

## Thank you to Team Altitude!

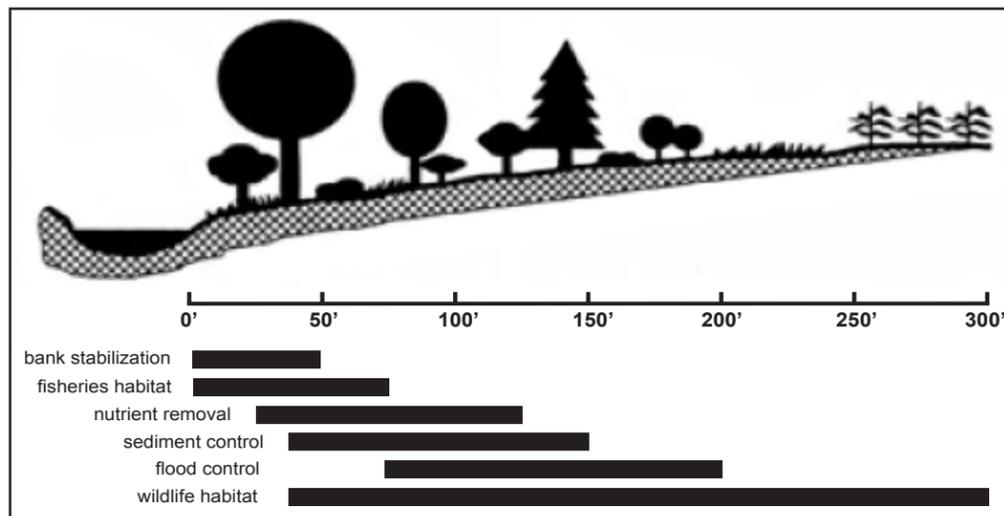
Last fall, Hartford Memorial Middle School's Team Altitude explored rivers and the importance of riparian buffers. They presented what they learned to families and friends and designed a riparian buffer planting. This spring they planted 150+ trees and shrubs, enriching the riparian zone at Watson Park. Team Altitude collaborated with The White River Partnership (WRP), Hartford Conservation Commission and the Parks and Recreation Department.

The Wellborn Ecology Fund supported the curriculum and Trees for Streams, through the WRP, provided the trees and shrubs.

Photos by Jon Bouton & Heather Baker-Morris



### RIPARIAN BUFFERS: THE WIDER THE BUFFER, THE GREATER THE BENEFITS



## Hartford Conservation Commission's 25th Anniversary serving the Town.

The Commission's charge is to:

- develop an inventory of natural resources throughout Hartford;
- maintain and preserve natural areas; acquire and protect valuable wildlife habitat, scenic view shed and watershed areas;
- educate and increase awareness of conservation and recreation goals and impacts; and
- encourage recreational uses consistent with the preservation of the natural beauty that exists within our town.

### A List of Members Since 1990

- |                   |                 |
|-------------------|-----------------|
| Sayward Ayre      | Marty Banak     |
| John Jalowiec     | Jean Lariviere  |
| George Gallagher  | Dana Young      |
| Lynn Bohi         | Jim Peters      |
| David Laing       | Fred Oertly     |
| Dorothy Williams  | Karen Douville  |
| Philip Johnson    | Lou-Ann Conroy  |
| John Peterson     | Pat Doran       |
| Katesel Strimbeck | Erin Flather    |
| Ronald Heroux     | Terry Cioffredi |
| Ronald Marra      | Skip Spaulding  |
| Ernest Finney     | Chuck Wooster   |
|                   | Mike McCrory    |
|                   | Kevin French    |
|                   | Celia Chen      |
|                   | Linda Wilson    |
|                   | Vickie Davis    |
|                   | Jon Bouton      |
|                   | Rebecca Dean    |
|                   | Shawn Kelley    |
|                   | Mary Hutchins   |
|                   | Janice Berger   |

### Did You Know?

Hartford has 24 miles of rivers and 113 miles of streams.

# 2015 Newsletter

## Town of Hartford's Conservation Commission

Dewey's Pond was created in 1869 by the A.G. Dewey Mill Company. A major wool processing mill from the 19th century, the mill employed over 500 people during its heyday; many of whom lived in Dewey's Mill Village.

