THE NEWSLETTER OF COLD HOLLOW TO CANADA FOREST LINK



SUMMER 2013

INSIDE

Emerald Ash Borer	3
Japanese Barberry, Deer and Tick Interactions	4
Enosburgh Conservation Commission Update	5
Pollinators	6
River Fest	8
Upcoming Events	9



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KEEPING CONNECTIONS

By Charlie Hancock

Greetings friends, and welcome to the Summer 2013 edition of *Connections*, the quarterly newsletter from Cold Hollow to Canada. We hope this edition finds you've been able to get outside lately to enjoy the beautiful (if somewhat wet lately) spring weather.

ith this edition we're happy to announce that CHC has received a grant from New England Grassroots Environmental Fund to launch the first phase of Landowner Cooperative project, announced in the Spring 2012 newsletter Cross Boundary Connections. Working with landowner cooperatives in our region we hope to engage multiple landowners with adjacent parcels to recognize the landscape-level importance of their individual properties, and take a holistic view of management that accounts for broader habitat and landscape level concerns. Work will focus on 1) the coordination between new and existing Forest Management Plans 2) the identification of opportunities for broad scale wildlife habitat enhancement 3) improved efficiencies for active management around a broad range of objectives including wildlife, recreation, forest health and timber production; and 4) an expanded ability to leverage greater cost-share funding from state and federal programs in implementing those practices identified across the different ownerships. We hope to engage these community members as a means to foster a greater appreciation in the community for their land, as well as recognition of its importance in a regional context. We also hope the project can serve as

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a model for landscape level collaboration to maintain our working forests and enhance wildlife habitat on a landscape level. We hope to use the NEGEF funds to get the project up and running, and leverage greater resources to expand the project in the coming year.

Work also continues in two of or member towns on planning for conservation. CHC, in partnership with the Vermont Natural Resources Council, has worked with local planning and conservation commissions over the last year, presenting information to advocate for the protection of large un-fragmented habitat blocks in our region and connectivity for wildlife between them. Enosburg's selectboard has adopted the bylaw revisions, available for viewing online at www.enosburghvermont.org. Work focused on the greater protection for large forest blocks and connectivity areas, with the natural resource overlay in town expanded to include areas designated by Fish and Wildlife as important for connectivity. Under the revised bylaws development in these areas must go through conditional

review to ensure that development maintains the ecological integrity and resources of concern in these areas. Perforation by new roads into these areas will also be limited to reduce fragmentation, and future development must ensure no adverse effects to wildlife habitat and active forest management, maintaining the working forests that help define our communities. Montgomery continues to work on revisions there, looking at similar issues around resource protection and conditional review to ensure that future development in conservation districts addresses the vision for resource protection detailed in the town plan.

We hope you enjoy this edition of the newsletter. Enclosed, we'd like to share an update on the Emerald Ash Borer, discuss the connection between Barberry and ticks in our forests and fields, and highlight great work by the Enosburg Conservation Commission, in addition to much more. Thanks, and enjoy.

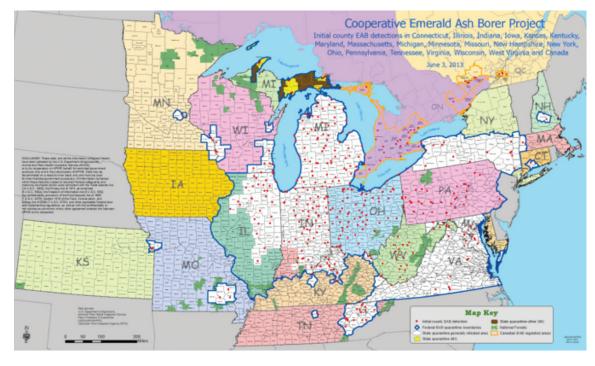
- The CHC Steering Committee



JOANNE WAZNY

Emerald Ash Borer

By Nancy Patch



This invasive insect was first detected in 2002 in Detroit. It has since moved through 19 states and killed millions of ash trees. It has now been discovered in NY north of Albany, in MA, in Canada just south of Montreal, and just recently in Concord NH. This means the State of VT is surrounded, and the insect is probably coming our way. Although EAB has been detected on all sides, these are primarily outlying, isolated infestations. The strategy that makes the most sense is to be pro-active and keep the expansion of this insect slow. If looking at a map of EAB infestation it is clear that the infestation in Michigan expanded to neighboring states, but it is also important to note that Wisconsin and Minnesota are relatively free of the insect. The proactive strategy of limiting movement of wood products, especially firewood has been

a successful strategy in those states.

