Greetings Friend, and welcome to the seventh edition of our quarterly newsletter. We hope that this edition finds you ready for winter, with your wood pile topped off, your skis waxed, and your woolies fresh from the cedar chest.

With this edition, we’d like to share a vision for our region which has been developed with our partners over the past year. We hope that this can lay the groundwork for increasing the pace of conservation in our region, ensuring that as our communities grow and change over the coming decades the rich natural resources that define our corner of the world remain intact for present and future generations.

The towns on the western flanks of the Green Mountain ridgeline in northern Vermont are a special place. Our communities are defined by the rural character which surrounds us. Rolling fields and pastures support our farm economy and paint our landscape. Vast forest expanses support our local wood products economy and supply the world with beautiful hardwoods. Our woodlands provide endless opportunities for recreation and places to escape the daily grind. Vistas from dirt roads of the Cold Hollow Mountains and the Jay Range never cease to take our breath away.

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Cold Hollow to Canada embraces Aldo Leopold’s land ethic, and believes our human community is comprised of interdependent parts that include the soils, waters, plants, and animals. More than being a home to us, our region is a critical crossroads for wide-ranging mammal species – like black bear and fisher, bobcat and lynx, moose and deer – and our intact, connected forestland ensures their populations’ health into the future. This region is part of one of the most ecologically intact temperate broadleaf forests in the world, nestled within the Northern Forest that stretches from western New York, through Vermont, New Hampshire and Maine to southern Quebec and Canada’s Maritime Provinces.

Our communities are changing. While we haven’t faced the same rapid growth that other parts of the country have experienced, the last ten years have seen a 7% increase in the population in our corner of Vermont (with as high as a 21% increase in one of our towns). This growth can be positive, enriching our cultural life and spurring greater economic opportunity and prosperity, but this growth also presents us with an important question: How do we support the growth of our human family, while maintaining the natural features that define the place we call home?

**IMPORTANT LANDS TO PROTECT**

**Habitat Blocks** – This is the “core” forest – the large swaths of relatively un-fragmented forest cover, defined as a contiguous area of natural cover with little or no permanent internal fragmentation from human development. Keeping these blocks of forest intact is important for maintaining the vibrant forest products economy, as well as for recreation, wildlife habitat, clean air and water, and aesthetics, among countless others. Varied habitat types occur within these blocks, which have been ranked through an analysis done by Vermont Fish and Wildlife and the Vermont Land Trust based on their biological and physical diversity value, their relative importance based on biological & conservation value, and the potential threat to them. Ranking values are shown in shades of green on the map, with highest five ranks shown here.

**Connecting Lands** – These are the critical areas, defined by an analysis done by the Staying Connected Initiative, VT Fish and Wildlife, and continued on page 3
the Vermont Land Trust, that connect one habitat block to another, crucial for movement between habitat blocks and allowing wildlife to move across the region and ensuring biodiversity and the long term health of these populations. Maintaining the forest cover and viable road crossings in these areas ensures the long-term health of wide-ranging mammals that need to move across the landscape to meet all their needs. These areas are often closer to town, and reinforce the region’s rural identity and character. These Connecting Lands can be seen in red hatching.

Forest Parcel Blocks – These are areas identified by Cold Hollow to Canada using the available parcel data from our seven town area. The layer delineates blocks of contiguous forest comprised of parcels at least 200 acres in size which are located in the Habitat Block analysis focal area. These areas are un-fragmented by ownership pattern, and represent the greatest opportunity to conserve a large percentage of those habitat blocks in our region. Forest Parcel Blocks are shown in green hatching.

Conserved Land – These include both public and private parcels protected from future development either by ownership or conservation easement. These lands are shown shaded in orange.

THE VISION

Cold Hollow to Canada’s vision for the future of our region is a strong and sustainable regional economy and a healthy and intact forested ecosystem. We believe protecting the forests’ integrity, in turn, protects our region’s way of life, economy, health and wildlife populations. CHC has developed a three-fold vision which lays the groundwork for ensuring that as our communities grow and change in the coming decades, we maintain that which defines this place we call home.

