

Mahican-Mohawk Trail is in Good Shape, but New Bridge is Still Far

Thanks to our new Trail Maintainer, Jim Vieira, the upper part of the Mahican-Mohawk trail from the Shelburne Route 2 trail head to Bardwell Ferry is in very good condition. This is still a rough walking trail but stepping stones have been placed to help you across the wet spots and blow downs have been taken out.

Negotiations for the bridge over the South River are stalled. But the trail from there to Deerfield is in good shape. At a recent meeting with USGen New England, which owns the crossing, it became apparent that there is not a bridge in our near future. We are still working on it but since word has come through that a Canadian company is negotiating to buy the dams we can't expect any action.

So for the foreseeable future be prepared to wade the river or tightrope across on the three steel cables which span the river about 30 feet above it.

We hope to improve the steps on the trail to the north side of the river this Fall and the Student Conservation Association workers did a nice job on the south side this summer but only got half of the trail stabilized.

The location, near the confluence of the South and Deerfield Rivers is a fantastically beautiful spot even if you are not going to hike the whole trail. It is accessible from the Conway Station Road off the Bardwell Ferry Road in Conway or better yet hike in on the M-M trail the easy one and a quarter miles on old railroad road bed from Bardwell Ferry.

If you are interested in helping on the trail, particularly in

DRWA Annual Meeting Monday October 18, 2004

Shelburne Falls Historical Society Museum (Arms Academy corner Church and Maple)

Please join us for our annual meeting at 6.30 pm: snack on some treats; listen to our exciting business report; take part in Board elections (taking part in elections is especially important this year!) and enjoy the truly inspiring presentations of our local watershed heroes: several groups of school children who will report on the watershed projects they conducted this year.

You will be proud to be a member of the DRWA or will want to become one!

We look forward to seeing you there.

Gisela Walker, President

the South River area this fall, please contact Jim Vieira (628-3881) or Polly Bartlett (413) 625 6628.

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Call for Volunteers:

The Town of Greenfield got an EPA grant to clean up the soil of an old gas station (Food and Fuel) right on the banks of the Green River on Deerfield Street in Greenfield. Part of the grant involves volunteers monitoring the site before and after the cleanup, for macroinvertebrates. For more information, contact Françoise Walk at 413-545-5531 or mfwalk@tei.umass.edu.

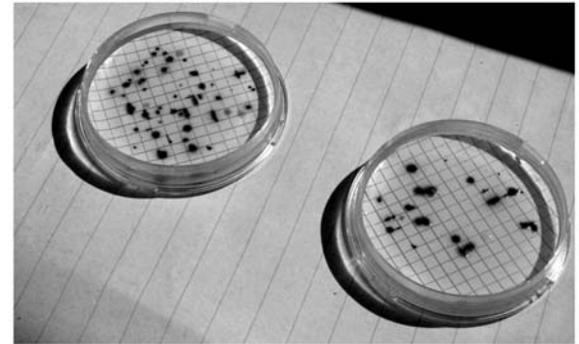
Better Data Shows the River Is Still Safe for Swimmers

This year, the DRWA monitoring program made a few changes to improve the testing in order to sharpen the picture of conditions at swimming sites on the river. The main change was switching from testing for the bacteria known as fecal coliform (FC) to a more specific strain pollution indicator: E-coli bacteria.

E. coli is a better indicator of pathogens than FC. Neither necessarily harms humans, but they occur in fecal material along with pathogens that are also present there and who are the real causes for nasty diseases (ear infections, but also hepatitis and even cholera!). Research has shown that E. coli is a better predictor of the presence of pathogens than FC are. In other words, there could be a lot of FC, but no disease causing organisms. Same for E. coli, but the relationship is stronger.

A total of 11 sites were monitored for bacteria at popular swimming holes this summer. We dropped Zoar Gap since in previous years it never showed any contamination, and we added the Mohawk Campground and Cemetery Pool in Charlemont. All our collections except for the last one occurred during fair weather, and when it's dry we do not see any bacteria levels in excess of the swimming standard of 235 colonies/100ml. The August 22nd collection, however, followed heavy precipitation. You can see on the graph that counts were higher at all sites that day. They exceeded swimming standards at Stillwater and at the Deerfield Academy.

Plans for next year are to conduct wet-weather surveys in 3 sub-watersheds to refine our understanding of pollution paths in areas that regularly show high bacteria counts after a rainfall. We also hope to move our lab to brand new digs in Greenfield, on the first floor of the Connecticut River Watershed Council's headquarters. We will need to raise funds for this endeavor, so watch your mail! **MF**



Top: Marjo Iken counts e-coli colonies on media after incubation for 24 hours.

Bottom: Close up of bacteria colonies growing on filter media. Three filters are used for each site.

Summer 2004 Bacteria Sampling Results

Number of e-coli colonies per 100 ml

	Date	6/13	6/27	7/11	7/25	8/8	8/22
Site sampled:							
Cold River		3	39	5	10	5	54
Deerfield Academy		10	50	NS	18	20	<u>305</u>
South River Confluence		8	NS	9	10	12	141
Stillwater		11	41	13	NS	9	<u>238</u>
Wilcox Hollow		NS	80	67	64	37	92
Cemetery Pool		29	17	12	50	NS	19
Mohawk Campground		1	5	4	9	7	24
Green River Covered		80	5	26	13	12	164
Sunburn Beach		17	68	93	39	14	NS
North River above BB		56	71	40	99	38	180
West Branch Deerfield		0	40	7	24	13	97

Key: NS=Not Sampled. LE=Lab Error. 000=Safety standard violation

Japanese Knotweed: What You Should Know

During spring and summer 2003, 14 volunteers and I surveyed local rivers and streams for Japanese knotweed, the non-native, invasive, perennial that is taking over the banks of the watershed's streams. We found the weed pervasive. Because this plant poses such a threat to the watershed and is very difficult for homeowners to remove from their property, we looked for control and eradication methods.

