



2007 Eastern Regional Wetland Restoration Institute (September 9-14, 2007)

FINAL REPORT

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The Eastern Regional Wetland Restoration Institute presented individuals with the skills needed to restore wetlands that look and function like natural wetlands. The advanced class was held September 9-14, 2007 in Olympia Springs on the Daniel Boone National Forest in Kentucky. Fourteen instructors worked alongside 26 participants to provide the highest quality instruction possible. Based on the results of the 2006 Eastern Regional Wetland Restoration Institute, the majority of this year's graduate can be expected to initiate or to improve the wetland and stream ecosystem program in their community.

This was an intense, 6-day, 13-hours per day, field-oriented training session that directly involved participants in the use of highly successful and practical techniques for wetland restoration. Students walked over drained and filled wetlands, met and talked with individuals who have drained wetlands, examined restored wetlands, and became involved in the actual restoration of wetlands in forest, fields, and at schools for environmental education. They learned how to build wetlands that will require little, if any maintenance, and how to renovate wetlands to provide greater benefit to plants and animals.

Participants attended from the following states:

- 1) Arkansas
- 2) Florida
- 3) Kentucky
- 4) Mississippi
- 5) Missouri
- 6) North Carolina
- 7) Tennessee
- 8) West Virginia

And they represented the following agencies and organizations:

- 1) Anderson (Tennessee) County Schools
- 2) Lexington-Fayette County, Kentucky
- 3) North Carolina Division of Water
- 4) Skybax Ecological Services, LLC
- 5) The Nature Conservancy
- 6) Third Rock Consultants, LLC
- 7) USDA Natural Resources Conservation Service
- 8) US Forest Service
 - a. Cherokee National Forest
 - b. Daniel Boone National Forest
 - c. Mark Twain National Forest
 - d. Monongahela National Forest

- e. Ouachita National Forest
- f. National Forests in Mississippi

We thank the following agencies, organizations, and businesses for helping to make the 2006 Eastern Regional Wetland Restoration Institute possible:

- 1) Agri-Drain Corporation
- 2) Association of State Wetland Managers
- 3) Copperhead Environmental Consulting, Inc.
- 4) East Kentucky Power Cooperative, Inc.
- 5) Eastern Kentucky PRIDE
- 6) Four Seasons Christian Center
- 7) FMSM (Fuller, Mossbarger, Scott and May) Engineers, Inc.
- 8) Kentucky Department of Fish and Wildlife Resources
- 9) Kentucky Transportation Cabinet
- 10) Sheltopee Environmental Education Coalition
- 11) University of Kentucky Tracy Farmer Center for the Environment
- 12) University of Louisville Stream Institute
- 13) US Environmental Protection Agency
- 14) US Forest Service San Dimas Technology and Development Center
- 15) US Forest Service, Daniel Boone National Forest
- 16) USDA Natural Resources Conservation Service

Tremendous interest was expressed in this training by more than 60 individuals who submitted applications for the 26 openings that were available this year. Funding for training was practically non-existent for agency personnel this year, so the availability of 20 scholarships was critical to participation. The cost of the training for those who did not receive financial aid, including room and board for the week, was a bargain, at only \$300.00 per participant.

Evaluations

The class evaluation for the 2007 Eastern Regional Wetland Restoration Institute was developed by the University of Kentucky where students provided quantifiable, anonymous reviews. The numbers given are the average of the 25 responses received, from 5 = “*Very informative*” to 1 = “*Not at all informative.*” Participant comments follow each numerical rating.

Examining Wetlands = 4.80

- I loved the hands-on getting into wetlands!
- Great introduction to wildlife flora and fauna
- Good warm up for the course
- Good coverage of most types of wetlands, natural and created
- An excellent review

History of Drainage = 4.80

- Of all the presentations, I found this one most valuable.
- This history gives me the justification we will need to get support for wetland restoration
- Look at landscape with a different view
- I felt this was a very important aspect.
- Eye opening
- Great basis for the rest of the week
- Historical perspective was valuable
- Knowing the past helps you see the present or future
- Amazing, this is something I didn't know much about
- Excellent review

Identification of Drained Wetlands = 4.56

- I definitely will be picking up on this now.
- I enjoyed hearing the stories first-hand from the people who drained the wetlands
- Helped me learn what to look for on the ground
- Very good to see actual drainage systems and hear how they were installed.
- I never knew about drain tiles and “lands”
- It was good to look at past land use practices
- Appreciate that farmers were not criticized for their reasons behind draining the land
- Love the old folks
- Puts perspective on just doing what you need to do to live on the land
- Excellent, especially Merlin's place
- I was impressed with the landowners and their knowledge in draining
- Always nice to listen to the older generations

Permitting, and the Wetland Reserve Program = 4.48

- Eye opener
- Not the most exciting topic, but Mike did a very good job with it
- Very effective presentations
- Good info I had not been exposed to
- Learned a lot that I did not know and needed to

Wetland Restoration on a Forested Ridge-top = 4.72

- Great to see how things that could go wrong and how they were dealt with.
- Great real world example
- Real situational awareness
- See much wildlife using this
- It helped us see how to deal with problems and make the best of it
- Showed steps to complete projects on our own
- Good to see from start to finish
- Great experience of what happens during implementation
- Useful to see what you can do when things go “sideways”

