

The background of the slide is a photograph of a lush green forested hillside under a blue sky with scattered white clouds. In the lower right foreground, a white church steeple with a dark, pointed roof is visible. To the left of the steeple, there is a large bush of white flowers. The entire slide is framed by a light green border on the left and right sides.

# The Vermont Town Forest Stewardship Guide:

A Community Users' Manual for Town Forests





## A Letter to the Reader

Dear Friend of Vermont's Town Forests,

Thank you for supporting Vermont's long and proud tradition of towns owning and managing forests for public benefit. While Vermont's town forests have always been important sources of timber, maple sap, clean water, wildlife, and recreation, they are more needed now than ever. Vermont is changing rapidly, both in its landscape and culture. Our town forests provide anchors in this changing environment, places that tie us back to the land, our communities, and the traditions that make Vermont such a unique and wonderful place to live.

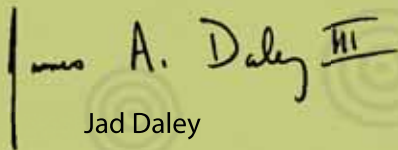
This guide highlights "best practices" from model town forests across Vermont to help your community maximize the potential in your town forest, from cutting edge forest management and timber production techniques to strategies for engaging your community through forest-based recreation and education.

In these pages you will find links to model communities cited in this guide, state agency personnel, private foresters, and other experts who can help your community envision new possibilities for your town forest and find resources to make your vision a reality. The Vermont Town Forest Project also stands behind this guide as a "live help" support system for your community. We hope that you will utilize our team of more than thirty public and private organizations ready to help Vermont communities realize their greatest ambitions for their town forests.

Finally, if your community does not yet have a town forest, it is not too late! Communities across Vermont are coming together to purchase new town forests. These new town forests will meet community needs for forestland that is open to all and help maintain the forest values that Vermonters hold most dear. Chapter Seven explains in detail how your community can find technical assistance and funding to purchase a town forest.

We hope that this guide and the support of the Vermont Town Forest Project prove helpful to your community. We look forward to working with you!

Sincerely,

A handwritten signature in black ink that reads "James A. Daley III". The signature is written in a cursive style with a vertical line to the left of the name.

Jad Daley  
Northern Forest Alliance

# Table of Contents

## I. Introduction / 2

- A. The Case for Town Forests: Community Lands for Community Values
- B. VTFP Description and Rationale
- C. History of Town Forests in Vermont and New England
- D. Map of Vermont's Town Forests
- E. State's Role with Town Forests

## II. Community Oversight of Town Forests / 12

- A. Management Models
- B. Town Forest Committees
- C. Conservation Easements
- D. Designated Conservation Funds
- E. Developing Town Forest Policy
- F. Liability

## III. Town Forest Management Planning and Implementation / 16

- A. Understanding Forest Management Plans
- B. How to Create a Town Forest Management Plan
- C. How to Implement a Town Forest Management Plan
- D. Financial Resources and Technical Assistance for Town Forest Management

## IV. Management Considerations/ / 26

- A. Forest Economics
- B. Timber Management and Maple Sugaring
- C. Water Resources
- D. Wildlife
- E. Recreation
- F. Forest Protection (Insects, Pathogens, and Invasive Species)
- G. Enforcement

## V. Town Planning for Town Forests / 44

- A. Town Plans
- B. Zoning Bylaws and Districts
- C. Subdivision Regulations
- D. Role of Municipal Boards

## VI. Engaging Your Community / 52

- A. Town Forest Educational and Cultural Activities
- B. Connecting across Generations: Youth-Elder Interviews
- C. Town Forest Statement
- D. Rediscovering Town Forests: Celebrations and Discovery Days
- E. Community Stewardship Projects
- F. Leveraging Community Interest and Awareness

## VII. Creating a Town Forest / 62

- A. Overview of a Community Conservation Project
- B. Success Story of a Vermont Town Forest Acquisition

