

Friends of the Suncook River

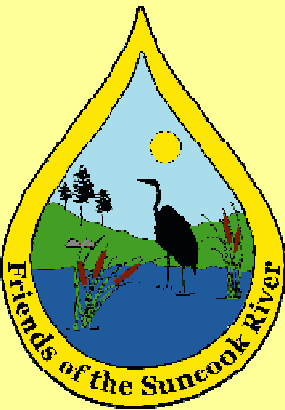
River Currents

Volume 6

Winter 2010

THE SEVEN SLEEPERS OF THE SUNCOOK RIVER WATERSHED

By Eric Orff



Goals:

- Identify and facilitate protection of natural resources, important cultural and historical areas.
- Identify lands to form greenways within the watershed and to join protected lands with adjacent greenways.
- Educate the public about the watershed.
- Educate landowners, public officials and citizens in the importance of protecting open space lands.

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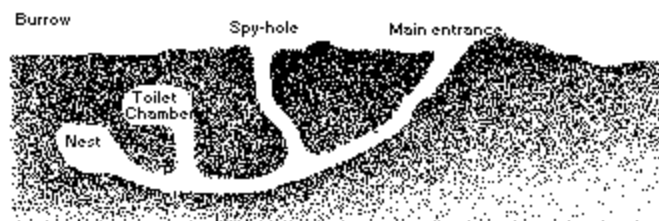
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Yawnnnnnnnnnnn. Down, down into my winter burrow you will find me soundly asleep in my winter woodchuck world. Wouldn't you like to sleep in on these snowy winter mornings, like I do? In fact, I'll sleep five months if I must, to avoid this wicked winter. I've chosen a nice grove of oaks to build my winter burrow in, not far from the cool summer burrow where I raised my three little ones (lest a hungry coyote nab me in my fat waddly search for my new home). No trips to the gym for me, but still I'll wake up next March or April about half the weight I was when I waddled into my winter sleep chamber. Oh, it's so cozy down here. I'll let my body temperature cool from 104 degrees F to maybe 38 degrees. I'm so relaxed, that my heartbeat slows down 95 percent (!), from 105 beats per minute to just 4. Four slooooooow beats. Very, very relaxed. So, so sleepy. Yawnnnnnnnnn.



Seven types of mammals dodge the depths of New Hampshire's winter by snoozing it away. Bats, woodchucks, chipmunks and jumping mice go into a deep sleep, or hibernation. For these animals, life nearly ceases; they are at death's door. Yet, somehow, an alarm clock built into their bodies awakens them at just the right time. Imagine if you could hit the snooze button for four more months! Not only do these animals get to sleep as long as the average teenager, they actually have a weight loss program that works -- the winter sleepers lose between 25 and 50 percent of their weight while sleeping. Rounding out the seven sleepers, bears, raccoons and striped skunks sleep during the cold months, but not as deeply as the true hibernators. Sometimes they snooze only during the coldest, snowiest parts of the winter.

WOODCHUCKS are masters of winter sleep. By late September, when air temperatures drop into the 40s, woodchucks go into hibernation. The woodchuck's weight will drop by about half over the winter. Its heart rate plummets from 105 beats per minute to just 4, and body temperature drops from 104 degrees F to about 38.



[http://www.hww.ca/~Content/109/Images/PHOTO2\(2\).GIF](http://www.hww.ca/~Content/109/Images/PHOTO2(2).GIF)

SEVEN SLEEPERS *(continued from page 1)*

BATS are also true hibernators. By late August or September, five species of New Hampshire bats are headed for their winter dens. These are usually caves or mines, not necessarily in this state, but possibly as far as 200 miles away. The last days of summer were spent adding about 25 percent to their body weight in order to have enough fat to last the seven months in hibernation. Bats' heartbeat slows from 210 per minute to just 8. A bat's body temperature may drop from nearly 100 degrees F to 32. Shivering prevents their body temperature from dropping below freezing.



JUMPING MICE, both woodland and meadow, occur across the state and, like bats and woodchucks, are true hibernators. They curl into a little ball and sleep for two or three weeks at a stretch, briefly awoken, then resume their torpor. Their body temperature hovers just above freezing.

