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A Forest for the Future

CONSERVATION OF FIVE PEAKS, MONTGOMERY

By Charlie Hancock, Board Chair

There's an old joke that Vermont has more cows than people. While today that ratio sits just over 2:1 (in favor of people) there are still parts of our state where black bear, bobcat, moose and even lynx outnumber us. The Cold Hollow to Canada region is home to some of these places, where vast stretches of unbroken forest—among the largest in the state—remain a place where we are but visitors. As this past year drew to a close, we celebrated the protection of over one thousand acres within one such area, permanently conserving a large working forest, known as Five Peaks, for future generations of both people and wildlife.

he path to conservation of the Five Peaks Property began in June of 2013, when the Trust for Public Lands (TPL) presented CHC with an opportunity to conserve a significant tract of land in our region. Very quickly Five Peaks was identified by CHC as a candidate, and the gears began turning to bring the vision of a connected landscape to reality. Over the last two years TPL has spearheaded the effort to secure a conservation easement on the property with the support of the State of Vermont Department of Forests, Parks, and Recreation, CHC, and generous operational support from the Open Space Institute's Transborder Protection



Fund. As 2015 drew to a close, a conservation easement was secured on the property.

The project is part of The Trust for Public Land's Green Mountain Program, an effort to protect working forests, wildlife habitat, and aquatic resources in the Green Mountains from the Canadian border to Massachusetts. To date, The Trust for Public Land has protected more than 48,000 acres in the Green Mountains, with a goal to conserve an additional 20,000 acres in the next decade, particularly along the Long Trail and Appalachian Trail. The property also fits squarely in CHC's conservation vision, which seeks to double the number of conserved forest acres in our region by 2030. TPL was able to obtain funds for the easement from the USFS Forest Legacy Program, which partners with states to permanently conserve forestland of exceptional environmental value.

The Five Peaks property—totaling almost 1,200 acres—is nestled in the northern portion of Montgomery. The parcel (which includes five individual hills) features stands of pine and hardwood, spruce and fir, old sugarbush, and forested wetlands. The parcel is also dotted with stone foundations which tell the story of the eleven farms that once supported a subsistence living from this land.

Five Peaks sits within a large block of over 35,000 acres—including both State Forest and lands of the Atlas Timberlands Partnership (held by the Vermont Land Trust and The Nature Conservancy)—which comprise one of the largest swaths of unfragmented forest outside of the heart of the NEK. These lands provide critical core habitat for our wide-ranging wildlife (like black bear and moose), and sit at the heart of the *Northern Greens Linkage*, identified as a crucial corridor for wildlife moving from the Sutton Mountains in Quebec to the Northern

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KATE WANNER, TRUST FOR PUBLIC LAND

Green Mountains of Vermont, and ensuring greater connectivity across the entire Northern Appalachian-Acadian Region.

The Five Peaks property is a working forest, where the landowners practice silviculture that not only harvests high quality sawtimber and fuelwood part of the engine that fuels our wood products economy—but also seeks to enhance wildlife habitat by engaging innovative tools like those of the Forest Bird Initiative with help from Audubon Vermont. Recognizing economic gain while leaving a healthy productive forest that will continue to accrue value for generations to come lies at the heart of a management strategy which directs annual low-impact timber harvest operations.

A conservation easement is no light decision. While the landowners retain their ownership of the land,

the Forest Legacy easement, held by the State of Vermont, places permanent restrictions on the parcel which both preclude future subdivision or development and dictate strict terms regarding the forest management activities that occur there. The parcel will be monitored on an annual basis to ensure that harvesting activities, and the Forest Stewardship Plan which directs them, are guided by principles of sustainability, and that the full range of services the forest provide—from timber production, to water quality protection, to wildlife habitat conservation—are ensured for the future.

The landowners had wanted to conserve the parcel since acquiring it 10 years ago and making it their home a few years ago. They wanted to see the diverse habitat preserved for posterity and to maintain a healthy and diverse working forest. In their words:





"We have seen first-hand how carefully planned and skillfully implemented thinning and harvesting provide more food and shelter for wildlife, at the same time supporting a local and sustainable wood products industry. Trees from our land have provided the flooring and cabinets for our house, fueled the power plant that serves Burlington, and gone to local sawmills for homebuilders and furniture makes. The conservation easement enabled us to know that this would continue for generations, as it had before us. If we are to have any legacy, this is it."

