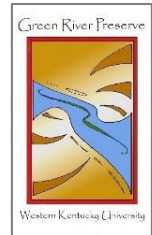




WKU Green River Preserve

News and Events Postings for 2014

www.wku.edu/greenriver/



December 2014

News and Events

Happy Holidays! We're thankful for you, and for all you do with and at and for the Preserve. Thank you for being part of our community. Here is a plateful of recent events, and for dessert, some upcoming events and plans. We've been busy this fall with classes, research, and community events.

Community -

At the end of September we invited everyone to celebrate the [10-year anniversary](#) of the opening of the Preserve. The historic Gardner House and its archaeological site were open for tours, lots of people took canoe trips or splashed in the Green River, and there was plenty to eat at the field house at lunchtime. The speakers were inspiring: Superintendent Sarah Craighead, Colonel Aaron Barrier, Dr Richie Kessler, Dr Albert Meier, Victoria Peters, Kristina Medeso, Dr Darlene Applegate, Dr Terry Wilson, Dr Gordon Baylis, and WKU President Dr Gary Ransdell. Here's an excerpt by one of our students, Victoria Peters:

"The Preserve is not just a piece of land but a symbol that represents growth and the pursuit of knowledge. More importantly to the students that work here it represents our passions, aspirations, and the potential of our generation.... When I am in the Preserve and I hear the sounds of the birds and the insects on a summer day I heard a symphony more beautifully composed than any created by man, and when I look around and see the rolling hills and the Green River rushing past me I see a landscape more perfect than any painted masterpiece. I am awed and humbled by the beauty that is surrounding us and in moments like these I fully appreciate that opportunity that I have been given to come and conduct my research here. Nothing inspires me more as a scientist and as a human being than when I am in the field and I feel the soil under my feet and the bark of the trees under my hands and know that what I am doing could help others." You can read the full text of [Victoria's speech here](#).

During the weekend of November 7-9, we were honored to host wounded veterans for a fifth annual deer management hunt. This activity helps control the deer population and prevent overbrowsing, and we're grateful to have the opportunity to provide these veterans "a place of rejuvenation...in one of Kentucky's wild places" (Chuck Reed, Director of Kentucky Wounded Heroes). Thanks to Chuck and to all the volunteers and veterans who made this happen, especially Garland Logsdon and the Horse Cave Volunteer Fire Department, Dr Mike Stokes, biology students, and many other volunteers. Something extra special happened that weekend - a veterans memorial flag pole and stone tablet near the GRP entrance were dedicated. Thanks to the initiative and energy of Curtis McDaniel for envisioning and organizing this honor. All materials and labor were donated: Modern Woodmen of America was a major donor for the project, and many others as well contributed labor, materials, or funds. A News-Herald [article with photos is here](#), and [another photo here](#).

Classes -

This fall has seen visits from WKU classes in environmental education, advanced ecology, entomology, wildlife management, aquatic ecology, and vernacular architecture; an NKU geophysics class; a Lindsey Wilson College environmental science class; and visits from Hart County High School science students and teachers.

This is a little of what REALLY went on during those visits: teachers discovering how best to inspire students outdoors; students looking at how forest composition changes in response to a gradient of soil moisture; capturing and identifying

a huge diversity of insect species and communities from different habitats; figuring out how to best manage populations of deer (abundant now, but nearly extinct 100 years ago); canoeing and wading in streams to see and better understand mussels, fish, crayfish, stream insects, algae, and river dynamics; investigating 200 years of human activity by sequencing the changes in a brick house; using geotechnical equipment to see underground into the soil and rock of earth history; comparing human-environment interactions now and in the past; and discovering how to ask and answer science questions while observing plants and animals in the window of an autumn transition.

Thanks to every professor, teacher, and student engaged in the process – you make the magic happen.

