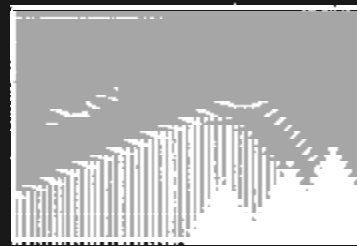


Fall-Winter 2001

# TinMountain



TIN MOUNTAIN CONSERVATION CENTER-PO BOX 1170 - CONWAY, NH 03818 - (603) 447-6991 - WWW.TINMTN.ORG

## Otter Knowledge: Otter-ly Amazing



What makes otters so enjoyable to watch? Is it the fact that they are elusive, exhibit a playful nature, or move so effortlessly through the water? Since these animals are rarely seen, a sighting in the wild becomes an exciting event. During a Tin Mountain snowshoeing program in early March at Thompson Wildlife Preserve, participants had a special otter treat. While having their lunch in the marshy area, an otter suddenly popped up in the stream and watched the participants for a while. The entire group viewed the otter at close range before it dove back under the water and continued on its way.

River otters are members of the weasel family, like the ermine, mink and fisher. The average otter is 3-5 feet long, and they weigh about 10-30 pounds. Female otters tend to be smaller than males. The average life span for an otter is 10-20 years.



Otters have thick, dark brown fur with the fur under the chin and on the belly lighter colored or gray. The longer guard hairs and dense undercoat trap air next to the skin. Trapped air and a fat layer help to keep the otter warm and dry. After swimming, the otters will roll on the grass, dirt, or even the snow to dry their fur. They also groom themselves often using their tongue and teeth to keep their coat in good condition.

Since they spend most of their time in water, otters have special features to help them adapt to their aquatic environment. The long, slim body cuts through the water with graceful motion, and all four feet are wide with webbing between the toes to help them swim. In order to swim underwater, otters have valves that close their ears and nostrils. The heart rate even slows so that they can stay under water for up to four minutes and travel up to a quarter mile before coming up for air.

The body shape and adaptations for swimming help otters chase their food, such as fish and frogs. Although they can catch faster moving fish like trout, otters prefer slower moving fish like catfish. A variety of other foods are also part of the diet such as turtles, snails, mussels, crayfish, snakes, snake eggs, worms, insects and aquatic plants. The otter's strong teeth even grind up the mussel shells and bones. Otters have sensitive whiskers, which they spread out and use to detect the motion of nearby fish. This action helps them to find food even in cloudy water. When winter arrives otters continue to be active and search for food under the ice.

*Inside: Fun Page  
Nature Program Series  
Summer Camp Dates*

(continued page 4)

## Tin Mountain Staff

*Executive Director*  
Michael Cline

*Education Director*  
Lori Jean Kinsey

*Communications/  
Public Relations*  
Donna Marie Dolan

*Bookkeeper*  
Nancy Simonton

*Teacher Naturalists*  
Karen Coffey  
Carol Foord  
Emberly Hudak  
Robin Lurie-Meyerkopf  
Bethany Powers

## Board of Trustees

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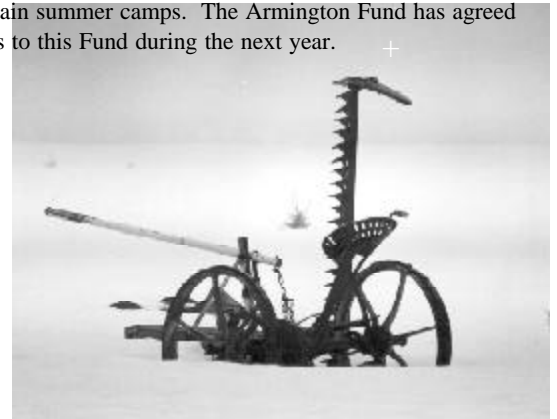
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## Grants Strengthen Programs

Recent grants have provided critical support for several Tin Mountain programs. A grant from the Clarence E. Mulford Trust has helped to sponsor a series of seven environmental education workshops for local educators. The workshops, dubbed the "Second Tuesday Series", not only offer factual information and techniques for conveying natural science information, but they also provide a chance for teachers to exchange ideas and experiences. The Pequawket Foundation made a grant to Tin Mountain to develop a greenhouse project in conjunction with students and faculty at Kennett Junior High and High School. International Paper Company Foundation once again awarded Tin Mountain's Forest for the Future a grant to help support the program that is offered at Molly Ockett and Kenneth Brett Middle Schools in Fryeburg and Tamworth, respectively. As noted in another article, the Kendal C. and Anna Ham Charitable Foundation provided the support required to purchase a pickup truck for the organization. MacDonald Motors also helped greatly with that effort.

