardens need more tending the first three years and substantially less there after. This garden had its second growing season. We got behind with the months of having a homeless gentleman that according to police was "not approachable" living there for months on end.

Jerry is taking up the slack.

I have scraped the vegetation throughout the park and planted over a dozen plant species in seed form the day after Christmas.

Before Christmas in early December, I killed 153 honeysuckles by pulling or digging. That speaks well of the park that I could do so much. There's still more to do. If anyone wants to spend some time there, get in touch and I'll tell you what needs some attention.



Seibert Park Native Flower Bed
BEFORE raking



Seibert Park Native Flower Bed
AFTER raking



Seibert Park Native Flower Bed
AFTER raking



PROJECTS

ORGANIZATION: Shaw Nature Reserve

Shaw Nature Reserve Invasives Removal by Jerry Esselman

No one can say our volunteers aren't real troopers. Even with a very last minute request from Mike Saxton, Ecological Restoration Specialist at SNR, and very frigid temperatures, two of our hardy volunteers, Jerry Esselman and Sean Tracy assisted in removing and burning the invasive honeysuckle on site.

Below is Jerry's summation and a thank you from Mike. The pictures tell the story. Good job guys.

"4 degrees! Loving Nature being good stewards clearing out honeysuckle & privet. Nobody even felt the cold loving what we do! Besides we had a BIG Bonfire!!!!"

"Thanks again to everyone for coming out and braving the cold! It ended up being a lovely day between the lack of wind, the hot pile and the good, hard work. Know that your efforts are much appreciated"

NOTE: This is an on-going project. Please check the Great Rivers calendar for upcoming work days.





Shaw Nature Reserve Invasives removal (continued)



SNR 1-7-2017 Site #1 Before



SNR 1-7-2017 Site #1 After



SNR 1-7-2017 Site #2 Before



SNR 1-7-2017 Site #2 After

If you would like to volunteer for future events, please contact Mike Saxton directly. Here is his contact information:

Mike Saxton
Ecological Restoration Specialist
Shaw Nature Reserve
Missouri Botanical Garden
636.451.3512 ex. 6011 | 563.349.7719
mike.saxton@mobot.org



PROJECTS

ORGANIZATION: City of Kirkwood

Keysor Elementary School - Outdoor Education Event by Pam Wilcox



While working at the UME honeysuckle removal project I met with Lesli Moylan. Lesli has an M.A. in Sustainability Education and is a Youth Gardening Expert. She also works with the Kirkwood School District and is on the project committee for the Tillman IGNITE project. I was invited to participate in an upcoming event at the Keysor Elementary School on Jan. 12th, called the Keysor Community Outdoor Education Event. The event was aimed at providing vendors to educate and enlighten Kirkwood parents about the merits of native gardening and upgrading the grounds of the various schools in the Kirkwood district. Lesli notes that the Tillman IGNITE project "is a campaign to transform Tillman's backyard from a boring blank rectangle that lacks imagination into a dynamic and engaging learning space that inspires creativity and curiosity". Guest speaker, Bill Ruppert also discussed the benefits of native plantings to native wildlife. Tess Wasserman and I manned an information table at Keysor and were visited by many school parents interested in more information on invasive species and the work of the Mo. Master Naturalists. It was a fun and inspiring event.





PROJECTS

ORGANIZATION: Missouri Department of Conservation

Eagle Days On Chain-of-Rocks Bridge

January 11-12, 2017

As in years past, the Great Rivers Chapter made a great showing at this year's MDC Eagle Days. Fortunately, chapter members Rachel Becknell, Renee Benage, Kathleen Evans-Kapayou, Michael Meredith, John Vandover, Bob Virag, and Pam Wilcox signed up for the public schools portion. We managed to get in two of the three days before the crazy weather rolled in. Wednesday morning, January 11, 2017, was so foggy for about an hour that you could not see Interstate 270 from the Chain of Rocks Bridge much less see any Eagles. We all felt sad for the school kids who braved the cold, marched out to the bridge, but saw nothing but low hanging clouds. Luckily when the fog lifted several eagles were spotted from the bridge to the cheers from the students. It's always a plus to start the program out with a live Eagle or two. The students are amazed when they first see the Eagle come out of his/her cage and spread their wings. The remainder of the days were cancelled due to an untimely ice storm. Hopefully, next year will bring better weather

The following is from Matthew Magoc, Conservation Education Consultant, MDC:

"Thank you again for your time and effort to make the students experience valuable."



Some of the eagles behave very well....



...but the weather certainly didn't behave this year.



Eagle spotted near the bridge, wondering what all the fuss was about. ---photo by Rachel Becknell



Turnout was good, considering the weather.



A good time was had by all, in spite of the weather.