The adult insect is a small green insect that is only out and mating for a short time of the year. The



more definitive evidence of the insect is either the D-shaped exit hole or the galleries found in the wood and caused by the larvae. Symptoms of the insect also



The state of Vermont in coopera-

tion with USDA has placed the

purple traps throughout the state

insect, but the identification will

that are designed to attract the

most likely come from a land-

include epicormic branching and sometimes the presence of woodpeckers feeding on the insects.



they have found. If we are diligent about spreading the word that firewood should not be moved and inform people of what to look for we can keep this insect contained and allow science and nature time to fight back.



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JAPANESE BARBERRY, DEER AND TICK INTERACTIONS

By Nancy Patch

apanese barberry (Berberis thunbergii) is an invasive plant that has been a favorite landscaping plant for many years and has been planted in yards extensively. Last year this plant was quarantined in Vermont and is no longer allowed to be sold in Vermont nurseries or plant

distribution centers. The plant produces prolific seeds, has few if any natural predators, leafs out early and grows later in the growing season, and can use



light very efficiently to photosynthesize, and can change the soil chemistry once established. The plant can also vegetatively reproduce by layering. These characteristics all make this plant highly competitive with native plants even in the understory of a forest. Entire forest understories have been replaced by Japanese barberry in some situations. Replacing regeneration and the herbaceous layer reduces biodiversity and can eliminate the future forest.

To make matters worse the incidence of black legged ticks increases substantially in barberry infested forests. Research has shown that ticks



carrying Lyme disease can have a density of 120 ticks per acre in a barberry infested forest compared to 10 ticks per acre in a forest free of barberry (Ward et al 2013). The presence of high deer density exacerbates the problem as the deer eliminates native vegetation while also being a main host of the tick. If native plants are free to grow there is some competition with barberry and if barberry is culturally controlled the native plant population can recover.

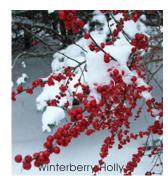
Controlling barberry is difficult, just cutting it will not control it. The plant very quickly grows



new sprouts after cutting. The first step for a landowner is to identify the plant. If you have one in your yard, replace it; even if you only have one plant. You can remove the roots then plant a different native species such as winterberry holly (Ilex verticilatta).

Methods of control include mechanical removal, herbicide, directed flame, and preferably a combination of two or more of these techniques. Even

after a successful treatment, monitoring and repeated removal of newly established plants or sprouts will be necessary. Contact a professional to find out more about control methods.



Ward. J et al; Japanese Barberry control methods. University of CT Extension

CONSERVATION COMMISSION CORNER

ENOSBURGH CONSERVATION COMMISSION (ECC) UPDATE

By Nancy Patch

nvasive species are at the foremost of our actions this summer. On April 26th the ECC hosted a presentation by The Franklin County Forester on a primer of invasive terrestrial plants in VT. This presentation was attended by people from a wide geographic area. The group was very engaged and many good questions were raised. For example: How does Phragmites get dispersed in the environment? The answer is the seed is naturally dispersed by wind and water, but this method of dispersal is not as effective as vegetative reproduction via rhizomes. Once the plant is established on a site it can expand very rapidly. In general establishment occurs by soils that have roots of the plant being moved by road crews when ditching or by other dirt moving equipment.



Another workshop will be hosted by ECC on June 26th presented by VT FPR to help towns plan for the impending

arrival of the Emerald Ash Borer. This insect was introduced from Asia and can kill almost all of the ash greater than 2 inches in diameter. The workshop is designed to assist municipalities to plan for the potential for large numbers of roadside hazard trees in the future. Conservation Commissions, road commissioners and selectboard members are encouraged to attend.



