

Littleton Conservation Trust



Newsletter

Autumn 2002

Now That Days Are Colder by Doreen Morse

I was thinking about the outdoor animals recently, wondering just this:

- ♦ Where do they all go during the winter?
- ♦ How do they find protection from the cold and wind?
- ♦ What do they do to survive?

Winter survival takes three basic forms: **hibernation, migration, and adaptation.**

*"Now that the leaves are down,
where are all the chipmunks
at the edge of town?"
... **hibernation***

There are varying degrees of **hibernation**, (from the Latin meaning "to winter") from catnapping to deep undisturbed sleep. I'll start with chipmunks. Those nifty little balls of energy are so busy collecting right now (and chattering constantly at my cats). Well-fattened with summer feasting (you've seen the greedy buggers at your feeder with cheeks so full they can't fully shut their mouths!), chipmunks join a small list of other animals with similar routines. This list includes bears, woodchucks, raccoons, little brown bats, red

squirrels, jumping mice, toads and others—winter sleepers all. Chipmunks store food, then some time in late Fall they retreat to their dark, warm, quiet homes and sleep. The chipmunk has worked hard by winter to extend his burrow with a labyrinth of chambers, (one will be a pantry, another the toilet area, etc.) and may seal the entrance as they do sometimes in summer. More than one chipmunk may inhabit a large burrow. Few hibernators store food as the chipmunk does, and not all sleep undisturbed through the entire winter. Chipmunks, unlike most other hibernators, may wake for a winter snack. Chipmunks will retreat to their burrows when the temperature has registered 50 degrees for several days in a row. He will curl up in a ball, close his eyes and sleep on a nest of grass with maybe a store of seeds beneath him. His respiration and heart beat slow considerably. Warmer weather may wake him, he may snack, and return to his sleep. We'll not see him for the better part of five months (with some exceptions).

Not all hibernating animals sleep underground. The raccoon, for instance, prefers a hole as high up in a tree as he can find. Some insects and reptiles also hibernate, although for insects it is called *diapause* and for reptiles *torpor*. Wasps sleep completely straightened out deep within a log or under bark. The larval May beetle digs down well below the frost line, as they cannot withstand freezing. Some insects can endure continuous freezing, and snails and spiders that have been encased in ice crystals and solid

(continued on Page 2)

Living With Our Wild Neighbors by Kathy Stevens

Littleton is a beautiful town that still has its rural character and open spaces to enjoy. But Littleton, like many towns today, faces ever-increasing pressure from development as more people want to move here to enjoy "living with nature". More and more houses are built, leaving less natural area for people to enjoy and fewer places for wildlife to live apart from people. We've built where the animals live, and now they live with us.

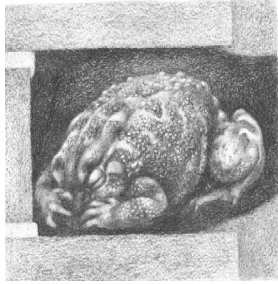
Our wild neighbors can be fun to watch and admire, but when they start to tear up our lawns and eat our shrubs, we sometimes perceive them as a nuisance. So, we all need to learn to live in harmony with our wild neighbors. They belong here too, and life would not be the same without them. Here are a few facts and tips on how to learn to identify and live with our wild friends.

(continued on Page 4)

Inside this issue:

<i>Littleton Trail Updates</i>	3
<i>Membership Information</i>	3
<i>About the LCT</i>	5
<i>Book Reviews</i>	6

masses of frozen soil for weeks at a time become active when thawed out. This is not something vertebrates can survive. Earthworms, ants, spiders, clams, spotted salamanders, turtles, snakes, and snails are all dormant in winter, all hidden under or within the ground, leaves, mud, or logs. Cold water holds more oxygen than warm water, and the frogs, turtles, and many fish that are hidden from view under the ice can breathe by

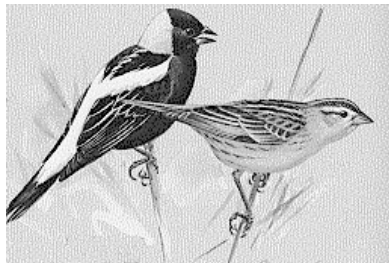


hibernating toad

absorbing the oxygen through their skin. The majority of our common animals, however, do not hibernate.