Bob Virag and Rachel Becknell searching for eagles



Eagle Veterans Michael Meredith and John Vandover were prepared for the weather.



The Chicken Dance never fails to lure a bald eagle to land on the bridge. (Oops...that's only MMN Confluence volunteer Allison Volk in her eagle hat in the center).



Foggy conditions called for a tight flying formation with these Ring-Bill Gulls. ---photo by Rachel Becknell



PROJECTS

ORGANIZATION: Great Rivers MMN

Honeysuckle Coasters! *By Tessa Wasserman*

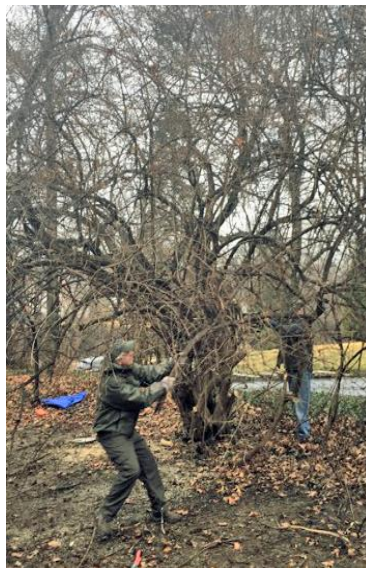
After taking the “Think About Tables” workshop with Dale Dufer and rethinking what we can do with honeysuckle wood in a sustainable manner, I came up with the candle holders and eventually made the mini reindeer (modeled after the ones in Webster Groves) for the MMN Great Rivers holiday party. It was at this party while talking with Bob Virag and Bill Hoss that Bob maybe jokingly said we should try and make something out of the “cookies” from bush honeysuckle. Of course it went from there that I knew a friend that had a giant bush honeysuckle on her property that would make larger cookies. Then Bob and Bill thought of coasters. Bill has a laser engraver, so why not etch them with a picture, or our logo? You see how the ideas start snowballing.

This project was mentioned at the last chapter meeting and has now been approved by our chapter with the idea of making coasters/plaques for special occasions, community outreach or fundraising events. With no time lost, Bob, Bill and I took down the giant bush on Thursday, January 19th. The amount of wood this one bush provided is unreal and shows how much property was compromised by its shade. We estimated a 24 x 28 foot plot with over 672 square feet area that had absolutely no undergrowth, just bare soil. The owner is delighted it is gone and plans a new native garden in its spot! Definitely a win win.

Now the process of correctly drying the wood to prevent cracking is the next hurdle. If anyone has access to a kiln or other method or just wants to be involved with this project, please let us know. The end result promises to be amazing!



Tessa Wasserman and Bill Hoss prepare to remove the ‘mother-of-all’ honeysuckle in Webster Groves



Bob Virag and Bill Hoss start chipping away at the giant honeysuckle.



Bill Hoss and Tessa Wasserman, Honeysuckle Slayers



Bill makes the kindest cut of all...



...freeing up over 672 square feet of barren soil.



The multiple stumps appeared to be at least 30 years old.



Bill's first laser engraved Honeysuckle Coaster



Bill's first laser engraved Honeysuckle Plank



PROJECTS

ORGANIZATION: Forest ReLeaf of Missouri

Forest ReLeaf Mark Twain School Tree Planting – “Ballerina Jean” by Tessa Wasserman

This little girl and her family were walking by a Forest ReLeaf community project and stayed to help plant over 7 trees along the street in front of the old Mark Twain school (Ruskin & Thekla). We were replacing ash trees on 12/03/16 that had been growing there for decades. She worked so hard for a 7 year old and named this tree “Ballerina Jean”. Her joy at planting her first tree ever and getting to name it in her own neighborhood was infectious! .





PROJECTS

ORGANIZATION: St. Louis County Parks

McDonnell Park Update by Shawn Thomason

The prairie at McDonnell Park in St. Ann MO is part of an 11.5 acres section of the park that Great Rivers members were asked to contribute their talents and energies to back in June 2013. The prairie itself started off as approximately 5 acres surrounded by a nice white oak woodland to the south and a mass of honeysuckle to the West, North and South. Since that time many hours have been spent eradicating exotic invasive species such as Sericea Lespedeza , Crown Vetch and of course Honeysuckle, followed by regular seeding and planting of Missouri native plants. The size of the prairie is now approximately 6.5 acres with another 1.5 acres slated to be added once the honeysuckle on the South side can be removed. The oak woodland is also receiving attention with regards to honeysuckle removal.