THE NATURE CONSERVANCY

The ECC has two projects to address both of these issues this summer. The first project is to coordinate with the town road crew to remove bush honeysuckle from the roadsides. ECC inventoried 17 roads that were identified by the road commissioner as areas that will be worked on this summer. The volunteers identified and flagged 56 plants for removal when within the ability of the road crews to do so. The second project has been initiated with a grant request for funding to inventory the roadside ash to help the planning process for prioritizing hot spots of potential infestation. Finally the ECC plans to continue the honeysuckle project by removing honeysuckle on the newly acquired town property below the Falls in the Village.



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Pollinators

By Nancy Patch



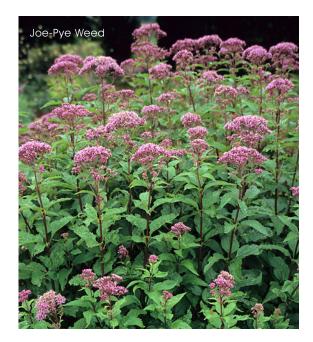
T is estimated that 90% of flowering plants and a third of our food crops need animal pollinators for successful reproduction. The pollinators include bees of course, but also butterflies, moths, birds, beetles, flies, and bats. Unfortunately both native pollinators and domesticated bee populations are declining. The decline is caused by habitat loss, disease and pesticides. This decline is a great cause of concern and many resources are now being directed to research and conservation of these animals and their habitats.

The good news is we can as individuals make a difference in the success of our native pollinators. What these animals need is food and shelter (egg laying or nesting sites). Like many of the other recommendations that we often espouse in this newsletter the focus on diversity in the landscape is again an answer to the problem. Our forests and fields include a wide variety of trees, shrubs and flowering plants that are very important to the native pollinators. Keeping these species as prominent components is one step to take. Some Vermont tree and shrub species that provide food at varying times of the year include serviceberry, hawthorn, witch hazel, winterberry holly, chokecherry, sumac, elderberry, Mt. Ash, basswood, blueberry, Viburnum species and dogwoods. As we manage our forests these trees and shrubs may be selected for retention and release, to allow for full expansion of their growth and flowering potential. Doing so is not only good for the pollinators but also for songbirds and a wide variety of mammal species that use the fruits of these

plants as a food source. Woodland herbaceous plants are also important, some of which include hepatica, baneberry, false hellebore, wood sorrel, partridgeberry and violets.



Another type of habitat that is common in our Vermont landscape includes small old pastures and meadows at the edges of forests and small opening in the forest where grasses, forbs, and wildflowers can be found. Native wild flowers such as Joe-Pye weed, goldenrod, aster, gentian, and Iris to name a few can attract pollinators. If



you have such a site, consider making it a designated pollinator meadow or "bee pasture". These "bee pastures" can be maintained by mowing with a brush-hog once every three year to five years. It is best to create at least three sections that are mowed in successive years to keep a wider diversity of plants. Small shrub patches can be retained.

Even a back yard can become a small "bee pasture". In our garden settings we can employ more concentrated efforts using cultivars and nursery grown plants. Try to get a wide diversity of plants that spread out the bloom time, and plant flowers in mass plantings (these attract pollinators more efficiently). The more diversity the better; it is shown that bee diversity continues to rise until about 20 different flower species occur on one site. Also accept less than a manicured landscape. Keep and learn to love the various flowers and plants that compete with grasses such as dandelion, bluets, and ground ivy, Patches of bare ground are important for ground nesting bees.

We have discussed food but shelter is also important for pollinators. Shelter includes dead standing trees, large down trees and stumps, piles of sticks or leaves, abandoned rodent burrows and bare or partially vegetated ground that is not plowed or otherwise turned over. Most native bees are ground nesters, though about 30% are wood nesters. Also retain plants for larval development; milkweed for Monarch butterflies. You can also build or buy a native bee box. Controlling the spread of invasive plants is especially critical for enhancing and maintaining biodiversity. Invasive plant species simplify the environment by developing monocultures and displacing native plants. Few species in a landscape will have a more concentrated bloom time and subsequent periods where no foraging opportunities exist for the pollinators. One of the most important management practices that you can employ is to use as little pesticide as possible. If pesticides must be used, perhaps to control invasive plant species, they should be applied directly to the target plant.



For more information, two excellent resources you can find online include "Selecting Plants for Pollinators" by USFW and USDA, and Pollinator Biology and Habitat, technical paper by USDA NRCS.

