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MCICSL Newsletter

Mammoth Cave Intl. Center for Science and Learning

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MCICSL Newsletter - June 2015

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Mammoth Cave International Center for Science and Learning

Mammoth Cave National Park
Western Kentucky University

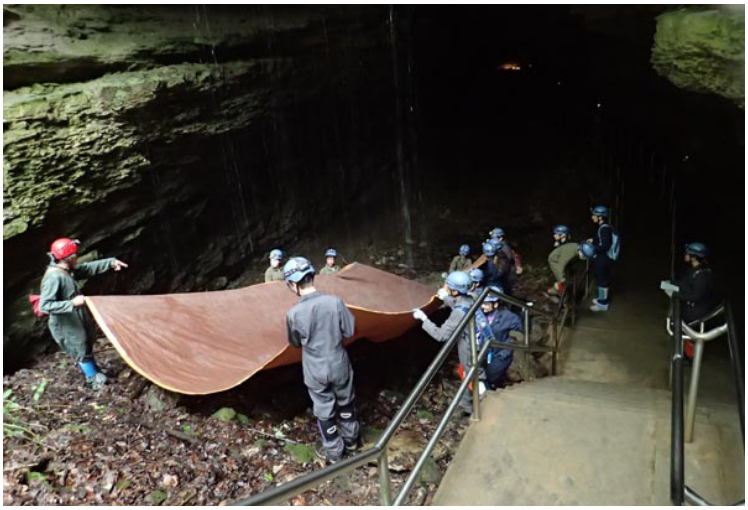
June 2015 Highlights



Dayton Regional STEM School participates in 5 citizen science projects over 2 days

June 2 and 3 were busy days as 26 students and 4 teachers from Dayton Regional STEM School worked with Shannon Trimboli (MCICSL Education Coordinator), Rick Toomey (MCICSL Research Coordinator), David Kime (NKU Honors Advisor), and Brigid Walters (MACA volunteer / WKU Gatton Academy student) to collect data for 5 citizen science projects. Over the two days, the students and teachers contributed 574 hrs of volunteer work photo-documenting historic locations in the cave, documenting and mapping CCC camp artifacts, collecting water discharge data from waterfalls in the cave, counting bats, and collecting dragonfly larvae. When they returned home, the participants contributed another 392 hrs of volunteer work creating projects based on their work at the park.





Public dye traces provide valuable research knowledge and public engagement

On May 30, Rick Toomey (MCICSL Research Coordinator), Chris Groves (WKU professor / Director of the Crawford Hydrology Lab), and Rick Olson (MACA Ecologist) conducted two dye traces with members of the public. The dye traces provided the public with an opportunity to learn first-hand about this important scientific technique. Participants came away with a better understanding of the difficulties associated with determining where the water goes in a karst system and why resource managers need that information. In addition to being a highly educational event, the dye traces served a valuable scientific purpose and have yielded some interesting preliminary results.



Barren County Middle School students collect dragonfly larvae for multi-park citizen science project

Barren County Middle School students participating in a week-long day camp at Mammoth Cave National Park worked with Shannon Trimboli (MCICSL Education Coordinator) on the morning of June 11. The students collected dragonfly larvae for a citizen science project studying mercury concentrations in National Parks across the country. 54 parks are participating in the study this year. For more information about the project, go to http://www.nature.nps.gov/air/studies/air_toxics/dragonfly/index.cfm.



June begins the busy summer research season at MCNP

Just a sample of the many research projects occurring at Mammoth Cave National Park this month:

- Restoration of saltpeter artifacts
- Insect herbivory in burned and unburned plots
- Identification of northern long-eared bat maternity and day roost sites
- Dye traces in developed area of the park
- Bio-accumulation of mercury in dragonfly larvae
- Determining cave water discharge rates
- Identifying and mapping CCC camp artifacts
- Photo-documenting historic sites in the cave
- Exit counts at Rafinesque's big-eared bat maternity roost
- Foraging of bats in burned and unburned plots
- Tick population and disease study
- Insect pollination and herbivory of 9 native plant species

New Interns

MCICSL welcomed 2 interns this month.

- Victoria Decker is a Campbellsville University student. She will spend 2 weeks with us working on a variety of projects during her internship. Her goal is to learn about and experience the depth and breadth of research and resource management projects at MACA.
- Michelle Hsu is a Northwestern University student. She will spend approximately 8 weeks with us. She will also work on a variety of projects. Some of the areas her internship will focus on include hydrology, microbiology, and producing educational videos of research projects.

In the News:

NPS Southeast Region Weekly Centennial Digest – May 14, 2015
Edmonson County Middle School's wood frog and salamander egg mass surveys at Mammoth Cave National Park were one of 3 citizen science projects highlighted in the region's centennial newsletter.

Barren County students help collect dragonfly larvae at Mammoth Cave National Park -
Glasgow Daily Times, June 11, 2015
http://www.glasgowdailytimes.com/news/barren-county-students-help-collect-dragonfly-larvae-at-mammoth-cave/article_2c611b98-10bd-11e5-b26c-77c65708438f.html

We have a new Facebook page!
Follow our activities on social media.
https://www.facebook.com/pages/Mammoth-Cave-International-Center-for-Science-and-Learning/842046972539082