Tin Mountain also received a grant from the John F. and Dorothy H. McCabe Environmental Fund to develop educational and outreach programs involving sustainable use of our natural resources, assist with the formation of the MWV Land Trust, and to support MWV Community Supported Agriculture. Additional support for this effort was obtained from a Northern New Hampshire Foundation Grant through the MWVCSA.

The Evenor Armington Fund provided a grant for much needed general operating expenses, as well as a strong contribution to the Suzie Engler Scholarship Endowment Fund to benefit children attending Tin Mountain summer camps. The Armington Fund has agreed to match, dollar for dollar, contributions to this Fund during the next year.



## Land Trust Formed to Protect Community

Discussions between and work by Tin Mountain Conservation Center and MWV Community Supported Agriculture at the Earle Family Farm has spawned the formation of the Mt. Washington Valley Land Trust that held its first public meeting on October 12th at the Eastern Slope Inn. Nearly 80 interested citizens attended the meeting that featured a panel of individuals with extensive land trust experience.

The Mt. Washington Valley Land Trust was formed to preserve open space that in a demonstrable way benefits the economic, social, and environmental health of the Valley community. The hope is to come up with a community-based land trust model, one that provides for uses such as farming, forestry, residence and recreation. The Mt. Washington Valley Land Trust is the first and only land trust to focus on preserving open space solely in the communities of the Upper Saco River Valley.

Land trusts acquire properties through gifts and purchases. Land is also protected through conservation easements, leases, exchanges, and in cooperative agreements through government programs such as the newly created New Hampshire Land and Community Heritage Investment Program. Funding also comes from corporations, foundations, and, for the most part, individuals. The Mount Washington Valley Land Trust hopes to start protecting land by next year, after a full board and a part time staff person is in place.

The organization is in the process of receiving its designation from the state and federal government as a non-profit entity. The help of many more community members is needed to guide the development of organizational bylaws, land selection criteria, financial systems and to serve on the board. Those with experience and knowledge in conservation and tax law, property transfer, finance and fundraising are especially needed. Contact The Mt. Washington Valley Land Trust at PO Box 424, North Conway, 03860, or, mwvtrust@ncia.net, or 383-8239 for more information.

# Letter

## Search for Permanent Site

Tin Mountain needs a permanent home in the Mt. Washington Valley to provide on-site programs, offices, and storage space; to strengthen community ties; and to foster greater opportunities for members to be involved with the organization. For the past two years, the Tin Mountain Board and staff have been considering a variety of options for a permanent site. One idea under serious consideration is to pursue a new home in conjunction with Mt. Washington Valley Community Supported Agriculture (MWVCSA) (Earle Family Farm), a like-minded organization experiencing growing pains similar to ours. Already, Tin Mountain is cooperating with MWVCSA on summer camps and school programs. A shared facility would offer an opportunity to provide education programs on a wider variety of topics in the natural world, including farming.

The ideal site would be at least 50 acres; include forestland, pond/river/stream, and cropland; contain the necessary structures (e.g., barn, office, conference, and storage space), be centrally located; and also be offered at a fair price. Tin Mountain's mission remains unchanged, i.e., to provide hands-on education programs that lead to an increased appreciation for the environment. A permanent site would allow us to offer more programs and services to the community while demonstrating sound land stewardship. In developing a site in cooperation with MWVCSA, Tin Mountain could continue to teach about our natural resources and add the sustainable land-use practices (farming and forestry) required to conserve these resources for future generations.

A facility committee of the Board of Trustees has been recently established to explore potential sites. The committee welcomes your comments and suggestions. Please call Tin Mountain and speak with Mike Cline at 447-6991.

My favorite bumper sticker of late is "If you can't change your mind, maybe you don't have one." The ability to change one's mind when faced with compelling new information requires not only the ability to recognize its relevance, but a willingness to embrace new ideas. Children readily incorporate new ideas, and their views are very much influenced by the latest information. However, like freshly poured concrete, our views and opinions tend to harden and stiffen over time.