## VIII. Resources / 72

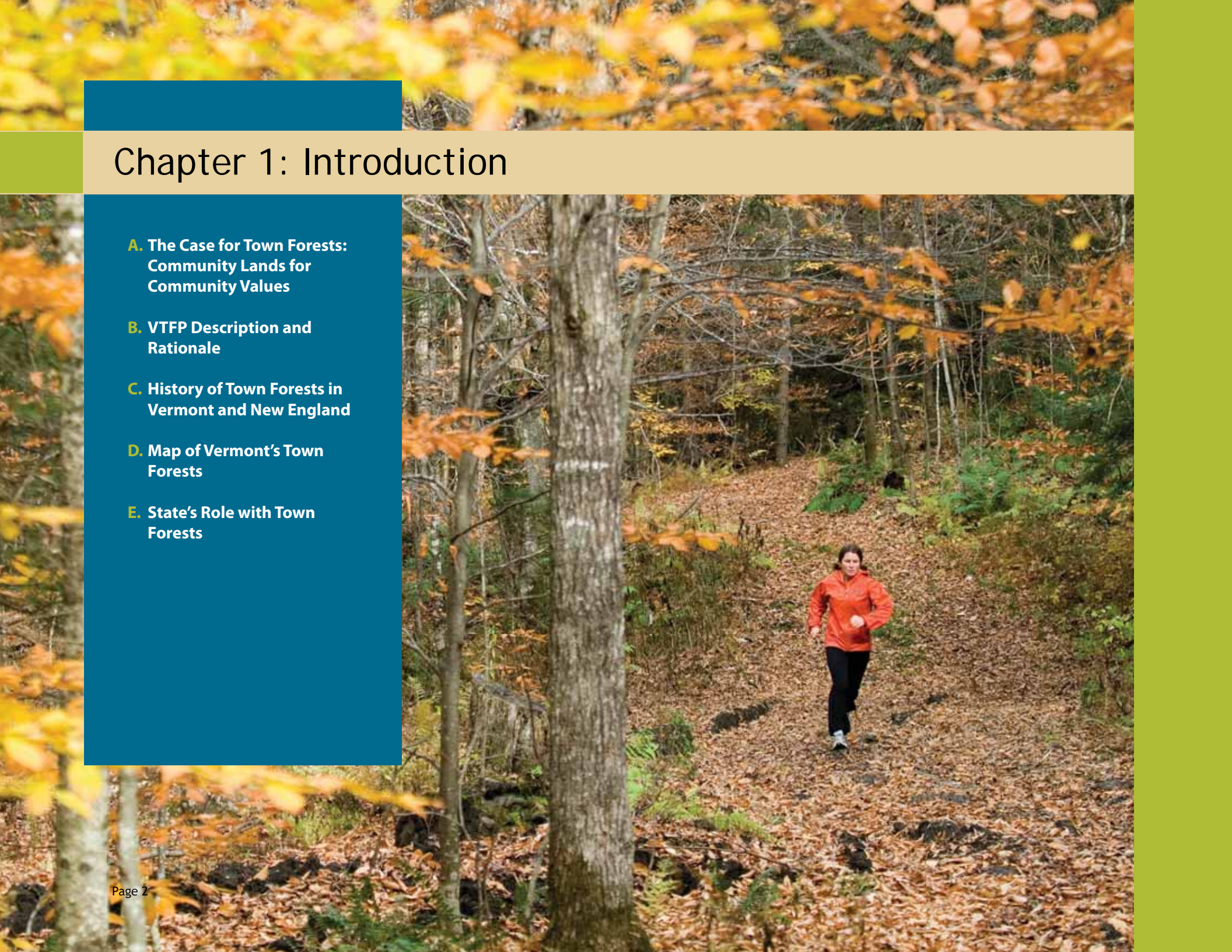
- A. County Foresters
- B. State Resources for Town Forests
- C. Town Forest Contacts
- D. Supplemental Chapter Materials





# Chapter 1: Introduction

- A. The Case for Town Forests: Community Lands for Community Values**
- B. VTFP Description and Rationale**
- C. History of Town Forests in Vermont and New England**
- D. Map of Vermont's Town Forests**
- E. State's Role with Town Forests**





## Introduction

### A. The Case for Town Forests: Community Lands for Community Values

Even with significant new development statewide, Vermont is still blessed with an abundance of forestland. So what are the unique advantages to a community of having a town forest? The public values that can be derived from these lands are remarkably diverse, leading each community to focus on different values that match that community's unique needs and circumstances. Here are some of the values that communities across Vermont cite most frequently when praising their town forests:

- ▶ **Community Rallying Point:** In many Vermont communities, the town forest is a place where neighbors come together to share and celebrate their connection to each other and the land. This effect is greatly enhanced in communities that open up town forest management and decision making for community involvement, and where the town forest is actively used for community programs in forest education, outdoor recreation, and forest stewardship.
- ▶ **Watershed Protection:** Many of Vermont's town forests were created to protect the town's drinking water supplies, a need so urgent that some Vermont communities own land within other municipalities for this purpose. Even in towns where the community has shifted to another water supply, these lands continue to play a key role in watershed protection for lakes, rivers, and streams.
- ▶ **Forest Products:** Many of Vermont's town forests provide important revenue to town budgets or funding for town projects from timber sales and leasing of sugaring sites. Actively managed town forests can produce significant revenue over time and cover their own stewardship costs. This provides timber and sap harvest opportunities for local businesses and supports our traditional forest-based economy.
- ▶ **Wildlife Habitat:** Vermont has a proud heritage of protecting wildlife habitat and is currently implementing a comprehensive new State Wildlife Plan that will protect Vermont's wildlife into the future. Town forests provide important habitat that is conserved from development and can play a key role in demonstrating model forest stewardship for wildlife to private landowners in the community.
- ▶ **Public Recreation:** Vermont has a proud tradition of healthy and active living that is built on our outdoor lifestyle—Vermont has the second highest per capita number of hunters in the nation! Town forests guarantee convenient public recreation access at a time when subdivision and development of Vermont's private forestland is leading to more posted land statewide. In some of our most populous towns like St. Johnsbury and Hartford, the town forest is the most easily accessible piece of Vermont's forest heritage and lies within walking or biking distance of young people and families.



Pictured left: a runner in the Calais Town Forest

## B. The Vermont Town Forest Project

The Vermont Town Forest Project (VTFP) was founded in 2004 to help communities across Vermont maximize the community benefits derived from their town forests and to help support the creation of new town forests statewide. The project has grown into a national model of statewide leadership and coordinated support for dispersed community activity. The VTFP is led by a team of more than thirty public and private partners (see below) that meets regularly and maintains an active email list. This team of organizations works to support Vermont communities on two levels:

- ▶ **Statewide Resource Center:** The VTFP develops informational materials like this guide, holds events including our field workshops and annual Vermont Town Forest Summit, and provides a voice in the media and the political process for the needs of town forests.
- ▶ **Town Forest Pilot Projects:** The VTFP works in close conjunction with interested communities to help them implement new town forest activities, providing staff time, financial resources, and technical expertise. Pilot projects have ranged from helping communities organize town forest celebrations and develop new forest management plans to assisting community purchase of a new town forest. In some cases, we have engaged in multi-year projects involving all of these tools, and more.

The VTFP is meant to be a resource for your community, and we hope you will use us! Please contact us for information, come to an event, or let us know if you would like to explore working more closely with us on a new pilot project in your community. Important note: the Vermont Town Forest Project is meant to address all town-owned forestlands, and not just those formally designated as a “town forest.” This includes what are commonly known as “school forests” and other municipal parcels. So please do not let your interest be limited by how your town has designated town-owned forestland.