Conservation and Research –

A bat survey at the new Lawler Bend tract, led by Zack Couch (DOW Wild Rivers), was featured on a WKU PBS segment – you can [see an 8-minute video clip here](#). A thorough plant survey of the new Lawler Bend tract has just been completed by Dr Julian Campbell. Removal of exotic plants continues. Endangered black sandshell and pink mucket mussels grown out this summer at the MCNP mussel rearing facility, hosted at the Preserve, reared under the guidance of Dr Monte McGregor (KDFWR), were released into the Green River.

We're thrilled that the Preserve is a place for research in multiple disciplines. Here are some of the master's degree students who have recently finished or are currently working on research projects that involve the GRP (links given to theses already available online). We're very proud of these students, and are grateful for their formal and informal advisors.

Biology: Nicholas Levis studied the [interactive effects of UV-B exposure and glyphosate herbicide on salamanders](#). Elizabeth Malloy compared food web dynamics along a longitudinal gradient of the Green River. Gregory Barren is working on comparing diatom communities in the Green River, and Megan Grandinetti is looking at how decay processes in streams for tree leaves and algae affect stable isotope ratios. Last year David Kem finished a study of the [effects of fire on spring-flowering herbaceous plants](#). Matthew Buchholz has just begun a study of parasites of small mammals (mice and voles) at the GRP. An undergraduate honors student, Victoria Peters, is studying influences of a buried karst valley on the growth of tree saplings in the Green River floodplain.

Geography and Geology: Kegan McClanahan recently completed a study of [carbon cycling dynamics in the Green River](#), and Laura Osterhoudt studied [weathering of carbonate rock and water chemistry in the Green River basin](#); these master's thesis projects included the GRP as a study site or reference point.

Folk Studies and Anthropology: Nick Schaedig is earning his master's degree in Folk Studies and Anthropology with his current work on restoration of the historic Gardner House; Virginia Siegel recently finished her master's while working on the house as well.

Upcoming events -

Photos! We're thinking that this winter could be a good time to get our photos organized and maybe uploaded to the WKU digital archives online so that they're permanently available for future reference. If you have GRP photos of any sort you'd be willing to share, please email them to ouida.meier@wku.edu or send us a link to your flickr, photobucket, google+, dropbox or other cache, or we can give you a place to deposit them. Details about location, date, people and critters in your photos would be great. If you're working on a project with repeat visits over time, please think about taking a series of photos each visit from the same vantage point. We'd love to feature them - seasonal change is fascinating. Video clips are also welcome. What's merely interesting now could be important comparison information in 10 or 50 or 100 years.

In January we'll be organizing a couple of stargazing trips to see winter constellations and the Milky Way ([let us know](#) if you're interested). Dr Andrew Wulff's field geology students will spend a couple of days mapping the geological layers of the GRP. In spring Dr Bella Mukonyora will host a week-long retreat with an interfaith group of religion scholars focusing on responses to and connections to place. Grad student Nick Schaedig will teach a late-May course on field methods in

historic preservation at the Gardner House. If you'd like to teach or take a class at the GRP this summer, or want to propose a project, [let us know](#) - we're making plans for formal and informal opportunities!

With thanks for you, on behalf of the whole GRP community,

Cheers,

Ouida

Dr Ouida W Meier, WKU GRP Director for Management, Education and Outreach

News and Events – Sept 27, 2014

FIRST – please mark your calendars for a celebration on **Saturday, September 27, 2014!** This event is to celebrate all that YOU and others have done for, with, to, and at the Green River Preserve! This year marks the 10th anniversary of the Preserve's opening in 2004, and we would love to have your company in celebrating all you have done at the Preserve, and in getting ready for the next decade we will share. Shuttle service to the Field House from the entrance begins at 8:30 am, the historic Gardner House will be open for tours and questions, remarks from invited speakers will begin at 11:30 am, and a casual lunch will follow. Reserve your spot for an optional canoeing trip at 9:00 am or at 1:00 pm. Please help us be ready for you - RSVP at <http://wku.edu/greenriver/celebration.php>. Thanks!

