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Cross Boundary Connections

ADAMS POND TO ENOSBURG MOUNTAIN

By Charlie Hancock

Hi friends, and welcome to the Fall 2013 edition of our quarterly newsletter! We hope that this edition of *Connections* finds you looking forward to cooler days, crisp nights, and the slow transition as the landscape is painted in a pallet of reds, oranges and yellows.

ith this edition of the newsletter we'd like to announce the successful launch of CHC's *Landowner Cooperative Project*, an initiative we first introduced in 2012. Within the past year we've received funding to implement the first phase of the project through the generous support of the New England Grassroots Environmental Fund, and this month CHC held the first gathering of our pilot group, which includes ten parcels spanning over 2,000 acres stretching from the Nichols and Perley Roads in Enosburg, to Adams Pond, and east to the Montgomery side of Enosburg Mountain. Three of these parcels, totally about 500 acres, were conserved earlier this year.

On September 14th fifteen of these neighbors gathered on the Woodward Neighborhood Road to tour wildlife habitat development completed on two parcels, including early successional habitat development, apple tree release, forest song bird habitat enhancement, and the reclamation of old meadows. Taken together, these practices create a patchwork between the parcels, each

project complimenting the other to enhance structural diversity and increase the richness of wildlife on a landscape scale for a range of species, from chestnut-sided warblers to black bear. Following the tour the group gathered over lunch to review maps of the region and discuss the broader importance of the ten parcels within this context of wildlife habitat and connectivity. Plans were developed by the group to gather on a quarterly or biannual basis to catch-up with neighbors and review other work completed within the cooperative, and even pitch on projects like apple tree release efforts on neighboring parcels. The next phase of project will also work to identify opportunities for continued broad scale wildlife habitat enhancement within the cooperative and improved efficiencies for active management by creating economies of scale across parcels. Pursing individual landowner goals, while recognizing and capitalizing on these opportunities, will allow the group of neighbors to implement cross boundary management practices that recognize these habitat level concerns.

CHC is presently pursuing additional funding opportunities to expand this project to three other cooperative groups in the towns of Montgomery, Richford and Bakersfield, as well as to bring in additional partners to the project, including Audubon Vermont to conduct forest song bird habitat assessments within the cooperative area. We hope in time the project can serve as a model for landscape level collaboration to maintain our working forests and enhance wildlife habitat on a landscape level.

We hope you enjoy this edition of our newsletter. Inside you'll find an update on Emerald Ash Borer preparation efforts in our towns, the back story on Lynx in our region, and the low-down on Garlic Mustard, another invasive species finding its way into our forests. Don't forget to check out the upcoming events, including Sue Morse and her traveling natural history museum at the Montgomery Grange Hall on Wednesday October 9th.

Thanks, and happy equinox.

- The CHC Steering Committee



JOANNE WAZNY

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Black Bear Meets Cold Hollow to Canada Members

By Nancy Patch



SUSAN MCGINLEY

▼ here have been numerous sightings of black bear and black bear signs this summer. In this issue of Connections we wanted to share some of those sightings. Susan McGinley took the photo of "Bear Breakfast" early in the morning off of her deck in Montgomery. Forrest Hammond, the state bear biologist, really liked this picture as it clearly showed that black bear frequently graze on vegetation. The game camera on Joan and Bill Hildreth's Keeping Track Transect shows another great shot. In this picture the bear is marking his territory on a frequently visited red pine. The tree is estimated to be 18 inches in diameter, so this is a big bear. Kevin Conneely has seen two bear this year and his wife Nancy (me) has seen some pretty good sized tracks both on my own property and on the Richford Keeping Track Transect. In Richford, our team (me, Debbie Foote, and Jim McKinstry) saw the largest pile of bear scat I have ever seen. Please tell us about your sightings!

The high population of Black Bear in Vermont has caused the VT Fish and Wildlife Department to open an early Bear Hunting season this year. The early season is from September 1st through November, with the late season continuing from November 16th to November 24th. It is a fine line between having enough bears around and too many. This may be a subjective number but we do know the population at the moment is very strong and healthy. The "too many" comes from the problems that do arise when the black bear and people come together. More nuisance bear claims have been made in recent years. It is illegal to feed bears, and simply wise not to. The more comfortable a bear becomes around people the more problems can occur.