The Forest Legacy easement ensures that this forest will remain intact for future generations. Five Peaks acts as an anchor, both as a base from which to build on as we look towards additional priority lands in our region, as well as a conservation success from which to build momentum as we expand the pace of conservation in our region.

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SIGHTINGS OF ROADKILL & STORIES OF NEAR MISSES



CHRIS MAZZARELLA

Cold Hollow to Canada is rededicating its efforts to the WildPaths Project! When wildlife cross roads, they are at risk of getting killed by vehicles and these collisions can be a safety issue for people too. Cold Hollow to Canada will spend the next three years helping to field truth the computer modelling done by the state to identify potential wildlife crossing sites. The data we collect together can help not only wildlife, but road managers on the state and local level.

We've tweaked the data collection protocols for random observations and identified where we need folks to Adopt a Roadway. Our hope is that by engaging community members like you, we can collect information about where wildlife are crossing both successfully & unsuccessfully or identify new sites. Please <u>visit our website</u> for more information or join us this spring on one of our WildPaths Walks celebrating National Citizen Science Day. If you'd like to host an information session or walk for your planning commission, conservation commission or other group, please contact us at <u>wildpaths@coldhollowtocanada.org</u>.

Wolves, Coyotes, and Hybrids? Which is Which?

By Nancy Patch



▼ he Northern Forest encompasses four states and three provinces stretching from The Tughill Plateau west of the Adirondacks to the tip of Cape Breton. This forest is the most intact broadleaved temperate forest in the world. We still have today most of the species that were here more than 300 years ago. Most but not all. Some species have gone extinct, like the Passenger Pigeon, and others have been extirpated like the catamount and the wolf. This is at least what we have thought. There is evidence that the cougar or catamount is moving back this way as it expands its western range. Certainly evidence of dispersing cats as well as possible pet releases have been documented, but no breeding evidence has been confirmed in the east.

The wolf on the other hand may be a bit more complicated. Recent genetic research in the scientific publication Biology Letters, has put a

new spotlight on the make-up of our native wolf species and the eastern coyote. There are two wolf species identified in this paper; the gray wolf and the eastern wolf. The eastern wolf has often been thought to be a hybrid between gray wolf and eastern coyote. The research has shown that eastern wolves are in fact a separate species. The authors also suggest the eastern wolf may be the same as the red wolf which was probably the resident wolf in our forests before European colonization. The red wolf, once found in the southeastern United States (and probably in the Northeast as well), became critically endangered in the 1900s, and the last wild animals were gathered and placed in captive breeding facilities. The captive breeding of a small population may have caused their genetics to diverge from eastern wolves that are still in the wild. The red wolf has been since been reintroduced in sites of the Southeast—where they breed

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readily with coyotes, perhaps further confusing the genetic situation.

Wolf taxonomy is very complicated even for the experts and this is exacerbated by the how we have referred to these animals historically as well as their penchant for mating with each other resulting in hybrids. The gray wolf actually comes in a variety of colors; white, creamy, tawny, rufous, and black. The gray wolf has bred with eastern wolf which has resulted in a hybrid that is called the Great Lakes wolf. The gray wolf has also bred with the western coyote which created what we now have in our woods, the eastern coyote, which is bigger and behaviorally different than its western cousin. The eastern coyote is sometimes referred to as the coywolf.



Eastern wolves, though, need conservation action. Their core population is centralized in Algonquin Provincial Park in Ontario. For many years, the animals could be legally shot as soon as they left the park. That's changed: there is now a buffer zone around the park that prohibits all hunting and trapping of wild canids. But beyond that, protection of eastern wolves in Ontario is largely on paper only. Why? The eastern wolf is difficult to tell apart from the coyote. And coyotes can be hunted or trapped year round, without bag limits. So it's essentially open season on eastern wolves in potential expansion areas. The paper's authors hope that establishing the evolutionary history of the eastern wolf, demonstrating it is a species and not a hybrid, will lead to better protection. "The eastern wolf needs a recovery plan that extends into dispersal areas, including Quebec," says Rutledge. "There is wonderful habitat for them to

disperse into; there just needs to be protection so they are not killed as soon as they disperse out of the buffer zone."