Water fed from the falls and pond above the Quechee Gorge powered the mill facility. By 1936, Dewey's Mill was the oldest mill in the country making "shoddy" (re-worked used wool for many different applications) and was also highly respected for its finer wool used for baseball uniforms (both Red Sox and NY Yankees) and wool for blankets (US Army and Navy).

In 1952, the mill closed and relocated to facilities in Enfield, NH.

The Quechee State Park was created almost immediately after the closing of the mill on some of its former property. In 1962, the US Army Corps of Engineers began acquiring land in the area as part of a large flood control plan to address flooding on the lower Connecticut River. Dewey's Mill Village and the Dewey Mill buildings were removed at this time. The project included construction of the North Hartland Dam and a campground and picnic areas in Quechee. A causeway between Dewey's Mill Pond and the Ottauquechee River was created, providing a walking trail and wildlife sanctuary.

In 1965, the State of Vermont leased the campground/picnic area from the Corps and turned over the management and operation of the park property to the Department of Forests, Parks and Recreation. Dewey's Pond has been used by many over the years for different recreational uses including fishing, boating, canoeing, kayaking, swimming, ice skating and more. Locals and tourists alike have enjoyed the pond for many years.

In 2003, harvesting of Eurasian milfoil was started in an attempt to keep the pond clean of milfoil, which had found its way into the pond. Yearly harvests have been organized with many groups and volunteers working together to harvest milfoil. Harvesting is mostly done by hand.

The Corp of Engineers, Hartford Parks and Recreation Department, Vermont's Dept. of Environmental Conservation and the public have all teamed up in this effort.

Recently a Dewey's Pond committee formed. Led by Tad Nunez (Hartford Rec.), members from the Vermont Institute of Natural Science, the Hartford Conservation Commission and interested citizens are focusing on the current state of the pond which has changed significantly since Tropical Storm Irene. The storm deposited huge amounts of fill in the pond, burying the native plants and animals and enabling the milfoil to spread more rapidly than before the storm. Subsequently the pond has experienced a decrease in the variety of wildlife and vegetation, when compared to the pre-Irene level. The Committee agrees the milfoil must be controlled. Left unchecked, they fear the Eurasian milfoil will kill off everything else in the



pond. The Committee is addressing the question of whether dredging the pond would help restore healthy wildlife habitats and recreation value to the pond. Because milfoil is less competitive in deeper water, dredging would also help control the milfoil.

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- Do we let the pond revert to marshland?
- Do we dredge the pond, restoring its former depth?
- Do we do anything?

These are the issues being considered. Please come help with the harvest of milfoil, or contact Tad to see how you can be of assistance.

**Working together, we can save Dewey's Mill Pond for everyone to enjoy in the future.**



## Nothing Rotten about Deadwood

by Joe Rankin

A guy down the road has been working in his woods for the last couple of years. He's cleaning them up. And I mean cleaning. He cuts the underbrush. Takes out the dead trees, the downed logs, the dead branches.

Okay, I confess. The neatnik in me is envious. Part of me would like my 70 acres of woods to look like a park. But that's the problem. A park is not a forest. And the forest is more than the trees. It's an entire suite of complex systems, merging and interacting. An ecological orchestra in the woods.

Dead and dying wood, standing snags, rotting branches are more than Mother Nature's litter. They're an integral part of the forest symphony – what forestry types call “coarse woody debris,” or CWD for short.

“Without that debris our forests would not be what they are. Not just in terms of aesthetics, but nutrient capture and recycling and wildlife,” explained Andrew Whitman, a scientist with the Manomet Center for Conservation Sciences in Maine.

Snags provide nesting and resting spots for woodpeckers and other birds, squirrels and fishers. A rotting log on the forest floor is home to mosses, fungi, liverworts and lichens, salamanders and frogs, millipedes and centipedes, mice and voles. Piles of branches shelter snowshoe hares and hibernating bears.

