

RATTLESNAKE GUTTER TRUST

NEWSLETTER

The Worlds Around Us...

AMATOR

Many years ago, one of my neighbors was studying wetland vegetation as she worked toward a degree in botany at the University. As winter turned to spring, she explored the terrain along the Sawmill River. Taking many more factors into account than were readily apparent to me, she finally selected a site across the river and staked out an area about six feet square. At least twice a day she crossed the river with notebook in hand to study this small plot. Through spring and summer, on into autumn, she catalogued and took notes, gathering specimens and identifying dozens of different grasses in this patch.

Her work involved good old-fashioned field research. The woman moved on shortly after her North Leverett research was done. But remembering her twice-daily trek to the plot in the water meadow and then learning the extraordinary number of species she had catalogued there made me give a little more attention to such diversity in my own yard, along trails that I regularly walked, along roadsides in my neighborhood. But I neither formalized nor catalogued my observations and would probably cite the pace of life as my reason for not doing so. Any such effort with grasses or wildflowers or trees would have had no practical purpose, I might have argued, and my own observations would have been distinctly amateur, a word I would have considered pejorative.

By definition, an amateur is one who practices an art or science for pleasure rather than as a profession. The word is a very direct descendant of the Latin word for love, *amator*. Victorians were zealous cataloguers of the natural world, ardent amateurs who studied both their own backyards and the more exotic lands of Asia and Africa. Observing, collect-

ing specimens, and, in many cases, importing and propagating unusual species were serious hobbies, usually lifelong.

A recent article in the *Boston Globe* points out the diminution of field research, both professional and, perhaps more significantly, amateur. Gone are the days of those Victorian cataloguers, of folks tramping about with walking sticks and specimen bags collecting grasses or butterflies, wildflowers or moths, pressing and pinning, identifying and labeling, all the while deriving great personal satisfaction in the entire process and, I'd wager, competing with one another to be the first to locate and identify a species that was rare. Bird-watching remains a popular pastime, but other elements of our physical world are being studied less and less as professional naturalists spend increasing amounts of time in the lab or before the computer while amateurs succumb to the "pace of life" excuse. Field research is tedious, at times difficult, and, on the professional level, seldom funded by grants. In this age of specialization, few amateur naturalists have confidence that their collections and observations could be important.

The *Globe* article focused on Peter Dunwiddie, a plant ecologist who has surveyed the flora on Nantucket. In the early years of this century, the island was one of the most studied landscapes in America. A significant portion of Dunwiddie's baseline data consisted of collections and notes almost a century old, most of them compiled by amateur naturalists. Working with research partner Bruce Sorrie, Dunwiddie established that 326 of the 1265 plant types on the island have not been seen in more than sixty years. Have 326 species of flora indeed

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A BUSY SUMMER

RGT Activities, Projects, and Initiatives

The past three months have been an active and productive time for the Rattlesnake Gutter Trust.

Following the selection of officers in May, the Trustees established goals for the coming year and began to broaden ties with other land trusts in the Pioneer Valley.

We've also launched several major initiatives.

Lee Ann Warner, Glen Ayres, and Evie Schuyler have begun working on a comprehensive conservation plan for Leverett. Modeled on similar projects by other land preservation organizations, RGT's plan will take a strategic approach to identifying and protecting those areas most important to preserving the special characteristics of Leverett. Earlier efforts identified local areas of special concern and established criteria for the Trust's acquisition of conservation restrictions. We hope to draw on the ideas and perspectives of people from all over town as we build on those efforts.

The Trust has designed and implemented a land monitoring program, assigning responsibility for different parts of town to individual trustees. We hope the program will enable the Trust to maintain a regular dialogue with landowners in Leverett. Providing interested residents with information about conservation restrictions and other land preservation options while staying alert to potential development and its impact on the town are two important functions of the Trust's monitoring efforts.

Brooke Thomas and Perky Greeley have launched several educational projects in partnership with the Leverett Elementary School. They are planning a special assembly devoted to Leverett's natural heritage and a "Mountain Day" exploration of Brushy Mountain and Long Hill for programs devoted to the history and environment of our town.