1. Forest Cover — CHC has a vision of sound stewardship on our private woodlands, driven by individual landowner commitment. This will be reflected through participation in Vermont’s Current Use Program; third party certification on individual parcels through organizations like Tree Farm, the Forest Stewardship Council or the Sustainable Forestry Initiative; and/or participation in conservation initiatives administered by state or federal agencies targeting wildlife habitat and forest health.

2. Permanent Conservation Easements – CHC has a vision of working with partner organizations and interested landowners to permanently protect 40% of the identified un-fragmented habitat blocks in our region by 2030 through the donation or purchase of conservation easements on individual parcels within Forested Parcel Blocks identified by CHC. Currently 20% of the identified valuable habitat blocks are conserved. To achieve our goal of doubling this by 2030, about 23,500 additional acres will need to be conserved. While this number may sound massive, it accounts for less than 30% of the total land area in the seven town CHC region.

3. Connecting Lands – CHC has a vision of preserving connectivity zones between habitat blocks will ensure the ability of wildlife populations to move across the greater landscape. Encouraging specific management practices on properties identified as crucial to landscape connectivity, in combination with permanent protection through the donation or purchase of conservation easements on properties.

OUR FUTURE

This vision – based on a shared commitment to this place we call home – will only be accomplished by building consensus in our communities around the places that we find important, and by engaging public and private partnerships to leverage the potential opportunities for conservation on the horizon. By working together this vision is more than possible … and it’s already underway. We hope that you’ll join us as a partner in this ‘greenprint’ for conservation.
How do they Survive?
As we get ready for winter by filling our woodsheds, harvesting our gardens, preparing our vehicles and pulling out our winter clothes, do you ever wonder how the wildlife in our forests get through the winter cold and snow?

Some animals hibernate; others find ways to tough it out. True hibernation is a state of deep sleep, or torpor, where an animal’s respiration, temperature, and heart rate are drastically reduced. Some very interesting examples of hibernation can be found in our reptile and amphibian species. These animals are ectothermic species, getting their body temperature from the outside environment. Snakes den below the frost line and curl up in a ball to hibernate, often in large numbers as there are few hibernacula available to the larger snakes. In Vermont the rare Eastern Timber rattlesnakes and Black Rat snakes den together. In the winter, aquatic frogs like Leopard, Green and Bullfrogs stay underwater in a very low energy state. When underwater all winter, they need to breathe through their skin so they cannot bury themselves deep in the mud. Terrestrial frogs like Wood frogs, Spring peepers and Gray tree frogs change their chemistry while they hibernate by producing either glucose or glycerol which acts like an antifreeze within their cells, allowing the fluid in their bodies to actually freeze without doing any harm to the frogs. Many insects also produce glycerol to provide this natural antifreeze.

Hibernation is not the only way to make it through the winter. Only a very few mammals in our region actually hibernate through the winter. These include woodchucks, bats, and woodland jumping mice. Black bear do not truly hibernate. While their heart rate does drop from forty beats per minute to ten and their oxygen intake is cut in half, their body temperature only drops a few degrees. They give birth and nurse in the den and they can wake fairly quickly if disturbed.

Toughing it out strategies used by different species include some of the following:

Insulation: Porcupines and foxes grow a thick underfur. Deer and moose also increase their underfur and their guard hairs grow longer and thicker. Birds can grow 50% more feathers in the winter. Small mammals such as mice and voles stay under the snow where the temperatures are warmer because of the insulating effect of the snow.

Using fat reserves: Many animals such as deer and bear build large fat reserves in the fall to get through the winter. Beech nuts and acorns are an important food source for these animals. Birds such as junco, finches and chickadees build up fat reserves during the day that get them through each night. These birds also have specialized beaks to utilize the winter seed found in native conifers which have a high fat content.

Getting social: Small birds like the chickadee group together in cavities to stay warm through cold winter nights. They rotate from the center of their cluster to the edges throughout the night to share the warmth and protect the inner layer.

Moving to where the warmth is: The best deer wintering habitat is under a thick insulation of hemlock or other conifer on a southwest slope where the solar gain is the highest. Deer move to these wintering areas when the snow gets too deep to move around safely. A red fox will find a tree to curl up next to that radiates the warmth of the sun back to the fox. Many animals follow the trails made by moose to make it easier to get through the deep snow.

