OUR [LAST] CHAPTER MEETING
[was] Thursday October 12th
[We took a] Tour of Columbia’s Bioreactor Landfill
Then afterwards we [went] OUT TO EAT at Como Smoke & Fire
😊

Our October 12th chapter meeting will be a tour of the Bioreactor Landfill in Columbia, with a start time of 4:30pm, and we will meet at the Landfill, located at 5700 Peabody Road. A bioreactor landfill operates to rapidly transform and degrade organic waste. The increase in waste degradation and stabilization is accomplished through the addition of liquid, and in some cases, air to enhance microbial activity. Please make arrangements so you can go! Be sure to wear closed-toed shows and long pants. After the tour, we will go out to eat -- we can vote on a place at our September meeting!

Directions: US-63 North to Hallsville/Centralia MO-B exit, turn right onto Paris, go 2.13 miles, then right onto North Brown Station, go 0.36 miles, then take first right on Peabody, go .92 miles.

This program was approved for TWO hours of Advanced Training. (Because we did not have a business meeting, there were no volunteer service hours for this event.) Advanced Training does not require a timesheet code, and does not include travel time.
Hello Boone’s Lick Chapter Members!

Last Thursday, we toured Columbia’s Material Recovery Facility (MRF) and Bioreactor Landfill. I was informed after the tour that a bunch of you were not aware that BEN KREITNER, the guy that ran our tour, is a brand-new Master Naturalist, he went through the training class this year! He works as the Waste Minimization Coordinator at the landfill. Ben did an outstanding job answering our (endless) questions, and he gathered answers to a couple of questions he was not able to answer for us, see below for the scoop. THANKS BEN!

If you attended the tour, you may count TWO hours of Advanced Training on your timesheet. Because we did not have a business meeting, you are NOT able to count any volunteer service hours for the event, sorry! But two hours of AT is nice. (And as always, AT hours do not require you to enter a timesheet code – only volunteer service hours require a timesheet code. Hey, have you started your 2017 timesheet yet?)

DID YOU KNOW? RECYCLING IN COLUMBIA MISSOURI

- The top of pizza boxes are always recyclable. You can recycle the bottom part if it has a little bit of residue on it no larger than a quarter (e.g., Shakespeare’s = NO).
- You can leave plastic caps on plastic bottles – each may be a different type of plastic but they can be separated mechanically at the processing facility.
- Sadly, compostable cups, plates, and other compostable materials that look like plastic are not recyclable. Compostable fiber materials can be recycled with other paper except for paper cups, those are not recyclable. (They recommend reusable cups, but if they must be disposable, plastic cups are the recyclable option.)
- You do not need to remove the labels off of glass jars or plastics before you recycle them.
- You do not need to rinse out soda and beer cans, a little residue is okay.
- You do not need to remove plastic tape from cardboard before you recycle.
- You do not need to remove the plastic windows from paper envelopes, but it would be nice if you did.
- Common items that are not recyclable, place in the trash: metal lids from glass jars, beer caps, Styrofoam, plastic film (e.g., shower curtains, plastic grocery bags), aluminum foil, blue recycling bags (they get too contaminated by the contents!)
• Shredded paper can be recycled if you put it in a large CLEAR bag so that the staff people can easily pluck it out of the pile.
• Smaller plastic things like utensils and straws generally cannot be recycled unless you have a LOT of them together in a large CLEAR bag for the staff people to see.
• Plastic grocery bags cannot be recycled though the city, but you can take them to bins available in other places (e.g., Wal-Mart).
• Bubble wrap, air cushions, and Styrofoam packaging peanuts can be dropped off at the UPS Store for reuse. There is a UPS Store conveniently located next to the Recycling Drop-Off Center in the Home Depot parking lot.
• If you have hazardous materials to dispose of, you can find more information on the Household Hazardous Waste Collection Site, they are open from 8am to 12pm on the 1st and 3rd Saturdays each month from April to November. Some things you might not know should go to the Haz Mat site and not recycling or trash include: aerosol cans, bug spray, flea collars, ink/toner cartridges, nail polish/remover, smoke detectors.

We asked Ben a couple of questions he was not able to answer during tour, so he found out the answers:

**How big is the landfill?** There are 107 acres currently permitted as landfill. The city owns approximately 550 acres to the east of Hinkson Creek, and approximately 150 acres on the west of the creek, so total site is 700 acres.