Japanese knotweed is easy to spot during late summer and early fall because it has reached its maximum height and is in flower (see photos). It grows up to 10 feet tall with bamboo-like green stems with purple spots. The large green leaves are heart-shaped and the flowers are white or cream-colored and form clusters. Knotweed grows just about everywhere: in backyards and gardens, waste places, rights-of-way, highway median strips, the edges of marshes and swamps, and on stream banks and islands. It is native to Japan, Taiwan, and northern China, where it grows primarily in sunny areas. In Japan its common name is *itadoki*, which means "strong plant"—an understatement.

Knotweed is difficult to remove because it spreads by its roots or rhizomes, which can grow to a depth of 6.6 feet, and horizontally as far as 23 feet from the original plant. A tiny piece of root and even pieces of the stem can start new plants. Knotweed spreads throughout watersheds when pieces of the roots and stems are transported in piles of dirt or fill, or are swept downstream. Once the plants are established at a site, they proliferate fast.

There are few ways to control knotweed: Cut it, mow it, pull it out, use herbicides, or a combination of all. But there are strict guidelines for herbicide use near wetlands and on stream banks, so a permit from the local conservation commission is required in order to use it. Getting a permit can take time.

Trying several different methods to eradicate the plants should be helpful. But remember that knotweed is a tenacious plant and it may take several years to get rid of it at a site. At a site owned by the Conte National Fish and Wildlife Refuge, biologists found that cutting a patch of knotweed 2-3 times a year during the growing season controlled it **after 3 years!**

When cutting knotweed plants, keep in mind that even small pieces of the plant have the potential to cause a new infestation,

so be careful not to spread it. Cut or mow at least four times a year between April and September. Pulling out small plants can be successful because they don't have long roots. After cutting, make sure you check the surrounding areas for re-sprouts.

It is safe for sheep, cattle, horses, and goats to eat knotweed. They prefer the new shoots, though. Grazing will not completely remove the plant from an area, but it will help prevent it from spreading.

Safe disposal is most important in terms of preventing new infestations. Knotweed can be burned or buried, but it cannot be composted while "green". You can pile it up and let it dry out but you must monitor the pile to make sure it doesn't re-sprout or get blown into new areas or washed into a stream or pond. If plants are buried, make sure they're buried at least 10 feet deep! Don't cut or pull plants and throw them in the river or on someone else's property.

The DRWA is pursuing funding to initiate a control program for Japanese knotweed in the watershed. We plan to model the program after successful ones developed in Oregon and Cornwall, England. However, controlling knotweed will require the efforts of many organizations and individuals working together.

For more information, the following sites have a variety of easy-to-understand information on all aspects of Japanese knotweed.

<http://www.ex.ac.uk/knotweed/welcome.html>

<http://www.invasivespecies.gov/profiles/japktwd.shtml>

<http://invasives.eeb.uconn.edu/ipane/>

Pat Serrentino



Bank of knotweed, above, grows so densely it displaces other vegetation.

Blooming knotweed, below, shows why the plant was once imported as a flowering bush for gardens.



DRWA Completes the Project:
Educational Nature Hikes
for the Deerfield River Watershed

The DRWA, with a grant from the Deerfield River Enhancement Fund, has developed a manual that contains three nature hikes and a canoe trip to compliment our outdoor program: *Hike and Bike Your Watershed*. The nature hikes cover a variety of topics and include a list of suggested locations and maps. The hikes are designed to be led by a naturalist or biologist with some expertise in the subjects, e.g., winter ecology, avian biology, or wetland ecology.

The first nature hike is entitled: "How Animals Survive Winter in New England" and explains how animals, from mammals to insects, survive the harsh conditions of a typical New England winter. "Spring Bird Hikes in the Deerfield River Watershed" focuses on two sites in the watershed: Highland Park in Greenfield and the West Leyden Wildlife Management Area (WMA) in Leyden. Highland Park is a well-known town-owned park which is accessible to a large number of people. The park is primarily forested but contains several vernal pools and small wetlands. The West Leyden WMA is managed to support birds that prefer early successional habitats or areas dominated by small trees and shrubs. Each hike includes a list of birds that participants may observe at the site.

The last hike focuses on amphibians (frogs and salamanders) that may be found in the watershed. Although this hike takes place in Dubuque State Forest in Hawley, any site that contains a wetland would be suitable. Dubuque State Forest was chosen because it has a number of different wetlands, ranging from vernal pools and seeps, to marshes and wooded swamps. A canoe trip to Grout

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The Deerfield River Watershed Association is a volunteer organization dedicated to the preservation, protection and enhancement of the Deerfield River and its tributaries in the interest of its adjacent communities. Its activities include water quality monitoring, educational programs, administration of volunteer programs and participation in regulatory matters.

Officers:

Gisela Walker, *President*

Françoise Walk, *Vice President*

Carrie Banks, *Secretary*;

Board Members:

Polly Bartlett, Peter Buell, Robert May,

Karl Meyer, Ted Merrill

www.deerfieldriver.org

Pond, located in the Green Mountain National Forest in Stratton, Vermont, was also featured. This natural pond is located in a high-elevation forest and can also be explored by trails.

Look for announcements of these hikes in our newsletter and website in the next year.

Pat Serrentino

DRWA Annual Meeting
Monday October 18

Details page 1

Become a DRWA Member!

Name

Street.....

City.....State.....Zip.....

E-Mail.....

Individual \$15, Family/Business \$25

Contributing \$50, Sustaining \$100, Patron \$500

Clip and send to DRWA Box 13

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