Conservation Democracy

By Charlie Hancock

Greetings Friends and welcome to the Spring 2013 edition of Connections, the quarterly newsletter for Cold Hollow to Canada. The sap’s been running for a few weeks now, and we’re seeing signs of spring everywhere. Pretty soon buds will be popping and the skis will be stowed away again until next year. Hopefully you’ve had a great winter and fun plans for spring.

Town meeting was a few weeks ago, and we saw a number of conservation related measures pass in our region, illustrating the commitment to natural resources that form the foundation of our communities. The largest of these measures was the passage of the Wild and Scenic petition in Enosburg, Montgomery and Richford (all three of the towns it was warned in). See inside for an article from Shana Stewart Deeds, the project coordinator in our region. Other measures that passed included the establishment of a Conservation Commission reserve fund in Montgomery, and town funds allocated to the Richford Conservation Commission for the first time since it was established. Enosburg has amassed about $10,000 to date in their Conservation Reserve fund, and continues to save for future conservation initiatives.

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Values mapping and town forest surveys were also available for four of our member towns, with a great response that will help inform future planning at the local level. Congrats to all our towns for advancing conservation within their own communities.

Also in this issue you'll find the low-down on Vernal Pools, and an article on a recent conservation success story in Enosburg. We hope you enjoy it.

Happy Equinox!
The CHC Steering Committee.
The Upper Missisquoi and Trout Rivers Wild and Scenic Study wish to thank you for your support and update you on the outcome of the March 2013 Town Meeting votes. Berkshire, Enosburgh/Enosburg Falls, Montgomery, Richford, Troy/North Troy, and Westfield all voted yes to support petitioning Congress to include the upper Missisquoi and Trout Rivers as national Wild and Scenic Rivers. Lowell did not support designation at their Town Meeting vote this March.

Many thanks to all of the Study Committee members who worked to get information to their communities so that they could make an informed decision about designation.

The Study Committee will now meet to discuss next steps at our March 21, 2013 Study Committee Meeting in Richford. I anticipate that we will agree to request our US Senate and House Representatives to introduce bills to Congress that request an amendment to the National Wild and Scenic Rivers Act to include the Missisquoi (from Westfield to Enosburg Falls) and the Trout Rivers as Wild and Scenic rivers. We will also have to write a report to Congress to accompany any such introduced bills.

Should this pass through Congress, it would be signed into law by the President. Then a local, Selectboard appointed Wild and Scenic Advisory Committee would be established to oversee designation much as the Study Committee was formed.

More information may be found on our website (www.vtwsr.org) or by contacting your local representatives to the Study Committee or the Study Coordinator — 2839 VT Route 105, East Berkshire, VT 05447; info@vtwsr.org.
Amphibians are not normally thought of as terrestrial animals, however many species make their home in our forests and fields, and are very commonly heard and seen in the spring. An amphibian is a vertebrate animal with scaleless, soft, moist skin and toes that lack claws (as opposed to reptiles, which have scaly dry skin and toes with claws). Think salamanders and frogs, not snakes and turtles. These little guys are incredibly neat because they lead a double life, undergoing a complete metamorphosis from larva to adult, with the larval animal being aquatic, but the adult of many species essentially terrestrial. They generally reproduce in water, in most cases with eggs laid in gelatinous masses or sheaths after fertilization.

This is where the Vernal pools come in. Vernal pools are temporary pools of water, formed from snow melt or spring rains, that provide essential habitat for amphibian breeding. They might simply look like big puddles that show up in our woods every spring, but these are distinctive wetlands in that they are devoid of fish and/or certain species of frog (because they are temporary with periodic drying) and thus allow the safe development of amphibians unable to withstand competition or predation by fish or frogs. The organisms that reproduce here are the “obligate” vernal pool species, so called because they must use a vernal pool for various parts of their life cycle. If the obligate species are using the body of water, then that water is a vernal pool (put more simply, a vernal pool is always a puddle, but a puddle is not always a vernal pool. Evidence of use must be found to classify this specific wetland community). In New England, the easily recognizable obligate species are the wood frog and mole salamanders.

