

RATTLESNAKE GUTTER TRUST

NEWSLETTER

EAST LEVERETT MEADOW

East Leverett Meadow is a small island of grassland in a sea of maturing forest. This open, sunny spot provides unique scenery for human visitors and a home for many animals that otherwise would not be here.

Grasslands were once common in the Connecticut River Valley and along the coast of New England. Native Americans began cultivating corn in the region about 1,200 years ago. The natives used fire to clear land for crops and to open the woods for hunting. Fires set by Indians, natural fires, and the activities of beaver all helped to maintain open lands. European settlers converted native fields and grasslands to cropland, and cleared much of the forest for farmland. Between 1800 and 1875, from 60% to 80% of central Massachusetts was farmland, mostly pasture. Grassland birds, such as grasshopper sparrows, upland sandpipers, meadow larks, and bobolinks, thrived during that period.

In the late 1800s the local economy began a shift from agrarian to industrial. That shift started a trend in the abandonment of farmland that continues today. Forests reclaimed farmland within a few years of abandonment. Today, Leverett probably has more forestland than at any time in the past 200 years. Most of that forest is more than 50 years old, and half of it is at least 90 years old. Wild turkey, black bear, and fisher have become common as the forest matured, while bluebirds, cottontails, and other familiar farmland species have declined. So, East Leverett Meadow preserves both the natural and cultural heritage of the town and adds variety to the list of animals that share the land with us.

The meadow contains about 22 acres of hayland and 8 acres of shrubland. Both the hayland and shrubland are ephemeral

habitats that quickly revert to forest if left undisturbed. The Trust has entered into a cooperative agreement with Tom Beauchesne, a local farmer and enthusiastic supporter of local land trusts, to harvest the hay each year. Trust members and friends will manage the shrubland by occasionally cutting the encroaching white pines and red maples when they grow tall enough to shade out the native forbs and shrubs. The shrubland contains a rich mixture of native fruiting shrubs and vines and a few old apple trees. That diversity makes it attractive nesting cover for both shrubland and grassland birds, and a favorite feeding spot for songbirds during fall migration.

Powerline rights-of-way provide much of the remaining open and shrubland in town. The meadow is bisected by a powerline, which provides a corridor to an adjacent wetland and the still active pastureland along Teawaddle Hill Road. Thus the meadow forms an important part of the town's largest complex of grassland and shrubland.

In recent years, grassland and shrubland birds have become a priority for conservation organizations such as The Nature Conservancy, Massachusetts Audubon Society, and state natural heritage programs. Interestingly, the "prime" grassland habitats identified by these groups in Massachusetts include eight commercial airports or military air bases, one landfill, one drained swamp, one military training ground, and two semi-natural areas! Thanks to all those who contributed to the purchase of the meadow, we can enjoy the hovering flights of bobolinks without the roar of jet engines or Hum-Vs.

The meadow is a great place to watch wildlife or just enjoy a view of the hills at any season. A massive, shag-bark hickory tree



in the middle of the meadow makes a perfect and peaceful viewing spot. In autumn the views are spectacular. Flame red staghorn sumacs extend across the north end of the meadow. To the west, red maples and golden aspens glow against a backdrop of tall, dark green pines. At sunset, deer, woodchucks, and an

occasional coyote may grace the scene.

Future plans for the meadow include a parking spot along the Leverett-Cushman Road, a footbridge across Roaring Brook, and a trail encircling the hayland. Please come and enjoy the sights, sounds, and smells of the meadow.—Bill Healy

LONG HILL MANAGEMENT REPORT 1998-99

Even since the last glacier wore down, molded and pried off Long Hill's southern slope, making for the most wonderful views, the hill has managed itself quite well—so to speak. Over the millennium a succession of vegetational types have replaced one another, building up a thin veneer of soil on the summit and casting the excess downslope into the ravines and pockets. And when fires raced up the slopes or when the great trees were cut down for pasture as they were over 150 years ago when Leverett romanced flocks of sheep, vegetative stages reversed themselves and started over again. Seeded from adjacent areas by birds and the wind, trees reasserted themselves on the slopes—sumac, cedars, white pine, oaks and then hemlock and beech. What we have today is a forest near the end of its successional run, composed largely of aged hemlocks and scattered with large red oaks and white pines.