CHIPMUNKS are winter wanderers between weeks-long periods of sleep. These little creatures take the time in late fall to store a cache of winter food which they eat during waking periods over the winter. Typically, chipmunks have excavated one or two chambers in their underground burrows and have filled them with hundreds of nuts. They, too, are true hibernators, as their body temperature drops from 96 to 106 degrees F to as low as 42-45 degrees F. Their heart rate slips from 60 per minute to 20. A mild winter day with little snow and an abundance of acorns will draw chipmunks out of the den for a winter scamper.



BEARS may double their weight in late fall in preparation for denning. Autumns with a lack of nuts and other foods, as we experienced in New Hampshire in 2003, can send some bears into their dens as early as September. During falls with an abundance of nuts, especially beechnuts or acorns, bears often will stay active into December. Bears usually build a den on top of the ground or under a blow-down or brush pile. Their winter sleep is not as deep as that of the true hibernators, as bears remain alert and can run away or defend themselves if disturbed. Their body temperature drops only about 10 degrees, from 100 degrees F to 90. Respiration drops more significantly, from about 40 to 8-10 breaths a minute. Unlike chipmunks, bears do not eat or drink or even relieve themselves during the 5-6 months of denning. Yet, adult female bears give birth to two or three cubs in January about every other year. They are able to nurse the cubs and care for them during the coldest of months by relying on body fat stored from the previous fall.

RACOONS AND STRIPED SKUNKS are the last of the winter sleepers. Unlike the true hibernators, these animals may sleep only during the coldest temperatures and the deepest snows, but remain active periodically throughout the year. There is no dramatic reduction in their body temperatures, heart rate or respiration. Life goes on, just at a slower pace. Just like us humans! To conserve energy, both raccoons and skunks congregate in communal dens. Often, it will be the mother and her young from the summer who will den together, but sometimes as many as 12 to 20 raccoons may den together.

Skunks enjoy mixed company of other skunks, as well; there can be 20 or more in a den, but usually no more than 10. Skunks, especially females, prefer to make their winter dens under or in buildings. Have you noticed a telltale odor of skunk this winter? If you have, get ready for the blast of reality when skunk-breeding season rolls around in January! Male skunks may travel over two miles a night in search of that den full of vivacious babes. Squabbling males or reluctant females may cause a stir that will include some spraying. Keep that clothespin handy! The denned skunks tend to have two or three brief active periods each day, each lasting less than 10 minutes. Skunks have a slight depression in body temperature and lose between 40 and 58 percent of their body weight. New Hampshire's seven sleepers are all snuggled into their dens for a long winter's nap.

Our Website continues to be updated thanks to Bill Provencal of Pittsfield!

Check it out!

www.friendsofsuncookriver.org

BIRDS OF A FEATHER...SHIVER TOGETHER

Submitted by Eric Orff

Remember the last time you were cold? I mean, really cold, when you shivered so much that your teeth practically rattled. Imagine being that cold every night....all night, all winter long. Birds are! From our cute chickadees to gracious crows, all birds shiver all night long, all winter long. To not shiver is to die.

Our black-capped chickadees not only shiver, but have adapted other heat conserving tactics to survive the cold New Hampshire winter nights. Chickadees actually grow more feathers for the winter, doubling the number from 1,000 to 2,000. Then, all these feathers are fluffed up to add an insulating layer, trapping the warmth of their bodies. They also tuck themselves deep into a thicket of evergreens, or even find a woodpecker hole for night shelter.



Have you noticed how ravenously the birds eat at your bird feeders, especially first thing in the morning and just before dusk? Chickadees can gain as much as 10 percent of their body weight each day and lose it that night. For an adult male human of 200 pounds, that would be a 20-pound gain each day. Imagine losing 20 pounds while you slept. Sounds like one of those too-good-to-be-true commercials, doesn't it? For birds it's true!

Because of this harsh reality, every cold night our local birds are flirting with death. It's always a gamble for them to see if they ate enough that day to get them through a long frigid night of shivering.