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RIVER FEST

By Annette Goyne

ichford's first River Fest sponsored by the Richford Conservation Commission went extremely well due to the hard work of many individuals and one of the nicest sunny days in June. Many workshops were offered from 11 AM to 2 PM, such as invasive plants along the river with County Forester Nancy Patch, wild edible plants with Todd Lantery, bird-watching with Susan Staples, water insects by John Little of the Missisquoi River Basin Association, fly-fishing with Gregg Campbell, assisted by Taylor Emerson, nature photography with Maggy Young, and canoe safety and firstaid by Montgomery Adventures.

A story hour was presented by the Arvin A. Brown Library, in addition to a children's activity table sponsored by the RCC. Wonderful music by the talented Missisquoi River Band created a festive atmosphere, while folks enjoyed a BBQ lunch offered by the A. A. Brown Public Library. Many informational booths were set up to let people know about river and local community efforts. Represented were the Northern Forest

Canoe Trail, the Missisquoi River Basin Association, the Richford Revitalization Project, Richford Economic Advancement Corporation, and Franklin County Caring Communities. The Richford Conservation Commission offered information on invasive insect species and provided an interactive watershed model for the public to better understand the effects of human activities on our waterways.

At 2:00 PM a flotilla of canoes and kayaks manned by 23 individuals took off from Davis Park heading down the river towards East Berkshire. The MRBA provided trash bags to each vessel and this intrepid crew collected 8 bags of trash, 31/2 tires, and a large, heavy, and very wet sofa! They also enjoyed a beautiful outing on the river to usher in the season and celebrate the wonderful opportunities for recreation the Missisquoi River offers!

The RCC would like to thank everyone who worked and participated in this successful event.

Upcoming Events

BAKERSFIELD CONSERVATION COMMISSION

Meets the last Thursday of every month at 7:00 PM in the Town Hall Building, 40 East Bakersfield Rd, Bakersfield.

ENOSBURG CONSERVATION COMMISSION

Meets the fourth Monday of every month at 7:30 PM in the Emergency Services Building, 83 Sampsonville Rd (Rte 105), Enosburg Falls.

MONTGOMERY CONSERVATION COMMISSION

Meets the first Wednesday of every month from 5:30 to 7:30 PM at the Montgomery Town Office, 98 Main St (VT Route 118), Montgomery Center.

RICHFORD CONSERVATION COMMITTEE

Meets the fourth Monday of the month at 6:00 PM in the upstairs conference room of the Arvin A. Brown Public Library, 88 Main St, Richford.

WILD AND SCENIC RIVER STUDY COMMITTEE

Meets the third Thursday of every month from 7:00 PM to 9:00 PM. Locations vary so visit www.vtwsr.org for up-to-date information.

*Don't forget to check coldhollowtocanada.org for updated Upcoming Events Emerald Ash Borer Preparedness Meeting Wednesday June 26th at 7pm at the Cold Hollow Career Center. Come discuss the impending arrival of the Emerald Ash Borer and how we can prepare for it. Sponsored by the Enosburg Conservation Commission and VT Forests, Parks and Recreation.

Invasive Species Control Workshop Saturday June 29th. Invasive Species Control Workshop focusing on Japanese Knotweed. Montgomery Conservation Commission. 9am at the Riverwalk Park/Ball field on Rt. 118

Cerceris Wasp Survey Workshop Saturday July 20th. Come learn about these predators of Emerald Ash Borer and how we can monitor the progress of EAB by checking in on what the wasps are bringing home for lunch. Montgomery Recreation Field, 11am. Sponsored by the Montgomery Conservation Commission.

Traveling Natural History Museum Wednesday October 9th. Sue Morse of Keeping Track brings her traveling Natural History Museum to the Montgomery Grange Hall. 6pm. Free and open to the public. Sponsored by the Montgomery Conservation Commission and Cold Hollow to Canada.

Vermont Renewable Energy Conference and Expo **October 28–29th 2013.** Sheridan Conference Center, Burlington Vermont. More info at: http://www.revermont.org/main/events/conferences

Keeping Track

December 4th. Sue Morse of Keeping Track with Animals of the North at the Enosburg Falls Opera House. Sponsored by the Enosburg Conservation Commission and Cold Hollow to Canada.

Invasive Species 101 **Date and Time TBA.** Presentation at the Bent-Northrop Library in Fairfield.

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