Big news – we recently closed on a small 16.6 acre tract addition, thanks to the WKU Research Foundation! This was a one-time-only purchase by the Foundation. The area is ideally suited for and will serve as the location for a future research and education campus at the Preserve. This brings the total size of the Preserve to 1,520 acres. We are very grateful for this addition and excited about the potential new prospects associated with it.

It has been a busy summer at the Green River Preserve. We were able to bring several groups of prospective WKU students out to the Preserve for day excursions with canoeing, including the GEAR Up program at WKU with students from all over Kentucky (thank you to WKU Enrollment Management for donating additional life vests!) and a Jr ROTC group from Allen County - Scottsville High School (fastest. canoe loading. ever.) as well as some other Friends of the Preserve groups. We definitely hope to see these students at WKU and at the Preserve in the future - opportunities for students at the GRP keep growing, especially for bright, hardworking students like these!

In conservation news, Dr. Mike Compton from the Kentucky State Nature Preserves Commission along with volunteer scientists from other agencies and universities conducted a fish and mussel species assessment along a section of the Green River protected by the Preserve. In just that section, the survey found 50 species of fish, 31 live mussel species (the average square meter of riverbottom held 18 individual mussels and 7.4 different mussel species!), plus a population of endangered spectaclecase - VERY exciting. The mussel rearing facility at the Preserve, directed by Dr. Monte McGregor of the Kentucky Dept of Fish and Wildlife Resources and run jointly by KDFWR and Mammoth Cave, has been busy rearing endangered species of mussels this summer, including pink muckets and black sandshells, to release back into the Green River - that work is a wonderful conservation success story for Kentucky aquatic wildlife.

This summer Dr. Darlene Applegate, a WKU archaeologist, led students in her Archaeology Field Camp course in the careful work of excavating and documenting the site where the actual bricks for the historic Gardner House at the Preserve were made over 200 years ago. The kiln allowed some of the bricks to be fired specially to produce a shiny black glazing along one edge, and this was incorporated into the Flemish Bond construction design of the house - a pinnacle of engineering for strength and aesthetics two centuries ago in Kentucky.

We've made excellent progress on Field House repairs this summer: the bottom floor still needs some work but will be much more suitable for classes than previously. Thanks to everyone who has cheerfully worked on, or put up with, less-than-finished spaces. We're hoping to add mini-posters featuring highlights of people's research, education, and conservation efforts. Kids (of all ages!) this summer have loved the pleasure of simply looking at stuff under moderate-magnification microscopes— snake skins, feathers, insects, flowers – the detail revealed there is always awe-inspiring.

We had our first wedding reception at the Pavilion - 150 guests! - it was beautiful, and the event creators (and happy couple) Jay and Amber Cottrell gave wonderful attention to detail (votive candles floated in glass cylinders of water with river rocks; one canoe in a wooden stand held iced bottles of water and soda, and another held wedding presents from guests). The Pavilion had strings of little white lights, adjacent tents with tables and chairs had "moon lights," and the DJ inspired some of Hart County's best dancers - who knew the concrete floor of the Pavilion was so good for dancing?

We were deeply honored to host Kentucky Wounded Heroes and their families for two canoeing weekends in August. Much of what we do at the Preserve runs on "sweat equity" contributions from many talented and hardworking individuals. We consider these wounded warriors to have invested ultimate sweat equity in their willingness to serve, and for what that service has cost them. We thank them, and their families, for their service. The work of many friends of the Preserve, including Chuck Reed, Kerry and Curtis McDaniel, and volunteers from the Hart Co. Volunteer Fire Dept, make it possible to host these families.

