

Batten Kill News



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The MISSION of the Vermont Department of Fish and Wildlife is the conservation of fish, wildlife, and plants and their habitats for the people of Vermont. In order to accomplish this mission, the integrity, diversity, and vitality of all natural systems must be protected.

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Introduction

This is the first issue of a newsletter that has as its goal: *to better inform the public and various organizations about the range of issues and developments pertaining to the conservation, protection, and management of the Batten Kill's natural resources.* While the newsletter will primarily emphasize the river's aquatic system (fishery resources, habitats, water quality, etc.), other topics may be discussed from time to time. The need for a newsletter stems from a public meeting held last August in Arlington regarding a fishing regulation change proposed by the Vermont Department of Fish and Wildlife (see **Update**). Many of the comments the public made at that meeting made it apparent that we need to do a better job of informing people like you about the many issues, problems, and projects affecting this important

river. We hope the newsletter will contribute positively to this end.

Of course, a newsletter should not, and will not, be the only means of disseminating information or for getting feedback from you. Public meetings will continue to be held periodically to share information, address your questions, and to get input on issues. The department will also look into other media, such as providing information through our home page via the Internet. However, we believe a newsletter at the present time is the best way of reaching the greatest number of people with an interest in the Batten Kill and informing them about what is being done to address its problems and to make it a better river than it is today. The newsletter will be issued semi-annually.

"A river...has so many things to say that it is hard to know what it says to each of us."
 — Norman MacLean, author of *A River Runs Through It*

Update on Proposed Fishing Regulation Change

At last October's Vermont Fish & Wildlife Board meeting, the Department summarized comments received from the public regarding the Department's proposed fishing regulation change that would affect 20 miles of the Batten Kill from the New York state line upstream to the Dufresne Pond dam in Manchester. The regulation, if adopted by the Board, would require all trout caught in the Batten Kill to be released back to the river. The regulation would place no special restrictions on terminal tackle; in other words, anglers could use natural bait, artificial lures and flies.

The proposed regulation is a resource conservation measure responding to a measured trend beginning since at least the mid 1980s which shows a 60% decrease in wild brown trout abundance in the river. The reduction in trout numbers, particularly fish greater than six

inches in length is one factor contributing to diminishing angler satisfaction with the fishery and their enjoyment of the river. Unfortunately the exact causes for the changes in the wild brown trout population are not well understood, and makes it impossible to adopt more specific corrective measures needed to reverse the situation. Implementation of the Department's proposal would address the one presently identifiable and manageable source of fish mortality...recreational harvest. The proposed rule would allow all anglers to continue to fish the river without any special limitations placed on gear. However, all trout would have to be released.

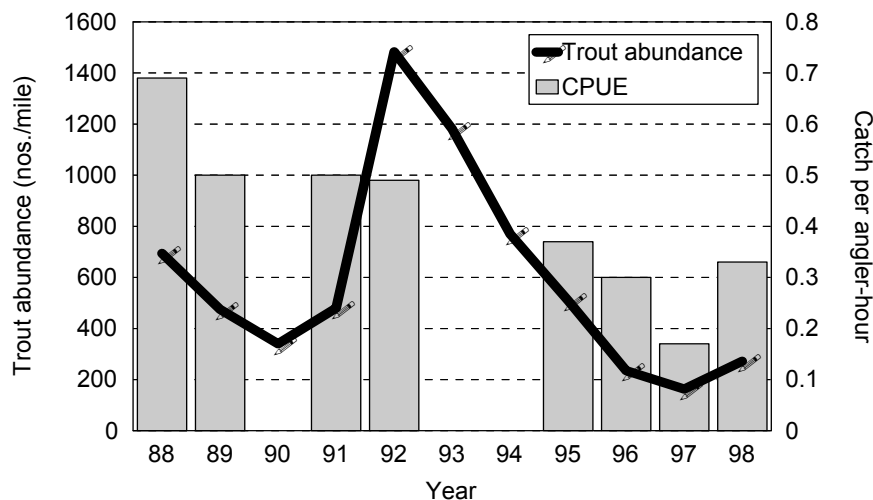
In October, the Fish & Wildlife Board adopted two amendments to the Department proposal which were recommended by Board member Jack Stannard. These amendments would allow children under the license age of 15 years to

catch up to two trout per day of any species or size, and all other anglers would be permitted to harvest one trout per day over the length of 18 inches. The amendments were passed by a vote of 5-2.

The amended proposed regulation was filed with the Secretary of State office and was warned for 35 days to receive public comments. During the commenting period, the Department received a petition requesting the Board hold a public hearing before taking a second vote on the proposed rule.