The wood frog, common to our upland forests, is a small (about 2”) frog of moist woodlands. As the name implies, this frog is not an animal of ponds and streams but one which spends its life in the woodlands and vegetated wetlands. In early spring, shortly after thawing from its winter dormancy, the wood frog finds its way to a vernal pool so it can breed. The males get rolling with a loud chorus which can be heard for a few weeks when the air temperature is above the high 40’s (note: the earliest callers in our woods are usually the spring peepers, followed by wood frogs, then the trill of American toads, pickerel frogs and finally leopard frogs, each with a distinct call). The eggs are laid in the vernal pools in the early spring and the frogs

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The tadpoles develop in the pool and eventually follow the adults to adjacent uplands. The presence of evidence of breeding by wood frogs comes in the form of egg masses or tadpoles, indicating that a pool is a vernal pool. The egg masses of a few hundred eggs each are often deposited in clusters of hundreds of masses. The gelatin covering, the size of the communal cluster, and exposure to the sun all help the eggs to be warmer than the surrounding water and they develop quickly. By mid to late April, small black wood frog tadpoles are abundant in vernal pools. As they feed on the leaves and algae of the pool, they grow quickly and become a green-brown color. By June, the tadpoles will have developed legs and be absorbing their tail in preparation for leaving the pool.

Mole salamanders also spend their lives in our upland forests, commonly burrowed on the forest floor. The mole salamanders are one genus, and in Vermont consist of three main species: the spotted salamander, the blue-spotted salamander and the Jefferson salamander (all of which are listed by the state as species of greatest conservation need). In early spring, when the snow is melting, the ground is thawing out, and nighttime temperatures edge above freezing, these salamanders make their migrations on rainy nights to vernal pools to breed. Many salamanders will return to the same pools in which they were born (referred to as ancestral pools). These migrations to the pools often involve hundreds of salamanders, making it quite the spectacle. Eggs are laid in masses which range from the size of golf balls to that of tennis balls, depending upon the species. Salamander eggs are surrounded by a matrix of jelly, which distinguishes them from frog egg masses in which single eggs are merely clustered together. These eggs will hatch in four to seven weeks, and larvae will feed on small invertebrates in the pond until they metamorphose and move onto land in the summer/autumn.

Another interesting species that make their home in the vernal pools of our forests are the Fairy shrimp. These are small (about 1 inch long) crustaceans which spend their entire lives in the vernal pool. Eggs hatch in late winter/early spring, with the adults observed in pools in the spring. Females eventually drop an egg case which remains on the pool bottom after the pool dries. The eggs pass through a cycle of drying and freezing, and then hatch another year when water returns. The presence of fairy shrimp also indicates that a water body is a vernal pool. Other species that indicate that the water body is a vernal pool include fingernail clams and dragon fly larvae.