This reticence that tends to develop with age may not be a bad thing. An optimist might say that with age we better discriminate between solid and flawed information. In building a body of evidence on a topic, each of us tries to use the best information - just as a cabinetmaker selects the best wood for each project. The difference is that the cabinetmaker eventually finishes his project; ours should be a lifelong pursuit. If we think our project is finished, then it's unlikely that we will ever change our minds.

Our philosophy at Tin Mountain is to instill a sense of wonder about the environment and an appreciation for factual information about the natural world. Learning about the natural environment is a lifetime endeavor, and each of us should be ready to update our "project" as new materials become available. We try to infuse this never-ending sense of inquisitiveness in all our programs.

Mike

### *Photos Courtesy of:*

Hausfrau Photo, Stefi Reed Hastings  
Stephen F Damon  
Ryan L Duclos  
Tin Mountain Staff

### *Articles:*

Tin Mountain Staff

### *Layout and Design:*

Donna Marie Dolan

### **In Memory of David Brower: the "Archdruid"**

**Former President of the Sierra Club and Founder of Friends of the Earth  
Died - November 4, 2000 at age 88**

Through our lifetime we accumulate a list of those we look to for inspiration and whose ideals we respect. David Brower was at the very top of that list.

His career in conservation and the preservation of the earth was unparalleled. Mountains and rivers were his home and when he was in a crowd of people he was never alone.

*"...I truly believe that we in this generation must come to terms with nature, and I think we're challenged as mankind has never been challenged before to prove our maturity and our mastery, not of nature, but of ourselves." Rachel Carson*

**In Memory of Ruth Dahl, Vincent (Pete) Foster and Linny Levin**

*(Otter Knowledge-continued from page one)*

As snow covers the ground, the otter turns to an unusual travel technique. Instead of bounding across the land, the otter takes several bounding steps and then slides on its belly. Education Director Lori Kinsey saw otter tracks on a trail while snowshoeing in the Kilkenny Range. The most amazing part to see was how well they used the land features during their travel. They would bound on the uphill sections and slide downhill. Using this bounding and sliding method, otters can travel up to 18 miles per hour. The slide can be from 5 to 15 feet long with defined prints at the beginning and the end of the slide.

Other otter signs can be found in their habitat. One easily recognized sign is their scat, which is full of fish scales. Several scat piles displayed on rocks or near rolling sites are indicators of otter territory. Like other members of the weasel family, otters have musk scent glands that they use to mark territory. Important otter information, such as health and sex, is communicated through this scent marking.

Although otters prefer more remote areas, they are often found in very unlikely places. A common local spot to see otters is near the Dam Ice Cream Shop in Chocorua. A Teacher Naturalist once spotted two river otters playing on the ice on the river there. For over 15 minutes, they would come out onto the ice and dive back under thoroughly enjoying themselves within a few feet of traffic on Route 16.

Otters use dens especially for winter protection. They are known to use old groundhog burrows, beaver lodges, beaver and muskrat bank burrows, or will excavate under tree roots or rock piles. The dens always have an underwater entrance and several entrances onto the land.

Sometime between January and May, otters begin breeding, actually mating in the water. Like the other members of the weasel family, otters have delayed implantation. The fertilized egg remains dormant and does not implant and start to develop until December, January or February. The young take two months to develop. A typical litter size is 2-3 pups, which are born blind and toothless weighing only 4-5 ounces. Pups stay in the den with the mother until they are 3-4 months old.

When otter pups are old enough to leave the den, they begin their swimming lessons. The mother carries or pushes the pup into the water and dives in beside it. She stays near the pup while it tries to swim and lets it rest on her back when it gets tired. After a few lessons, the pup is ready to swim and play in the water. The pups stay with the mom for about a year before they leave to find territories of their own.

Otters' winter activities are easily read on the winter landscape. Signs abound from tracks and slides to middens and scat. These winter stories are a window into the lives of this otherwise elusive animal.

*Emberly Hudak*

## Mountain High Learning

Over the past 3 years, Tin Mountain Conservation Center has been working cooperatively with the Hostelling International in Conway to provide programs

for groups visiting the Mt. Washington Valley. Mountain High Learning programs are an opportunity for groups to immerse themselves in the environment and learn first hand the natural history of the Mt. Washington Valley.

The most popular of these programs focuses on exploring the wetlands of the Brownfield Bog both by canoe and on land. Sightings

of nesting kingbirds, wood ducks, scarlet tanagers, dragonflies hatching, and moose signs abound. Snowshoe and hiking trips focus on forest, wildlife, and winter ecology.