The hearing was held during the evening of January 13 in Manchester and was attended by approximately 60 people of which about 30 spoke to the Board about its proposed regulation as well as the one recommended by the Department. It is anticipated that the Board will take a second vote on the amended rule at its January 26 meeting in Montpelier.

Average Trout Abundance and Angler Catch Per Unit of Effort for the Lower Batten Kill Fishery, 1988-98



Trout abundance estimates are for brown and brook trout greater than or equal to 6 inches in length. Creel surveys for CPUE estimates were not conducted for the 1990, 1993 and 1994 fishing seasons.

Batten Kill Study Team Established

A team of fishery and aquatic scientists has been set up to investigate possible causes for the decline in the wild brown trout fishery in the Batten Kill. The team will review currently existing information, such as relating to the fish community and other biota, water quality, and habitat, as well as identify data gaps and needs. This will enable identification of additional studies and monitoring that can be conducted within the near term. The team consists of Douglas Burnham of the Vermont Department of Environmental Conservation and supervisor of that department's biomonitoring program; Steven Roy, fisheries biologist for the Green Mountain National Forest; and Rich Kirn and Ken Cox, Vermont Fish and Wildlife district fisheries biologists. Other resource scientists and managers will also be involved on an as-needed basis.

On January 14 the study team held its first meeting. The team got off to a good start by identifying fourteen possible factors that may be contributing to the observed decline in the river's brown trout fishery. These focus areas include such topics as fish habitat, water quality and pollution, stream temperatures and flows, nutrients and aquatic productivity, fish health, predation, food availability, genetics, land use and development impacts, and past and present resource management. Of these, the team decided to begin data collection and evaluation of fish habitat, including temperature and flows; fish health; and stocking history. The next meeting of the team will be this spring to finalize this summer's field activities and schedule.

Fish & Wildlife Department Conducts Fish Passage Survey

Last summer the Department surveyed much of the Batten Kill drainage for manmade structures, such as dams and culverts, which can block the movements of fish, especially trout migrating upstream to spawn. So far, the main river up to Dufresne Pond dam and the lower 2-3 miles of the river's tributaries have been inventoried. The survey will be completed next summer. This information is important to identify artificial structures which are blocking fish from critical habitats and will assist this Department as well as state and town transportation agencies in designing more fish-friendly road crossings as these structures are scheduled for replacement.

FYI

Brown trout were imported into the U.S. from Europe in 1883 and were first introduced into Vermont in Bennington County in 1892. Before its introduction to the Batten Kill, sometime before 1910, the only salmonid inhabiting the river was our native brook trout. Second only to the brookie, the brown trout is the most widely distributed salmonid in the state.

The brown trout is a fall spawning species like the brook trout. Eggs are deposited in crude nests, called redds, excavated in predominantly gravel stream bottom, where they lie to develop slowly over the long winter. In early-mid spring, depending on water temperatures, the eggs hatch into fry and measure less than an inch in length. Once the fry have absorbed their yolk sac, the young fish emerge from the streambed to feed on small aquatic organisms. By the fall of the year, young browns in the Batten Kill have grown to an average length of about three inches.



Trout Unlimited Chapter Assists with Trout Spawning Survey

Members of the Southwest Vermont Chapter of Trout Unlimited (TU) assisted the Fish and Wildlife Department and Green Mountain National Forest fisheries biologists with identifying trout spawning sites in the Batten Kill. TU volunteers spent several weekend days throughout November and into early December floating the river in canoes from Manchester to Arlington searching for trout spawning nests (redds) and marking these for later study. Over 40 spawning areas were identified and will be part of a Batten Kill habitat assessment to be conducted next fall. We extend thanks to all those people, who took time out of their weekend hunting or wood splitting activities, to lend assistance with this activity.

Batten Kill Bank Erosion Repaired

This past September a collaboration of state, federal, and county agencies attacked a long-standing eroding streambank on the lower Batten Kill in Arlington. The project involved 350 feet of the Batten Kill located a couple hundred feet upstream from "The Scales" pull-off on Route 313. This bank has been actively eroding for at least 20 years resulting in the release of sediments to the river with possible negative impacts on aquatic habitat and life, and the loss of agricultural land.

The Bennington County Conservation District, Natural Resource Conservation Service, U.S.

Fish and Wildlife Service, Green Mountain National Forest, and Vermont Agency of Natural Resources all joined expertise, financial resources, and labor to correct the problem. A combination of bioengineering and standard bank stabilization techniques were used, including tree root wad and whole tree revetments, rock vanes, and stone rip rap. Also, the top of the bank will be revegetated. The project was made possible by a \$10,000 grant from the U.S. Department of Agriculture's environmental quality and wildlife habitat incentive program.

"Water is the most critical resource issue of our lifetime and our children's lifetime. The health of our waters is the principal measure of how we live on the land." — Luna Leopold, hydrologist

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