

Long Pasture Wildlife Sanctuary

Presents:

A Hands-On Wetland Creation Workshop for Professionals



Part of the Spadefoot Toad Restoration Project

Hosted by: Mass Audubon

- ❖ Center for Wetlands and Stream Restoration
- ❖ Partners in Amphibian and Reptile Conservation
- ❖ USDA Natural Resources Conservation Service

Dates: April 26 – 28, 2011

Location: 345 Bone Hill Rd. Barnstable, MA

About the Workshop: Isolated wetlands provide vital habitat to many species of amphibians, reptiles, birds, and mammals. Unfortunately, a majority of these ecosystems have been lost due to draining and filling throughout North America. These landscape modifications are now affecting recovery efforts for endangered species, reducing water quality, increasing flooding, and reducing ground water supplies. Fortunately, it's now possible to construct ponds and wetlands that look and function similar to natural wetlands, with desired hydro-periods, aquatic vegetation, and animal life.

This hands-on workshop is designed for individuals interested in learning how to use practical, low cost techniques for building wetlands for wildlife. Participants will see how wetland projects can be planned in forested and open areas, on vast expanses of public land, and even on school grounds to benefit plants, animals, and people. Attendees will discover how to select the best locations for building wetlands, test soils, choose construction techniques, work with heavy equipment operators, and establish native plants. Also, through a series of presentations, participants will learn about conservation efforts using reintroduction, translocation, and habitat creation techniques and learn about Eastern spadefoot toad conservation efforts on Cape Cod. A field trip to a nearby spadefoot population is included.

Who Should Attend: Biologists, foresters, hydrologists, engineers, technicians, educators, land trusts, and other non-profit and environmental org professionals.

Cost: \$175 which includes lunches on three days, hand-out materials, signed copy of the book *Wetland Drainage, Restoration, and Repair* by Thomas Biebighauser, and more!

Instructors:

Tom Biebighauser has restored over 1,300 wetlands in 16-States and 2-Canadian Provinces. He teaches practical, hands-on wetland restoration workshops across North America where participants learn about wetland restoration and drainage by becoming involved in the design and construction of naturally appearing and functioning wetlands. Tom has developed highly successful and inexpensive techniques for restoring and repairing wetlands on mined lands, steep slopes, mountain ridges, large valleys, timber sale areas, and at schools. He's written 3-books about restoring wetlands; *A Guide to Creating Vernal Ponds*, *Wetland Drainage, Restoration, and Repair*, and *Wetland Restoration and Construction - Technical Guide* (in press). Photographs showing the many wetlands Tom has restored can be viewed at: www.wetlandsandstreamrestoration.org

Ian Ives is the Director of Mass Audubon's Long Pasture Wildlife Sanctuary. He has a strong background in local wetland conservation and vernal pool protection. Ian is currently leading an Eastern spadefoot toad (*Scaphiopus holbrooki*) restoration project at Mass Audubon's Ashumet Holly Wildlife Sanctuary. This project involves the creation of a spadefoot breeding pool, the construction of which will be the centerpiece of this workshop.

Bryan Windmiller holds a PhD in biology and a Master's degree in Environmental Policy, both from Tufts University. He has worked as a consulting wildlife ecologist since 1987 and was the founder of an independent ecological consulting firm, Hyla Ecological Services, Inc. In 2006 – 2007, Bryan was a visiting scholar at James Cook University in Australia, where he studied the epidemiology of a fungal disease that has caused the extinction of amphibian species worldwide. Since then, he has work as an independent consulting ecologist, specializing in rare species conservation management and citizen outreach and education projects related to wildlife conservation.

Guest Speakers:

Brad Timm received his B.S. in Wildlife Biology at the University of Rhode Island, his M.S. in Wildlife and Fisheries Conservation at UMASS-Amherst, and is currently a Ph.D. candidate in the Wildlife and Fisheries Conservation program at UMASS-Amherst. While the majority of Brad's research has focused on the ecology and conservation of pond-breeding amphibians, he has also worked on research on coyotes, reptiles, sea ducks, and remote-sensing based landcover mapping methods. Brad's most recent research has involved the movement ecology and breeding habitat ecology of adult Eastern spadefoot toads.

Donald Liptack has 30 years experience working with land users, farmers and municipalities on water quality, sediment erosion control and wildlife habitat issues. He holds a B.S. from the University of Maine in Wildlife Management and a M.S. From Antioch New England University in Resource Mgt and Administration and is currently the District Conservationist for the USDA NRCS in Hyannis.

AGENDA
HANDS-ON WETLAND CREATION WORKSHOP
APRIL 26-28, 2011

Tuesday, April 26

9:00 a.m. Registration opens. Meet at Long Pasture Wildlife Sanctuary, 345 Bone Hill Road, Cummaquid MA.

9:30 a.m. Welcome and Introductions, Ian Ives.

10:00 a.m. Restoring Wetlands in Fields, Forests, and Urban Areas. Presentation by Tom Biebighauser.

11:00 a.m. Eastern Spadefoot Toad Restoration Project at Ashumet Holly W.S. Presentation by Ian Ives.