To tap into the resources of the VTFP, please contact the Northern Forest Alliance, which coordinates the project on behalf of the partner organizations. You can also connect directly with our partner groups to explore possible support and collaboration. **Northern Forest Alliance**, 32 Park Street, Stowe, VT, 802-253-8227, [www.northernforestalliance.org](http://www.northernforestalliance.org)

**VTFP Partners:** Vermont Department of Forests Parks, and Recreation – Vermont Department of Fish and Wildlife – U.S. Forest Service, Green Mountain National Forest – National Forest Foundation – University of Vermont – Association of Vermont Conservation Commissions – Vermont Land Trust – Vermont Natural Resources Council – Trust for Public Land – Orton Family Foundation – Middlebury College – Vermont Humanities Council – Audubon Vermont – Catamount Trail Association – Green Mountain Club – Vermont Youth Conservation Corps – Forest Guild – Vermont Woodlands Association – Center for Whole Communities – Community Forest Collaborative – Upper Valley Land Trust – Northern Rivers Land Trust – Jay Ericson Photography – Moosalamoo Association – Biomass Energy Resource Center – Northern Woodlands – Mad River Valley Planning District – Town of West Fairlee – Town of Stowe – Town of Brattleboro – Town of Warren – Town of Fayston – Town of Waitsfield – Town of Moretown – Town of St. Johnsbury – Town of Hartford – Town of Randolph – Town of Goshen – Town of Dorset – Town of Craftsbury – Town of Townshend – Town of Hinesburg – Town of Sheldon – Town of Marlboro – Town of Corinth

## C. History of Town Forests in Vermont and New England

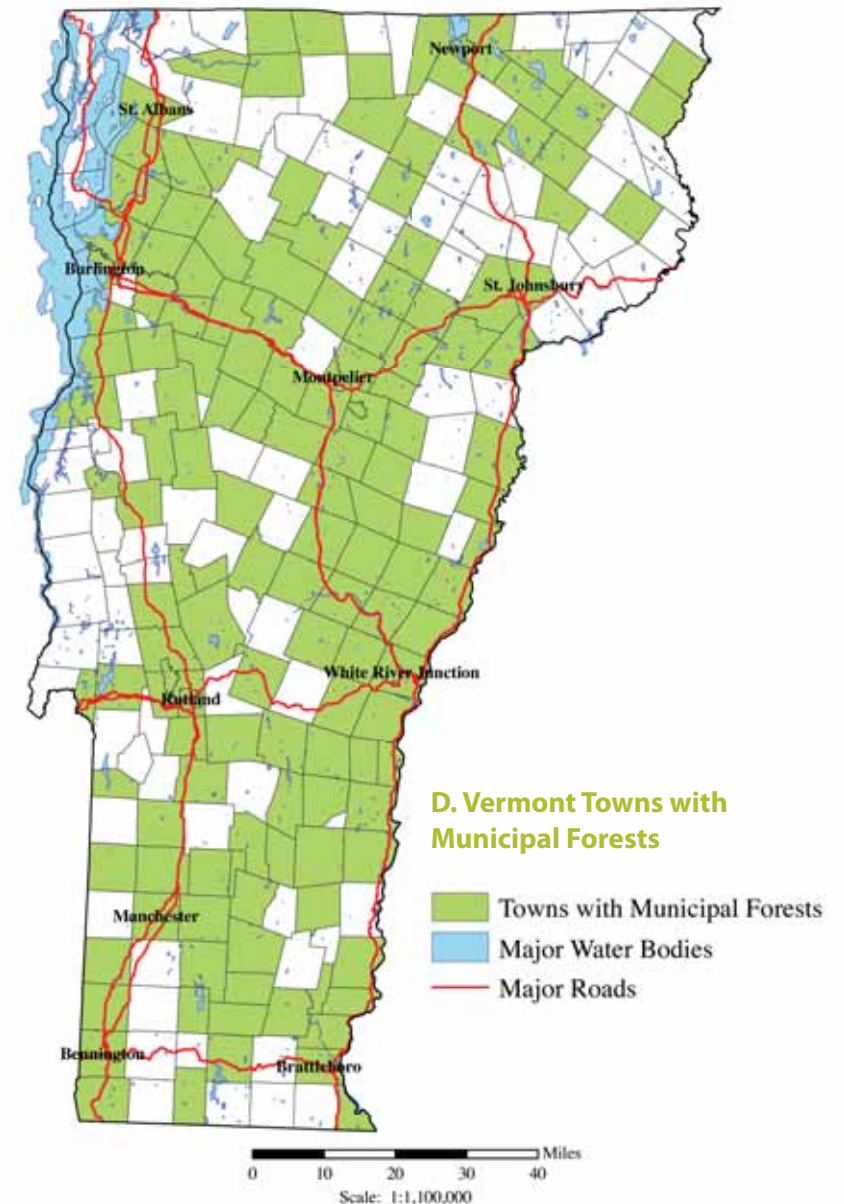
This section is excerpted from "A Forest in Every Town: Vermont's History of Communal Woodlands" by Robert McCollough, University of Vermont. Professor McCollough has written extensively about the history of town forests in Vermont and New England, and is a leading authority on the subject. Professor McCollough is one of a number of professors at the University of Vermont who teaches courses that include town forests and other community forestry. More information about the University's programs on town forests is available from its Rubenstein School of Environment and Natural Resources.

