

WHY YOU SHOULD ATTEND

Migratory fish are critical components of coastal and estuarine ecosystems. Species such as alewife, blueback herring, American shad, American eel, and even sea run trout create valued fisheries and play an important ecological role in the marine food web. More than 200 coastal streams in Massachusetts provide important habitat for these fish, but many of these waterways have been obstructed by man-made structures, such as dams and improperly designed culverts, which limit the passage of migratory fish to important upstream habitats.

Community organizations and government agencies at the local, state and federal levels all play a role in ensuring fish passage in the Commonwealth's coastal streams. This workshop, which is the second in our series on restoring coastal streams, will introduce participants to the tools available for assessing and addressing barriers to passage in their home streams.

D I R E C T I O N S

Waquoit Bay National Estuarine Research Reserve
149 Waquoit Highway (Route 28), E. Falmouth, MA

From /Sagamore Route 6: Take Exit 2 (Route 130). Turn right off the ramp and follow 130 South 7.2 Miles to second light, turn right onto Great Neck Road and follow to the Mashpee Rotary. Take Route 28 North toward Falmouth/Woods Hole. The reserve is located 3.5 miles from the rotary on the left.

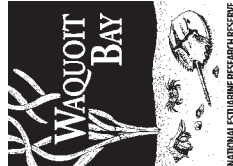
From the East: Route 6 to exit 5 (Route 149 South). Follow 149 South towards Marstons Mills to Route 28. Take a right on 28 North (towards Falmouth). Follow Route 28 around the Mashpee Rotary and continue on 28 North towards Falmouth/Woods Hole. The reserve is located 3.5 miles from the rotary on the left.

MA Division of Marine Fisheries
Annisquam River Marine Fisheries
30 Emerson Avenue, Gloucester, MA

Take Route 128 north to first rotary (Grant Circle - actually part of Route 128). Take first right off rotary onto Washington Street. Take 5th right onto Centennial Avenue (at Georges Coffee Shop). Go over RR bridge to second right onto Emerson Avenue. The Gloucester Office is the last building on the left. Parking is available in parking lot inside gates - the main entrance is located at the front of the building.

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NATIONAL ESTUARINE
RESEARCH RESERVE
P.O. Box 3092, Waquoit, MA 02536



One Workshop: Two Locations

Coastal Decision-Maker Workshop



COASTAL STREAM HABITAT RESTORATION *Workshop Series*

Restoring Connections in Coastal Streams: Assessing & Addressing Barriers to Fish Migration

Thursday, March 10, 2005
9:00AM- 3:00PM

Waquoit Bay National Estuarine Research Reserve
149 Waquoit Highway (Route 28)
E. Falmouth, MA

Wednesday, March 16, 2005
9:00AM- 3:00PM

MA Division of Marine Fisheries
Annisquam River Marine Fisheries Station
30 Emerson Avenue
Gloucester, MA

Restoring Connections in Coastal Streams:

Assessing & Addressing Barriers to Fish Migration

8:30 am - 9:00 am **Registration & Continental Breakfast**
 9:00 am **Welcome & Introductions**
 9:10 am - 10:00 am **Assessing Migratory Fish Barriers in Coastal Massachusetts**
 In 2001-02 the MA DMF surveyed all rivers and streams flowing into Massachusetts' coastal waters. The survey identified 380 obstructions to migratory fish passage, with the majority being man-made dams. One of the project's leaders will give an overview of the survey and it's findings as well as offer recommendations for further evaluating barriers in local streams.

*Philip Brady, Aquatic Biologist
 Massachusetts Division of Marine Fisheries*

10:00 am - 10:15 am **Break**

10:15 am - 11:00 am **Fish Passage in the Northeast: Old Problems, New Solutions**

Restoration of migratory fish in the North-eastern US has been ongoing since the Industrial Revolution when numerous dams and other barriers were built that blocked movements and access to spawning areas for many species. This presentation describes the impacts of these barriers, actions to provide passage for fish, and technical challenges to prevent blockage, delay, and mortality of migratory fish species. Many new developments and problems will be discussed, focusing on some fish that have previously received little attention, including the lamprey, American eel, and sturgeon.

*Alex Haro, Ph.D, Ecologist
 S. O. Conte Anadromous Fish Research Center, USGS*

11:00 am - 12:00 pm **A Project Level Perspective: Case Studies**
 Various individuals involved with fish passage restoration projects at the local level will lead an interactive discussion about the opportunities and challenges of addressing barriers in streams. These speakers, who will vary with workshop location, will refer to their own experience while fielding questions about implementing successful projects.

12:00 pm - 12:45 pm **Lunch** *(provided)*

1:00 pm - 3:00 pm **A First Hand Look: Field Trip**
 An afternoon field trip will visit local coastal streams to see typical examples of problematic barriers as well as locations where fish passage issues are being successfully addressed. Participants will have the opportunity to discuss concepts introduced in the morning sessions in the context of real world scenarios.

(Transportation is limited and will be provided on a first come-first served basis, please indicate if you would like to participate in the field trip.)

Participants will

- Learn about the habitat requirements and migration capabilities of various fish species common in local waters.
- Acquire an understanding of how various human activities and developments impede migratory fish access to important habitats.
- Learn how to identify and evaluate barriers to fish in coastal streams.
- Gain a realistic perspective of the opportunities and inevitable challenges of restoring fish passage in coastal streams through examples and lessons from actual projects in the region.



Please sign me up for the following workshop:

Thursday, March 10, 2005

Waquoit Bay NERR, 149 Waquoit Highway (Route 28)

Workshop _____ Field Trip _____

Wednesday, March 16, 2005

Annisquam River Marine Fisheries Station, Gloucester, MA

Workshop _____ Field Trip _____

Name _____

Organization _____

Address _____

City, State, Zip _____

Phone _____

Fax _____

E-Mail _____

There is no charge for the workshop.

Space is limited, please register early!

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