McDonnell Park Update (continued)

Highlights from 2016 include:

1. 20 new prairie species were identified from the Fall 2015 seeding done by Great Rivers members.
2. 1.5 acres were added to the prairie through honeysuckle removal
3. Nancy Willis conducted butterfly surveys through out the year
4. In November, the woodland received an application of glyphosate utilizing the parks mist blower to hopefully eradicate much of the remaining honeysuckle
5. Four Bluebird houses and two Screech Owl houses were added and will be monitored by Brenda Hente
6. 25lbs of Savanna seed mix (valued at \$2100) and approximately 15 trays of native plugs purchased through a cooperative MDC grant with Missourians for Monarchs was added to the prairie
7. A final mowing of the prairie to allow for easier identification of invasive species in the Spring and to allow more sun to reach the newly seeded seedlings.

The plan for 2017 is to allow the prairie to grow up without a spring mowing to allow for identification of new and existing plant species and of course to provide the awesome pollinator habitat and cascade of colors we saw back in 2015. Bird and butterfly monitoring will continue along of course with the on-going attack on invasive species.

Missourians for Monarchs have offered more stratified seed that will be added late winter/early spring and another grant partnership is being explored to install more pollinator habitat in other areas of the park.

If you have time stop by and visit. The prairie is located on the southwest corner of Adie and Link in St. Ann, MO. There is a gate with a sign and paths will again be mowed so that the inner prairie can easily be accessed.



Two Screech Owl houses were added



Four Bluebird houses were installed



PROJECTS

ORGANIZATION: Great Rivers Greenway

Chain of Rocks Project – by Shawn Thomason

In October 2016, Great Rivers member Shawn Thomason who works at St. Patrick Center negotiated a contract with Great Rivers Greenway to install native landscaping at the West entrance to the Chain of Rocks Bridge. Shawn worked with homeless clients of St. Patrick Center along with staff from Gateway Greening and Great Rivers Greenway weekly to design and build the beds and then installed native plants which will provide pollinator and Monarch habitat. Because Shawn engaged in this work as part of his job at St. Patrick Center he did not claim any MMN volunteer hours.





PROJECTS

ORGANIZATION: Missouri Botanical Garden

Garden Glow 2017 at Missouri Botanical Garden --- by Kari Pratt

I love volunteering my time at the Botanical Garden when I can and this year's glow is no exception. I volunteered the last day of the show and the crowds were big and excited to be there. I love the opportunities for interactions with patrons and "over the top" feeling I get from being outside during the holidays. During the glow, I like to try to do two shifts, one inside and one outside to make the longer trip to get there more worthwhile. If you ever get the opportunity to volunteer at The Garden Glow...please sign up. You won't be disappointed!





PROJECTS

ORGANIZATION: Missouri Stream Team



Missouri Stream Team - St. Louis Area Winter Chloride Monitoring Study 2016-2017

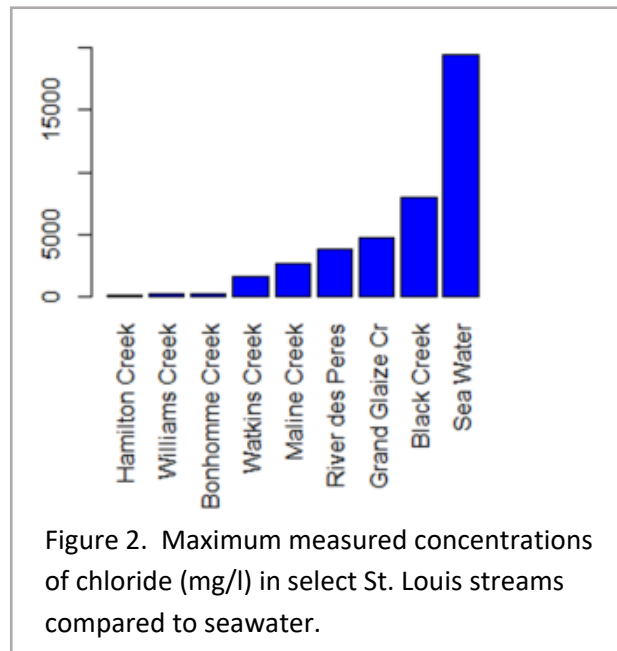
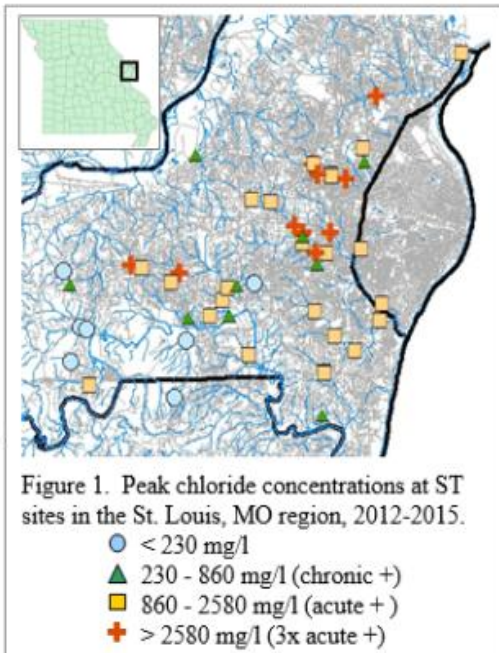
by Danelle Haake