*“Now that the days grow shorter,
now that the summer’s gone, where are all the
robins who hopped across our lawn?”
...migration*

A second option for animals is to **migrate** to a warmer climate or to some place where they can find food. No birds hibernate (except the western white-throated sparrow). Some birds migrate, and some stay for the winter. The migrators, such as Canada geese, various ducks, and red wing blackbirds, often travel in flocks to warmer climates. Some travel alone, such as the bobolink, flycatchers, and hummingbirds. The bobolinks we see at the top of the hill at Long Lake Park travel up to 11,000 miles to their winter homes in Brazil and Argentina. They are North America’s longest-distance migrators. Birds are guided by the sun, moon, and stars for direction. They can also use the Earth’s magnetic field. Migration, however, is not an easy “out” for birds that undertake it. A migrating bird must accumulate up to an additional 50% of its bodyweight to provide the reserve energy necessary to make the trip. Birds face additional obstacles on the way such as parasites, diseases, and predators (including humans), along with changing food availability.



bobolinks

In addition to birds, some insects and mammals also migrate, although I found no migrating mammals from our area (except human migration to Florida). The most commonly known migrating insect is probably the monarch butterfly, but other butterflies, such as the painted lady, also migrate.

*“Now that the nights are frosty,
meadows silver-white, where are all the
crickets that used to chirp at night?”
...adaptation*

The next verse of the poems is: “*They’re hiding under cover, feeling tired and old. Most of them will perish from the winter cold.*” Despite this, crickets will sing in the spring, as their eggs, stored safely underground, will survive and hatch. Just like humans, animals have found ways to **adapt** and survive. If the adult is unable to survive, they insure the species survival by placing their eggs where they will survive, or nature places them at some immature stage of development that can survive the winter. The praying mantis also lays eggs before she dies. These eggs, however, are placed in a case built by her, attached to a branch above ground. One case, or *ootheca*, will produce hundreds of tiny mantises in the spring. Some insects, such as the larvae of the stag beetle, thrive inside dead oak trees in winter, eating continuously through the seasons until adulthood—a two-year process. Honeybees are active all winter. The hive members work together by vibrating their wings to burn off the honey they have eaten and this, in turn, generates heat to keep the hive warm.

The birds we see who “tough it out” in our winter season, can adapt to the cold and have an available food source – often our feeders. These are the seed-eating birds such as the chickadees, nuthatches, blue jays, and cardinals. Birds such as the nuthatch and downy woodpecker also find hidden dormant insects and larvae to eat. The occasional warmer weather may bring an odd robin or two to pick emerging worms in uncovered areas, such as over our septic tank covers. Birds, however, who rely totally on insects, fish, or other prey, typically move to where these are available. Birds can fluff their feathers to trap warm air close to their bodies to stay warm, and have some extra fat to help them through the season.

Animals who stay, or who arrive here from northern areas, find life very hard; adaptation is a life and death matter. Prey is rare and hidden, often covered in snow. The tiny shrew is active 365 days a year, out and about under the snow in winter. This may be why the shrew lives only about eighteen months – it wears itself out. A hibernating bat of the same size may live seven or eight years.

Some animals store food, such as our gray squirrels, moles, and even our blue jays, which often store food in old bird nests. Mammals grow longer, denser fur in winter. Some change their fur color for protection and put on a new layer of fat. Some animals, such as porcupine and skunks, hunker down in a warm burrow, tree hole, or rock crevice for

(continued on Page 5)



For those who like to walk the trails on town conservation lands, here is a description of some recent additions and upgrades:

Mary Shepherd Estates Open Space

A trail is just about complete within the 20 acres turned over to the Conservation Commission this year. You can reach it from Snow Terrace near Woodridge Road. It follows a wooded ridge then proceeds down to an open field near the Westford town line. It crosses a brook before going up a hill to a yet-to-be completed parking area on Powers Road. Look for white trail markers. The trail is about one-half mile one way.