For the staff of Tin Mountain Conservation Center, this is a wonderful opportunity to work with people from outside the Mt. Washington Valley. Many of the groups come from urban settings and these are often first time experiences for the participants, which makes it exciting for all.



## New Places and New Faces

There have been a number of staff changes at Tin Mountain over the summer. After two years as Teacher Naturalist working with the Forests For the Future program and overseeing our Explorer's Camps program,

Cally Leach took a job as a fourth grade teacher at the Jackson Elementary School. We miss Cally's commitment and dedication to environmental education and the youth of the Mt. Washington Valley and wish her the best of luck at the Jackson School!

Replacing Cally is Emberly Hudak who relocated to Conway from Virginia. Emberly has worked

for many years at various nature centers in the south and brings a breadth of experience to the position. She will be working with the Forest For The Futures program in Molly Ockett and the Brett School as well as Project K.I.T.E programs in Conway and MSAD #72. She has been on numerous mountains and rivers in the area becoming acquainted with the Mt. Washington Valley.

Also hired on a permanent basis are Teacher Naturalists Karen Coffey and Bethany Powers. Both Karen and Bethany have worked at Tin Mountain in the past and we are thrilled to have them back with us. We look forward to a very energetic and productive year ahead!



# Nature Program Series Schedule



### **Winter Ecology**

Wednesday, January 10, 7:00 PM  
*Red Jacket Mountain View*

Chris Lewey of Raven Interpretive Wildlife Programs will present a slide show looking at the basics of winter ecology, including adaptations of plants and animals in winter. A field trip follows on Saturday, January 13.

### **Snowshoe Wanderings**

Sat., January 13, 10:00 AM -2:00 PM  
*Meet at the Stow Corner Store*

Join Naturalist Chris Lewey of Raven Interpretive Programs on this snowshoe exploration of Evans Notch in search of animal tracks and other signs of wildlife. Dress warm, bring a lunch and snowshoes or borrow ours. Please call 447-6991 for reservations.

### **Trickster Tales- the Life of the Eastern Coyote**

Thursday, January 18, 7:00 PM  
*Molloy Ockett Middle School*

Michael Clough from The Vermont Institute of Natural Science will lead us through this interactive program of stories, slides, and touchable artifacts looking at the life of the Eastern Coyote.

### **Star Wizard**

Friday, January 26, 7:00 PM  
*Chamberland Farm, Brownfield, ME*

Star wizard Matt Krug will give us a tour of the celestial skies as we search for such familiar faces as Canis Major and Orion and some less well known as Aldebaran, Castor, and Betelgeuse. Dress warm. Bring binoculars or borrow ours. Bonfire following. Call 447-6991 for reservations and directions.

### **Community Farming**

Tuesday, January 30, 7:00 PM  
*North Conway Community Center*

Community Supported Agriculture brings farmers and community members together. Tom Earle of Earle Family Farm in Center Conway will share the history, growth, and success of this new agricultural model.

### **Full Moon Snowshoe**

Friday, February 9, 7:00 PM  
*Tin Mountain Field Station, Jackson*

Join the staff of Tin Mountain Conservation Center as we explore under the light of the full snow moon. We will experience the nocturnal world in winter including trying to call owls. Dress warmly. Bring snowshoes, or borrow ours. Call 447-6991 for reservations.

### **Bountiful Beavers**

Sun., February 11, Noon  
*Bennett Family Farm, Jackson*

Teacher/Naturalist Carol Foord will introduce us to the many adaptations of the beaver. After this we will head out to explore a newly formed beaver meadow. Dress warmly. Bring snowshoes or borrow ours. Please call 447-6991 for reservations and directions.

### **Open Space For All**

Thursday, February 22, 7:00 PM  
*Green Granite Motel*

Tom Currin of the Lakes Region Conservation Trust will provide valuable information for those interested in preserving their own land or working to help preserve community lands. Local landowners will share reasons for choosing to ensure their lands' natural qualities. Co-sponsored with MWVLT.

### **Winter Birds of Plum Island**

Saturday, February 24, 6:30 AM  
*Meet at IGA Parking Lot Conway*

Snowy Owls, Snow Buntings, and Larkspurs are just some of the possibilities to be found at the Parker Island National Wildlife Refuge in Newburyport, MA. A long car ride but worth it for a good day of winter bird watching. Please call 447-6991 for reservations.