**How many times do they cycle the leachate and what do they do with it afterwards?** Most leachate is wasted to the Waste Water Treatment Plant. The liquid that is dosed into the landfill is from storm water impoundment with a trace amount of leachate present. This is the case because our leachate is currently mixed with our domestic sewer waste stream, and we do not want to inject all of the other items that are present and associated with the percentage that is domestic sewage. Currently, most of the liquid being applied to Cell 5 comes from customers disposing of brown grease from local restaurants. Subsurface injection activities have been greatly reduced due to operational and infrastructural considerations. If leachate was recirculated, and wasting was limited, we would evaluate ammonia levels to determine at what point the liquid would need to be wasted.
If you are not sure something can be recycled, ask the **WASTE WIZARD**, available online and also via a phone app called **COMO Recycle and Trash**. Residents can find out the recycling and trash collection day for their address and receive reminders on their phone! The app also includes the Waste Wizard tool that tells you which items are recyclable and how/where to recycle them.

P.S. I am sad to report that Chris Egbert’s wife Kay passed away on September 12th. I am gathering donations so that we can purchase something to honor Kay – we will be working with Chris to come up with ideas and a plan. If you would like to donate, you can bring cash/checks to our next chapter meeting (checks can be made out to me). Please keep Chris and his family (including Miss Coco Chanel, the lovely Shih Tzu) in your thoughts and prayers during this heartbreaking time.

**Jill**
Jill Edwards  
Boone’s Lick Chapter President (2017)  
Missouri Master Naturalist Class of 2013

Please email me with questions, feedback, and ideas for future chapter meeting presentations!

Thank you to Elke Boyd (Class of 2016) for the pictures from our tour of the Material Recovery Facility. Butterfly selfie picture of Miss Coco Chanel taken by Chris at the Chestnut Roast.

**MEMBER’S CORNER**
Help Rock Bridge Memorial State Park celebrate its 50th anniversary by strolling around the Rock Bridge area and Devil’s Icebox Trail and taking in station with live music, short presentations about the park’s history and guided Connor’s Cave tours.

To request that this opportunity be approved for advanced training, please complete the Advanced Training Approval Form on the chapter website and email it to MMNATrain@gmail.com.

Missouri Department of Conservation

News Release

Serving Nature and You

Join MDC Nov. 8 for Wild Webcast: No Mo Invasive Species
Learn more about Missouri invasive plant and animal species by taking part in this free webcast.
JEFFERSON CITY, Mo. – Join the Missouri Department of Conservation (MDC) from noon to 1 p.m. Nov. 8 for a free MDC Wild Webcast on invasive species in Missouri. MDC Aquatic Habitat Specialist Kenda Flores and Habitat Management Coordinator Nate Muenks will provide a brief presentation on different invasive plant and animal species found in Missouri such as zebra mussels, asian carp, hydrilla, bush honeysuckle, Callery pear, and more. They will also talk about how MDC staff is helping control invasive species and what you can do to help prevent them from spreading. In addition, MDC experts will answer questions from webcast participants.
Join MDC Nov. 8 from noon to 1 p.m. for MDC’s Wild Webcast on invasive species, including (top left to right) hydrilla, bush honeysuckle, Callery pear, (bottom left to right) feral hogs, and zebra mussels. Register now to take part in the Wild Webcast at http://bit.ly/2gd3GNS.

To request that this opportunity be approved for advanced training, please complete the Advanced Training Approval Form on the chapter website and email it to MMNATrain@gmail.com.

VOLUNTEER OPPORTUNITIES

SERVICE PIN FOR 2017: THE BUMBLEBEE

For updated information on volunteer opportunities, please see the online calendar on the chapter website. Please contact the person indicated for more detailed information on any of the projects. To submit a project for consideration for service hours, fill out a Volunteer Opportunity Approval Form, and email it to MMNVolOpps@gmail.com for consideration.
ASSIST WITH NATIVE PRAIRIE SEED COLLECTION

There are many opportunities to assist with native seed collection throughout this summer and fall. It’s an excellent way to learn new species of plants while assisting with prairie restoration in Missouri. See below for a tentative schedule -- locations and times are TBD. Volunteers will travel to different locations within about 45 minutes of Columbia to gather seed for prairie restoration at Prairie Fork Conservation Area. MDC will provide limited transportation; carpooling is encouraged. Chris Newbold, Natural History Biologist for MDC, will send an email a week or so before each trip. Please email Chris Newbold or call 573-815-7901 ext. 3392 to be added to Prairie Seed Collection email list. Opportunity Code for Timesheets: PRFORK

2017 SEED COLLECTION SCHEDULE

Only three more left this season!

- Saturday October 21st: Rocky Fork
- Sat Oct 28th: Prairie Fork or Auxvasse Glade
- Saturday November 4th: Tucker Prairie

Photo to left: Common Milkweed (Asclepias syriaca)

YOU CAN FIND EXCELLENT PICTURES AND DESCRIPTIONS OF WILDFLOWERS HERE.

Prairie Photo Credit: Suzanne Wright (Class of 2005) – Seed Collecting at Tucker Prairie

More Volunteer Opportunities – see the Chapter Calendar for details!