In our backyard, we also have a no bag limit kill allowance for eastern coyotes. We need to work towards a different conservation plan if we want to protect and allow the eastern wolf to expand its range. The authors are suggesting that we not dwell on which animal is which, but on the ecosystem, and we know the ecosystem needs top predators. The eastern wolf can play a role along with the coyote, perhaps future big cats as well as the human hunting community in controlling the deer population. In a recent Forest Service publication, White-tailed deer in Northeastern Forests: Understanding and Assessing Impacts, September 2015, it was made very clear that White-tailed deer overabundance is a major threat to the sustainability of the forests in the Northeastern United States. There is no other threat factor other than development that can inflict such damage to forest ecosystems and forest-related economies. "It doesn't matter what forest values you want to preserve or enhance, whether deer hunting, animal rights, timber, recreation, or ecological integrity, deer are having dramatic, negative effects on all the values that everyone holds dear." Stephen Horsely USFS. The eastern wolf, the catamount, and because of us, the coyote belongs here. We need these top predators to help us protect the sustainability of the Northern Forest.

¹ Rutledge et al Biol.lett. 11:20150303



Water Quality Impacts from the Forest

By Gary Sabourin, edited by Nancy Patch

▼ here is a concerted effort going on right now throughout the state and in many sectors to try and clean up Lake Champlain and the excessive Phosphorus flow into the lake. The forest industry takes this very seriously. We have had Acceptable Management Practices (AMPs) on logging jobs in place for more than 30 years, but these rules have just been overhauled by the Department of Forests, Parks and Recreation and are now out for public comment. Below is a summary of the changes to the AMP rules. The revision of the rules specifically strengthen stream crossings where most of the water quality problems exist. It should be noted that only a small percentage of the phosphorus load is thought to come from forest road erosion, but every sector needs to think about their impact.

Summary of Proposed Revisions to the Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont

Background: The Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs) were adopted as rules and became effective on August 15, 1987. Act 64 of 2015 (the Vermont Clean Water Act) amended 10 V.S.A. §2622 to require the Commissioner of Forests, Parks and Recreation, on or before July 1, 2016 to revise by rule the AMPs to ensure that all logging operations on both public and private forestland are designed to prevent or minimize discharges of sediment, petroleum products, and woody debris (logging slash) from entering streams and other waters; improve soil health of forestland; protect aquatic habitat and aquatic wildlife; and prevent erosion and maintain natural water temperature. Act 64 further states that the rules adopted shall be advisory and not mandatory. The proposed revisions will provide for a high level of forest water quality protection by enhancing standards for improving stream crossing practices

and controlling runoff from forest roads and skid trails. These are areas needing improvement as documented through the AMP Monitoring Program and the



2012 Vermont Timber Harvesting Assessment. The proposed revisions were developed with input from within ANR and from public stakeholders. The revisions also propose a new format: proposed AMPs are presented by category as they pertain to—Truck Roads, Skid Trails, Stream Crossings, Forest Buffers, Petroleum Products and Hazardous Materials and Log Landings.

The proposed revisions are summarized as follows:

Sizing Permanent Stream Crossing Structures (Culverts and Bridges) on Perennial Streams

Permanent bridges and culverts on perennial streams, including new installations and replacements, will need to comply with conditions and standards set forth in the ANR Stream Alteration General Permit and Rule.

Sizing Temporary Stream Crossing Structures (Culverts and Bridges) on Perennial and Intermittent Streams

Proposed revisions will provide new standards for sizing temporary stream crossing structures (culverts and bridges) on perennial and intermittent streams for logging operations. These structures are required to be removed upon completion of logging. Proposed revisions also include conditional requirements for the use of temporary pole-ford and brushed-in stream crossings.

Management of Ditch Water on Truck Roads

The AMPs currently prohibit drainage ditches along truck roads from terminating directly into streams but do not provide clear direction for how WINTER 2016













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to manage the ditch water to prevent sediment from discharging into streams. The proposed revisions provide for a new requirement that specifies a minimum distance for installing turnouts to divert the ditch water into a filter area.