### **Ski Touring Mountain Woodland**

Saturday, March 3, 10:00 AM  
*Meet at the parking lot of the Albany Covered Bridge*

Join Naturalist and author Ned Beecher on this 6.9 mile winter ski exploration of the Lower Nanamocomuck Ski Trail. Ned is author of the Tin Mountain book, *Outdoor Explorations in the Mt. Washington Valley*, with a chapter focusing on this area. Moderate difficulty. No beginners please. Please call 447-6991 for reservations.

### **Winter Camp**

Sat. to Sun., March 3-4, 9AM-1PM  
*Tin Mountain Field Station, Jackson*

Spend a fun-filled weekend with Tin Mountain Teacher Naturalists at our field station. We will learn about snow, build snow shelters, and go tracking on snowshoes. After a hearty meal we will share stories, star gaze, and camp in at the field station. Wake up the next morning and continue the winter fun with us. For ages 9-11. Cost \$40. Please call 447-6991 for reservations.

### **Bio-Diversity in New Hampshire: Rare Species and Unusual Places**

Thursday, March 8, 7:00 PM  
*Albany Town Hall*

Join David Van Luven, Coordinator of the Natural Heritage Inventory Division of Forest Lands, as he takes us on a slide journey looking at the incredible array of plant species and habitats found within the state of New Hampshire. He will also focus on some of the more unusual species such as the Small Whorled Pagonia, and the Dragon Mouth Orchid, as well as the Pine Barrens habitats in Concord and Ossipee.

### **Green Forestry**

Thursday, March 15, 7:00 PM  
*Pine Tree School, Center Conway*

Sustainable forest management that is certified by a third party may be the answer to improving forest management on private forest lands. Michael Thompson, a wildlife biologist from Woodlot Alternatives, Inc., Topsham, ME, certifies lands for large and small landowners and will explain how it works.

### **Spring Snowshoe Adventure at Pondicherry Wildlife Refuge**

Saturday, March 17, 8 AM  
*Meet at Dunkin Donuts, Glen, NH*

Join Naturalist Nancy Ritger and Education Director Lori Jean Kinsey for this exploration of Pondicherry in search of spring. Signs of beavers, otters, moose, and possibly even red wing blackbirds are some of the sights to anticipate. Bring your own snowshoes or borrow ours. Please call 447-6991 for reservations.



### **First Season Festival**

Sunday, March 25,  
*North Conway Grand Hotel*

Come join the fun at our annual benefit dinner and auction at the Four Points Sheraton. Call 447-6991 for more information.

### **Woodland Flowers of Spring**

Thursday, March 29, 7:00 PM  
*Grand Summit Hotel*

It won't be long before the first blooms of spring poke through the snow. Join Education Director, Lori Jean Kinsey for this slide presentation looking at the seasonal progression of spring wildflowers in the Mt. Washington Valley.

### **Aquatic Flies and Fly Fishing**

Thursday, April 5, 7:00 PM  
*Chocoua Public Library*

Water specialist Kevin Coffey will lead us into the world of aquatic insects through fly tying. He will spend some time looking at different nymphs and insects followed by an opportunity to try your hand tying a fly or two.



## **TinMountain** CONSERVATION CENTER



### **Winter Ecology**

### **Snowshoe Wanderings**

### **Eastern Coyote**

### **Star Wizard**

### **Community Farming**

### **Full Moon Snowshoe**

### **Bountiful Beavers**

### **Open Space for All**

### **Winter Birds/Plum Island**

### **Ski Touring Woodland**

### **Winter Camp**

### **Bio-Diversity in NH**

### **Green Forestry**

### **Spring Snowshoe Adventure**

### **First Season Festival**

### **Woodland Flowers of Spring**

### **Aquatic Flies and Fly Fishing**

### **TMCC Annual Meeting**

Please contact Tin Mountain for details:  
Tin Mountain Conservation Center  
PO Box 1170  
Conway, NH 03818