MMN Great Rivers Chapter Stream Teamers are helping Danelle Haake in her quest to determine if “brining” would be considered a Best Management Practice (BMP) substitute for application of road salt to reduce the toxicity of salt water pollution in St. Louis region streams. Great Rivers members Al and Cori Westcott, Susan Orr, Beth Skelton, Shawn Thomason, and Bob Virag brave rain, sleet, hail, and snow every week throughout the winter months again this year to monitor the water quality of local streams.

Introduction:

Chloride pollution from road salt is a common issue in urban communities in the snow belt. The application of road salt to melt snow and ice results in an increase of chloride concentrations in nearby streams and groundwater. This increase can far exceed toxicity limits for freshwater aquatic life in urban streams. Winter chloride concentrations in urban waterways often exceed US EPA recommended exposure criteria for protection of aquatic life: 230 mg/l chronic, 860 mg/l acute.

To document the scope and scale of the chloride reaching streams in urban and suburban areas of the St. Louis region, volunteers with the Missouri Stream Team (ST) program have monitored concentrations of chloride in their adopted waterways since 2012. In that time, 31 trained volunteers have collected over 1,500 in-stream chloride measurements at 52 sites throughout the St. Louis region (Figure 1). They have identified chloride concentrations above the chronic and acute toxicity thresholds at 43 and 34 of these sites, respectively. They have also found chloride concentrations that are over one third of the amount that is found in seawater (Figure2).



Next Steps and call for volunteers:

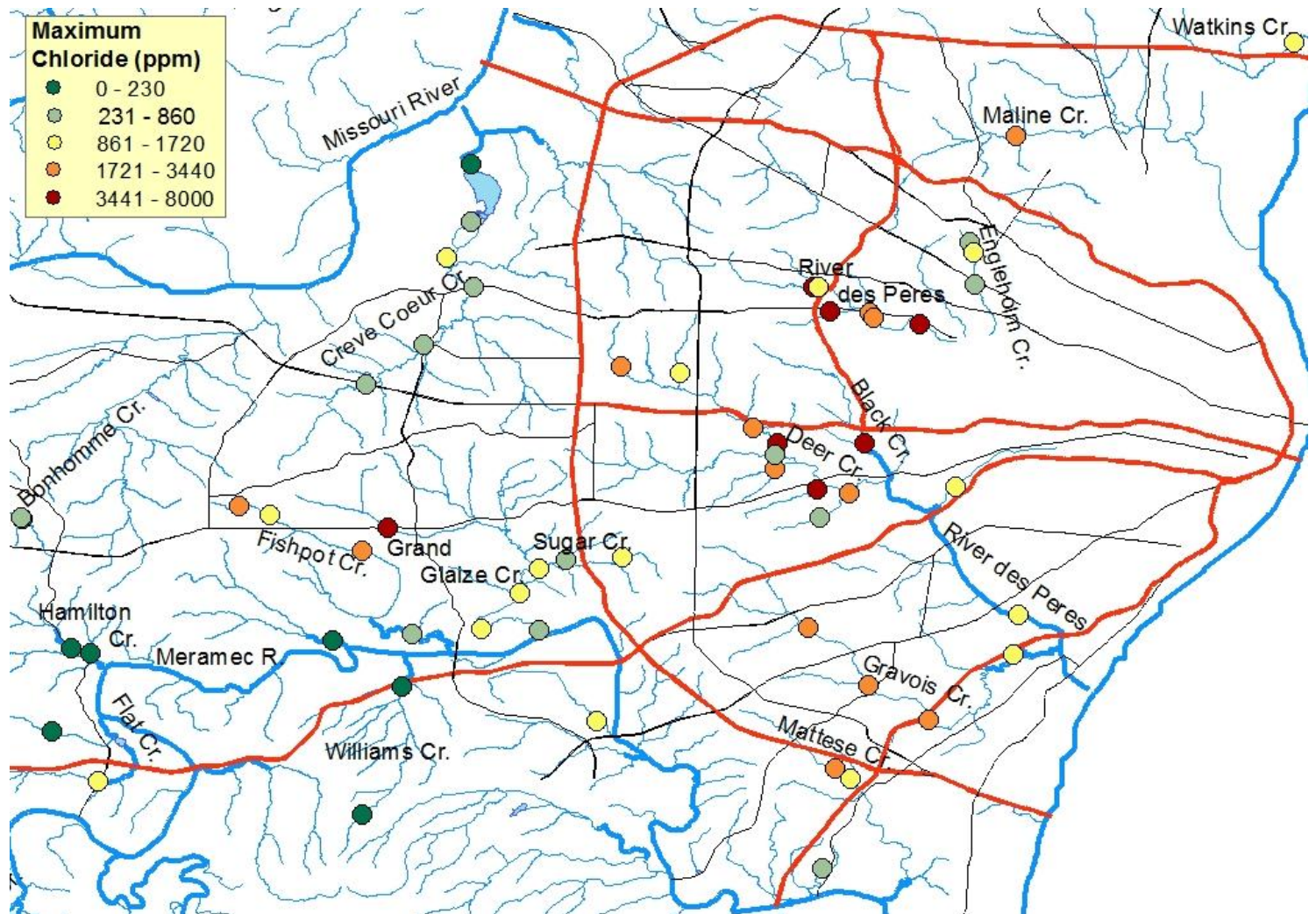
The data collected will be used in scientific studies by researchers at St. Louis University. This research is currently focused on assessing the impacts of the use of salt brine as an anti-icing best management practice. Additional research efforts are focused on the local impact of chloride on aquatic invertebrates, as well as the residence time and long-term impacts of chloride in groundwater.