The hemlocks, some with a girth of 32 inches (seedlings when the last century turned), tower above the forest floor, dominating much of the cooler and shadier slopes of the hill. So dense is the canopy that the rays of sunlight which can find their way to the forest floor sparkle on the brown mat of needles. Little grows here and the saplings which dare must put all their energy into fast-growing, straight-supporting shafts which track corridors of light upward. So delicate are they that without support of neighboring branches they usually cannot withstand a heavy snow. Once bent off track or broken, they hardly ever recover. Here and there a big hemlock snaps or loses its balance, and, if

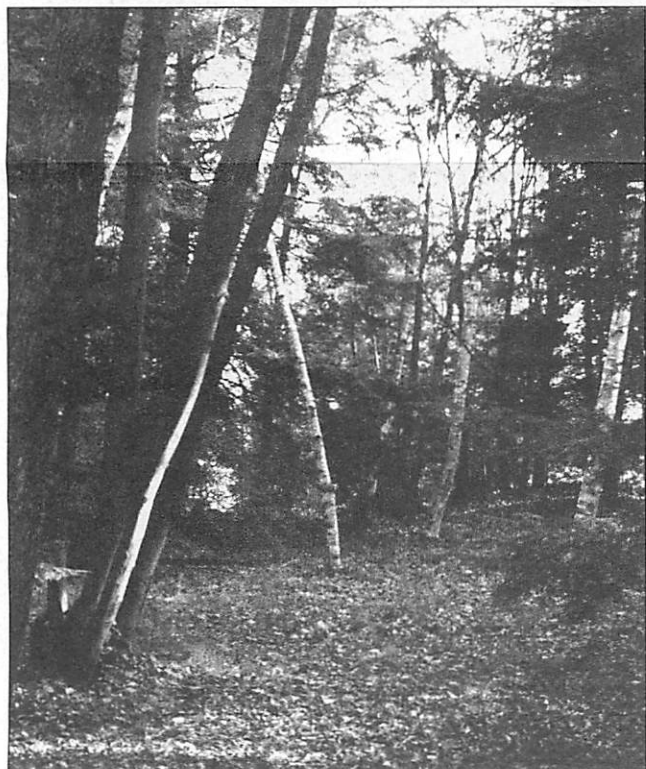
ample room is available to fall, it leaves a gaping hole in the canopy. Light streams in and water from light rains soaks the organic material of the forest floor. Ferns are the first to take advantage of the new conditions and they shine like emeralds in a world of browns. Occasionally on a still day a single fern leaf will be dancing back and forth, seeming to wave at a passerby. Like the water which percolates underground, filling the small well halfway up the trail three days after a heavy rain, streams of air course up and down the slope depending on the time of day.

As winter comes to the hill and a blanket of snow covers all, the hemlocks have a special burden. Much of the snow stays aloft, clinging to drooping branches until a wind comes up, dislodging it in a series of miniature avalanches. Several times during the past two years a soaking rain followed the snow and froze it in place, adding to the immense weight. When the winds finally came, many trunks could not take the pressure and so, throughout the hemlock forest, trees are broken off 8-12 feet above the ground. Lying on the floor the following summer, they eventually lost their needles and became like the skeletons of giant circular fish.

Well, this is one kind of management and a lot of patches of ferns, followed by raspberries and then by yellow birches, have begun to sprout up. Where humans are concerned, not much formal control is exerted on the generations of trees which have grown up together. A neighbor kindly placed a sitting bench at the overlook a few years ago for those who like to contemplate the view. After the spring melt, logs to check erosion are put in place across the trail, only to be removed at the end of the fall so that sledgers can whiz down the winding slope. We are concerned, however, with the consequences of a hemlock blight which is spreading northward and would have a large impact on the Hill.