### **Wed., January 10, 7 PM**

*Red Jacket Mountain View*

### **Sat., January 13, 10 AM - 2 PM**

*Meet at Stow Corner Store*

### **Thurs., January 18, 7 PM**

*Molley Ockett Middle School*

### **Fri., January 26, 7PM**

*Chamberland Farm, Brownfield, ME*

### **Tues., January 30, 7 PM**

*North Conway Community Center*

### **Fri., February 9, 7 PM**

*TMCC Field Station Jackson*

### **Sun., February 11., Noon**

*Dundee Road, Jackson*

### **Thurs., Feb. 22, 7 PM**

*Green Granite Motel*

### **Sat., Feb. 24, 6:30 PM**

*Meet IGA Parking Lot, Conway*

### **Sat., March 3, 10 AM**

*Meet at Albany Covered Bridge*

### **Sat. to Sun., March 3-4**

*TMCC Field Station, Jackson*

### **Thurs., March 8, 7 PM**

*Albany Town Hall*

### **Thurs., March 15, 7 PM**

*Pine Tree School, Ctr Conway*

### **Sat., March 17, 8 AM**

*Meet at Dunkin Donuts*

### **Sun., March 25**

*North Conway Grand Hotel*

### **Thurs., March 29, 7 PM**

*Grand Summit Hotel*

### **Thurs., April 5, 7 PM**

*Chocorua Public Library*

### **Sat., May 19, TBA**

Our thanks to L.L. Bean for continued sponsorship.  
Special thanks to the North Conway Grand Hotel, Grand Summit Hotel,  
Red Jacket Mountain View and Green Granite Hotel

## FIRST SEASON AUCTION & DINNER MARCH 25, 2001



North Conway Grand Hotel

## ANNUAL MEETING MAY 19



SUMMER CAMP

### Day Camp Ages 6-9

Session I July 2-13

Session II July 23-August 3

### Kindercamp Ages 4-5

July 16-20

### Explorer Camp

July 2-6	Peaks and Paddles I
July 9-13	Peaks and Paddles II
July 16-20	Trekkers
July 16-20	Canoe Voyageurs
July 23-27	Paths and Peaks
July 30-Aug. 3	Peaks and Paddles III

### Farm Camp

July 2-6	Session I	Ages 4-5	Kindercamp
July 9-20	Session II	Ages 6-10,	Ages 6-9
July 23-27	Session III	Ages 8-11	
July 30-Aug. 3	Session IV	Ages 4-5,	Kindercamp

Check our web site for registration updates. If you are on our mailing list you will receive a camp brochure in early spring. Tin Mountain members are entitled to a 10% discount.

## Mt. Washington Bicycle Hillclimb



Theresa Beckett

AUGUST 21, 2001



Dick Ring and Tim Johnson

The 28th Annual Mt. Washington Auto Road Bicycle Hillclimb was run on August 19th, 2000 with Jeanie Longo shattering the women's course record with a time of 58 minutes and 14 seconds, and Tim Johnson came in alone at 55 minutes and 46 seconds. Interest in the event, which benefits Tin Mountain Conservation Center, continues to grow each year. The Mount Washington Auto Road can only accommodate 600 riders due to limit parking at the summit, but at least 1,000 riders expressed interest in participating in the grueling ride. This year's hillclimb is slated for August 25th. All proceeds are used to offset costs of Tin Mountain's school programs.

## Most Educational Display Fryeburg Fair

Tin Mountain Conservation Center's Winter Forest display at the Fryeburg Fair was awarded the most educational display in the Forestry Resource Center. The display recreated a forest in winter with a variety of plants and wildlife signs throughout. Children and families were encouraged to play forest bingo in search of 16 different items ranging from a squirrel midden to a white pine tree. Many thanks to Tin Mt. volunteers who helped set up and oversee the booth over the course of the fair. Special thanks to Larry Kinsman of Fryeburg, Maine for his yearly donations of interesting natural artifacts, such as this years woodpecker tree, for our display.



## Series 2001

FOR ALL AREA TEACHERS.

**January Winter Ecology** Presentations and activities will explore winter survival strategies for plants and animals. Also included, will be snow explorations, ecological experiments and winter bird identification.

**February Nature Journals** A variety of approaches to keeping nature journals will be examined, including writing and drawing.

**March Nature and Literature** Learn to use children's nature story books, field guides, and reference books in effective nature presentations.

**April Wetlands** Explore the world of wetlands as they come alive this spring.

**May Wildflowers** Spring is here and plants and flowers abound. Learn identification of common species as well as pollination strategies, folklore, and activities about wildflowers.