Sarah Doublet Forest / Nagog Hill Orchard

We completed a connector trail this year that links the town-owned land and parking lot on the lower end of Nagog Hill Road to the trails in the Trust-owned Sarah Doublet Forest. The trail, named the "Dr. Ed Bell Trail", follows a high rock ridge with a curved stone wall at the top. This unique trail is unlike any other in town and is about one-half mile long. You can also access it from the Sarah Doublet parking lot using the "Tatatiqunea" Loop.

For an online guide to Littleton conservation lands, go to:
www.littletonconservationtrust.org

Holly Park

This small well-kept area has a loop trail through dense vegetation, behind the park on Trust land. Over the last several years, the trail had grown in and was not usable. This year we cleared it again. It is a nice short (5-10 minutes) walk for those who like to explore such places.

Oak Hill

We are using a uniform color system to remark the trails, most of which were last marked more than several years ago. We are abandoning many old narrow side trails to eliminate confusion, to generate more wild areas, and to produce some relief for stressed wildlife and wildflowers.

Long Lake Park

The trail for the first few hundred feet at the Harwood Avenue parking lot became quite muddy with roots creating obstacles to walkers last winter and spring. Over the last few months, we placed wood chips on the trail for easy access and comfortable walking in this wet woodland area. Wood chips were provided by the Littleton Highway Department.

Most of this work was done by volunteers Ray Grande, Charles Tirone, and Art Lazarus.

Membership Information

Your membership, in any amount, is a statement of your support for our all-volunteer efforts. Membership funds allow us to maintain and expand our trails, offer educational programs, promote environmental advocacy, and provide access to our properties at no charge for all residents. Our Permanent Fund is our stable, long-term endowment fund.

Littleton Conservation Trust Membership Form

New membership Renewal

Date: _____

Name: _____


Address: _____

Phone: _____ Email: _____


<input type="checkbox"/> Individual: \$10	<input type="checkbox"/> Family : \$15
<input type="checkbox"/> Supporting: \$30	<input type="checkbox"/> Contributing: \$60
<input type="checkbox"/> Patron: \$100	<input type="checkbox"/> Life Patron: \$1,000

Permanent Fund Donation: \$_____

Please send me information about how to preserve my own land.



Please send this form to: Henry S. Harvey, M.D. , Treasurer
 Littleton Conservation Trust
 PO Box 594
 Littleton, MA 01460



What Animal Are You Dealing With?

Here are some signs of wildlife that you might find around your house:

- ◆ **If someone's been digging** around your porch or you're finding patches of grass ripped up, check for the distinctive odor of a skunk. Skunks like to borrow under structures, and they hunt for grubs and insects to eat in the lawn and garden.
- ◆ **If you've got noises in your attic**, squirrels or raccoons are probably visiting you. You will more likely hear squirrels in the day, raccoons at night. If it sounds like puppies are up there, it could be young raccoons.
- ◆ **If there are long burrows showing up under your grass or garden**, they are most likely dug by woodchucks (groundhogs). Woodchucks also like to eat your flowers. Small burrows and missing flower bulbs are signs of chipmunks or moles.
- ◆ **If you find the top parts of your shrubs torn** with ragged edges on the twigs, deer are probably visiting you. If your plants are being nipped with clean edges, it's most likely rabbits or other small critters.



Some Ideas About What You Can Do

Here are some ideas about what you can do to keep wildlife away from your house:

First, remove food sources that may attract animals, such as trash, dirty barbecue grills, and spilled birdseed.

Next, look at your house and other structures – block and permanently repair entry holes into your basement and attic. Put up wire fencing or trellises around the base of your porch or deck to keep skunks and raccoons from taking up residence underneath.

