

WETLAND CONSTRUCTION TRAINING

October 7-8, 2017

Cooper Farm
Ball State University
Muncie, IN

This hands-on restoration workshop is designed for individuals who would like to learn how to use practical, low cost techniques for building wetlands. You'll learn how to design and build wetlands that specifically provide habitat for mid-west amphibians. Attendees will discover how to select locations for building wetlands, test soil texture, choose appropriate construction techniques, work with heavy equipment operators, and establish native flowering plants. Contractors will be operating a large excavator to build a large wetland during the weekend. Lectures will be offered in the evening on the history of wetlands in the Midwest and the principles of wetland construction.

Primary instructor Tom Biebighauser has restored over 1,900 wetlands in 23-States, Canada, New Zealand, and Puerto Rico. He teaches practical wetland restoration workshops around the world where participants learn about restoration by becoming involved in the design and construction of naturally appearing and functioning wetlands for rare species. He's written 4-books about wetland restoration techniques, and instructs graduate-level courses on the topic at two-Universities. Tom has received 44-awards for his contributions to wetland restoration, including the National Wetlands Award for Conservation and Restoration in 2015.

You can view some of the wetlands he has built by visiting: <http://www.wetlandrestorationandtraining.com>



Please dress for being outdoors in hot and dry weather! And bring your own:

- water
- hard hat
- safety vest
- gloves
- protective eye wear
- leather boots
- lunch each day
- rain suit

For more information, please contact

Tim Carter: tccarter@bsu.edu

Phone: 765-285-8842

Workshop is limited to 40 participants total.

Cost:

BSU Students - \$75 (deadline to register Sept 16th)

Professionals - \$200 (deadline to register Oct 2nd)

Participants will receive a copy of "Wetland Restoration and Construction- A Technical Guide," (book) by Thomas R. Biebighauser at no charge.

Register: Online at:

https://commerce.cashnet.com/BALL_EMS022

Who Should Attend: Students, biologists, foresters, hydrologists, engineers, forest planners, and technicians. You do not need wetland experience to attend.

Accommodations: Participants are responsible for their own accommodations and meals. There are numerous hotels on the NW side of Muncie (near intersection of McGalliard and Bethel) that are in close proximity to the work site and BSU.

Cooper Farm Wetland Construction Training Agenda

For safety, all personnel attending the training must wear a hardhat and high visibility vest or shirt. We will have extra hardhats and vests you may wear if you don't have them (please notify us in advance).

October 7 (Saturday)

8:00am: Meet at the wetland construction site. The address is **5800 W Bethel Ave, Muncie, IN 47304**.

8:00am: Construction Begins on Wetland

- Safety discussion
- Introduction and orientation to the property
- Discussion with heavy equipment operators about building the wetland
- Plastic ribbons are used to mark the trees and shrubs to be removed by heavy equipment
- Some full-length trees and shrubs are stored out of the way to be placed in the finished wetland for wildlife habitat
- Wire flags are used to mark the perimeter of the wetland to be built after trees and shrubs have been removed
- The excavator is used to:
 - remove and save topsoil for spreading in the finished wetland
 - Dig a core trench and build a groundwater dam
 - Shape a naturally appearing wetland basin with pits and mounds

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

- Control of head-cuts using soil, rock, and wood
- Using wetlands to disable a ditch
- Spillway design considerations
- Maintenance of natural and constructed wetlands
- Use of survey equipment
- Soil texture analysis
- Native plant identification and establishment discussion

5:00pm: Break for Dinner

7:30pm: Lectures at BSU-Biology – maps and directions will be provided

October 8 (Sunday)

8:00am: Meet at the Wetland Construction Site.

Construction Continues with the Excavator:

- Shaping a spillway that will become a wet-meadow wetland
- Replacing topsoil
- Placing large woody debris
- Loosening compacted soils (rough and loosen technique)

Cooper Farm Wetland Construction Training Agenda

- Large and small woody debris are placed in the wetland
- Seed (wheat) is spread over exposed soil using a shoulder mounted bag-style seed spreader
- Straw is spread by hand over all exposed soil for mulch
- Plastic ribbons and wire flags are removed

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

- Control of nonnative plants
- Rough and loosen technique for controlling erosion and establishing native plants
- Designing wetlands for rare species
- Design wetlands that may be built in the future.

Notes:

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

Tom Biebighauser and other instructors will be onsite at all times providing technical guidance for building the wetland. A laser level, tripod, and rod will be used to monitor all phases of wetland construction.

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

Emergency contact numbers:

Tom Biebighauser

Cell Phone: 606-356-4569

Tim Carter

Cell Phone: 765-729-5453