### "Town Forests

The town forest movement emerged as an outgrowth of changing attitudes about America's forests, a rethinking that took form during the second half of the nineteenth century. Concern for depleted timberlands, emergence of professional forestry, and synthesis of a conservation movement all helped foster community initiative, as well. The appointment of Bernhard Fernow to head the Department of Agriculture's forestry division in 1886 marked a turning point. Fernow, a Prussian-born professional forester, was well acquainted with Europe's prosperous communal forests and urged a similar program for this country... Fernow wrote in 1890:

***...if every town and every county will give profitable occupation to its waste lands by utilizing them for forest growth, the movement would not only increase the financial prosperity of each community, the efforts of those who work for a rational forest-policy in the country at large would be subserved by every communal forest established.***

Despite Fernow's enthusiastic introduction, his successor, Gifford Pinchot, was far less sanguine about the prospects for town forests in the United States. As a consequence, the U. S. Forest Service did not become an active participant in the movement until Franklin Roosevelt's administration. The lead fell, instead, to private forestry associations and state forestry offices. Although town forests became popular in New York, Pennsylvania, and several midwestern states, New England towns seized the idea with an enthusiasm that other states never quite matched. The region's ancient bond between community and forest was largely responsible, and town forests endured in New England long after interest in other states faded... Massachusetts, New Hampshire, and Vermont developed the region's strongest programs during the movement's first several decades. Enabling laws, enacted in all three states by 1915, marked the beginning of a class of local forests devoted by clear statutory definition to timber production.



Vermont's 1915 enabling law authorized the purchase of land by towns for the purpose of growing timber and wood, and it established a special category, school endowment forests, for parcels of 40 acres or more that had been inspected and approved by a state forester. Responsibility for managing endowment forests was also left to government foresters, who supervised all cutting. Town wardens were given the job of protecting against fires and vandalism, and income from harvests went to town treasurers, who were required to file annual reports. A 1917 amendment replaced school endowment forests with municipal forests but retained the 40-acre requirement, the first of several important features that distinguished Vermont's program from those in other New England states.

Initially, municipal forestry in Vermont was practiced most actively on watershed lands. Barre, Bellows Falls, Brattleboro, Chester, Essex Junction, Montpelier, Northfield, Rutland, Springfield, Stowe, and Waterbury all established forests to protect their water supplies, and all began planting by 1926. In other towns, municipal forests were acquired by grant or direct purchase and were often attempts to put idle or abandoned farmland to good use. In 1921 Sheffield purchased an outlying farm to eliminate the need for plowing snow and transporting school children along the remote mountain road that led to the farm.

Vermont lagged behind its two neighbors in the number of town forests established before World War II. In 1930 the state forester reported forty-two forests—encompassing 8,919 acres—roughly half the number of forests in both New Hampshire and Massachusetts...Vermont's forty-acre law, not always closely observed, nevertheless may have dampened interest in some towns. By comparison, neither Massachusetts nor New Hampshire communities were bound to any minimum size. Surprisingly, plantings on Vermont's municipal forests were equal to, and possibly exceeded, those in New Hampshire by 1930. Explanation lies in the very intensive management on watershed forests, notably Rutland, Essex Junction, Bellows Falls and Montpelier.

Developments after 1945, however, provide the most convincing evidence of Vermont's initial unhurried pace. That year, the legislature amended the state's enabling law and began reimbursing towns for half the price of lands acquired for forests. A separate law enacted in 1951 required communities to include propositions for municipal forests in warnings for annual town meetings. Vermont's forest service subsequently created positions for two full-time municipal foresters, the only New England state to do so. With both financial and technical assistance mandated by law, Vermont now set a progressive standard. Its program soon flourished, surpassing Massachusetts and New Hampshire after 1960. Management records are comprehensive and accessible, and the locations of many municipal forests have been plotted on town highway maps, a practice observed nowhere else in New England. A number are still managed for timber and wood, and the 40-acre rule, although eliminated in 1977, probably deserves a sizable portion of the credit.

Vermont's municipal forests (and those in other New England states, too) were planted with fast-growing, commercially salable, coniferous types: red, scotch, and white pine or Norway and white spruce. Many of the transplanted seedlings were obtained at cost from the state nursery in Essex, and the Vermont Forestry Association offered to plant 5000 trees in any town establishing a forest of 100 acres or more. The forest service's newsletter, *Green Mountain State Forest News*, chronicled the progress of land acquisitions, formation of municipal forest committees, and planting—the three dominant aspects of the movement's plantation phase.



Often donations of land also spurred towns to action. In Woodstock, for example, Governor Franklin Billings, who had been appointed chair of the town forest committee in 1926, donated 22 acres on the slopes of Mount Tom the following year; 5000 Norway spruce were transplanted shortly thereafter. Among Vermont towns, tax rates differ substantially, and it is not unusual to find municipal forests owned by one town but located in another. Possibly reluctant to remove property from its tax rolls, Jamaica refused a gift of more than 600 acres from Helen and Scott Nearing, authors of *Living the Good Life*, the bible for the 1960s “back to the earth” generation. The Nearings, who stipulated that their land be used as a town forest, turned next to Winhall, which accepted the property in 1950 and began harvesting timber on one quarter of the lot. Proceeds of \$5,000 more than compensated for taxes of \$190.08 owed to Jamaica. Towns frequently own more than one parcel of land devoted to municipal forestry. Bennington, in addition to three parcels within the town, classified separate lots in Woodford, Pownal, and Shaftsbury. Nor are state boundaries an insurmountable barrier, for both North Adams and Williamstown, Massachusetts, own watershed forests in Pownal.

Yet Vermont’s state foresters set a steady pace and tended local woodlands consistently. A 1933 working plan for Proctor’s municipal forest by Wilbur E. Bradder, a district forester, delineated compartments on a forest type map, noting tree composition, age, history, and recommended treatments for each sector. He also encouraged retention of food trees such as thornapple and cherry to sustain wildlife, revealing forestry’s expanding role in shaping a cultural landscape of conservation.