Management of Surface Runoff on Truck Roads and Skid Trails

The AMPs currently provide direction for preventing surface runoff from entering streams at stream crossings on skid trails and truck roads by installing waterbars, turn-ups or broad-based dips but do not specify where the diversion should be installed in reference to the stream crossing. Proposed revisions specify a minimum distance for installing waterbars, turn-ups or broad-based dips.

Stream Buffer Protection

Proposed revisions increase the distance for required seeding and mulching of areas of exposed soil adjacent to streams and other waters from 25 feet to 50 feet.

Petroleum Products and Hazardous Materials

Existing AMPs do not address the proper management of petroleum products and other hazardous materials on logging operations. The proposed revisions to the AMPs address this issue.

Acceptable Grades for Truck Roads and Skid Trails

Upper limits are proposed for acceptable maximum grades on newly constructed truck roads and skid trails to better control soil erosion and protect water quality.

Proposed AMP 6.1.1 states: Permanent and temporary truck roads shall not exceed 10 percent

This document was prepared by Gary Sabourin and edited by Nancy Patch. The entire AMP manual and the changes can be found at vtfpr.org under forestry.



JOANNE WAZNY

The 2015 East Franklin County Christmas Bird Count

By Charlotte Bill

Five Red-tailed Hawks!

Four Tufted Titmice,

Three Cooper's Hawks,

Two Bald Eagles,

And a Partridge near an Apple Tree!

Well, correctly speaking, that partridge is a Ruffed Grouse. Otherwise, this is an accurate tally of five of the 48 species recorded by 39 observers on January 2, 2016, during the fourth annual East Franklin County Audubon Christmas Bird Count (CBC). First conducted on January 5, 2013, the East Franklin County CBC is one of Vermont's newest.

According to Audubon, the first CBC was conducted on Christmas Day in 1900 and now takes place every year from December 14 through January 5. It is "[t]he nation's longestrunning citizen science bird project" (CBC Home). As well, Audubon informs us, "Audubon and other organizations use data collected in this long-running wildlife census to assess the health of bird populations and to help guide conservation action" (CBC History).

Every CBC area is a circle with a 15-mile diameter. Our circle's center is intentionally set between Howard Road and the Missisquoi River near the Dairy Center in Enosburgh in order to include significant stretches of the Missisquoi and Trout Rivers, the eastern half of Lake Carmi, the villages

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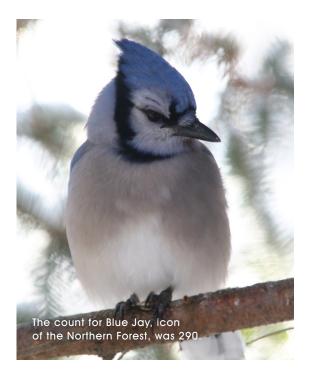
of Montgomery, Richford, Enosburg and Berkshire, and large chunks of our Cold Hollow to Canada forests. This territory offers diverse habitat for year-round resident bird species, as well as for migrants such as Rough-legged Hawk and Bohemian Waxwing that visit us for the winter from their more northern breeding territories.

In fact, this year's observers recorded not only a Rough-legged Hawk (compared to a high count last year of five and none in our first two count years), but also 13 Bohemian Waxwings, a welcome first appearance of this species during our four-year history. Other new species for the circle were 41 Common Goldeneye, nine Hooded Merganser, two Great Blue Heron, 19 Ring-billed Gull, one Herring Gull, one Great Black-backed Gull, and one Belted Kingfisher. Obviously, this year's open water on Lake Carmi and the Missisquoi River provided excellent conditions for these species.

Besides adding eight new species, this year's count set several other records. We recorded 48 species, compared to our previous best of 40. We also observed four count week species, i.e., species seen



PHOTOS: CHARLOTTE BILL



during the three days on either side of count day, though not on count day itself. Two of these were never-before recorded species, Greater Scaup and Bufflehead, both seen on Lake Carmi. Finally, observers tallied 5,672 individual birds, breaking 2012's record of 5,486.

This year's data will be available online after Audubon has reviewed all data from its more than 2000 active count circles (115th CBC). However, you can access previous years' count results at CBC Results.

