

Promoting a fishable, swimmable Hoosic River!

Cold Water By Lauren Stevens

The Hoosic River is a cold water fishery, in which—unusual for southern New England—trout reproduce. Loss of the salmonids, the prime sports fish of the Appalachians, would be bad enough, but trout represent an entire ecosystem: what trout eat, what eat trout, other cold water fish and their habitat. Trout fishing produces income in Berkshire. In other ways, including local pride, the presence of trout improves the quality of human lives.

Water temperature does not track air temperature exactly, yet warmer weather as the climate warms indirectly warms the water—especially in open ponds, say

behind a dam. The official state classification, Cold Fishery Resource (CFR), is forgiving. The test for a waterway is that it "meet one or more of [fish] life history requirements." On summer days, the Hoosic temperature exceeds 68 degrees F, a temperature unfriendly to trout. Still it qualifies for now, as trout seek out a deep hole, a shaded spot, or temporary refuge in a colder tributary.





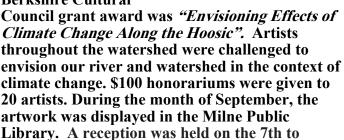
Other life requirements include "high water quality, natural flow regimes, intact riparian areas, highly oxygenated water, complex and diverse physical habitat, longitudinal and lateral connectivity." These suggest the kinds of steps that can be taken to prolong CFRs.

The first step is to determine which water bodies, perhaps tributaries to the Hoosic, are most likely to stay cool longer. Our local brooks are fortunate to tumble down from high, well-wooded elevations. Fortunately for the fish, and us, much of the high elevation land is protected by steep slopes, state forests, Scenic Mountain Act, or other zoning.



Riverworks 2022!

This year's project through a North Berkshire Cultural





honor the artists' work.



This program was supported in part by a grant from the Cultural Council of Northern Berkshire, a local agency which is supported by the Mass Cultural Council, a state agency.



For your pleasure along the River

Click on "Recreation" at hoorwa.org for activities to do along the Hoosic River.

hoorwa.org/calendar Click on our calendar for listing of programs

Fall Appeal Campaign

From \$20 to \$200 to \$2000 to any other amount—all donations are welcome to support HooRWA's work in looking after the River! You can donate online at HooRWA.org and click on Donate. Or, if prefer to mail us a check, you can. Mail membership to: HooRWA PO Box 667, Williamstown, MA 01267

Thank you for your enduring support!

Cold Water continued...

Humans can take actions to assist what elevation and forests provide. Banks are key: they should be tree lined or at least vegetated, in order to shade the water—and prevent erosion and filter pollution. Riparian land can be protected by owner's actions, conservation easement or outright conservation ownership in order to maintain the banks.

Trees should be left in or over the water unless they constitute a flood threat. They provide cover for fish, which have avian predators, and they provide shade. Trees can be dropped into the stream and secured in place. The common pattern of a stream, pools and riffles, can be augmented, if necessary, by excavating deeper pools.

Dams no longer in use can be removed. Although breaching larger ones can be complicated and expensive, many homeowners have created small dams in the brooks that run by their backyards. Permission from the Conservation Commission granted, their removal might be fairly simple.

The state's Wetlands Protection Act includes considerations of heat, although seldom invoked. Conservation commissions in the six Hoosic River towns in Massachusetts, as well as other concerns, should consider whether a project will increase the temperature of an adjacent waterbody.

HooRWA would like to keep our cool trout cool.





Water Quality Monitoring

Throughout the summer and into September we were busy out in the field. Every other week we collected water samples to test for bacteria.



Samples were then brought to Berkshire Community College Biology Department Lab for processing.

You can read our summer Williams College intern Lydia von Schwanenfluegel's blog account of the process and watch the video she created at HooRWA.org

These activities were part of a larger data collection effort. Volunteers also monitored the temperature in Hoosic River tributaries. HooRWA is working with our partners at Housatonic Valley Association (HVA) and Berkshire Environmental Action Team (BEAT) to gather information on bacteria and water temperature in the Housatonic River and Hoosic River watersheds. We have conducted E. coli sampling on many streams to identify impacted



rivers. monitor impaired rivers, and identify bacteria sources. Identifying sources will aid in mitigation of high bacteria counts. This Coalition's goal also includes documenting current temperature regimes in



State-identified coldwater fisheries resources (CFRs) and tracking climate change impacts (warmer air can mean warmer rivers). The Coalition will use this data to support identification of restoration projects that will improve climate resilience of coldwater streams, and to determine if streams meet state standards for cold waters.



And at the end of September, staff from Watershed Assessment Associates took samples of benthic macroinvertebrates to study the health of the River. This is the company that produces HooRWA's Hoosic River Health Report Card each year.



All these efforts are thanks to grants from MA DEP, Whipstock Hill Preservation Society, Mountain One, and Allen & Company, and donors such as you.



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Arianna Alexsandra Collins Executive Director HooRWA is dedicated to the conservation, habitat restoration and enjoyment of the Hoosic River and its watershed, through education, research, and advocacy.

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