By 1950 nearly seventy Vermont towns had established municipal forests. In 1956 Eugene Keenan became the state’s first municipal forester and was assigned to towns in the state’s southern half. Two years later E. Warner Shedd emerged as Keenan’s counterpart in northern regions, and in its biennial report for 1957-1958, the Department of Forest and Parks announced its goal to establish a municipal forest in every Vermont town. By 1962 the count had risen to 104 towns, with more than 37,000 acres devoted to forestry management. Included among these were several fire district forests, created to subsidize the costs of fire companies chartered by towns in a manner similar to water utilities. Along a slightly different vein, more than 500 acres donated to the Proctor Free Library in 1943 and mapped by F. J. Olney, a surveyor for the Proctor Marble Company, were later classified as a municipal forest. Certificates of good forestry practices were awarded to Bethel and Vergennes in 1966 by the state’s forestry department. Vermont’s number of municipal forests climbed steadily, eventually approaching 150 if one distinguishes parcels owned by towns from those owned by municipalities, villages, school districts, fire districts, or water utilities within these same towns. For instance, separate parcels in Hardwick are owned by the town, the school district, the fire district, and the village.



Snowshoeing in Johnson Town Forest

*Despite its mediocre record in the field of commercial timber production, the municipal forest movement in Vermont—and in New Hampshire and Massachusetts, too—made valuable contributions.*



Despite active promotion of municipal forests in Vermont, circumstances were working against the movement. Forestry requires patience, and return on dollars invested is a long-term proposition. Town select boards were often reluctant to spend money on silviculture, so crucial to the production of salable timber. Despite its mediocre record in the field of commercial timber production, the municipal forest movement in Vermont—and in New Hampshire and Massachusetts, too—made valuable contributions. Most significantly, it was hugely successful at encouraging communities to set aside tracts of woodland for public use. In truth, the movement inaugurated a trend that has scarcely slackened and that today is being carried forward by conservation commissions and community land trusts. These events have contributed greatly to the evolution of community structure in New England. Municipal forests have also witnessed the maturing of a woodland stewardship manifest in New England towns from their seventeenth-century origins. During the twentieth century, particularly its second half, the utilitarian functions that characterized eighteenth and nineteenth-century communal woodlands have been replaced by a modern ethic emphasizing recreational uses and ecosystem protection. Paths in town forests span that important period, offering unique views of this changing ethic and providing timely, backyard reminders that timber, recreation, and ecosystem stewardship can all prosper in one place—reminders, too, about the value of observing history in our environment.

### **Watershed Plantations**

A separate category of local woodlands, watershed forests, emerged during the latter part of the nineteenth century and early years of the twentieth century. Their origins coincided with the development of professional forestry and with an improved understanding about the importance of forest cover to a balanced ecology. During a period that began shortly after the Civil War and continued until the onset of World War I, a remarkable number of New England cities and villages built reservoirs and purchased surrounding lands to protect surface water against pollution from agriculture and industry.

Vermont's watershed forests complimented the state's municipal forest movement, in several cases becoming models of local forestry management. The city of Essex Junction began acquisition of lands surrounding two springs near the village of Essex Center before 1900 and at the urging of a local lawyer, Allen Martin, implemented a forestation plan in 1923. By 1930 more than



400,000 seedlings, mostly scotch, red, and white pine, were thriving on the forest's 750 acres of sandy soil. The history of Rutland's city forest is also one of careful management. As early as 1881, the city began purchasing woodlots and farms to protect its water supplies. The most active period of acquisition and planting began after 1910 and by 1930 the city had transplanted more than half a million seedlings, many of them Norway spruce and pine, on 3,500 acres. Most of the land is situated in the neighboring town of Mendon, where it protects the drainage basin of Mendon Brook below Mount Killington. Although Rutland's forest eventually grew to 4000 acres, it is not Vermont's largest. That distinction goes to the Morrisville Village Forest, which encompasses more than 5000 acres and is managed by the Morrisville Water and Light Department. Most of the property, including numerous lease- land parcels, was acquired in 1944 and surrounds the Green River Reservoir in the towns of Eden and Hyde Park. A mammoth dam completed in 1947 created that reservoir, and the water and light commissioners finally designated the land as a municipal forest in 1959.

In very recent years, computer models have been developed to monitor stream and overland flow, making possible the quantification of subtle ecological phenomena such as evaporation from tree canopies. The result is an ability to conduct very intense management of compartments. At the same time, federal requirements for water quality have imposed new burdens on utility companies, and advances in water treatment technology have in some cases made watershed forests obsolete. It is no surprise that several towns have opted to sell valuable waterfront property. Communities that are more forward-looking have instead converted these reserves to public lands. Elsewhere, however, protection of surface water still reduces the need for expensive, repeated purification, and watershed forests remain functional."

*Excerpt reprinted with the permission of the author, Robert McCollough.*



Brushwood Community Forest, West Fairlee

## E. Vermont Dept. of Forests, Parks & Recreation: State's Role with Town Forests

*Steve Sinclair, Vermont State Forester*

As so eloquently captured by Robert McCollough, the Vermont Department of Forests, Parks, and Recreation has a long history of strong support for Vermont communities in their use and management of town forests. In 1909, the Vermont Forest Service was created—the predecessor to the Department of Forests, Parks and Recreation (VTFPR). The following year, then state forester, Austin Hawes, created a municipal forest program. In 1915 the Legislature authorized the establishment of endowment forests. Any town or city having 40 acres or more could have the property examined by the state forester and if he found it suitable, it would be designated as a school endowment forest. In 1917 the term was changed to municipal forest. This statute still remains, and under a separate section, requires the Commissioner of VTFPR to provide management assistance to any town requesting services.