So get outside this spring and look for vernal pools! If you find a potential pool, look for the indicative egg sacks or larvae which will confirm its use. If you have pool in your woods, document the presence of breeding populations and report it to the Vermont Center for Ecostudies, which is working on a vernal pool mapping project to document pools across the state (http://www.vtecostudies.org/VPMP). This information will greatly improve conservation planning, help protect species of conservation concern that depend upon vernal pools, and preserve the ecological values associated with these critical, but often overlooked, wetland habitats.
This last December a small group of neighbors in the Cold Hollow to Canada region decided together to donate Conservation Easements on their prospective land ownerships to the Vermont Land Trust (VLT). The owners are Nancy Patch and Kevin Conneely; Lew and Claudia Rose; and Stu, Tilda and Allison White. These easement donations are permanent and will forever keep these three almost contiguous parcels as an entire intact forest. In total, the area of conservation is approximately 500 acres. There is a long history of these neighbors thinking about conservation as a group. For almost a decade a group of neighbors ranging from 6–10 parcels had applied for Federal Forest Legacy funding which would purchase development rights in exchange for a public access easement. After almost ten years, some pretty close approvals and one top ranking (and then cut to funding), we discovered that our parcels were not competitive enough nationally to get the funding to purchase the development rights. Another way would have to be found. One of the three property owners that recently conserved the land was me and my husband Kevin. Conserving the land permanently with the Vermont Land Trust has been a dream of mine for many years, but Kevin was not in so much of a hurry. He felt that we were not going to change anything so what was the rush. He also thought that waiting out for potential Forest Legacy funding made sense. But this summer, after thinking further and knowing funding was probably not an option, Kevin suggested that now was the time. I sent a quick note to the Vermont Land Trust staff suggesting we might be considering the conservation of our land. We then heard back that there was some funding that was available through the Staying Connected Initiative (SCI) to help pay for closing and due diligence VLT staff costs but that it was going to run out by the end of the year. To our readers out there, many of you know that SCI has been a partner with CHC since the beginning and had provided early staffing to get our organization off the ground. I asked if there was sufficient funding available for other landowners in our neighborhood group. When the answer was yes, I immediately contacted several of the landowners with contiguous land. We had just a few weeks to make up our minds and sign the paperwork so not everyone wanted to or could make that quick of a decision. Owners of two properties were able to make that quick turn-around. In addition to the help with due diligence costs we will also qualify for a charitable tax deduction up to 50% of our gross income and be able spread it out over 15 years, which helps if your income is not large. Following in our own words are the reasons for and results of conserving our forests.

**LEW ROSE**

“My wife Claudia and I have long been opposed to sprawl and unplanned development for lots of reasons but certainly maintaining the connectivity necessary for a thriving and balanced wildlife habitat was a big issue. So after being unsuccessful in trying to conserve our land through the Forest Legacy program, we, with some encouragement felt it was time to just do it. We think of ourselves as stewards of the land for future generations and “kinda” don’t get the ownership thing. Conservation may not be for everyone, particularly someone who wants to maximize the value of their land through development. But, if you are fine with keeping it whole, based on experience at the Vermont Land Trust there is likely no decrease in value of the property and it could even increase the value. For us there was a tremendous feel good part about doing something for wildlife habitat that would be forever. When we signed the paperwork I was overwhelmed with this sense of doing the right thing.”

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STU WHITE

“Our families have enjoyed the property in Enosburg since 1968. We were attracted initially because it was for us flatlanders a remote, wild and beautiful place in the foothills of the Cold Hollow Mountains. Over the years, after the euphoria settled down some and we learned more about the land and its place in the region, we became increasingly appreciative of the special setting we had stumbled on to. We joined the current use program when it began in late ’70s. As hair turned gray we thought more and more about conservation, and were fortunate to have some like-minded neighbors. After several years of looking into various conservation programs, we were finally able to band together as a small group and donate easements, thanks to a VLT grant program that made it all possible. We would not have done this were it not for the help from VLT and the SCI funding made available to us. We have watched with great interest the development of the Cold Hollow to Canada concept and are proud to be a piece of this larger effort.”

NANCY PATCH

“This is a dream come true. I now walk the land the same as before but with a new sense of accomplishment and peace knowing that this land will never be broken up again. We purchased the land in four parcels, three of which had once been the original farm. We put it back together and now it will always stay that way. Conservation of our landscape is my mission in life; I have been a forester for almost 30 years, a former board member of VLT for 9 years and have helped put together the Cold Hollow to Canada partnership. I can now walk the talk to the fullest extent. Our three properties make up a very special place in Enosburgh as part of the interior of a large block of forest with other conserved lands close by and adjacent to the Town Forest. We have documented a wide variety of wildlife species on our properties including black bear, bobcat, fisher, otter, mink, moose, deer, coyote, fox, vernal pool obligates, several species of snakes, and amphibians, and about 60 species of birds, with sightings of bald eagle. Maybe the bald eagle will nest someday by the interior wetlands. I walk to the cliffs, look out at the secluded ponds and wetlands and hear the ravens talking. I like to think they are saying thanks.”
Our world is getting smaller, more crowded and our natural communities are in greater and greater need of help. In the next couple of hundred years, maybe we will have a global population that is declining and then stabilizing at a sustainable number both for us and for the planet. But in the meantime, we need to be thinking smarter about growth and development. In order to plan well we also need to understand what happens under what type of development. This is not so easy a thing to accomplish.

