## AGENDA

Monday, March 20, 2023

12:30 pm: Welcome by Stephanie Bishir and Emily Hodapp at Meredosia NWR headquarters2219 Beach Rd, Meredosia, IL 62665

12:45 pm: History of Wetland Drainage presentation by Tom Biebighauser

1:45 pm: Illinois Chorus Frog presentation by Mark Alessi

2:45 pm: *Wetland Restoration Techniques* presentation by Tom Biebighauser Springs and wetlands have been altered by farmers across the Midwest for generations. This presentation shows the steps necessary for restoring naturally appearing and functioning wetlands at a reasonable cost.

3:45 pm: Adjourn

5:00 pm: Optional group dinner at Leo's Pizza (meal not provided) 230 S Main St. Jacksonville, IL 62650

# Tuesday, March 21, 2023

8:00 am: Meet at wetland construction site Introduction to site and overview of sand prairies Construction begins on wetland

- Safety discussion
- Discussion with heavy equipment operator about building the wetland
- Plastic ribbons are used to mark trees and shrubs to be removed by heavy equipment
- Trees and shrubs salvaged for later use
- Topsoil is removed and saved for later spreading in the completed wetland
- Nonnative plants are removed and buried
- Clay texture soil beneath the surface is exposed and harvested
- A basin for wetland is excavated and lined with clay texture soils in layers that are compacted

12:00 pm: Lunch outdoors (provided)

12:45 pm: Construction continues

5:00 pm: Adjourn for the day





## Wednesday, March 22, 2023

8:00 am: Meet at wetland construction site

Construction of the wetland continues

The following hands-on wetland design activities will take place during construction when there is time:

- Completing a Wetland Design Form for a site
- Selecting a place to build a vernal pond
- Using a tile probe to check for groundwater
- Using a soil auger to determine soil texture by layer
- Marking the perimeter of a wetland
- Mapping using a smartphone or iPad

12:00 pm: Lunch outdoors (provided)

12:45 pm: Construction continues

The following hands-on activities will take place during construction when there is time:

- Control of head-cuts using soil, rock, and wood
- Designing wetlands for rare species
- Maintenance of natural and constructed wetlands
- Use of survey equipment
- Soil texture analysis
- Native plant identification and establishment discussions

5:00 pm: Adjourn for the day

Optional group cookout at Meredosia NWR headquarters (food provided)







## Thursday, March 23, 2023

8:00 am: Meet at wetland construction site

Construction of the wetland continues

12:00 pm: Lunch outdoors (provided)

12:45 pm: Construction continues

4:00 pm: Field trip to visit Illinois chorus frog breeding wetlands to observe and listen to frog calls

6:00 pm: Adjourn

Friday, March 24, 2023

8:00 am: Meet at wetland construction site

Construction of wetland continues

- Topsoil is spread in and around the wetland
- Naturally appearing points and shallow bays are shaped around the edges of the wetland with pits and mounds being shaped in the wetland
- Compacted soils are treated using the rough and loose technique
- Seed and mulch
- Selectively replace vegetation/woody debris for wildlife habitat

12:00 pm: Group photograph taken at the completed wetland!

Adjourn







### Notes

Registration fee covers food costs for lunches and one dinner.

The times listed are estimates. The construction of the wetlands may go faster or slower than planned.

Please dress for being outdoors! Participants are recommended to bring water bottle, rubber muck boots, hard hat, gloves, and protective eye wear.

Plan to attend the training and work, even if there is rain. Work and training will be temporarily suspended for safety if lightning is detected.

### **Emergency contact numbers:**

Stephanie Bishir: (309) 267-4096 Emily Hodapp: (217) 341-9176

### Instructors

Primary instructor, Tom Biebighauser, has restored over 2,700 wetlands and streams across Canada, in 26-States, New Zealand, Puerto Rico, and Taiwan since 1979. Tom designs and builds over 100-wetlands and streams each year. He has developed highly effective techniques for building naturally appearing and functioning wetlands for wildlife, fish, and endangered species. Having built over 1,400 dams, he has since decommissioned over 300 dams. He retired in 2013 after working 34-years for the US Forest Service as a Wildlife Biologist, where he initiated wetland and stream restoration programs across the United States. Tom has served as an instructor for the British Columbia Wildlife Federation Wetlands Institute for 17-years, restoring over 250-wetlands and streams across Alberta and British Columbia since 2003. He instructs a Graduate-level class on Wetland Design for Engineers at the University of Louisville Speed School of Engineering, as well as classes for the British Columbia Institute Technology. Tom has developed highly effective and low-cost techniques for building wetlands and streams for rare species across North America. The habitats he builds require little, if any, maintenance and do not involve the use of diversions, dams, dikes, pipes, or pumps. Tom has written 4-books about wetland restoration and has received 44-awards for his outstanding contributions.

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