At the end of the first fifty years of the municipal forest program, ninety towns and communities owned a total of 33,000 acres of municipal forests. The rapid expansion of the program placed significant demands on our staff, and in 1957 two municipal forester positions were created, one in the north and one in the south. These foresters were available to provide assistance in developing management plans, marking timber for cutting, and supervising sale operations. A report from the municipal foresters in 1970 shows management involvement on 25 municipal forests, generating over 2 million board feet of timber, 4,000 cords, and an income of \$44,000. Furthermore, 142 acres of timber stand improvement was conducted and 10 acres of planting took place. However, state budget reductions led to the elimination of the municipal forester positions in mid-1970s. The 13 county foresters picked up their work, where it remains today.

A 1931 report from the Vermont Commission on Country Life put the value of municipal forests this way:

***“Municipal forests are a valuable source of public education. Schools as well as the general public can here secure first-hand information that often is obtainable in no other way. Such a forest area may well be the recreational center for the community, and when properly managed and administered, should become a source of revenue....”***

A 1970 VTFPR report to the State Legislature even more precisely identified what remain to this day as the multiple use forest resource management objectives of the municipal forest program:

- 1) Opportunities for environmental conservation education;
- 2) Timber production;
- 3) Watershed protection;
- 4) Forest based recreational opportunities;
- 5) Fish and game habitat and public access;
- 6) Local employment.

Not all communities have gone through the trouble of having the Commissioner formally designate their properties as a municipal forest, but in terms of support from VTFPR this is not a limiting factor. Our records currently identify 121 municipal forests with approximately 120,000 acres—a remarkable forest resource for Vermont that is worthy of careful management and robust public use.



The VTFPR continues to commit resources to assist towns despite the reduction in staff resources available for municipal forestry. The best point of initial contact for communities is with your county forester, who will provide direct support or guidance as to how to find support and resources from elsewhere. The State's Urban and Community Forestry Program is also an important resource for communities. The program provides grants and other assistance to municipalities for municipal forest activities.

As the values and benefits of forest land continue to expand and change, the type of services that VTFPR will provide must change as well. Currently wildlife habitat management assistance, recreational trail development, and conservation education have taken on greater role, but development and implementation of forest management plans also is a vital piece of our work with communities.

 **To Learn More:**

You can visit [www.vtfpr.org](http://www.vtfpr.org) or call 802-241-3678 to learn more about how VTFPR can support your community's use and management of its town forest. See Chapter Eight for a listing of county foresters and other resources.



## Chapter 2: Community Oversight of Town Forests

- A. Management Models**
- B. Town Forest Committees**
- C. Conservation Easements**
- D. Designated Conservation Funds**
- E. Developing Town Forest Policy**
- F. Liability**



## Community Oversight of Town Forests

*David Paganelli, Orange County Forester*

Ownership of a town forest brings with it many important responsibilities and considerations for a community. A town must consider oversight issues such as forest management, financial management of expenses and revenues, and potential liability that might arise from an injury on the town forest. This chapter will help your community think through these issues and put in place a strong management system that maximizes the benefits from your town forest and minimizes any risks or potential concerns.

### A. Management Models

Management and oversight models for town forests vary from town to town, and sometimes even between parcels of town forest within a town. In most cases the select board directly oversees all management activities, but it is common for select boards to delegate this authority to others, such as town forest committees, conservation commissions, or even certain designated individuals. In some towns, other groups or boards control individual forests. For instance, in the same town, one forest may be overseen by the select board, a second by a sub-committee of the school board, and a third by village trustees. This flexibility in structuring oversight allows towns to develop systems that work for their particular situation.

### B. Town Forest Committees

A model that seems to be gaining popularity is the town forest committee. Members are initially appointed by the select board and serve at the pleasure of that board. Often town forest committees are made up of three to five dedicated members with special interest in particular forests. Members typically have long tenures which allows an accumulation of “historic memory” of the town forest they are charged with overseeing. Since it is common for select board members to come and go with each election, the longer terms on a town forest committee allow time for long-term working relationships to develop with the county forester managing the property, and with loggers that may do work there. Such a model encourages forest stewardship and continuity of management.



Volunteers in Mount Holly

### Town Forest Committee

#### Case Study:

#### Town of Randolph

The Town of Randolph got energized about its three town forests when resident Steve Springer rejuvenated the defunct Randolph Forest Committee. The committee found that the town forests were being well used for timber harvest, but were largely overlooked for public recreation. The committee took on the task of marking the property boundaries, developing a recreation management plan, and creating new parking areas, signage, trails, and other amenities to facilitate public use—a project that is well underway. The committee has even begun to develop public events and activities to encourage residents to come discover this community asset. Randolph stands as a model of how a town forest committee can spark a community to enhance and more fully use a town forest.



#### To Learn More:

Contact Steve Springer:  
[natureboy@innevi.com](mailto:natureboy@innevi.com)  
or (802) 728-9602



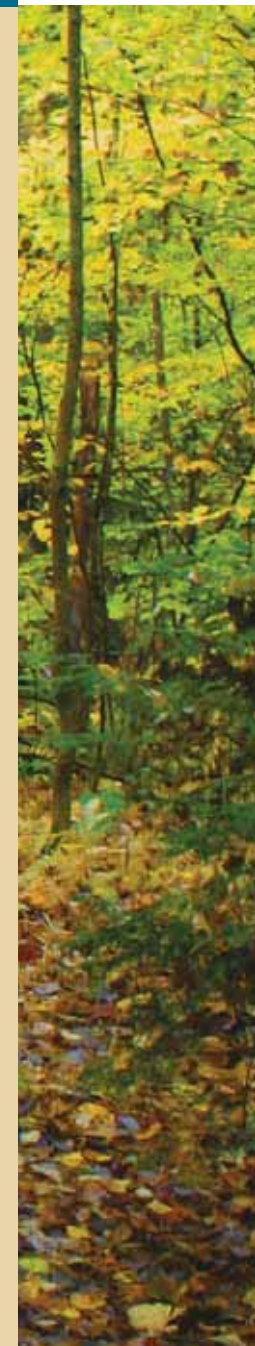
## Town Forest Policy Case Study: Town of Hartford