We are hearing about the impacts of wind development, pipeline development, transmission line development, and ski area development. But what about our every day, incremental slow migration and encroachment into the woodlands by new housing and exurban development. Exurban development is defined as development outside the urban and suburban area and is low density having lot sizes of 5 to 40 acres. It has been shown that this type of development results in ten times the amount of land use change and is growing faster than any other type of residential are in the U.S.

Research in the Adirondacks has shown that the area of change or influence on bird habitat around a single home is 200 meters out from the house as point center, or 31 acres. The agent of influence of this residential development includes the roads, changes in composition and structure, effects associated with pets, effects associated with recreation, and human-wildlife conflicts. Roads impact mobility for birds and amphibians as well as increasing predation. They are also agents for road collision and mortality, and the spread of invasive species. These edges can often draw birds in because of increased food sources but the predators have a greater success, making these edge sinks rather than sources. A sink is where a population will be subject to decline and a source is where the population increases.

House pets such as cats are incredibly good hunters and have an enormous negative impact on bird success. Dogs can have a very negative effect on deer. It has been shown that domestic dogs can account for up to 14% of the fawn mortality. Repeated recreation use, and especially trail development can also impact habitat, much in the same manner that roads impact wildlife through edge effect and higher predation rates along those edges. Lastly wildlife-human interactions are becoming more common. This can sometimes be caused by feeding wild animals in an attempt to “help” them. This includes feeding songbirds outside the winter months when bears may be looking for food. In most cases when a bear becomes a “nuisance” the bear will lose its life. The “nuisance” person just gets told to take down their birdfeeder.

How do we think smarter about development? Some ideas are to increase the pace of conservation (a CHC goal), cluster future development projects and maintain a open space component in those developments adjacent to the interior forest, and keep residential development within a certain distance of an existing road which would limit encroachment of interior forest. Education is also a good choice. When you buy a woodlot and build a house remember the impacts you may have and think about your wild neighbors.
**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.

*Apple Tree Pruning Workshop*
Sponsored by the Montgomery Conservation Commission, Sunday April 14th from 1–3pm. Green Mountain Road, Montgomery. Free and open to the public. Contact the Montgomery Conservation Commission for details.

*Vernal Pool Walk*
Sponsored by the Montgomery Conservation Commission, Sunday May 5th from 1–3pm. Sheldon Farm Road, Montgomery Center. Free and open to the public. Contact the Montgomery Conservation Commission for details.

*A Walk in the Woods*
Saturday May 18th 9:00–1:30, at 2767 Woodward Rd, Enosburgh. Join Nancy Patch, County Forester and Steve Hagenbuch from Audubon VT to discuss Ecological Management for Timber and Wildlife. Sponsored by Vermont Woodlands Association, Vermont Coverts and Audubon VT. Please register by May 16th by calling 802-747-7900 or e-mailing info@vermontwoodlands.org. Please bring a lunch and dress of the outdoors.

Vermont Coverts 3-day Cooperator Training
Vermont Covert’s 3-day training is designed specifically for landowners, offering classroom and field studies in forest and wildlife management. Learn how a healthy forest can enhance wildlife habitat, provide recreational and timber benefits. You will discover how to make a difference on your own land and provide guidance to neighbors and within your communities to encourage forest stewardship.

**2013 Dates**
June 7–9 Northwoods Stewardship Center, East Charleston, VT
September 6–8 Kehoe Conservation Camp, Hydeville, VT

The training program is free and includes room, board and materials. A $100 deposit is required to hold your space (refundable upon request at the completion of the training). For more information or to register, visit our website www.vtcoverts.org or contact Lisa Sausville, Executive Director, (802) 388-3880 or lisa@vtcoverts.org.

*Don’t forget to check coldhollowtocanada.org for updated Upcoming Events*