The greatest concentrations of Vermont bears are found in "core" habitats that tend to be remote from roads, human developments, and human activity. Vermont black bears need large forested blocks of sufficient size to meet the home range

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and food requirements of female bears and cubs. The CHC region is considered core habitat with the greatest numbers of bear found in Montgomery and Richford, with Enosburgh, Waterville, and Bakersfield following. A fairly recent study at the University of Vermont indicates that increases in human development will diminish bear habitat (Donovan et al. 2007). The study projects that between the years 2000 and 2020, the number of housing units in Vermont will increase by at least 12,107 and that most of these units will occur in what are now relatively undeveloped locations.

Under this scenario, the occurrence of black bear would likely decline in some areas of the state in the next 12 years. The way to keep our bear population healthy in the long term it be smart about growth and development and work to conserve and protect are large blocks of forest.

Interesting Bear Fact: In late summer and fall the black bear's calorie needs go from 2,500 per day to 20,000 per day. So, they are spending all their time feeding on high fat content foods at this time of year. Acorns and beechnuts are an important food source.



JOAN AND BILL HILDRETH



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THE CANADA LYNX

By Lenny Tamulonis

ne of the most secretive and solitary animals to be found in Vermont is the Canada lynx. This native species is very rarely seen here and for over 200 years there were only four verified sightings in Vermont until around 2000. But the really good news is that recently there have been more sightings, mostly in the Northeast Kingdom at the Sylvio O. Conte National Fish and Wildlife Refuge in Essex County. These lynx probably migrated from Maine where there's been a recent rise in the lynx population and hopefully they've begun to establish a resident population here. Needless to say, lynx are protected by Vermont's Endangered Species law and the U.S. Fish and Wildlife Service has designated them a threatened species.

They're a close cousin to the bobcat and look a lot like them (in fact, there have been some reports of bobcat-lynx crossbreeding in Canada). They grow to nearly 35 inches long and can weigh as much as 25 pounds. Their main features are long ear tufts, black-tipped tails, and prominent facial ruffs like sideburns on their cheeks. They have longer legs than a bobcat and large, heavily furred feet that are well adapted to travel on snow with relative ease and this is a big plus since their primary prey is the snowshoe hare.

Lynx will go great distances when hunting for food but their dependence primarily on snowshoe



ERWIN BAUER, USFWS



TIMOTHY CATTON, USDA

hares keeps them in areas where young forests make good hare habitat. In the summer, if need be, they'll hunt small mammals like voles, birds, squirrels and occasionally even a deer. When they do take down a larger animal, they'll feed and then drag the remaining carcass to a hiding place and cover it with leaves and dirt for later eating.

An interesting fact: the great horned owl is notorious as a food thief. Sometimes it will position itself above a hunting lynx, and when the lynx flushes out its prey, the owl will swoop in and carry it off.

Generally, lynx were thought to be nocturnal creatures, but in reality they are active both day and night. They are a solitary animal and males and females keep apart except during the breeding season. A male's range can be as much as 18 square miles and a female's range about half that but male/female ranges can overlap. They'll use scent marking and spray urine to mark their territory as well as leaving feces deposits on a tree stump or in the snow. They'll also prominently scratch a tree as an indication or warning to others.

In a regional effort, Vermont has been partnering with wildlife agencies in New Hampshire, Quebec, and Ontario to preserve them because lynx are wideranging animals and need blocks of forest habitat connected by travel corridors. And naturally, this perfectly fits in with Cold Hollow to Canada's goal of habitat conservation and forest links.



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Invasive Species: Garlic Mustard (Alliaria petiolata)

By Nancy Patch



arlic mustard is an herbaceous non-native invasive plant that was brought to this country in the mid 1800's as an edible plant. The prolific seeds of this plant have been dispersed by wind and water throughout the forests and fields of New England. This plant once established can quickly take over an entire understory of a wooded area, overwhelming wildflowers and tree seedlings. There is also new evidence that this plant is killing older trees. Researcher Kristina Stinson of Harvard has concluded that garlic mustard destroys the essential relationship between the beneficial mycorrhizal fungi in the soils and the roots of trees. These fungi aid trees such as maple and ash as well as thousands of other native plants of the temperate northeast by transporting usable phosphorus to the roots and by protecting the roots from harmful pathogens. Garlic mustard kills the fungal spores preventing colonization of these beneficial fungi



into the roots of young plants. As a result the entire forest community changes. It is not known how long the effect of the chemicals secreted by garlic mustard last in the soil.

Infestations of garlic mustard, like all invasive plants, are easier to control when the population is small. It is therefore very important to recognize this species in all its growth forms. New growth has round

shaped leaves on purple stalks low to the ground with no tall stalk. Older plants have heartshaped toothed leaves on a tall stalk. The delicate white flowers bloom in April and May.