The Town of Hartford in Vermont's Upper Valley is a model community for development of town forest policy. When the Hartford Conservation Commission decided to develop a new set of town forest policies and a management plan for the 423-acre Hurricane Town Forest, it identified all of the key user groups in town and formed a "Friends of the Town Forest" network. Through a collaborative process that included six steering committee meetings, two public forums, and a public conservation commission meeting, Hartford developed a highly sophisticated management plan that enables a wide variety of activities to occur in the Hurricane Town Forest (left). Activities include hunting and limited motorized access for ATV use, while still protecting the public water supplies and other public interests. Hartford has continued to encourage public involvement as it implements its policy and management plan. This includes opportunities for members of the public to walk timber sales on the town forest before they are harvested to learn about what trees will be cut and how the harvest fits into long-term management of the property.

### To Learn More:

[www.uvm.edu/nrscfav/town-forest/case-studies.pdf](http://www.uvm.edu/nrscfav/town-forest/case-studies.pdf)

or contact:  
Matt Osborn, AICP Planner  
[mosborn@hartford-vt.org](mailto:mosborn@hartford-vt.org)  
(802) 295-3075





### **C. Conservation Easements**

Some towns choose to place conservation easements on their town forests to limit the potential for future sale and development. Others may have conservation easements in place, as a condition of purchase. Conservation easements are usually held by local land trusts and are designed to promote forest stewardship while discouraging subdivision, development or liquidation logging of town forests. Typically, conservation easements encourage long-term management according to a management plan prepared by a forester and approved jointly by the town and the land trust.

### **D. Designated Conservation Funds**

A town may choose to establish a designated conservation fund to provide long-term funding for conservation projects. All revenue generated from cutting timber on town forest lands is deposited into that fund and is then available only for maintenance or improvement of the town forests or other closely-related projects. Towns use their conservation funds for various purposes, such as to purchase additional land, fund forest-based education programs, pay for a survey to establish and mark property boundaries, construct and maintain forest roads, or improve recreation access. The important principle behind using a conservation fund is to assure that money generated from the town forest goes back into the forest and forest-based activities, and is not simply absorbed into the town's general fund.

### **E. Developing Town Forest Policy**

When a town decides to establish a town forest, it involves a significant and long-term commitment of time, energy and money. In particular, land stewardship requires sustained effort and resources. For that reason, it is important that the public understand and support the concept of land stewardship and agree on broad town forest policy. Development of a formal town forest policy is best accomplished through a facilitated public meeting process where citizens are encouraged to discuss the long-term benefits of ownership, various management options, alternatives for management and oversight models, and different funding mechanisms that may be necessary to improve and properly maintain the forest. (See Town of Hartford Case Study on page 14)