Perhaps our most exciting educational initiative is a joint project with LES, the Trust, and the Conservation Commission to create an environmental classroom on the land behind the school. Work is going forward to map this newly-acquired parcel, identify areas of special interest and designate specific sites for ongoing study. Taking advantage of the rich variety of vegetation, habitat, and topography at the school's back door, this project has limit-

less possibilities, from collecting weather data to comparing soil composition, from observing regrowth in an area recently logged to cataloguing flora and fauna, from monitoring stream flow to establishing an interpretive nature trail.

Much work lies ahead to make the LES Environmental Classroom a reality, but it is a project of great promise for both the school and the community.

If you have other ideas that you'd like to share with the Trust or if you're interested in participating in any of our current projects, please contact Co-chairs Steve Weiss (548-8172) and Lou Bannister (367-2125).

THE RATTLER

Beginning this month, Rattlesnake Gutter Trust is launching a kids' edition of the RGT Newsletter.

The Rattler will be distributed to students at LES and will contain articles, photographs, poems, personal essays, letters, and comic strips devoted to environmental themes, with special emphasis on Leverett.

The purpose of the kids' edition is to introduce young people to Leverett's natural heritage, to provide information about land preservation and land conservation issues, and, most of all, to offer kids a place where they can write, draw, think, and talk about the natural world around them.

The Rattler is a combined effort of LES students and RGT.

Anyone interested in submitting material for the next issue of *The Rattler*, tentatively scheduled for December, can contact Steve Weiss at 548-8172. Or you may mail submissions to RGT, P.O. Box 195, Leverett, MA 01054.



A SHORT HIKE UP LONG HILL

With Autumn upon us, it is a wonderful time to get to know or renew your acquaintance with Long Hill, one of Leverett's most delightful places.

RGT accepted ownership of the Long Hill Natural Area in the Fall of 1993 from the Valley Land Fund, which acted as an interim holder for the Long View Alliance, a group of Leverett residents who worked to preserve the hill from development.

Located off Camp Road, about a half-mile from the intersection of Long Hill and Depot roads, the Long Hill Natural Area consists of approximately 35 acres covering the top and sides of the hill from the northwest around to the southeast. The parcel also includes frontage on Camp Road on the north side of Long Hill and a small piece on the south side along Leverett Pond.

Because the Long Hill Natural Area encircles a good portion of the hill, differences in exposure and elevation have created a diversity of habitats.

Following a gentle trail from the parking area off Camp Road, one climbs through a predominantly hemlock forest to the summit at an elevation of 662 feet. From there, the pond and town center spread out below. To the south, the view stretches across the Pioneer Valley to the Holyoke Range. On a clear day, you can see into Connecticut. And, as the leaves begin to fall, other views open up to the west, revealing Bull Hill and Mount Toby.

Descending the hill on the northeast slope through the darkness of the mature hemlock groves, one eventually enters a deciduous woodland of oaks, maples, and birch. The lowland forest gives way to red maple stands interspersed with dark, vernal pools and an occasional seep adjoining the wetlands covering the north end of Leverett Pond.

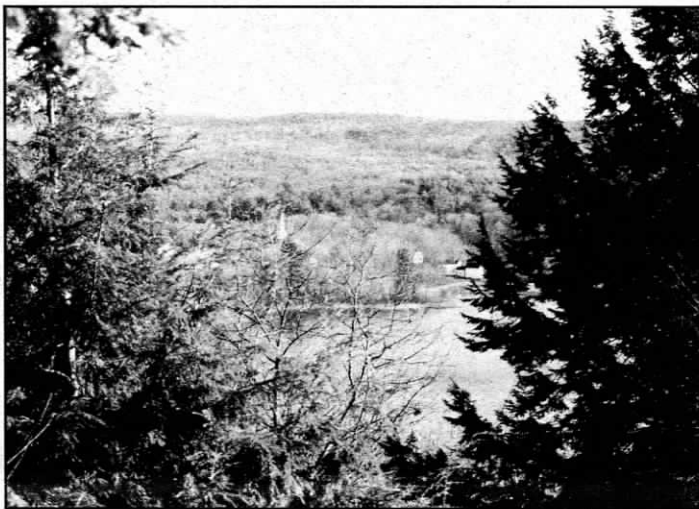
The Long Hill Natural Area is managed by a sub-committee of the Trust consisting of community members including Brooke and Shirley Thomas, Connie Robb, Evelyn Schuyler, Matt Kelty, and Cynthia and Roy Kimmel.