With this in mind, RGT approached Matt Kelty of the Department of Forestry and Wildlife at UMass and asked if he could advise us on options for increasing diversity and public enjoyment of the Hill. Matt recruited two forestry students, Kevan Gale and Michael Mayer, and supervised a project entitled "Long Hill Natural Area: Vegetation Description and Management Recommendations" (January, 1998). The report identifies major species of trees, their basal area, and the board feet per acre. Management recommendations are as follows:

The first priority for this area would be the clearing of the established trails. They are still littered with fallen trees from the winter storms of 1997. Another vista could be established on the western side of the summit area. Here there is an area of cliff wall, which would only require the removal of about 15 trees to establish a vista that would look out to Mt. Toby. A new trail could also be established joining the trail that runs to the north with the summit trail by connecting them where the summit trail



turns to the southwest.

For purposes of wildlife habitat, there would need to be some patch cuttings made to establish tree and shrub regeneration. Signs of deer were found in high number at the northern edge of the property where the tree composition changes first to a younger hardwood stand and then to a wetland. Although hemlocks produce lower snow depths and cover for deer, these mature hemlocks do not provide the type of escape cover required by deer. Without any regeneration of hardwoods or a shrub layer, there is little food for deer. This also holds true for turkeys that are in the area. The hemlocks do provide good habitat for owls.

Hemlocks could be removed in small patches to allow seed of some tree and herb species already in the forest to regenerate. If

some of the patches were made around some of the large red oaks in the area, it would allow for the establishment of oak seedlings. This would provide both cover and food for many different species of both birds and mammals. These patches could be made along the pre-established trails so that a logger contractor could use the trail to move timber. This would also allow hikers to observe birds and other animals from the trails.

We very much thank Matt, Kevan and Michael for their assistance.

Respectfully submitted,
Brooke Thomas

ROARING BROOK CONSERVATION AREA CAMPAIGN A SUCCESS

On January 20, representatives of Rattlesnake Gutter Trust met with trustees of the Kestrel Trust to celebrate the successful conclusion of a year-long effort to secure the Roaring Brook Conservation Area on Shutesbury Road in East Leverett. Almost twelve months to the day after RGT first learned of the availability of the property, a little more than six months after fundraising began, the Rattlesnake Gutter and Kestrel Trusts, along with the Leverett Conservation Commission, the Valley Land Fund, and the Berkshire Chapter of the Appalachian Mountain Club had together raised the \$62,000 necessary to complete the purchase of the property. It has been a remarkable collaboration.

The Roaring Brook property is a stunning addition to Leverett's conservation lands. A 51-acre woodland bisected by both Roaring Brook and the Metacomet-Monadnock (M&M) Trail, it contains over 2,000 feet of stream frontage, high bluffs overlooking Roaring Brook, and an open oak and hemlock forest through which sparkling tributary streams flow into Roaring Brook from the south. The property provides habitat to numerous species of birds, mammals, reptiles, and amphibians, including black bears, deer, fishers, wild turkeys, owls, and a variety of salamanders, turtle, snakes, and fish. It is a wonderful property that Leverett residents will enjoy forever. But it almost didn't

happen.

The origins of the Roaring Brook project actually go back more than two years. In 1996, RGT designated Roaring Brook, the principal tributary draining the Brushy Mountain watershed, as an area of primary focus. Concerned that this important riparian habitat be protected from residential development and other incursions, the Trust determined to create through conservation restrictions and land acquisition a protected corridor along the four miles of Roaring Brook that run through eastern Leverett, and to work with the Conservation Commissions of Leverett and Amherst, as well as with private regional conservation and land preservation organizations, to extend that corridor beyond Leverett's borders. In the summer of 1997, thanks to the generous donations of Leverett residents, the Trust purchased the thirty-acre East Leverett Meadow abutting the brook toward the western end of town. Early in 1998, Mr. Andrew Scheffey donated 16 acres along the Brook beginning at the Town's eastern border with Shutesbury.

Then, almost by accident, the Trust learned that the owner of a 51-acre parcel midway between the Scheffey land and East Leverett Meadow was planning to put her property on the open market.