*These workshops, dubbed the "Second Tuesday Series", not only offer factual information and techniques for conveying natural science information, but they also provide a chance for teachers to exchange ideas and experiences. This series is possible thanks to a grant from the Clarence E. Mulford Trust. Staff development credit available. To register call Tin Mountain Conservation Center at 603-447-6991.*

## 2nd Tuesday Teacher Workshop





## BACK IN THE CONWAY SCHOOLS!

After a five-year absence in the three Conway Elementary Schools due to funding restrictions, Tin Mountain Conservation Center is back in Conway, John Fuller, and Pine Tree Elementary Schools. All students in grades three through six will be involved in the Project K.I.T.E, Kids In The Environment, program. This program focuses on helping children learn about the important resources found in the Mt. Washington Valley. Third grade students investigate a unit on Wildlife of New Hampshire. Fourth graders study the cultural and natural history of the Forests of New Hampshire. Fifth

grade students undertake a unit on the White Mountains and sixth graders are exploring three local lakes in a unit on Lake Ecology.

Each unit consists of three classroom visits from a Tin Mountain teacher/naturalist as well as a field trip to various locations, which explores these resources first-hand. Many of these units are well underway (see Lake Ecology Article) with many planned for the winter and spring. We have received only positive feedback from teachers and students alike, as we are once again involved in the Conway School System. Thanks once again to all Conway voters who made this possible last spring by supporting Tin Mountain at the polls.

The Project K.I.T.E. program is currently entering its eighth year in MSD #72 in grades Kindergarten through eighth grade with additional units on Wetlands, Watersheds, the Saco River, and Forests of New Hampshire. Our thanks to parents, teachers, and staff of Fryeburg, Lovell, Brownfield, and Denmark for their unfailing support of Tin Mountain programs in their schools.



## LAKE ECOLOGY UNIT

This fall the Tin Mountain Conservation Center brought the Project K.I.T.E. (Kids In The Environment) program back into Conway, John Fuller, and the Pine Tree Elementary schools. Designed by Tin Mountain staff in cooperation with SAU 9 sixth grade teachers, this unit was based on curriculum which utilized the lakes in the region: Crystal Lake, Echo Lake, and Conway Lake. Karen Coffey, teacher naturalist at Tin Mountain, organized the unit which consisted of two class visits to each school prior to a half-day field trip to the schools respective lakes.

The students had a great time while learning about the chemical, physical, and biological properties of the lake. Data collected on dissolved oxygen, phosphorus, turbidity, pH, temperature, wildlife, and shore land vegetation was compiled and analyzed in the classroom. A relay race, "How Much Water?" made the students really think about how we use our fresh water resource as they were laughing and getting soaking wet. The students also created a detailed drawing of the lake and made weather observations.

We especially would like to thank, the Dean family, owners of Cove Campground, for use of their property and the town of Eaton for use of water fronts for our investigations.

The weather was picture perfect on all of the lake ecology field days. There will be follow-up trips to complete the unit in mid-winter and early spring.





### Wish List

Tools  
Chainsaw  
Pole Pruner  
Tractor  
Radio  
Binoculars  
Digital Camera



## Turtles Under The Ice

After observing painted turtles swimming under the ice on Red Eagle Pond, Education Director Lori Jean Kinsey and her daughter Larissa were intrigued to know more about how turtles spend the winter. Author and turtle expert, David Carroll writes that turtles are hibernators diving into the mud of shallow ponds or lakes to spend the winter. The mud is warmer than the water above and warms increasingly the deeper they go. Painted turtles may burrow into the mud as much as one and a half feet where there could be as much as a temperature difference of 4 degrees F. They have a complicated metabolic strategy that allows them to become anaerobic in this oxygen-depleted environment, though they are also able to absorb some oxygen directly from water. There is some thought that they will move out of the mud and into the water to take up oxygen through their skin. So why were we seeing the turtles swimming under the ice? Mr. Carroll acknowledges that there is some movement under the ice up to the time turtles enter hibernation and when they awaken in early spring.



## NATURE TRUE OR FALSE

- 1) The American Robin is a medium-sized bird that migrates south in winter. T/F
- 2) The Eastern Gray Squirrel eats small animals and sleeps all winter. T/F
- 3) The Raccoon is nocturnal (active at night) and is known for washing its food. T/F
- 4) The Black Bear is active in winter and eats only other animals. T/F
- 5) The Bullfrog lays between 12,000 and 20,000 eggs per season. T/F
- 6) The Eastern Chipmunk makes an underground tunnel system for its den. T/F
- 7) The Northern Flying Squirrel actually glides; it does not really fly. T/F
- 8) The female Mosquito is an insect that feeds on the blood of mammals. T/F
- 9) The Red Fox is an herbivore or an animal that eats only plants. T/F
- 10) The Striped Skunk is an omnivore or an animal that eats both plants and animals. T/F
- 11) The Little Brown Bat eats berries and nuts, and sleeps in caves all summer. T/F
- 12) The Porcupine is an excellent tree climber and especially likes hemlock. T/F
- 13) The Woodchuck is also known as a Groundhog. T/F

I 1 2 2 F 3 T 4 F 5 T 6 T 7 T 8 T 9 F 10 T 11 F 12 T 13 T

## WORD SCRAMBLE

\*See if you can unscramble these words! If you need help... look in the Otter article for the words.