If you you are interested in volunteering in this program, please contact Danelle Haake: danelle.haake@gmail.com or 314-961-4410.



Missouri Stream Team – (continued)

St. Louis Area Winter Chloride Monitoring Study 2016-2017



Peak chloride concentrations throughout the St. Louis County watershed 2012-2015

Thanks to help from the Great Rivers Chapter Stream Team volunteers, the study will soon determine:

- 1) If the application of liquid brine to the roads instead of conventional road salt throughout the county reduces the salt concentrations in storm water runoff, lakes and streams, and
- 2) the extent of injury to aquatic organisms caused by toxic salt levels in the watershed



PROJECTS

ORGANIZATION: Forest ReLeaf of Missouri

Forest ReLeaf of Missouri by Vaughn Meister

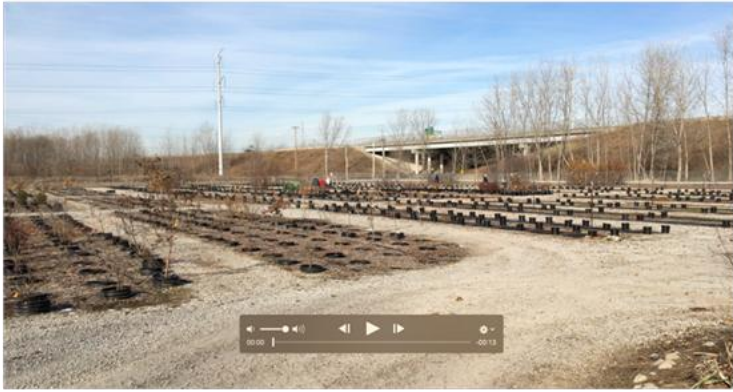
Putting the Nursery to Bed for the Winter

We had another wonderful year at Forest ReLeaf and during November and December we put the nursery to bed. Many Master Naturalists from all three chapters work regularly or occasionally at the Communitree nursery on the grounds of Creve Coeur Memorial Park.



Photo of volunteers in the gator and wagons

In November and December we have different tasks. We fulfill the last requests for free trees and shrubs. Yes some of our customers are still planting trees on warm days in December and Jan. We overwinter up to 8,000 3 gallon trees that are either still available or too small to give away, by stacking them tightly in the hoop house. These may be oak trees that grow more slowly than the tulip trees, or some of the shrubs, like Rose Mallow, that we trim back before stowing for winter. About 4 years ago we put up the 'hoop house' that protects those 3 gallon trees from desiccation over the winter. The cold weather, snow and ice wouldn't hurt those yearling trees but the drying winds would kill them unless we gave them this protection.



In the winter if you drive by the site at 2194 Creve Coeur Mill Road, just south of where Hwy 364 crosses over Creve Coeur Memorial Park, you will see a desolate graveled area where we grow those 3 gl trees from planting in March until winter comes. You can still see over a thousand of our larger trees, planted in 15 gl containers that are sunk into the ground. These larger trees which are several years old, are given to areas that have many fewer trees, the tree deserts of our area.

In the past few years we have increased our effort to grow trees not just from the bare root seedlings we get from the MO state nursery in Licking MO, but to grow

many trees and forbs from seed. In the past two months we have planted trays of acorns, Dawn Redwood, and Buckeyes as well as Swamp Milkweed and Gray headed Coneflower, among many other varieties.

You can join us for a single event. We have two Saturday planting days this coming March, the 11th and the 25th, that are designated for Missouri Master Naturalists and Master Gardeners. We work from 8-noon and would love to break our record for number of seedlings planted on a Saturday. You could also join us as a regular or intermittent volunteer on Wednesday or Friday mornings from 8 AM to noon.. If you want to do one of the MMN planting Saturdays please email me Vaughn.meister@yahoo.com so we can be sure to have enough treats for break time.



