

Fall Newsletter 2017

Director's Update

In many ways, our work at the Watershed Committee of the Ozarks is about stewardship. We are stewards of our sponsors' and investors' resources, of our volunteers' time, of the Watershed Center, of water, and ultimately of the earth. As fall commences and the year draws to an end, it's a good time to reflect on some of our stewardship related activities here at the Watershed Center.

With the help of the Missouri Department of Conservation, we recently completed a revised Forest Stewardship Management Plan which will guide our land stewardship activities at the Watershed Center for years to come. This plan is an extension of our mission and should steer us toward long-term ecosystem health and resilience, improve the aesthetics of the Park, and demonstrate the "best practices" we implement to others. We do this all in hopes these practices will spread. The plan divides about 45 acres of the park into 9 different units. Each unit has recommendations to help us reach the management goals.

Through the Little Sac Restoration and Improvement Project, we were given the opportunity to work with landowners to improve grazing systems and soon will be able to "heal" a section of stream between Fellows and McDaniel Lake. On a nearby property, we are revisiting and restoring the agricultural demonstration area which will add to our ability to showcase stewardship in ways which benefit soil, water,

plants and animals, and farmers.

The seeds of stewardship for the next generation are continually sowed at the Watershed Center. Students and volunteers have been learning about low-impact development, green building, participating in water quality monitoring, removing invasive species, and harvesting seeds. It is our great hope that we will have the opportunity to interact with students in the area several times before the end of their school careers. As our capacity continues to build and numbers of field trippers continues to grow, that hope is closer than ever to being realized.



Overlook at VWM Park Photo Credit: Mark Bower

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City Utilities of Springfield Greene County City of Springfield

Projects Update

Little Sac Restoration and Improvement Project

Watershed Committee of the Ozarks was awarded a subgrant agreement from the Missouri Department of Natural Resources on April 1, 2014 for the Little Sac Restoration and Improvement Project. On April 1st, 2016 a grant amendment was awarded bringing the total grant funding to \$360,062 with a required \$205,785 in local match. The goal of this project is to improve the drinking watershed for Springfield and Greene County area by implementing best management practices (BMPs) that will reduce nonpoint source pollution.

Since the start of the grant, several projects have been completed including the installation of five prescribed agricultural grazing systems, the installation of three bank vegetative buffers strips, riparian corridor improvements, and continued



An eroding streambank and site of upcoming restoration work

collection of water quality data at five locations in the watershed. These projects are made possible with our grant partnerships with City Utilities of Springfield, the Greene County Soil and Water Conservation District, and the Missouri Department of Conservation. All of these installed practices will help to improve water quality, decrease soil erosion, and improve aquatic life.

On November 6-8, the Watershed Committee will host a 3-day hands-on workshop to restore and stabilize a section of eroding streambank on a 300-foot section of the Little Sac River. Workshop attendees will assist in a restoration project using techniques such as Longitudinal Peaked Stone Toe Protection, an engineered floodplain bench, unrooted live pole plantings, vegetated and curved keys, and rooted stock plants. The workshop instructor, Dave Derrick, is a Potomologist and Stream Stabilization Specialist with River Research & Design, Inc. from Vicksburg, MS. Mr. Derrick has over 20 years of river restoration experience, including 35+ years of experience as a Research Hydraulic Engineer with the Corps of Engineer's Engineering Research and Development Center's Coastal & Hydraulics Laboratory (ERDC-CHL). This will be a unique hands-on learning opportunity! To find the informational flyer and sign-up for the workshop visit: http://watershedcommittee.org/wp-content/uploads/2017/10/Stream-stabilization-workshop Nov2017.pdf or call

(417) 866-1127.

Stacey Armstrong Smith, Projects Manager

Partnership Pays

Recently WCO was awarded the Partnership and Philanthropy award from the Missouri Conservation Heritage Foundation (MCHF). MCHF advances the conservation and appreciation of forest, fish, and wildlife resources by applying financial resources to the priorities of the Missouri Department of Conservation in collaboration with donors and other partners. WCO was honored to receive this award during the conservation related events surrounding the opening of the Johnny Morris Wonders of Wildlife Museum.



WCO receives Partnership Award

Mike Kromrey, Executive Director

Watershed Center Update

Greener Greenspaces

Over 550 7th grade students from Carver, Pleasant View, and Reed Middle Schools participated in a project-based learning unit titled Greener Greenspaces. Students made four field trips to the Watershed Center where they participated in a variety of activities to learn the value of clean water, common sources of water pollution, and ways to prevent water pollution. Teams of students used this information, along with independent research, to create their own proposals for possible improvements or Greener Greenspaces around their schools. Students worked with a targeted budget of \$500 for their project designs. As a capstone to the learning unit, the teams will share their proposals with fellow classmates. Springfield Public Schools will then fund the implementation of the top proposal as selected by a review committee.



Controlling the spread of invasive species.



Investigating the effects of pollution on lake life.

STEAM Residency

This fall we kicked off an exciting new program in collaboration with the Springfield Art Museum. The STEAM (Science Technology Engineering Art & Math) residency explores the overlap between science and art as students practice their observation and documentation skills through journaling. Participating schools received two classroom visits, by both watershed and museum staff, and made field trips to both the Springfield Art Museum and the Watershed Center. Using skills and practices drawn from both disciplines, students explored and documented diverse Ozark ecosystems.

Jeff Birchler, Watershed Center Coordinator



Kate Baird introducing journaling to students.



Students listening to nature



2400 E. Valley Water Mill Rd. Springfield, MO 65803

Research at the Watershed Center

Research is being conducted on the prairie plot located near the C. W. Titus Education Facility at Watershed Center and Valley Water Mill Park. Amanda Coleman, a graduate student at Missouri State University in Springfield, MO, is working in conjunction with her advisor, Dr. Alexander Wait, to measure the strength of plantpollinator networks for her thesis entitled "Pollinator Networks in Established Urban Prairie Units Compared to Rural Remnant Prairie Units." Urban prairies are a vital green space and are becoming more common; however, the pollinator communities are not well documented, and the "success" of these small prairie units within the urban landscape are not known. By comparing pollination networks in rural and urban prairies, including an extensive evaluation of a 1 km area around the prairies ("habitat matrix"), the project should provide managers of urban prairies information on the current status of the pollinator populations in their units. This will allow them to make recommendations for management practices.



A pollinator favorite at the Watershed Center