Please consider joining us for our 5th annual count, to be held Saturday, December 31, 2016. It promises to be interesting, fun, and an excellent way to add to our understanding of our Cold Hollow to Canada region!

For more information about the East Franklin County CBC, contact Eddy Edwards at eddy_edwards@fws.gov.

CELEBRATING THE NEW YEAR TRACKER STYLE

By Joan Hildreth

I t was a perfect day for a KTMP outing even though the tracking conditions weren't absolutely perfect. A little more than a dusting of snow the night before had left most of the tracks we discovered somewhat muffled, requiring more intensive study than would have been ideal. But the temperature was reasonable for January 2nd, and there wasn't enough snow to require snowshoes.

In attendance were the entire Montgomery KTMP crew including our elusive local free agent tracker (he knows who he is!), the 6 year old daughter of one of our team members, and a tracker from a team in Richford. We also had the good fortune of having Travis Worthington of Montgomery with us. Travis is a professional tracker, a lean, sturdy young man who is calm, patient, and polite. Although he is full of knowledge which he enthusiastically shares, he knows to not overload anyone with too much information at once, and is attentive to questions and comments. It's also impressive that Travis does not appear to jump to conclusions. One of the team members observed that "Travis isn't an opinionated tracker; he's a diligent tracker."

When we started our walk, we let Travis know that KTMP teams monitor their transects once each season of the year and document any sign of specific focal species including bear, moose, fisher, mink, bobcat, lynx, and otter.

We also let him know that we enjoy looking for the sign of other wildlife which are not on the focal species list, too. As we walked along we passed several sets of deer tracks. Travis pointed out the various gaits (walking, trotting, bounding, running) of the deer, and even discussed how to tell whether an animal is left or right leg dominant. We then spent time looking at tracks which we thought were either red squirrel or weasel, following them a greater distance than we normally would, with Travis gathering and sharing information about the behavior of the animal, and concluding that they were weasel tracks. (In addition, he pointed out an edible plant below a cliff, and we all took a bite or two. It tasted like dirt, but thankfully we all lived.) Although none of this was directly related to the species we monitor for KTMP, it was still very interesting—and fun!

After making our way to the top of a cliff, one of our team members, Doug Clowes, discovered some intriguing tracks, and with Travis' guidance, we all studied them very carefully. Evidence pointed toward them being feline tracks. The pattern was direct register, and the tracks were round, not elliptical. After gently extracting the powdery snow from the tracks, no claw marks could be discerned. Travis said that the size of the tracks was larger than that of a bobcat, and there was a soft halo surrounding them in the snow that was indicative of the fur on the bottom of a lynx foot. We continued to follow the tracks and came to a place where the animal had avoided an obstacle by walking across a small log (something a feline would do), and after making a 5 foot leap to the top of a large boulder, there were still no claw marks showing in the tracks. It appeared that we may have discovered lynx tracks. We were all pretty excited!

The walk continued, and we saw plenty of other wildlife sign along the way, with Travis offering additional useful insights. We stopped to have a look at a grove of red pines which we had documented as having been frequented and marked regularly by bears. We found that this had continued since our last walk in the fall as evidenced by there being lots of new bear fur, claw marks and bite marks on the trees. We documented these latest findings and continued on.

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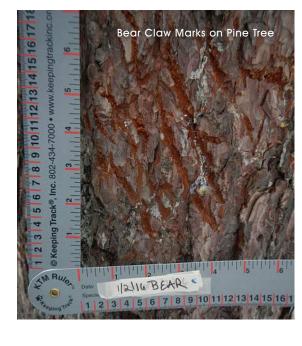














Our last stop was at a grove of wild apple trees where we had set up a game camera after finding bear sign there in the fall. Sure enough, there were fresh claw marks on one of the trees, and when we looked at the camera's content, there was a video of three bears taken on December 16th, and it included showing one of the bears climbing down from the tree which had the fresh claw marks. It was definitely pretty cool to see that!

We then returned to where we had started the walk earlier that morning, feeling a bit tired, but content. It had been a wonderful way to start the New Year. We had spent the day tracking with great people in a beautiful area which is home to abundant wildlife and where we all are fortunate

enough spend time, too. We were also pleased to have had the opportunity to benefit from Travis' knowledge of and enthusiasm for tracking wildlife. That made a great day even better. We're already marking our calendars for the next outing and are looking forward to it. Who knows what we'll see then...