We had a great year with Mike Walsh who has been the forester at Forest ReLeaf for the last nine years and who has made it so much fun to volunteer there, as well as teaching tree classes for the MO Master Naturalist class, St Louis Community College and the Missouri Botanical Garden. All of us have really enjoyed volunteering for him.

A Forest ReLeaf regular, Vaughn Meister



PROJECTS

ORGANIZATION: The Green Center



Volunteer at the Green Center!

We would love to have you volunteer with us! Many volunteer opportunities exist at the Green Center. Whether you enjoy working indoors or outdoors, we have a volunteer opportunity for you.

VOLUNTEER OPPORTUNITIES:

Restoring Wildlife Habitat/Removal of Invasive Plant Species

Assist in the removal of invasive species from The Green Center’s prairie, wetland and woodland eco-systems. Invasive species will gradually suppress the diversity of native plants and indirectly eliminate their pollinators. The removal of invasive species allows native plants to re-emerge and establish themselves, particularly in our woodland areas. This is an extremely important activity that brings visible and rewarding results.

Plant Propagation, Transplanting

Learn to propagate Missouri native plants. Work with experienced Master Gardeners, Green Center staff, and other volunteers. Minimal physical labor is required. Winter activities include starting and tending to an indoor seedling nursery. Mid to late spring activities involve separating seedlings into small pots.

Gardening

Find out how you can introduce native plants into your own garden and attract butterflies and birds. Enjoy working alongside other learning gardens volunteers. The results are rewarding and the experience always involves observations of butterflies, birds, and other wildlife. Assist with seed collecting, planting and care taking within the Roger Pryor Prairie Garden, Woodland Garden, Ozark Endemic Garden, Discovery Garden, Herb Garden and our Diversity Garden vegetable beds.

Leading Interpretive Classes/Instructor (training provided)

It is so gratifying to see the look on children's faces or adults, when they are surprised by things they see and learn in the Green Center’s open spaces. Train to lead outdoor programs in the prairie, wetland, and/or woods. Enjoy the outdoors through different seasons and learn the magic they have to offer. Work with our staff and volunteers to lead classes that focus on our outdoor spaces, or art, or science, or combine any or all of these areas together.

School Vegetable Gardens

The Green Center collaborates with U City in Bloom on a vegetable garden project at the University City elementary schools. Volunteers work with school children to prepare garden beds, plant and maintain the gardens and harvest the gardens at the end of the school year. If you love gardening and working with children, then this is a great opportunity for you.

Contact: info@thegreencenter.org www.thegreencenter.org

CONTACT INFORMATION:

What days / times are you available to help?

NAME: _____

M / T / W / Th / F / S / Su (circle)

ADDRESS: _____

_____AM _____PM

PHONES: Home: _____

Cell: _____

Business: _____

E-MAIL: _____

Areas of interest? _____





PROJECTS

ORGANIZATION: Forest Park Forever

Collecting for the Forest Park Forever Herbarium by Cori Westcott



Plants of Missouri USA
22 April 2016

Josh Wibbenmeyer joined Forest Park Forever in 2012 as a Nature Reserve Steward. One of the many ways he hopes to steward the natural communities of Forest Park is to create an herbarium of all plant species living in the park areas managed by Forest Park Forever. A collection of dried plant specimen of all flora found in the these areas will serve as an identifying tool for the study of the plants in the future. It may be used as the basis for a floral field guide of the park. It also provides a natural historical library for the use of the staff responsible for stewarding the natural communities there.

Chapter members John Powers, Anene Tressler-Hauschultz and Bill Hoss volunteer as collectors for this FPF herbarium project. Bill describes his collection time beginning with a list of plant species and where to find them suggested by Josh in an email.

Bill related in great detail the steps a specimen collector must follow in order to ensure the

integrity of preserving the data and the plant. For the sake of brevity, some steps will be omitted. When he has found a plant, he looks for two specimen to collect. He photographs the whole plant, the bloom, the leaf and the base of the plant.

He lays as much of the plant as possible flat upon newspaper. As he is positioning the plant, he tries to set the leaves so that an observer would be able to see the configuration of the leaf to the stem. He tries to flatten the leaves so their shape can be discerned. The stem itself is a wealth of identifying characteristics. The plant is then covered in newspaper and sandwiched between two sheets of corrugated cardboard. The air in the inner waves of cardboard help to draw moisture away from the plant.