Most animals use a variety of these strategies to get through the winter, but even with all these possibilities, some animals do not make it through extreme cold and deep snow, or sometimes when there is no snow. One uncertain factor in the survival of our northern species is the affect of climate change and the ability of our wildlife to adapt to these changes. The best thing we can do to help more individuals survive is to maintain diversity in our forest structure, species distribution, food sources and cover. Oak, cherry, beech, apple trees, large dead trees, dense understory that includes nut and berry producing shrubs, large down logs, and small openings all help a diverse range of wildlife species. Ask your consulting forester or county forester for advice on wildlife habitat enhancement.
“Imagine you’re in a forest, deep in the heart of the Democratic Republic of Congo … there are strange noises up above …”

The barn is dark, sounds of insects fill the air, a tree nearby shakes, and a shadowy figure moves among the branches. Suddenly there is a vocalization, a flurry of limbs and a great ape swings into view …

The great ape is none other than renowned scientist and conservationist Ian Redmond, and the barn is the headquarters of Chimp-n-Sea Wildlife Conservation Fund in Johnson. It was early October when Ian Redmond swung to Vermont from England to share a talk accompanied by incredible, intimate footage of gorillas he’d captured while working with the late Dian Fossey (Ian was one of Dian’s research assistants). Ian spoke of his personal connection with these incredible apes, our close cousins, and about the effects of climate change, not only on gorillas but also on their habitats and all of Earth’s support systems. He spoke of the stories that we tell ourselves about our place in nature while Borgo, a “human-ape hybrid” contributed a reading from Mark Laxer’s The Monkey Bible (an exploration of the line – both scientific and mythological – which separates humans from non-human animals, and a plea to slightly alter the stories by which humans define themselves as a way to protect the great tree of life). Lively discussions followed.

Proceeds from the event, which was a successful inauguration of the barn at 480 Hogback Road, went to the Ape Alliance (www.4apes.com). Ian also spoke to students at Cambridge Elementary School, and Lamoille Union High School in well-received and inspirational events. Mark Laxer and Sara Lourie, co-founders of Chimp-n-Sea were proud to present this event in association with Cold Hollow to Canada (and beyond!). They hope to hold future wildlife, storytelling, and conservation events at their barn. For more information about Chimp-n-Sea or to receive information about future events see: www.chimp-n-sea.org or email: info@chimp-n-sea.org. For more information about The Monkey Bible see: www.monkeybible.com. A video of the event will be posted soon, please check www.chimp-n-sea.org in early December for details.
The Richford Conservation Commission has been exploring the possibility of creating a Nature Trail at Richford Elementary School. The land surrounding the school hosts several different types of habitat including woods on either side with different species of trees, a stream bed and banks, open fields and grassy brush areas. These habitats are home to many species small and large. We hope to partner with some interested students, parents, faculty, and community members to make this happen. A planning committee will be organized this winter, so if you would like to help, please call Annette Goyne at 933-2416.

We are helping to host a Wild Path Monitoring Workshop on Dec. 3rd at Richford High School, sponsored by The Staying Connected Initiative and CHC. The workshop is at full capacity with 20 interested individuals. Several Richford citizens have signed up and we look forward to having citizen scientists recording wildlife crossings in various areas of Richford over the coming years.

Upcoming programs include a Christmas Bird Count at the end of December. (The date is yet to be determined, but will be announced in local papers.) We are planning a Feb. 19th Winter Tree ID snowshoe walk jointly with the Montgomery Conservation Commission. It will take place from 1:00 to 3:00 PM at the home of Joan and Bob Hildreth in Montgomery. In April, we will offer a workshop on how to release wild apple trees to bear fruit for wildlife jointly with The Covered Bridges Garden Club of Montgomery. This workshop will be taught by forester Charlie Hancock who has generously offered to share his expertise.
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 Library, 86 Mountain Rd, 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 www.coldhollowtocanada.org for updated Upcoming Events*

PHOTO: JOANNE WAZNY