1. treot -----
2. slweae -----
3. mnreie -----
4. kmni -----
5. rhsfei -----
6. dgrau riahs -----
7. morgo -----
8. neguto -----
9. bgwbeni -----
10. atcs -----
11. smku -----

## Winter Explorations

Brownfield Bog, Brownfield, ME

Wetlands are not only exciting in the spring but a great place for winter explorations. Managed by the State of Maine Department of Inland Fisheries and Wildlife, this 5,000-acre wetland is easily accessible by snowshoes or cross country skis. Signs of mammals abound in the form of tracks, browse, scat, and scent mounds. Bird activity is evident in the now-easy-to see bird nests that are abundant in the naked deciduous trees and shrubs. It is a winter botanists haven with the many unique shrubs, trees, and plants that thrive in this wetland environment. The thickness of ice in wetlands varies according to currents and seepages. Use caution if you travel off the main path onto these frozen waterways. To get to the Brownfield Bog, follow Route 160 east approximately 1.5 miles and bear left at a fork in the road. Follow this left fork about 100 yards before turning left down a dirt road. There is a small area to park where the road becomes unplowed. Strap on your skis or snowshoes and follow the unplowed road through the bog. Remember, always prepare for winter excursions by bringing extra clothing, and plenty of food and water. Have fun!

## At Last! A Truck for Tin Mountain!

Only past and present staff and the people who have repeatedly lent their pickup trucks for Tin Mountain work may truly appreciate this news, but Tin Mountain has finally obtained a pickup truck. Thanks to a grant from the Kendal C. and Anna Ham Charitable Foundation and the generosity MacDonal Motors, we obtained a secondhand pickup truck that is in excellent condition and should provide many years of service to the organization.

Prior to this acquisition, staff cars took a real beating hauling canoe trailers and all types of "natural" cargo that many people might object to carrying inside their car. Although some staff may miss the challenge of stuffing 50 pairs of snowshoes in a Subaru, or driving 15 miles without sloshing pond water in open-top buckets, the convenience offered by our own pickup truck is almost on par with indoor plumbing. Keep your eyes open for the Tin Mountain truck around town, and join with us in thanking the Ham Foundation and MacDonal Motors for the help.

## A Teacher's Guide to the Mountains of New Hampshire

Tin Mountain Conservation Center, The Appalachian Mt. Club, and The Mt. Washington Observatory combined efforts in the development of White Mountain Ecology, *A Teacher's Guide to the Mountains of New Hampshire*. This curriculum guide introduces teachers and students to the weather and ecology of the White Mountains. It will also provide them with some basic knowledge of hiking safely in the mountains. The goal of these activities is to increase students' understanding and appreciation of the mountain ecosystem and to encourage teachers and students to use the White Mountains as a teaching resource. Special thanks to the New Hampshire Charitable Fund and the Stanton and Elizabeth Davis Fund of the Northern New Hampshire Foundation for support of this project.



### Annual Appeal



## Annual Fund Drive Now Underway

With November came Tin Mountain Conservation Center's Annual Fund Drive. This yearly appeal to supporters provides a large percentage of the revenue necessary to keep Tin Mountain programs going and all the bills paid. Over the past three years, the Fund Drive has grown steadily and the hope is for another record year. All donations are tax deductible and those that contribute become members of Tin Mountain Conservation Center. Please contribute what you can.

10% Discount for Campers  
Free Admission Nature Programs  
Tin Mountain Newsletter  
Nature Program Schedule  
10% Off Our Popular Hats and Shirts  
Free Use of Our Resource Library

Enclosed is my gift of \$ \_\_\_\_\_

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\_\_\_\_\_\$1,000 *Benefactor*

\_\_\_\_\_\$500 *Patron*

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PO Box 1170, Conway, NH 03818



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