Since taking over the property three years ago, representatives of the Trust have established a parking area and erected a sign identifying the site, maintained the trails, cleared brush at the southern view from the summit, and filled in a well that could have

been a hazard to children or small animals. Planned projects include marking the property boundaries, creating a trail that would link the summit with existing trails around the north and south ends of the pond (Dave Field's Friendship Trail), marking trees as they die to keep an inventory of species mortality, and creating small clearings in the hemlock forest to encourage plant and animal diversity.

Do yourself a favor. The next crisp day take a short hike up Long Hill. You won't be sorry you came.

—Brooke Thomas



An early autumn view of the Pond and the center of Leverett from the crest of Long Hill.

The RGT Newsletter is mailed to all current members to keep them abreast of Trust activities and concerns.

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

RATTLESNAKE GUTTER TRUST
P. O. Box 195
Leverett, MA 01054

Name: _____

Address: _____

vanished from Nantucket? Or do some of them remain, unseen by Dunwiddie and Sorrie? What is missing—certain species or the amateur and professional field researchers who love tracking them down?

“There used to be a lot of extremely talented naturalists... Today, I don’t know where those people are. Maybe they’re hang-gliding,” laments Dunwiddie.

But wait. Amateur field research lives and it lives in, of all places, New York City.

Dr. Steven Clemants, a taxonomist for the Brooklyn Botanic Garden, is coordinating the New York Metropolitan Flora Project, the first study of its kind since 1915. The project is cataloguing and mapping all plant life within a 50-mile radius of Central Park. Preliminary work by botanists suggests that at least a third of the species that existed in the area a century ago have disappeared. The Project seeks to provide a current baseline against which to measure past and future changes. The first phase catalogues woody plants and is projected to take at least six years. Working with Dr. Clemants are 150 volunteers—students, bird watchers, retirees—many of whom are amateur naturalists. Each volunteer is assigned at least one of 1,000 five-kilometer squares into which the region has been divided.

A retired Bell Labs scientist who is doing five New Jersey squares says, “The surprising thing to me is that I didn’t know very much.” Another volunteer, a retired lawyer, was astonished to find that the tree in his backyard is not a black walnut, as he thought, but a butternut. A woman who is surveying three Long Island plots says, “Ecology isn’t just endangered whales and Yellowstone. It’s the living relationships in your own immediate area.”

Interior Secretary Bruce Babbitt tried to close the research gap three years ago when he proposed a new agency to inventory plants and animals, nationwide. Conservatives in Congress, however, fearful that a survey would turn up rare species that would need protection, rejected the plan. As a result, researchers don’t know what plants and animals are truly on the brink of extinction. Ironically, some species have been re-discovered after being declared extinct while “rare” species, such as the famous snail

darter, have been found to be much more plentiful than was thought.

On Nantucket, Dunwiddie has rediscovered some “lost” species, but he insists there are hundreds more. “There’s only a few aficionados such as myself who even care,” he says.

The Flora Project in New York belies this. Clemants asked for volunteers and found them by emphasizing, in part, that professional experience was not necessary, that interest and love of the world around us is the first criterion. And the stories of both places, New York and Nantucket, show that I was wrong all those years ago when I couldn’t find a practical reason to learn a bit more about the flora in my own valley.

As Dunwiddie puts it, “Scientific abstractions and fancy technologies are no substitute for the wisdom that springs from knowing the world and its creatures....”

—Roberta Bannister



A STRATEGIC APPROACH TO FARMLAND PROTECTION

One of our greatest natural resources lies right beneath our feet. Formed over the millennia from the decomposition of organic and inorganic matter, moved about by glaciers, rivers, and wind, the soils of the Pioneer Valley are among the best and the most productive in New England.