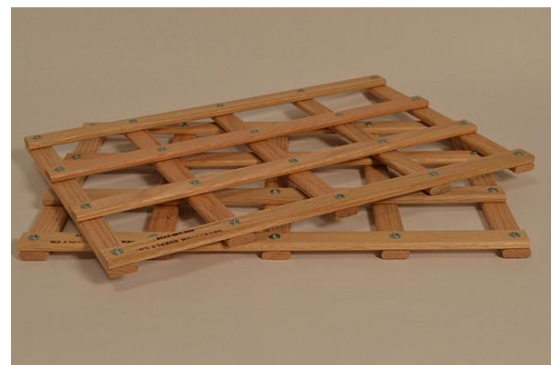
The protected specimen is then placed between two latticed wooden frames pressed together by cotton or nylon webbing press straps.

He records the latitude, longitude and elevation of the precise location where he collected the specimen. Bill says the work is a good learning experience. Each volunteer collects one day a week on a rotating basis. Even after their careful retrieval of flora, Josh has an equal amount of time following a series of steps as the specimen "voucher."

What a rewarding service it must be to contribute to a herbarium!



Belt for Herbarium Press
Photo courtesy Herbarium Supply Company
P.O. Box 10966, Bozeman, MT 59719 USA



Herbarium Press
Photo courtesy Herbarium Supply Company
P.O. Box 10966, Bozeman, MT 59719 USA



DISCOVERY

Planthopper Parasite Moth, *Fulgoraecia exigua* -- by Cori Westcott

On the morning of August 19, 2016, while walking the wetland boardwalk through Missouri's Pershing State Park, Linn County, Missouri, I noticed these tiny, white, seemingly floating spheres just inches from the surface of the boardwalk. I suspected they propelled themselves along a silken thread. Each creature was no more than 3 millimeters across. They seemed covered in a powder.



Planthopper parasitic moth - *Fulgoraecia exigua*
-- Photo by Cori Westcott

Upon closer examination, I could make out the underside of the creature. I could just barely see legs and an abdomen. In the photo you can see the powder residue left on my finger and just make out a bit of thread.

You can view the video I posted to my YouTube channel here: **What is it?** <https://youtu.be/3RJHXukLJzU> . Watch the varieties of propulsion it uses to leave my hand. It uses the silken thread to move as well as hopping.

You can see it without much of its white silken case by watching the following YouTube video produced by the Insect Pollinator's Channel here: **Larva.7.2010** <https://youtu.be/7VcRdG6r-98>

With the help of BugGuide.net, I can tell you about this mysterious creature. It's a Planthopper Parasite Moth, a *Fulgoraecia exigua*. In its first instar, it attaches itself to the abdomen of a Fulgoroid planthopper underneath its unfortunate wing and sucks its bodily fluids. It does produce silken thread as I observed in this video because it creates a cocoon of silk. It is an ectoparasite, in that it attaches to the skin and remains outside the body of its host. It pupates to become a moth.



Fulgoraecia exigua,
Planthopper Parasite Moth
© Copyright Cameron Prybol 2011-2014
www.discoverlife.org

Explore your own mysterious insect critters at BugGuide.net, an online resource devoted to North American insects, spiders and their kin, offering identification, images, and information.



Fulgoraecia exigua larva
credit © Carmen Champagne,
Moth Photographers Group
www.discoverlife.org



THE LITTLE BUCK

By John Vandover

It was late October, early morning and clarion clear. Brilliant sun shafts were just piercing through the mostly bare branches of the forest. The sky, a deep cerulean marked hither and yon with wispy hints of cirrus pressed high into the stratosphere. It was a mythic harbinger that a hard winter might possibly come. And oh the wind, it was a steady in my face Zephyr. It made me smugly appreciate the layering and weather proofing choices I had made as I snuggled up against a massive root ball. The time was shortly after dawn. And to all indications I was situated in right place, hopefully at the right time.

I strategically located myself in a position that overlooked a wide curving bench. It made a big sweep around the head of a deep hollow that dropped about 100 feet to a small drainage. This is a remote, ruggedly beautiful location deep in tall timber. My pre-season scouting revealed this bench to be an absolute cervid thoroughfare. It was literally cluttered with tracks, rubs and scrapes....fresh and pungent. And that's why I'm cozied myself here out of the wind, against that large root wad. My goal, have the chance of a lifetime to slip an arrow into a large buck. After all, that's what dreams are made of.

The wind was constant all morning and in my favor. Comfortably snuggled against my root wad nest, I had a clear unobstructed view down and around the bench. The only animal activity that morning was squirrels. And there was plenty of it. I had a forest soap opera...of sorts all around me. Some squirrels sat arrogantly regal on limbs about the bench barking and chattering. They carried on a non-stop conversation amongst themselves that lasted seemingly forever. Others, the apparent field hands of their species, scampered about ferreting out the last remaining acorns to stash for their winter meals. Upon reflection I really think the squirrels on the limbs were directing and even commanding those on the ground to acorn locations.