These birds can find food naturally, but you can help, too. Is your bird feeder near some close cover, like a thick hemlock or pine tree? Don't toss that Christmas tree just yet. Place it near your bird feeder for much-needed winter cover. If it's snowing, be sure to clear the feeder of snow by mid-afternoon. It's that last meal of the day that is most likely going to get birds through the night.

2009 MILFOIL TREATMENT ON THE RIVER

Submitted by Jim Fougere & Ed Neister

After the 2008 treatments of the river and hand pulling by divers, the Barnstead Milfoil Committee felt that the program was making progress. Pockets of milfoil between Route 126 and the Parade Road dam in Barnstead did remain and were treated in the early summer of 2009. These treatments were considered to be successful except for several pockets not included in the earlier treatment plan. A follow-up treatment was conducted in the late summer. Other treated areas in the river appear to be free of milfoil and also have healthy populations of bladderwort and other native species.

A more hands-on approach was utilized at Suncook Lake. The lake association with their team of divers used the NH DES suction harvester to supplement their normal effort of hand-pulling weeds. This test was considered to be extremely successful and hopefully can be used in conjunction with other non-chemical methods such as hand pulling. During the summer season divers did find a number of "new" locations that weren't there last year. The current opinion of this finding is the milfoil seeds are sprouting in the heavily silted locations - years after the plants were considered to have been killed or were removed.

Unfortunately, the U.S. Army Corps of Engineers was able to recreate this scenario in the lab with milfoil plants grown from silt removed from the Suncook River even though there was no root matter in the soil sample. If it proves that the seeds can lay dormant for a 2-3 year period, all areas of the river that previously had milfoil will need to be monitored for re-growth.

The current plan of the Barnstead Milfoil Committee is to set up a group of Weed Watchers to closely monitor the river and lakes, especially locations where flowering milfoil has occurred in the past. Hopefully, this effort will allow identification of milfoil colonies which could then be dealt with through methods such as suction harvesters or hand pulling before treatment is the only option available. If you are interested in becoming a Weed Watcher either in the river or on the lakes, contact Ed Neister at eneister@worldpath.net.

Of Chickadees and Roosting Boxes



One of the first things that Jim did when we moved into our home over ten years ago was to put up the birdfeeders and birdhouses for the feathered friends in the forest. Perhaps it was the guilt of wiping out nesting areas when clearing a few trees for the house and driveway, or maybe it was the need to focus on completing small projects instead of dealing with the scope of a whole house that drove him to this task.

That was a November. This November, with the slowdown of his work, he busies himself again in the cellar; cutting, sawing, and hammering away. The end-result is that we are able to give relatively inexpensive Christmas gifts to friends and family that carry the added benefit of offering shelter and a place to roost for our forest friends in the winter months.