12:00 p.m. Lunch provided

1:00 p.m. Field Trip to Sandy Neck Barrier Beach, Sandy Neck Road, Sandwich MA

- Tour of spadefoot habitat, including wetland sampling and species identification, barrier beach ecology and the Sandy Neck spadefoot population. by Ian Ives and Nina Coleman, Sandy Neck Park Manager.

- Identifying historic impacts to wetlands by Tom Biebighauser.

4:30 p.m. Supper on your own

7p.m. Evening Presentations at Long Pasture Visitor Center

- Techniques for Restoring Wetlands Presentation by Tom Biebighauser.

- The Ecology and Conservation of the Eastern Spadefoot (*Scaphiopus h. holbrookii*) in the Province Lands at Cape Cod National Seashore. Presentation by Brad Timm

9p.m. Adjourn for the day

Wednesday, April 27

Establish a naturally appearing ephemeral wetland by using a liner
And excavator to provide habitat for the eastern spadefoot and other
vernal pond species. Meet at Ashumet Holly Wildlife Sanctuaty, corner of Currier and
Ashumet Rds, East Falmouth MA.

8:00 a.m. Construction Begins

- Safety discussion
- Examine wetland establishment site and design
- Discuss project with heavy equipment operator
- Remove vegetation and topsoil using the excavator
- Create depression using the excavator
- Place and anchor the geo-textile layers and the aquatic-safe liner

12:00 p.m. Lunch provided

12:30 p.m. Wetland Construction Continues.

- Use excavator to cover geo-textile layers and liner with topsoil
- Blend excess mineral soil into the surrounding landscape
- Place large and small woody debris
- Construct drift fence for sampling herp use of new wetland
- Sow and plant native plants and mulch using straw

While construction is taking place:

- Techniques for restoring and creating wetlands
- Soil texture and wetland construction techniques

7 p.m. Evening Presentations at Long Pasture Visitor Center.

-Farm Bill programs related to Fish & Wildlife habitat improvements, specifically the Wildlife Habitat Incentives Program (WHIP) and the Environmental Quality Incentives Program (EQIP) by Donald Liptack.

- Opportunities for Active Management Projects in the Conservation of Massachusetts Amphibian and Reptile Populations. A presentation by Bryan Windmiller on ongoing and potential conservation efforts using reintroduction, translocation, and habitat creation techniques by Dr. Bryan Windmiller.

-*How They Pulled the Plug*, A History of Wetland Drainage Presentation by Tom Biebighauser.

Thursday, April 28

Establish a naturally appearing ephemeral wetland by using a liner and excavator to provide habitat for the eastern spadefoot and other vernal pond species. Meet at Ashumet Holly Wildlife Sanctuary, corner of Currier and Ashumet Rds, East Falmouth MA.

8:00 a.m. Construction Begins

- Safety discussion
- Examine wetland establishment site
- Discuss project with heavy equipment operator
- Remove vegetation and topsoil using the excavator
- Create depression using the excavator
- Place and anchor the geo-textile layers and the aquatic-safe liner

12:00 p.m. Lunch provided

12:30 p.m. Wetland Construction Continues.

- Use excavator to cover geo-textile layers and liner with topsoil
- Blend excess mineral soil into the surrounding landscape
- Place large and small woody debris
- Construct drift fence for sampling herp use of new wetland
- Sow and plant native plants, mulch using straw
- While construction is taking place*
 - Discussion on using wetlands for outdoor classrooms
 - Techniques for increasing use by amphibians, reptiles, and bats
 - Preventing OHV damage to wetlands

3:30 p.m. Adjourn

Lodging: Accommodations close to Long Pasture Wildlife Sanctuary

**Holiday Inn Hotel Cape Cod –Hyannis
1127 Rt 132, Hyannis MA 02601
Tel (508)-775-1153**

**Hyannis Days Inn Hotel
867 Iyannough Road, Hyannis MA
Tel (508) 771-6100**

**Cape Codder Resort and Spa
1225 Iyannough Road, Hyannis
Tel (508) 771-3000**

**Courtyard Cape Cod
707 Iyannough Road, Hyannis, MA
Tel (508) 775-6600**

**Lamb and Lion Inn
2504 Main St, Barnstable, MA
Tel (508) 362-6823**

REGISTRATION FORM
HANDS-ON WETLAND CREATION WORKSHOP
APRIL 26-28, 2011

Note: One form per person please

Name:

Address:

Email:

Phone Number:

Affiliation:

Please email me a receipt (circle one):

Yes

No

Registration Fee = \$175 U.S./person

How to Register:

By phone using credit card. Call Long Pasture Wildlife Sanctuary at 508-362-7475 Ext 9355

Mail: Send registration form and payment to: Long Pasture Wildlife Sanctuary, P.O. Box 235, Cummaquid MA 02637. Make checks out to Mass Audubon **or** credit card payment

Credit Card Type(no AMEX pls)_____ #_____ Exp Date_____

Include name and address

For your safety, we will not accept faxed or e-mailed credit card information.

For more information: Ian Ives, (508) 362-7475 Ext 9350. E-mail: iives@massaudubon.org

Cancellation Policy

The registration fee is non-refundable and the written materials will be sent to registrants who cannot attend. If cancellation becomes necessary, substitution in lieu of cancellation is recommended. For cancellation, please contact Ian Ives.

Please hurry, registration is limited to 30 participants!