Below are a few tips about what to do to prevent visits from specific animals.

- ◆ **Skunks** are gentle creatures that don't see well and spray in self-defense if startled. If possible, fence in areas of your yard for your pets to keep skunks out. Keep your dogs leashed and close by as much as possible. Ammonia-soaked rags can repel skunks (as well as raccoons, wood-

chucks and other critters) if placed around areas they are visiting. (Re-soak the rags as the smell fades.) If your pets get sprayed, use the following solution to neutralize the odor: Combine 1 quart of 3% hydrogen peroxide, ¼ cup baking soda and 1 teaspoon liquid soap. (Many groomers use this solution to de-skunk pets.)

- ◆ **Woodchucks** can be frightened away by moving stimuli such as a beach ball left to blow in the wind, a scarecrow that sways with the wind, some spinning pinwheels or balloons blowing in the wind. Also, keep the grass cut and/or try covering plants with fabric or cut-off gallon milk jugs. You can sprinkle some plants (ask at your local nursery) with Epsom salts (re-apply after rain). Finally, put up a fence if you can. Bury the bottom one-foot underground, and leave the fence loose to make climbing it harder for the woodchucks.
- ◆ **Chipmunks** and **squirrels** can make a meal of your bulbs, growing buds, and spring flowers. You can protect your bulbs by covering them with wire or plastic screening, or by spraying them with natural repellants before you plant them. (For a list of repellants, ask your local nursery or contact the MSPCA Living With Wildlife program.) Spray ornamentals with natural repellants to help deter feeding frenzies. Also try wrapping fruit trees with netting and use squirrel-proof bird feeders.
- ◆ **Raccoons** can be deterred with the same fencing used for woodchucks. Another good approach is to use radios, lights, and sprinklers late in the day when raccoons are most active. Remember to use locking lids on your garbage cans.
- ◆ **Rabbits** can be held at bay with chicken wire or tree protector fencing, and by applying repellants with the active ingredients thiram or capsaicin (cayenne pepper extract) onto plants (but not food crops).
- ◆ **Moles** can be prevented from burrowing under your garden by burying hardware cloth 8-10 inches deep around it. Also, castor oil-based products can deter moles.
- ◆ **Deer** can be kept out of nibbling range by fencing and, like woodchucks, can be repelled by moving stimuli: scarecrows that move, motion-sensitive sprinklers, strips of tinfoil, balloons, scare tape, wind chimes, and radios. Homemade repellants can also be effective. For example, try placing human hair, soap, or garlic into stockings or cheesecloth and hang them around the area you want to protect. Varying and mixing these deterrents can maximize their effectiveness, as can starting to take action as soon as you notice signs of deer in your yard. Finally, planting native species of shrubs and trees can help because deer are especially attracted to exotics.

I hope some of these ideas help those with wild animal issues! For more information, I recommend contacting the Massachusetts Society of Prevention of Cruelty to Animals (MSPCA) and its Living With Wildlife Program (my resource for much of this article) at www.livingwithwildlife.org.

Support Your Local Farm



Local farms give Littleton its rural character. Visit your local farm stands often and give them your support!

Now That Days Are Colder *(continued from Page 2)*

protection during the most bitter cold, waiting to venture out during better weather. Other animals are active all winter, including rabbits, deer, foxes, and turkey. They eat what they can find or catch, and nestle into the snow, under brush or in dens for warmth. The beaver is probably the star of adaptation. He stores food in the bottom of the pond all summer, building his home of mud and sticks, and working on his dam to maintain the necessary water level for his survival. Snug in his home with his family, he lives through the winter – provided that no trapper or other predator catches him.