Ten years ago, the Pioneer Valley Planning Commission began a coordinated effort to categorize farmland based on soil type and use that information to help state and local officials preserve our dwindling agricultural lands. That initiative has recently been heralded in a report by the American Farmland Trust as a model for strategic preservation of farmland around the country.

Call to Action

Citing what in many areas has been at best a scattershot, ad hoc approach to farmland protection, the AFT report calls on states and local communities to become more selective in identifying their most important and vulnerable farmland, and to work together with land owners and private land conservation groups to protect it.

The AFT call to action comes at a particularly critical time for agricultural land in the Pioneer Valley and throughout New England. The continuing deterioration of urban areas, the first baby boomer retirees, and new technologies that allow more people to live away from their places of work are accelerating the pressure on the region's farmlands.

Meanwhile, tighter state and local budgets have diminished the funds available for public purchase and conservation programs. At the same time, a major shift in national farm policy toward less regulated markets for agricultural products has placed greater emphasis on prime farmland, even as public interest in protecting farmland for nonagricultural reasons—scenic open space wildlife habitat—has widened.

A Two-Stage Approach

Faced with these new pressures and possibilities, the AFT recommends a two-stage approach to farmland preservation: identifying and mapping criteria to delineate farmland for protection, then building

consensus among various interest groups to save those lands from development.

The first step is to single out strategic farmland by overlaying characteristics important to the community. The AFT report identifies three broad categories of strategic criteria for policy makers to consider: agricultural, environmental (e.g., climatic factors, access to major watersheds); and economic. Once specific criteria are identified for a given region or community, local officials using a computer-assisted mapping program known as Geographical Information Systems or GIS can graphically plot where each of those criteria exist. By "layering" those criteria maps one on top of another, a composite map is created showing the lands of highest strategic priority. The more characteristics a certain piece of farmland has, the more strategic value it has for its community.

In its "pioneering" effort ten years ago, the PVPC used a similar strategy. Focusing on such towns as Hadley, Westfield, Amherst, Northampton, Deerfield, and others, commission members utilized soil data to create a regional map identifying agricultural lands of particular value in each of a dozen or more cities and towns. Then the PVPC worked with local planning and select boards, conservation commissions, state agencies, and private trusts to help them use the data collected to protect Pioneer Valley farms.

Building Consensus

"The process is not about building maps," says AFT director of public policy, Edward Thompson Jr.. "It's about building consensus. The objective is people coming together."

Indeed, the strategic approach to land preservation draws its greatest strength from the emphasis on a community-wide process that works from the ground up.

While everyone has his or her own definition of what is "best" for their town or region, establishing conservation criteria through dialogue among community members not only takes advantage of the widest possible range of ideas and perspectives, it can also have substantial educational benefit for the town, and is ultimately the surest way to build a solid foundation for action.

—Steve Weiss

ON THE WORLD WIDE WEB

No, RGT does not yet have a Web site, but we've been surfing around lately to hunt up a few sites that might interest you.

Visit one or two the next time you're surfing the Web. We think you'll have a great time.

The Nature Conservancy
<http://www.tnc.org>

Earthlaw (Legal resources for environmental activists)
www.envirolink.org/orgs/elaw

The Wild Ones (an international club for children)
[http://www.cc.columbia.edu:80/cu/cerc./wild ones](http://www.cc.columbia.edu:80/cu/cerc./wild%20ones)

<http://www.cs.uidaho.edu/~connie/interest-wildlife.html>
(This is a learning tool with many animal and ecosystems links.)

Audubon Society
<http://www.audubon.org/audubon/>

Environmental News Network
<http://www.enn.com/>

GLOBE
<http://globe.fsl.noaa.gov/>
(This is a program where classrooms from more than 20 countries participate in global ecology studies.)

"Captain Planet"
www.turner.com/planet
(A comic book-style site for kids.)

"Eddie the Ecodog"
www.mbnet.mb.ca/eddy
(Another comic book site that teaches kids simple environmental lessons.)

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