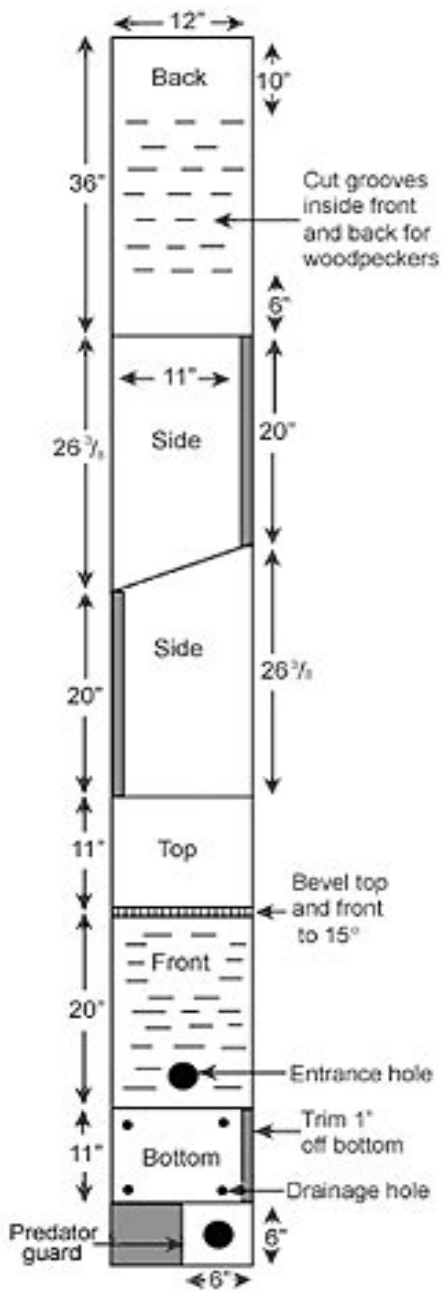
As you know, setting out roosting boxes will increase the number of native birds in your neighborhood. Just as putting out nest boxes increases opportunity for breeding, putting out winter roosting boxes and feeding in the winter increase survivorship of resident birds. Boxes that are relatively airtight and have entry openings down low allow birds to survive extreme winter conditions. More than one bird can use larger boxes at a time. Although this produces increased temperatures in the roosts and greater energy savings for each bird, boxes that are too large can be dangerous to the health of the birds. A low box reduces the problem of birds becoming covered by excrement from birds on higher perches. (http://wild-birds.suite101.com/article.cfm/winter_chickadee_nesting)

Mount your roost box on a metal pole or a wooden post, and attach a metal baffle below the box to keep predators out. Place the box in a sheltered spot, out of prevailing winds. South-facing boxes receive the most warmth from the winter sun. (<http://www.allaboutbirds.org/NetCommunity/attractingbirds-other>)

With the economy suffering its own winter of sorts, what better way to find comfort in the short cold days of New Hampshire's winter than by watching wildlife in our own backyard?

Shelter from the cold winter weather for those non-migratory birds in your backyard can mean huddling in bushes, tree crevices or utilizing nesting boxes in the surrounding area to minimize exposure to the elements. Studies noted in a recent article in National Wildlife magazine described black-capped chickadees as maintaining their body temperature during the coldest weather by shivering. The result can be an unbelievable weight loss of 25% overnight - so keep feeding the birds to help offset this energy drain.

A note from Jim.....



One other way to help out is to erect a winter roosting box. Basically, the roosting box is bigger than a nesting box can accommodate 6 or more birds and has fewer ventilation holes in order to minimize heat loss inside the box. Other typical features include an entrance hole in the bottom, which also reduces heat loss and multiple perches inside to accommodate the birds. You can find plans or even purchase the boxes online. A simple web search of "winter roosting box" should get you a number of choices, such as the Cornell Lab of Ornithology or Shaw Creek Bird Supply as pictured here. The plans that we have used for number of years are found in an interesting book called *Woodworking for Wildlife: Homes for Birds and Mammals* by Carrol L. Henderson of the Minnesota Department of Natural Resources.

Belknap Range Conservation Coalition

The mission of the BRCC is to promote the conservation of open space, responsible stewardship, and low impact public enjoyment of the scenic, natural, recreational and historical resources of the Belknap Mountain Range. The Coalition meets monthly, and is currently focusing its efforts on identifying key parcels of land in the Belknaps, which merit protection. If you would like to attend a meeting, can suggest one or more parcels which you believe merit protection, or would like additional information on the BRCC, please contact BelknapRangeCC@aol.com.





Tree frog 'frozen in the dead of winter'

Did you know that some animals are for all intense in purposes really dead right now for the winter? More astonishing is that these critters will arise again right around Easter or soon after as the sun melts the snow. The critter I have awe for is the tree frog. They indeed do freeze to death every winter. Solid ice. Life totally ceases for them for months at a time. They simply lie in wait under the leaf litter in our forests and wait for the earth to warm in spring. And when it does these frogs magically come back to life and flourish. They really are the dead of winter.

LIFE BELOW THE WINTER SNOW

Here it is, almost February -- the month we know as "the dead of winter." It will be months before life is resurrected from the bleakness of New Hampshire's snow-covered landscape. In reality, though, there is no "dead" of winter -- lots of life exists just beyond our eyesight. It's called subnivean life. Life UNDER the snow. Mice, voles, shrews -- and the predators that search for them, like weasels and pine martens -- live a subnivean life for months under the snow cover.