Perhaps one of the most difficult notions for us to remember is that winter is a very alive time. We all can watch the busy birds at our feeders, and we may be fortunate to come across a deer in our backyard, or see the tracks of a wandering fisher or other animal crisscrossing the snow. But it is easy to forget the many creatures big and small that are dealing with the cold, wind, and snow in wonderful and magic ways mostly unseen and unheard. I can't imagine living outdoors in the winter, even dressed properly with plenty of food. We humans have come a long way from our outdoor, cave-dwelling days, but I'm in awe of our hardy animal neighbors.



fisher tracks

To write this article, I checked through the handful of nature books on my personal shelves and consulted the library catalogue. (From home, you can use the internet to access over 30 libraries within our local system). I ordered myself eight books likely to help me. Here is a list of some of them:

Now That Days Are Colder

by Aileen Fisher, Bowmar, Glendale, California 1973 *(source for poem)*

Insect Hibernation

by Walter Gojmerac, Raintree Publishers, Milwaukee, Wisconsin 1986

Field Book of Animals in Winter

by Ann Haven Morgan, Van Rees Press, N.Y. 1939

A Guide to Nature in Winter

by Donald Stokes, Little, Brown and Co. Boston 1976

Winter-Sleeping Wildlife

by Will Barker, Harper & Brothers, N.Y. 1958

Life in the Cold

by Peter J. Marchand, University Press, Hanover, N.H. 1987

LCT Secretary, Doreen Morse, reminds Littleton folk that she is happy to email advance notice of Trust events to those interested. Please send your email address to her at dannmorse@yahoo.com

The Littleton Conservation Trust (LCT), distinct from the Town's Conservation Commission, is a private land trust formed in 1962 to promote Littleton's rural character; to preserve its water, plant, and wildlife resources and its unique views; and to provide environmental education. The LCT is caretaker of over 260 acres of property (all gifted from far-sighted residents) on which we manage a system of trails for public use.



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The Book Corner Reviews by Kathy Stevens

Solving Sprawl: Models of Smart Growth In Communities Across America

By F. Kaid Benfield, Jutka Terris and Nancy Vorsanger

Rapid growth and expanding suburbs across America have created heavy traffic, strip malls, and a loss of open space now known collectively as “sprawl”. Solving Sprawl is a book containing 35 actual stories about how cities and towns in urban, rural, and suburban America have successfully confronted the negative impacts of rapid growth and environmentally damaging sprawl and created “smart” communities and development projects where people can live, shop, and work in a better way.

The book has a general introduction to the issues pertaining to sprawl, then sets out stories about specific smart growth projects all across America according to where they are located: urban, suburban, or rural areas. Included in each story is specific information about the project’s background, the principal people and/or agencies involved, data about the smart growth features, and how the project helped the environment. Following these stories is a section on successful efforts to preserve environmentally and historically important open spaces.

The projects described in this book vary greatly in size, scope, purpose, and density. They demonstrate that in any community—large or small, urban or rural—with the right inspiration and cooperation, smart development can lead to a greater sense of community, less traffic, and healthier home and work environments. That is something from which we all can benefit!

Aldo Leopold A Fierce Green Fire: An Illustrated Biography By Marybeth Lorbiecki

A Fierce Green Fire gives us an in-depth look at the life of one of the original and greatest conservationists of the 20th century, Aldo Leopold. This well-written and heavily-illustrated book tells Leopold’s life story from his early years in late 1880’s Iowa, through his Yale education and inspiring life as a naturalist, Forest Service employee, educator, and writer. The book brings to light the struggles he faced, the inspirations that guided him, and the powerful conservation ethic he held throughout his life.

By including many quotes and excerpts from his books and essays, the most famous of which are the environmental classics A Sand County Almanac and Round River, the author illuminates Leopold’s keen sense of the impact human activity has on the earth. The book further shows how he lived his life striving to understand and educate others about how to appreciate the complexity of ecosystems and about how to live without spoiling the environment.

This book is a fairly quick read that may stay with you for a long time, as it inspires you not only to read (perhaps re-read) Leopold’s works, but also to be even more keenly aware of the impact we all have on the environment.

These and other books donated by the LCT are
available at the Reuben Hoar Library