Submitted by the Montgomery Keeping Track Monitoring Program (KTMP) Team—Doug Clowes, Jeff Goyne, George Hambleton, Bill Hildreth, Joan Hildreth and Todd Lantery. Also in attendance were "Junior Tracker" Miss Marion Lantery, Maryann Wood from one of the Richford KTMP teams, and Travis Worthington.







Upcoming Events

COLD HOLLOW TO CANADA PROGRAMS

National Citizen Science Days—WildPaths Walk
Saturday, April 16th, 10 am – Noon
Friday, May 20th, 9–11 am
Sites TBD, Free event

Please register by contacting Bridget at bridget@coldhollowtocanada.org

Join us as we kick-off the reinvigorated CHC WildPaths citizen science project in the Northern Green Mountains. WildPaths is an opportunity for community members to help gather much needed data on where wild animals are crossing our roads; both successfully and unsuccessfully. We'll walk one of the many wildlife crossing sites identified by the state looking for signs of animals and roadkill. Find out how the WildPaths project will help inform decision making when it comes to wildlife and transportation. Participants will learn how to share random observations or how to Adopt a Roadway for the project. National Citizen Science Day kicks off April 16th and runs through May 21st.

Programs by Local Conservation Commissions

Film Screening of "Jumbo Wild" Wednesday, March 2nd, 6:30 pm Grange in Montgomery Center Admission \$5.00

Contact: Charlie @ 326-2093, northwoodsforestry@gmail.com or Annette @ 933-2416 or richfordconservation@gmail.com

Co-sponsored by the Montgomery & Richford Conservation Commissions and Montgomery Library

The Jumbo Glacier Resort is a year-round ski resort proposed in the Jumbo Valley In the heart of BC's Purcell Mountains. Located in the traditional territory of the Ktunaxa Nation, 55km west of

Invermere, the resort would occupy 6,000 hectares and access four glaciers. For over 24 years, local residents, concerned citizens and the Ktunaxa Nation have strongly opposed this development for environmental, economic and spiritual reasons. Despite this overwhelming opposition, development has continued to move forward despite overwhelming opposition. This breathtaking film tells the story of this amazing place and the fight to protect it. Find out more at: http://www.patagonia.com/us/the-new-localism/ Jumbo-Wild

Winter Tree Identification & Wildlife Tracking Sunday, March 13th, 1 pm Richford Elementary School's Nature Trail, Free event

Contact: Charlie @ 326-2093, northwoodsforestry@gmail.com or Annette @ 933-2416 or richfordconservation@gmail.com

Co-sponsored by the Montgomery & Richford Conservation Commissions

Paint & Sip Fundraiser
Thursday, March 10th, 6–9 pm
Grange in Montgomery Center
Fee of \$40.00 Benefits the Montgomery
Conservation Commission.
Snacks provided. BYO Beverage. Space limited.

Call Sue Wilson for further info and to reserve 326-4189.

Apple Tree Pruning Sunday, April 10th, 1 pm Location TBD, Free event

Contact: Charlie @ 326-2093, northwoodsforestry@gmail.com or Annette @ 933-2416 or richfordconservation@gmail.com

Co-sponsored by the Montgomery & Richford Conservation Commissions

REGIONAL CONSERVATION COMMISSION MEETINGS

BAKERSFIELD CONSERVATION COMMISSION

Meets the last Monday of every month at 1:00 PM in the Town Hall Building, 40 East Bakersfield Rd, Bakersfield.

ENOSBURGH CONSERVATION COMMISSION

Meets the fourth Monday of every month at 7:30 PM at the Cold Hollow Career Center, 184 Missisquoi St., 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 COMMISSION

Meets the fourth Tuesday of the month at 5:00 PM in the upstairs conference room of the Arvin A. Brown Public Library, 88 Main St, Richford.

COLD HOLLOW TO CANADA STEERING COMMITTEE

Meets the third Monday of each month from 6:00 to 8:00 PM at the Cold Hollow Career Center in Enosburg Falls or Bakersfield Library. We rotate the location, so please let us know if you'll be joining us. It'd be great to see you there.