- Real world
- Liked the hands-on
- A very good educational experience of what actually happens in the field

Bat Use of Wetlands = 4.64

- Enjoyed this very much
- Reflects importance of wetlands to our bats
- Very knowledgeable instructors
- I thoroughly enjoyed mist netting
- Fun and interesting
- Had never done anything like that before
- Good experience
- Excellent
- Very cool
- Loved it
- Fun stuff
- Please help James Kiser transfer from slides to PowerPoint
- Would have liked more information on other T & E species that are wetland dependent

Wetland Establishment with Synthetic Liner, Rodburn Elementary School = 4.72

- Outstanding hands-on training
- Couldn't say enough good things about it, what a wonderful opportunity for the children
- Helps a lot with understanding and confidence
- Opens many potential projects for me
- I liked the interaction with the contractor, FS people, and kids coming out
- Beautiful connection with our outdoors and our children's education
- Interesting to see how quickly a small but usable wetland can be installed
- I really learned something new
- Great experience to be part of construction and seeing the whole process develop
- Great hands-on experience enabling students to be involved in the entire process
- Showed the steps schools are headed

Environmental Education and Wetlands = 4.64

- Very inspirational to do this back home
- Great, glad you did this.
- Like to see more schools use them in the future, excellent!
- Ideas galore
- Important for our young kids to learn early
- Very inspiring
- Great stuff, I love environmental education

Building a Wetland (in a box) = 4.68

- Great demonstration and learning tool, fun as well.
- Reinforced the point, never assume anything
- Fun and practical way to put what we learned to use in a safe and controlled setting, baby steps
- Good hands-on experience
- Excellent test
- Super idea
- Helped pull the week together
- Very good teaching tool

Waste-Water Wetlands = 4.52

- I want to build one
- Wish I would have known about this earlier
- Makes the wildlife idea “hit home”
- Seems like we should all be developing this on our land
- Had not seen this before, interesting
- It would be good to hear from a health department representative
- Wonderful demonstration how we can help our environment
- Very practical and tied to personal aspect
- Inspired me to plant native plants in my leach field

Large Scale Wetland Restoration = 4.60

- Restoration with actual costs!
- Could add more in future years
- Learned a lot about mitigation at the 50 acre site we visited
- Curious to see how things work out
- Enjoyed discussion about mitigation projects
- It was interesting to use what we had learned to critique what they were doing on that site

Food and Lodging = 4.68

- Best food I’ve ever had at training . . . hate to leave!
- The food was outstanding and the cooks were a joy to talk with.
- Excellent facilities
- Wonderful meals
- Food was great, thanks to the cooks; they know how to season food
- Lodging was good
- I will have to move on to Weight Watchers when I get home
- Great food
- Four Seasons needs to fix their septic system
- The rooms were nice and comfortable
- Good food, lunches were sub par
- Food was fabulous, lodging was good

Participant Summary of the *Overall Experience* = 4.92

- One of the best trainings I have attended
- This was great; I'll definitely recommend it to others.
- Can't wait to get started building myself
- Best one I've attended
- Overall great experience
- One of the best trainings I have ever been to
- I will recommend it to many
- May it last year after year
- Keep up the great work.
- More bathroom breaks
- I will recommend this to others I work with
- Coming into this my only concern was spending a week away from the office near the end of the fiscal year, but I am so glad I did.
- This training was so beneficial to me as a biologist
- Great job, one of the best trainings I have ever been to
- I have learned and will definitely be able to apply the applications learned
- Best training in a long time
- I would recommend this to anyone interested in wetland restoration
- Very good, new perspective for me
- This was excellent overall, keep it up
- Hands-on made the difference
- I would rank this in the top three of the Forest Service trainings I've ever attended, and I've attended a lot!
- Great job!
- Thanks for allowing me to come
- Would recommend others to attend
- I feel much more comfortable in discussing wetlands with landowners and constructing them.
- The leaders have been excellent!
- I'll feel more comfortable in the field when addressing wetlands.

The highly successful techniques for restoring wetlands demonstrated at the Eastern Regional Wetland Restoration Institute are not taught in any other training session we are aware of across the United States. When followed, these practices can insure that wetlands constructed will develop their planned hydrology, and provide for a diversity of plants and animals.

The largest surprise to several of the instructors this year was the belief many of the participants brought with them that only those sites with hydric soils and remnant hydric plants are suitable for wetland restoration. Fortunately, during the week we discussed how fields with hydric characteristics represent partially drained wetlands, and that techniques are available for restoring wetlands in fields and forests that are completely drained.

2008 Eastern Regional Wetland Restoration Institute

The 2008 Eastern Regional Wetland Restoration Institute is planned for September 7-12, 2008 at the same location in Kentucky. The class will be involved in the construction and planting of at least two wetlands, one will be a large site in a riparian area to be restored by using the deep-coring method; the second will be a small wetland that will be created at a school by using a synthetic liner.

Sincerely,
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