- Every Wednesday from 7:30am to 4:40pm: 10/25, 11/1, 11/8: Birding Trip with Bill Clark (Columbia Audubon Society, in State Park or Conservation Area, fledgling birders welcome – the best way to learn birds is by birding with an expert! Meet at SW Corner of Parkade Center parking lot, call Bill at 573-474-4510 to RSVP. (Timesheet Code CAS)
- **Saturday October 21st from 10am to 12pm**: Work Party at Russell Elementary Outdoor Classroom, weeding the gardens and prairie planting, and collecting seeds. If you have questions email Lea Langdon or call 573-864-7647. (Timesheet Code SOC)

- **Tuesday October 24th from 8am to 11:15am**: Work Party at Two Mile Prairie Elementary. If you have questions email Lea Langdon or call 573-864-7647. (Timesheet Code SOC)

- **Saturday October 28th from 9am to 12pm**: Work Party at Rock Bridge Elementary, working in the pollinator garden. If you have questions email Lea Langdon or call 573-864-7647. (Timesheet Code SOC)

- **Saturday October 28th**: Prairie Seed Collection, more info above, email Chris Newbold to be added to the email list or call 573-815-7901 ext. 2870 for more information. (Timesheet Code PRFORK)

- **Saturday November 4th**: Prairie Seed Collection, more info above, email Chris Newbold to be added to the email list or call 573-815-7901 ext. 2870 for more information. (Timesheet Code PRFORK)

- **Saturday November 11th from 10am to 12pm**: Work Party at Purdy Conservation Easement (2800 Green Valley Drive). If you have questions email Lea Langdon or call 573-864-7647. (Timesheet Code GLT)

---

**ADVANCED TRAINING OPPORTUNITIES**

For updated information on advanced training opportunities, please see the [online Chapter calendar](#). To submit an opportunity for advanced training consideration, use the form on the chapter website and email it to MMNATrain@gmail.com.
Farming With Beneficial Insects for Pest Control:
Conservation Biological Control Short Course
George Washington Carver Farm
Lincoln University
3804 Bald Hill Road, Jefferson City, MO

Thursday, November 2nd, 2017
9:00 am - 4:00 pm

$45 per person – registration required!

Learn about supporting beneficial insects that provide pest control in this full-day short course. Conservation biological control is a science-based pest management strategy that seeks to integrate beneficial insects back into cropping systems for natural pest control, ultimately reducing and in some cases eliminating the need for pesticides. Join Jennifer Hopwood, Senior Pollinator Conservation Specialist at the Xerces Society, as she overviews conservation biological control and beneficial predators and parasitoids that attack insect pests. Participants will learn how common farm practices can impact beneficial insects and how to assess and create farm habitat for beneficial insects.

Advanced training does not require a timesheet code – only volunteer hours require you to enter a timesheet code.

RE-POST: Hike to Hidden Treasures
Rock Bridge Memorial State Park
First Saturday of Each Month
1:30pm to 3:30pm Free!

Call 573-449-7400 to RSVP
Get to know Rock Bridge Memorial State Park better by participating in hikes that will guide you to hidden treasures of the park, share information about history and nature and provide a service project opportunity (optional) of about 20 min. Included will be special natural features and photos and information from the park’s historical research about what life was like back then and about how the park was founded. A small amount of the route will involve walking off-trail. Hikes are free but reservations are required because space is limited. When you call (573-449-7400), you will be given driving directions. Reservations can be made starting one month in advance.
Recommended for ages 8 years and up. Children must be accompanied by a responsible adult. Prefer no dogs.

First Saturday of each month. Come to one or all. Time: 1:30 to 3:30 p.m.

- **November:** Devil’s Icebox, Rockbridge Mills, Glacial Relic “Red Rocks”
- **December:** Special Use Area, Coyote Bluff, Bluff-top views

Advanced training does not require a timesheet code – only volunteer hours require you to enter a timesheet code.

### NATIVE PLANT PROPAGATION WORKSHOP

**Registration Required!**

Sunday November 5th  
Noon to 4:00 PM  
At MDC Central Regional Conservation Office

Learn how to collect seeds from native plants in the wild and how to coax them to grow. Space for this workshop is limited. **Please register before Oct 30th.**

Contact Lea Langdon at wildonesmidmo@gmail.com to register. Fee for material and supplies is $10 if you are pre-registered, $15 at the door. Fees will be collected at the door, cash or check (made out to Rebecca Erickson). Doors open at noon. Bring a lunch if you like, get checked in, socialize, as soon as everyone is settled, we will begin. No food or drink will be provided so bring your own. MDC’s Central Regional Conservation Office is located at 3500 E. Gans Rd., Columbia, MO

Becky Erickson has an MS in field biology and 20 years’ experience collecting wild native seed and propagating it in containers for seed production and for landscaping. She will explain the mysteries of how to coax native flowers to grow where you want them.
Come to learn techniques in . . .
Identifying seeds on dormant plants
Seed cleaning and storage
Preparing seed for stratification and the next step after it germinates!