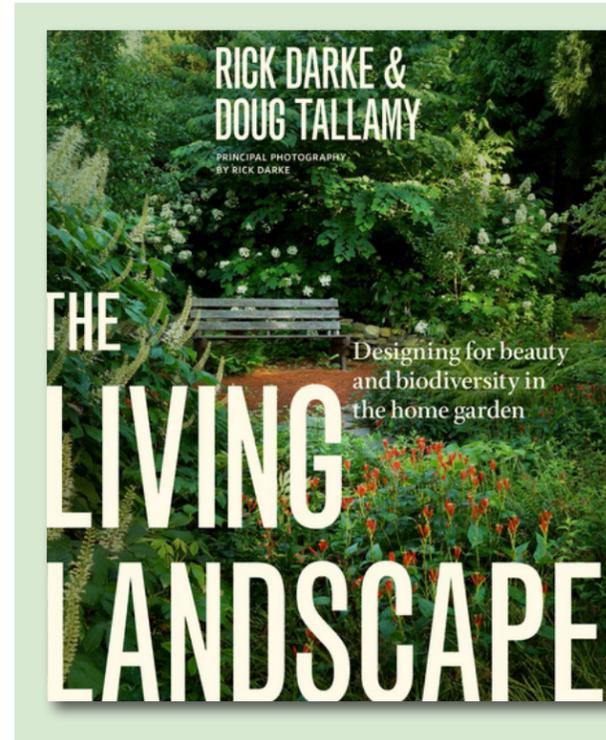
Deadwood is critical to many species of fungi, which make their living breaking down the lignins and cellulose in wood and leaves. A dead tree will host a succession of species, Whitman said. “The fungi that use fresh dead logs are not the same as the ones that use logs that have been rotting for 50 years.”

Downed wood is also an important reservoir of bound-up carbon. “In older forests, 100 years or older, it can account for 22 tons per acre, or the weight of five cars. In younger forests it's about 1 to 5 tons per acre or the weight of about one car. It's not a trivial amount,” Whitman explained. That's important because, in terms of climate change, carbon on the forest floor means less carbon in the atmosphere.

Carbon, nitrogen, calcium and the other elements that once made up a living tree are gradually released through the process of decay and then reused. It's the forest fertilizing itself. In the meantime, those dead trees and branches littering the forest floor slow runoff in times of high rainfall.

Coarse woody debris also plays a crucial role in aquatic ecosystems, noted Whitman, providing nutrients to a stream. Downed wood also improves a stream's “structure,” creating plunge pools, eddies, and places for fish to hide and stay cool.

In an intensively managed forest, the amount of coarse woody debris can decline over time. These days we often try to extract the last dime's worth of value from a harvest, chipping



branches and tops for the biomass market. It's not unusual for trees that once would have been left to die and then rot to get chipped instead.

“About 20% of bird species, 50% of mammal species, 44% of amphibian species, and 58% of reptile species in the Northeast use coarse woody debris for foraging, shelter, or other uses. And this is for the vertebrate species we know well,” said Whitman. “In an intensively managed forest, those species will struggle. While it looks great and it may be efficient in terms of fiber production, it can lead to a loss of biodiversity.”

The effects of that sort of harvesting may not show up for decades. But some studies indicate that over three rotations, nutrient levels in forest soils may start to drop if whole tree harvesting is used, he said. That would translate to slower tree growth and perhaps to a less complex forest that's less able to cope with pests and diseases. And restoring a depleted forest isn't economical, or easy, or fast. Dropping a few tons of 10-10-10 isn't going

## Conservation Commission Donates Books

Interested in attracting more birds and butterflies to your yard? Check out the new book, *The Living Landscape*, at your Village Library. It is the “how-to” gardening sequel to *Bringing Nature Home*. *The Living Landscape* is the fourth book donated by the Conservation Commission. Other books include: *Bringing Nature Home*, *Living With Bears*, and *Landowners Guide - Wildlife Habitat Management for Lands in Vermont*.

**CHECK THEM OUT TODAY!**

to bring back those complex ecosystems or restore species that were lost. Only time would do that. Lots of time.

“Northern New England is fortunate to have its current levels of CWD,” said Whitman. “Similar forests in Europe have nowhere near the same amount of deadwood and so often lack species we still have. It is no wonder that tourists from Europe love to see our ‘wild’ northern forests, where deadwood is a mark of wildness.”

*HCC note: We thought this article was very informative and well written. We wanted to share it with Hartford residents.*

*Joe Rankin writes forestry articles from his home in central Maine. The illustration for this column was drawn by Adelaide Tyrol.*

*This article is reprinted with the permission of the Center For Northern Woodlands Education. A not for profit organization, Northern Woodlands seeks to advance a culture of forest stewardship in the northeast by increasing understanding of and appreciation for the natural wonders, economic productivity and ecological integrity of the region's forests.*