At first, prospects for the Trust to help preserve the parcel did

1999 MEMBERSHIP DRIVE

New members wanted! Longtime members—let us know you're still with us!

If you wish to become an RGT member, complete the application below, clip and send with your annual dues (\$5.00 for adults, \$1.00 for children, \$500.00 lifetime membership) to:

RATTLESNAKE GUTTER TRUST
P.O. BOX 195
LEVERETT, MA 01054

Name: _____

Address: _____

Gift in memory of: _____

If you have a specific area of interest or concern, please let us know: _____

not look good. While the \$62,000 asking price was not unreasonable, to ask Leverett residents to contribute again so soon after the East Leverett Meadow campaign seemed a significant obstacle. So was the fact that if we began but could not complete the purchase, we would have to sell a portion of the property or go significantly in debt. For a small, local land trust, these were serious concerns.

It was at that point, with little more than two weeks left before the landowner's deadline ran out, that the Amherst-based Kestrel Trust stepped in and, with substantial financial help from RGT, along with contributions from Valley Land Fund and the Berkshire chapter of the AMC, made a downpayment on the property. All that was left to do was raise a little more money—about \$42,000 more!

A joint steering committee of the Rattlesnake Gutter and Kestrel Trusts held its first meeting at the Black Sheep in Amherst on June 2, and began to figure out how it could be done. Over the next six months members of the two conservation organizations staged general fundraising campaigns in Leverett, Amherst, and, Shutesbury, made telephone appeals to neighboring landowners, talked with newspaper reporters to get publicity for the project, put up posters, distributed flyers, had a table at the Dump, filled out grant applications, contacted area businesses, and talked with anyone who would listen about the project.

The response of the people of Amherst, Shutesbury, and especially Leverett was astonishing and deeply gratifying. The Town had already extended help in the form of a \$6,000 appropriation from the Leverett Conservation Commission's land acquisition fund. Then dozens and dozens of individuals chipped in with contributions of \$5, \$25, \$100, \$1,000. By the beginning of December RGT had raised nearly \$14,000 and Kestrel Trust more than \$10,000 from their members and other interested—and generous—area residents.

At the same time, we approached funding organizations and businesses and asked for their help with the project. Once again we met with a warm reception and cold cash: in all, \$18,000 in grants from the Dorothy Stebbins fund (which had helped make possible the purchase of East Leverett Meadow), the Yankee-Arrowhead Foundation, the Community Foundation of Western Massachusetts, Eastern Mountain Sports, the Fields Pond Foundation, and the Massachusetts Department of Fisheries, Wildlife, and Environmental Enforcement whose Riverways Program provided the grant that put the fundraising campaign over the top.

And with the property secured, more grants are pending—to finance construction of a bridge across Roaring Brook, to pay for signs and a parking area, to reroute the M&M Trail, to extend the trails on the property eastward into Shutesbury and west to East Leverett Meadow and the center of town, to form a Roaring Brook Watershed Alliance, and to continue RGT's effort to create a corridor of protected land all along Roaring Brook from Shutesbury to Amherst.

Within a short time, the parcel will be turned over to the Town to be managed by the Leverett Conservation Commission as the Roaring Brook Conservation Area, and the Trust will turn its attention to extending and expanding the evolving riparian corridor. For now, we would like to extend our thanks to Janice Stone, Jim Scott, and Judy Eiseman of the Kestrel Trust, to Pete Westover of the Amherst Conservation Commission, to Al Shane and Chris Ryan of the Appalachian Mountain Club, to the Valley Land Fund, and to the Leverett Conservation Commission. Thanks to their collective efforts, and the true generosity of many, many others, the Roaring Brook Conservation Area is today a reality.

—Steve Weiss

In this issue of our Newsletter, we've presented reports on the on-going activities of the Trust (management of ELM and Long Hill) as well as the latest news about a successful campaign to preserve another special place in Leverett (Roaring Brook). Preserving land involves not only its acquisition (or the acquisition of protective conservation rights by various restrictions), but also caring for the land after it has been protected.

Rattlesnake Gutter Trust
P.O. 195
Leverett, Massachusetts 01054

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