Advanced training does not require a timesheet code – only volunteer hours require you to enter a timesheet code.

**NOTEWORTHY**

*See an interesting video or article online? Please share your link via email to mmndragonflyer@gmail.com*

- **Having a Bad Day? Not After Watching This Raccoon Mama Teaching Her Kit How to Climb a Tree**
- **Cool Video of People Watching the Eclipse from the Mizzou Campus**
- **City of Columbia’s New Commemorative Poster Features McBaine Bur Oak Tree with Flowers**
- **Video: Watch this Butterfly Photobomb a Koala’s Picture Shoot**
- **Rapper B.o.B Wants to Prove the Earth is Flat Once and For All**
- **Scientists Have Drilled Info Earth’s Hidden 8th Continent**
- **Video: Pennsylvania Man Finds Huge Water Bubble under His Lawn and Tries to Pop It**
- **Photos: This Alaskan Man Woke Up To a Strange Noise, Then He Saw This on His Porch**
- **Video: Loving Swan Reunites with Partner**
Watch Day Turn to Night in these Breathtaking Photos

The Amazon is the New Frontier for Deadly Wildlife Tourism

Whales and Dolphins have Complex Relationships and Call each Other by Name

Dog Saves 10-Year-Old Boy & His Mom from Rattlesnake

Tsunami Carried Japanese Animals to Continental United States

Keep Having a Good Day: Watch this Canadian Guy Politely Ask Three Bears to Leave his Backyard

**OUR NEXT CHAPTER MEETING: THURS NOV 9TH AT 6:30PM**

---

**Shoes Older than the Pyramids:**
Archaeology in Mid-Missouri

*Presented by Dr. Candace Sall, Associate Curator, Museum of Anthropology, University of Missouri*

Arnold Research Cave in Callaway County has been a dry cave for thousands of years. Under these conditions, excavators in the 1950s and 1980s found artifacts made of perishable materials, such as netting, twined bags, and the world’s oldest open-toed sandal. Thirty-five shoes were found, and most are made of rattlesnake master (*Eryngium yuccifolium*). Come see the artifacts featured in the talk at the Museum of Anthropology.

---

**Missouri Master Naturalists**
Boone’s Lick Chapter
2017 Officers

*Please Join Us on Facebook: Missouri Master Naturalist, Boone’s Lick Chapter*

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Jill Edwards (Class of 2013)</td>
<td><a href="mailto:MMNblpresident@gmail.com">MMNblpresident@gmail.com</a></td>
</tr>
<tr>
<td>Vice President</td>
<td>Robbie Scholes (Class of 2013)</td>
<td><a href="mailto:MMNVicePres@gmail.com">MMNVicePres@gmail.com</a></td>
</tr>
<tr>
<td>Advanced Training Committee</td>
<td>Linda Korns (Class of 2011)</td>
<td><a href="mailto:MMNATrain@gmail.com">MMNATrain@gmail.com</a></td>
</tr>
<tr>
<td>Communications Committee</td>
<td>Jill Edwards (Class of 2013)</td>
<td><a href="mailto:MMNDragonflyer@gmail.com">MMNDragonflyer@gmail.com</a></td>
</tr>
<tr>
<td>Position</td>
<td>Name</td>
<td>Class Year</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Secretary</td>
<td>Sonja Berry (Class of 2015)</td>
<td><a href="mailto:MMNSecretary@gmail.com">MMNSecretary@gmail.com</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Linda Karns (Class of 2011)</td>
<td><a href="mailto:MMNTreasurer@gmail.com">MMNTreasurer@gmail.com</a></td>
</tr>
<tr>
<td>Chapter Historian</td>
<td>Becky Bohlmeyer (Class of 2010)</td>
<td><a href="mailto:BohlmeyerR@umsystem.edu">BohlmeyerR@umsystem.edu</a></td>
</tr>
<tr>
<td>Training Committee</td>
<td>Suzanne Wright (Class of 2005)</td>
<td><a href="mailto:suzwright7002@gmail.com">suzwright7002@gmail.com</a></td>
</tr>
<tr>
<td>Volunteer Opportunities &amp; Project Approval Committee</td>
<td>Phil Knocke (Class of 2006)</td>
<td><a href="mailto:MMNVolOpps@gmail.com">MMNVolOpps@gmail.com</a></td>
</tr>
<tr>
<td>Chapter Co-Advisors</td>
<td>Kent Shannon</td>
<td>University Extension</td>
</tr>
<tr>
<td></td>
<td>Bob Pierce</td>
<td>University Extension</td>
</tr>
</tbody>
</table>

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