I did however catch sight of a distant movement, a slight shift of a different shade of brown. Could it be a deer? My excitement mounted, but the distant brown shift materialized into a couple of turkeys. They slowly made their way across the bench a good couple a hundred yards from me and dropped out of sight down the side of the hollow. They were however a welcome diversion from the constant squirrels.

And then it happened, about ten thirty. That magic moment hunters live for. In spite of the constant wind I picked of the faint sound of rustling leaves that were on the ground. Could that be the sound of hooves in the leaves? I strained to hear that sound if it reoccurred. Maybe the next time I could even get a bearing on its direction. Then I heard it again and I was able to peg it coming from my right way down the bench. I couldn't see anything, but my excitement level certainly started to climb.

Then, all of a sudden, deer materialized as if out of thin air. Where but a moment before there was nothing, now there was a group of nine slowly making their way toward my position. Could this be my day? Was I about to get a chance to arrow that big buck of my dreams? They were still over a hundred yards away when I hooked my release aid to the string and checked the yardage setting of the sight. On their present course they would slowly pass about twenty five yards from where I sat. I was ready, I was pumped, all the deer had to do was come abeam of my position.

I carefully watched them slowly make their way down the bench. There were two bucks and seven does. One buck was seven or eight points, it was hard to tell exactly. The other was smaller and the does ranged from yearlings to mature matrons. And then ever so slowly they stopped and grazed opposite my root wad. The now visible eight pointer was broadside of me but had a couple of does directly opposite him. I didn't have an ethical shot. My arrow would have passed through the buck and nailed the doe that was on his offside. This was a true hunter's dilemma. I was wracking my brain to devise a ruse to get that buck to move clear of the doe without being spooked.

Then the completely unexpected happened. The little buck, it was a four pointer, started grazing directly toward my root wad hide. The next thing I know, the little buck is about three feet from my face and looking directly at me. Then he is about a foot and a half from me. He knows I'm there. He blinks his eye lashes and licks his lips as he munches down a couple of still greenish forb leaves. This ballet goes on for about five minutes. My god he was almost tame. I wiped my hand across my forehead and all he did was bat his eye lashes again and pick up another leaf. Hell, I think I could have petted him. Meanwhile the rest of his band, including my big buck slowly grazed off to my left and out of my hunt.

Finally, little buck turned and moved about five feet from me. He turned his head to face me, wagged his tail, licked his lips and seemed to smile at me. After moving another five or so feet away he stopped and did the same things again. He then moved slightly further away, turned for one final look before moving on to catch up with his buddies.

That deer was so personable and cute, there was no way I could have arrowed him. He needed to live to grow into a truly large buck, a monarch of the woods. I sat there for some time simply trying to comprehend what I had experienced. I guess I sat there a good half hour before slowly walking the mile back to the Cabin. A slow cigar and a rich bourbon awaited me.



Aldo Leopold



Jan 11. It's the birthday of writer and ecologist [Aldo Leopold](#), ([books by this author](#)) born in Burlington, Iowa (1887). Aldo grew up in a big, prosperous family, lived on a 300-acre estate with a lot of his relatives. The whole family spoke German together and worked in the gardens and orchards, where he learned about plants and soil. He went hunting with his dad and bird-watching with his grandfather.

While he was studying at Yale, he practiced writing by composing long letters home. Theodore Roosevelt created the U.S. Forest Service in 1901, and a few years after that, Leopold finished his master's degree and joined the Forest Service. He worked on surveying and drawing maps.

When he was in his 20s, he was caught in a storm out in the wilderness and he ended up with kidney disease. For the rest of his life, he had bouts of poor health. And it was during these bouts that he began to write. He wrote *Game and Fish Handbook* (1915) and *Game Management* (1933), about wildlife conservation. After 19 years in the Forest Service, he became the Professor of Game Management at the University of Wisconsin-Madison, and bought a piece of land on the Wisconsin River. And it was there, at his home in Wisconsin, that he wrote many of the essays for which he is now famous.

He tried to publish a collection of his essay, but for seven years his manuscript was rejected. He kept reworking the essays, and finally, when he was 60 years old, he got the news that his book was going to be published. One week later, a neighbor's trash fire got out of control, and Leopold was afraid that it might spread to his farm, so he went out to help fight the fire. Suddenly, he lay down on the grass and died of a heart attack.

So Leopold's children spent the next months putting the book together, and in 1949 *A Sand County Almanac* was published. It became one of the most important texts of the conservation movement

**Aldo Leopold wrote,
"Harmony with land is like harmony with a friend;
you cannot cherish his right hand and chop off his left."**

Source: *Writer's Almanac* writersalmanac.org distributed by the American Public Media



Winter Sunset photo by Sean Tracey 2016