Control and management of this species is difficult. The survival of garlic mustard seed is probably 10–12 years (this is double the number previously thought). Repeated mowing has been proven to be ineffective, and no effective biological controls have



been discovered.
The two methods
of control that
are recommended
include handpulling annually and
herbicide control.
Hand-pulling is
still the best way
to eradicate small

populations, but annual monitoring is necessary because of the long seed viability. Larger populations may require herbicide applications which should be done by a certified pesticide applicator.

A recent Garlic Mustard infestation was detected in Montgomery. Prior to this I had not seen this plant in Franklin County. Garlic Mustard is common in Grand Isle County, where there are many large infestations. —N.P.



POLLINATOR UPDATE: MONARCH BUTTERFLY

By Nancy Patch

Tou may have noticed that there are not many Monarch Butterflies around this year. That is because there has been an estimated drop in population of adult butterflies returning this year from 350 million in 2012 to 60 million this year. At this point, the number and condition of the remaining butterflies is the most important issue. It is this remnant of the population that must survive the return migration, and to recolonize the summer breeding habitat in the United States and Canada. The Monarch will move north with the females laying eggs on newly emerging milkweed plants as they migrate through the southern states and into the Midwest and Northeast.

Monarch Butterflies do have a remarkable capacity to rebound from catastrophic weather induced mortality if their habitat is intact, but there lies the rub. Monarchs need Mountain Forest Habitat in Mexico, but communities near their wintering grounds are causing pressures from agriculture and tourism. The acres of wintering ground in 2013 have diminished from 22 acres in 1994, to 7 in 2011, to just 3 acres in 2013 (NYT, 2013). There was once at least 50 acres of Monarch wintering grounds in Mexico. The Mexican government is responding, and we will have to see if their efforts will have an impact. In the U.S. the maintenance of the Monarch primary food source, the milk weed is also just as critical. Because of genetically modified corn resistent to herbicides and the expansion of cropland, it is estimated that 120-150 million acres of habitat has been eliminated (NYT, 2013). Milkweed once was very prevalent among the rows of corn before heavier uses of herbicides were applied. Milkweed is also common in our fallow fields in Vermont. Let's do what we can and maintain the milkweed where we can.

Emerald Ash Borer Update

By Bill McGroarty

he Conservation Commissions from the towns of Bakersfield, Enosburg and Richford have set up a multi-town task force to develop a region wide



approach to confront the anticipated invasion of the emerald ash borer. As reported in our recent *Connections* edition, this invasive insect has shown up in all of the states surrounding Vermont and is expected to establish itself here in the very near future. This very strong probability will be devastating to Vermont's ash tree population and present a serious threat to vehicular traffic as roadside ash trees die and fall.

In order to confront this threat, the three town task force is working "to develop a joint plan of things to be done effectively together to ensure future safety of citizens while making the best use of available budgets to do a pre-emptive survey of ash trees along town roadsides."

Thus far all three towns have applied for and received \$500 grants from Vt. Incentive Program and will use these funds to: adopt a plan on the best way to inventory road side ash trees; conduct the inventory of these trees; and create a plan as to how best to handle this threat.

This committee is meeting regularly and the best way to keep up with proceedings is to contact your town Conservation Commission.



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 Invasive Plant Presentation: September 21st, 10:00am, at the Bent-Northrop Library in Fairfield Center. Join Franklin County Forester Nancy Patch for a primer on invasive species identification. Plants will be on hand inside and outside for identification. Learn to keep your woodlot or sugarbush healthy.

Brownway River Trail Walk: September 25th, rain date 26th, 5:00–7:00pm. Meet at the Enosburg Falls Elementary School Parking Lot. Join Nancy Patch, Franklin County Forester for a walk along the trail to discuss the restoration project, wildlife habitat, and conservation.

Keeping Track Wildlife Event: Wednesday October 9th, 6:30–9pm, at the Montgomery Grange Hall, Main St. Montgomery Center. Extensive wildlife exhibits and traveling natural history museum. A presentation with stunning wildlife photography by internationally renowned naturalist and tracker Sue Morse. An opportunity to learn more about tracking skills and the *Keeping Track Wildlife Monitoring Program*. Free and open to the public. Sponsored by the Montgomery Conservation Commission with support from Cold Hollow to Canada.

Wildlife of the North with Sue Morse, Wednesday December 4th, 7pm, at the Enosburg Falls Opera House on Depot St., Enosburg Falls. Come see Sue's incredible wildlife photography of the Canadian north including wild caribou, wolves, fox and a myriad of other species. Sponsored by CHC and the Enosburg Conservation Commission.