

The Eastern Brook Trout Newsletter: North Eastern Division

*A partnership between
Trout Unlimited And the
Eastern Brook Trout Joint Venture,
Together with all who value
Brook Trout And its Habitat*



Connecticut:

Report by James Belden

Farmington Valley and Northwest chapters have started a joint chapter brook trout restoration effort on Rock Brook in the town of Harwinton. The effort will be within a private 300 foot section of the brook that has a known population of native trout.

The restoration will entail demolition of rock walls built across the brook by a prior property owner without proper wetlands permits. TU is now writing a wetlands permit application that will use the rocks and boulders in the "wall" in constructing vortex rock weirs. Other streambank stabilization work using nearby downed tree material will also take place.

Candlewood Valley Chapter has received and finally signed the contract for the Brookie grant from the USFWS via the EBTJV application for nearly \$11,000. This grant will help us continue our water quality analysis and remediation studies for habitat and brook trout populations in Deep Brook in Newtown, CT. The work includes the gathering of thermal, chemistry, precipitation, stream flow and macroinvertebrate data, with assessment of impairments and strategies for remediation and management. In spite of our extensive habitat work we are seeing a reduction in brook trout numbers in Deep Brook. This water quality work is the next step in our attempts to sustain and revitalize the brook trout in this watershed which includes a Class 1 Wild Trout Management Area.

IMPORTANT ANNOUNCEMENT

The Connecticut Council had designed and is marketing a Back the Brookie and Chapter Patch which is on their web site link. There is a photo of the BTB patch, and our Patch Ad detailing the two patches.

We thank you for the opportunity to place this info in the next round of EBTJV newsletters so that TU members everywhere can order one of their own to proudly display on their back, or to

Contents:

Connecticut	1
Mass/Rhode Island	2
New Hampshire	3
Nash Stream	
Restoration	3

PROTECT, RESTORE, RECONNECT, SUSTAIN

Cont'd from page 1

frame. As these unique patches are just beautiful and we can accommodate any chapter name into either patch. <http://www.backthebrookie.com/>

Mass /Rhode Island:

Report by Mark Hattman

This summer MA/RI TU has been focusing on physical and electro surveying of coastal termination streams in search of wild/sea run brook trout. These surveys were conducted in cooperation with the Massachusetts Division of Fisheries and Wildlife, and were conducted on the south shore of Massachusetts and Cape Cod. This is an ongoing effort to obtain evidence of brook trout in the south east part of the state where there is presently a lack of documented evidence of brook trout. This will allow the Joint Venture to fill in information that says there are no brook trout, but TU members know that brook trout do exist. This information will give TU information to support funding opportunities for future restoration efforts.

The Massachusetts's legislature passed, and the governor has signed, a new one billion environmental bond issue. This important issue will provide capitol funding to protect the commonwealth's land, air, and water assets with steady, consistent funding for the next five years.

New Hampshire:

Report by Adam Bronstein

Dead Diamond River:

This is the second year of radio tagging on the Dead Diamond River in northern New Hampshire by NH Fish and Game, cosponsored by TU. The movements of Brook trout and bass in the Dead Diamond are being analyzed throughout the Magalloway basin. This year's study should reemphasize the correlation between basin-wide connectivity and a healthy, productive and resilient brook trout population. As a direct result of this study, it has been found that fish travel long distances to seek out food sources, thermal refuges and for breeding. Last year, trout were observed moving many miles away from the place in which they were caught. Some traveled as far as the Rapid River in Maine during the spawning season.

The complete trout sample set has been tagged for the year and more bass remain to be tagged. "The water levels have been insane and the fish haven't moved much at all. We still have five bass left to tag and the ones already tagged have been hunkering down between the gauge pool and the Magalloway" as reported by Dianne Timmons, project head with the NH Fish and Game Department. Bass have been introduced into the river system and are competing with Brook trout, much as they are in the Rapid River. This study hopes to discover the distribution of bass within the Dead Diamond system. It is hoped that they are not passing through the main gorge of the Dead Diamond which acts as a natural bottleneck.

PROTECT, RESTORE, RECONNECT, SUSTAIN

DNA tests are also being conducted from the scales of trout caught in the Dead. It is trying to be determined if the trout in the river are a native heritage strain of fish. If the results are returned positive, it would be a major finding for New Hampshire and could result in further regulation and monitoring of the fishery.

Nash Stream Restoration:

As Reported by John Magee, Fisheries Habitat Biologist with the NH Fish and Game Department.

The restoration plans are going very well. In 2007, we hired a contractor to conduct a comprehensive geomorphic assessment of about nine miles of Nash Stream. In 2008, with the contractor, we developed a matrix to:

- 1) Identify the problems at Nash Stream and determine what types of restoration treatments are available to fix each of those problems.
- 2) Determine exactly which restoration treatments would offer the biggest bang for the buck in each area of Nash Stream.

Most recently, we have submitted permit applications to New Hampshire Department of Environmental Services to conduct in stream and riparian restoration work for about $\frac{3}{4}$ mile of Nash Stream.

Concurrent with the restoration project, we received funding from the United States Fish and Wildlife Service to determine the effects of natural and human created (culverts) barriers to brook trout movement and stocking hatchery fish on genetic integrity in the entire Nash Stream Watershed, and to determine the effect of two specific culverts on the movement of brook trout. We are also researching the small and large-scale movements of fish in the two brooks using PIT tags. In 2008, we used radio tags to determine the large-scale movement of wild and hatchery brook trout in the Watershed.

To date, we have learned that wild brook trout in the tributaries move upstream in the spring and early fall. Additionally, hatchery fish stocked into the mainstem of Nash Stream appear to move little, although at least one fish moved about 10 miles upstream during the warmest three days of the summer. This research is ongoing and we just tagged more fish in August.

Eastern Brook Trout Joint Venture Update

Efforts are well underway this summer with on-the-ground stream survey crews covering over one hundred miles of rivers and streams throughout the state looking for the presence of brook trout populations. Updates to national and statewide predictive models will be conducted with the new data and will be available on the EBTJV's webpage. With more quantitative data and improved predictive modeling, efforts to conserve and protect Brook trout populations in the state will be greatly enhanced. Scientists and biologists can also use this new data to point them to areas where trout are not present in watersheds where they otherwise should.