Oh what a life they lead! While temperatures may dip to 10 or even 20 degrees below zero, and a sharp winter wind can add an almost immeasurable chill, subnivean life is warm and snug. Water vapor condenses under the snow's surface, freezes and seals out the chilly outside air. Typically, temperatures are just above freezing in a creature's winter lair under the snow, sometimes 50 degrees warmer than the night air outside.

In their tunnels under the drifts, mice and voles dine on nuts, seeds, grass and bark, for the most part hidden from prying eyes of predators like foxes, coyotes and owls. The little creatures create multiple burrows under the snow, leading to food supplies. Often, routes travel along dead and down woody debris lying on the forest floor under the snow.

Some predators have learned to hunt for these munchy morsels by listening and pouncing into the snow to capture them. Still, for nearly half the year, mice and voles find heavenly habitat sequestered beneath the snow in their subnivean world. So don't think of February's blanket of snow as a casket for the dead of winter, but as a warm, protective comforter for a universe of winter wildlife.

Snowshoeing Safety Tips

Layer Your Clothing & Check Your Bindings

Even on short outings, you'll work up a sweat. Layers are great to take off and put back on.

Pack a Water Bottle

If you don't have an insulated bottle, simply carry the bottle upside down. This will prevent the water at the mouth from freezing.



<http://www.buildingsnowshoes.com/images/snowshoes.jpg>

Stretch Your Muscles If possible, start out on flat land.

Keep Your Balance Using ski poles helps with balance and gives you a better workout.

Talk About It & Stick to the Trails Tell your friends or family where you're going, even if it's just in your own backyard

Be a Friend to the Forest's Wildlife If possible leave your dog at home as it can scare off wandering or starving wildlife. Avoid spending prolonged time in an area with a lot of tracks. Animals need to conserve as much energy as possible during cold spells and avoiding you or your dog as predators means stress.

Pack the 10 Essentials (Seattle Pi)

Topographic map, compass, extra food, extra clothing, fire-starter, matches, sun protection, a pocket knife, first-aid kit, and flashlight.



Some Places to Snowshoe in the Suncook River Watershed

- Gilmanton: Cogswell Mountain Conservation Area
- Barnstead: Stevens Property & the Harrison Property
- Pittsfield: Town Forest
- Chichester: Chichester Central School Trails
- Strafford: Blue Job Mountain Trails
- Epsom: Town Forest—Mountain Road entrance
- Northwood: Northwood Meadows on Rt. 4
- Bear Brook State Park—Padunk Rd. entrance

Board of Directors

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Pam Miller

Secretary - Barnstead

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VOLUNTEER OPPORTUNITIES...

You can help by -

☺ donating cans in the *Can Trailer* located at Webster Park on Rt. 28 south in Epsom (Keep them coming!)

☺ helping FOSR empty the *Can Trailer*

☺ helping tag mussels next July

☺ serving as a board member for your community

Your Membership Will Make a Difference. Please Join Today!

___ I am interested in finding out more information about the VRAP River Chemistry Monitoring Program .

___ I am interested in volunteering for Friends of the Suncook River. Please email me with information and events.

___ I am interested in talking to a FOSR representative regarding land protection options.

___ I would like to support Friends of the Suncook River financially, with a donation for the following:

New Member Renewing Member

___ Free (Student Membership)

___ \$10 (Friend Membership)

___ \$25 (Family Membership)

___ \$50 (Municipal/Corporate Membership)

___ Other: in the amount of: _____

Name: _____

Address: _____

Phone: _____

Email: _____

Friends of the Suncook River is recognized by the IRS as a 501©(3) tax exempt organization, contributions are deductible to the extent permitted by law.



P.O. Box 34

Center Barnstead, NH 03225-0034



Thanks to all who have donated cans.
FOSR recycled over \$1,000 worth of cans in 2009!
A TON OF CANS!