We're now watching plants and animals at the Green River Preserve shift from summer into autumn modes of being. We're continuing long-term research studies and conservation projects, have new graduate students and research projects starting at the Preserve, new classes of students visiting and doing field work, and new opportunities for K-12 teachers and students. It's a very exciting time of work, and we'll let you know more about all of it in our next news email. For now, we hope to see you on the morning of Saturday, September 27th! Don't forget to register at <http://wku.edu/greenriver/celebration.php>.

Thanks for being part of the WKU Green River Preserve!

April 18, 2014 - Thank You for a Successful Volunteer Work Day at the Preserve!

Thanks so much to those who were able to turn out for the Volunteer Work Days last weekend. Despite competing activities and obligations, we had a strong core of hardworking, efficient, and cooperative people – who turned out to have truly remarkable skills! - working to solve the problems that developed at the field house this winter from flooding issues. We deeply appreciate the labors of Gordon Baylis, Danielle Brown, Carl Dick, Sonya Dick, Blaine Ferrell, Pat Kambesis, Albert Meier, Quinn Rockrohr, and Mike Stokes. These individuals moved the field house several important milestones closer to recovery of full functionality. We're incorporating improvements as we go, and think when we're done that the ground floor will be better suited for classes and the top two floors better suited for living space than ever before.

People painted cinder block with drylock, repaired plumbing, hauled trash and construction debris, put up baseboard and paneling to refinish a bathroom, insulated windows, repaired screen doors, installed a new gutter drain, put up bulletin boards, upgraded spaces with newly donated lamps and a table (thanks so much to Cindy Graham and Nancy Givens), supported damaged ceiling, cleaned rooms and vehicles, replaced thresholds, and installed a keyless locking system. It was a remarkable amount of effective work that really highlighted the basic proposition that the WKU Green River Preserve is a collaborative endeavor. Thanks again to these wonderful people for their partnership. Certainly there is more to do, and for some longer jobs (e.g., painting) we made a great start and will need to finish. There are frequent incidental opportunities to help – [let us know](#) if you want to hear about them.

The progress on the field house means we can go ahead with holding three one-week sessions of field camp this summer for area students entering grades 4-6, 7-9, and 10-12 (one session for each age group). These will be scheduled in June, mostly day trips with one overnight, and will be interdisciplinary – we want to cover a range of topics from natural history and science to cultural history. If you are potentially interested in participating, please contact ouida.meier@wku.edu. Feel free to forward this to others who might be interested, or to pass on your recommendations.

Thanks again for your collaboration in Green River Preserve endeavors.

April 12, 2014 - Volunteer Work Day at the Preserve! We've scheduled a volunteer work day at the [Green River Preserve](#) for Saturday, April 12th. There will be plenty to do, both outdoors and indoors, if you can come. This winter was very tough on the field house, and we need your help!

Please email ouida.meier@wku.edu so we know you're coming!

Details:

The work day will run from 9am-4pm; join in for whatever part of that you can. Transportation for the day from WKU is available, and we will provide simple sandwich makings at lunchtime. Please contact us so we can plan for food; ask if you'd like a map and driving directions, a ride from WKU, or to let us know about any particular skills you may be able to offer or tools you may be able to bring for the day (please label anything you bring so it goes back home with you!).

We may: paint cinder block, repair plumbing, haul trash and construction debris, put up drywall and paneling, replace wooden steps, caulk windows, repair screens, replace deadbolts, replace felt on chair and table legs, haul and assemble metal outdoor table and chair sets, organize the barn, deep clean the field house.... We'll prioritize based on your skill set, so let us know what you can help with.

If you're doing spring cleaning and are getting rid of items, we could use some small bedside tables / chests, table lamps and floor lamps, and outdoor furniture (esp. stackable chairs for porch and balcony).

We hope you feel needed - you certainly are! - and we hope you have time to help. Let us know if you want to help but can't make this work day - we'll let you know about future opportunities. Thanks so much for your help!

Want to receive occasional Green River Preserve news? Email ouida.meier@wku.edu. Thanks for your interest!