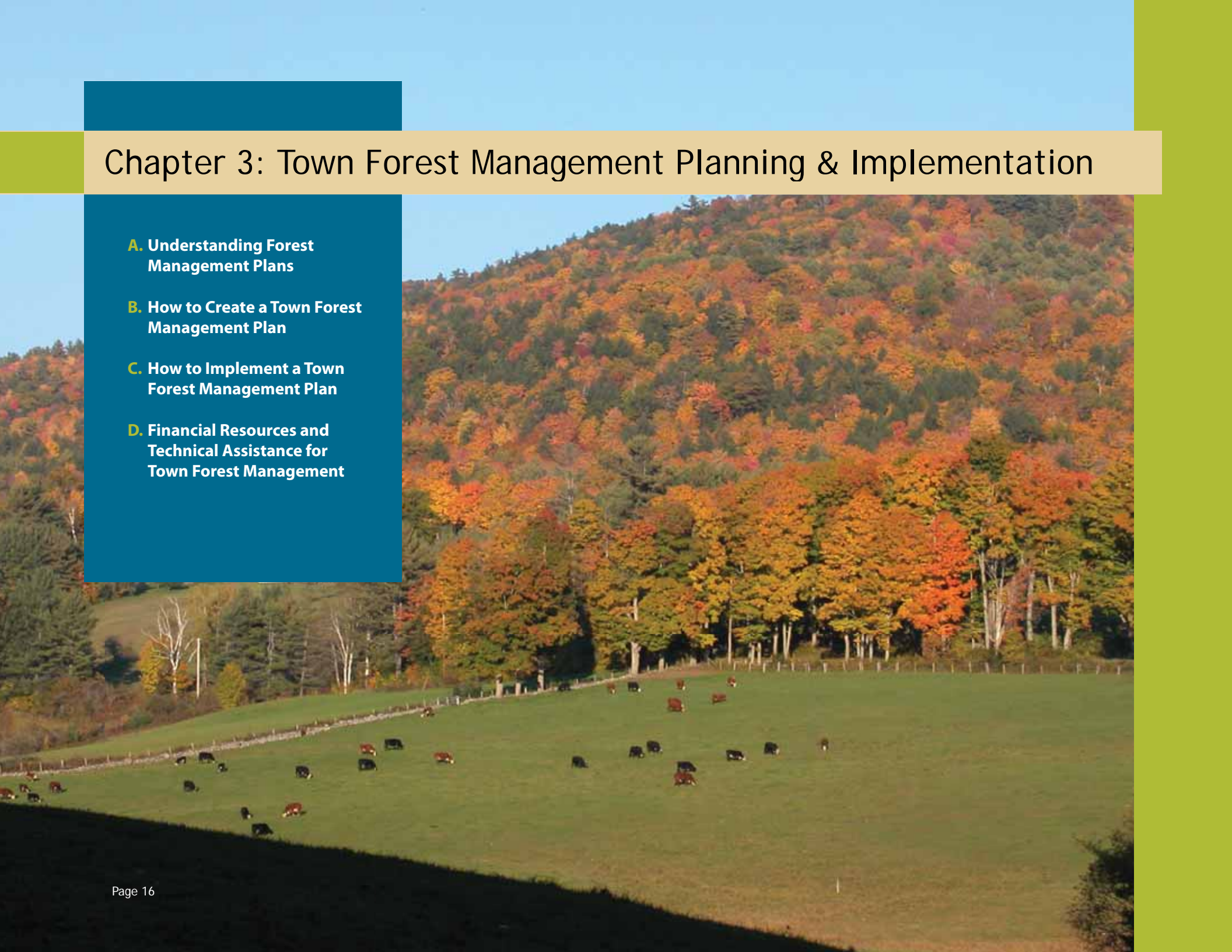
### **F. Liability**

One essential question that many communities ask in this era of litigation is what legal exposure a community might have if a member of the public were injured on the property, or any other legally actionable event were to occur on the land. In general, a community can feel comfortable that its legal exposure related to ownership of a town forest is no different from a baseball field or other public recreation area. Most communities have a general insurance policy that covers liability related to town property. However, it is generally advisable for a community to assure that the town's policy is written to cover the unique kinds of situations that might occur on a town forest, such as injury related to a timber harvest or other unusual circumstances that might not arise on other town property.



## Chapter 3: Town Forest Management Planning & Implementation

- A. Understanding Forest Management Plans**
- B. How to Create a Town Forest Management Plan**
- C. How to Implement a Town Forest Management Plan**
- D. Financial Resources and Technical Assistance for Town Forest Management**





# Town Forest Management Planning and Implementation

*Michael Snyder, Chittenden County Forester and David Brynn, University of Vermont*

## A. Understanding Forest Management Plans

The foundation of a successful town forest that enriches life in a community is a well-constructed management plan that accurately reflects community goals for that town forest. This chapter will explore the content and design of a forest management plan, how to engage community members in creating a management plan, and how to go about implementing a management plan.

### **Why Have a Forest Management Plan?**

Communities should have written management plans for their town forests because a carefully crafted and well-implemented plan will lead to more robust forest health and improved delivery of public benefits. If nothing else, the plan helps organize what is known about the forest, what is wanted from the forest, and what has been done and is intended to be done in the forest. It is a means of identifying and then doing what can be done to protect and enhance the forest and its attributes most important to your town. A management plan helps you get where you want to go more efficiently. It is possible to make mistakes in the management of forests, and good management plans help avoid them. Beyond all that, forest management plans help provide and improve continuity of management. The importance of this continuity cannot be overstated given how forests tend to outlive their owners and managers.



Looking toward Sterling Town Forest, Stowe

### ***What Are the Different Types of Forest Management Plans?***

Forest management plans vary widely to match the diversity of forests and the people who create the plans for them. Most commonly, forest management plans are comprehensive documents containing clear statements of purposes and goals, specific descriptive assessments covering the nature and potential of the parcel, and a detailed schedule of recommended forest management activities. They are often long, detailed documents containing statistics and sometimes technical language that can be difficult to read for non-professionals. Yet, they don't have to be. The best plans are comprehensive and contain detailed technical information but also include summaries and explanations that are accessible to and understood by all community members.

There are other forms of town forest management plans. Instead of a comprehensive plan, a community may rely on a set of written forest management guidelines—a statement of purposes and an outline of principles meant to guide land stewardship. Such management guidelines can be helpful as a starting point for a more complete management plan and can be very valuable when used as a filter through which future forest uses and activities can be evaluated.

A third form is the practice or activity plan. These are not comprehensive plans or overarching guidelines but instead are very specific action plans. They focus on and describe a specific activity to meet goals of the forest. They address short-term objectives to help reach long-term goals. These can be evaluated against the larger principles. A practice plan or an activity plan explains the details of a proposed activity in the forest, such as which trees will be cut, cutting method and equipment to be used, how access will be achieved, where roads and landings will be located, and other details.

### ***What Are the Advantages and Disadvantages of Each?***

Each general plan type has advantages and drawbacks. It is not possible to prescribe which type is best for any town forest circumstance. The choice is best made on a case-by-case basis in each town through a deliberate public process. Still, it is probably safe to say that, to the extent that a town's resources and time allow, the more detailed and comprehensive the plan, the better.

Many towns rely on existing institutions in town, such as a conservation commission, tree warden, or other appropriate entity working with their county forester to oversee the management of the town forest. Others hire a third party, such as a consulting forester, wildlife biologist, or other professional and appoint a new body like a town forest committee. Whichever framework a town chooses to use, it is important to do so with a realistic understanding of the town's capacity to fill this important function of plan oversight and implementation. A forest plan that sits on a shelf and is not implemented is clearly of lesser value!

### ***B. How to Create a Town Forest Management Plan***

Although formats and styles do vary among management plans and from town to town, a sound and effective town forest management plan should contain at least these essential elements: a statement of purposes and goals; a description of the forest's location, boundaries, stands, natural communities, and management areas (including both narratives and maps); and specific management recommendations by forest area and date. Creating such forest management plans truly is best approached as a three-stage process:





### **1. Identify the Forest: What Is Its Nature and Potential?**

This stage typically centers on an inventory of the features and resources of the land including a range of information on the geology, soils, topography, vegetation, animals, and waterways of the forest in question. Many times the inventory is conducted with an eye toward specific potential uses, such as recreational trails, the amount, quality and species of timber, pulp or firewood, or the types of habitats and possibilities for their enhancement. Here, the advice and guidance of an experienced local forester is invaluable. Start with a professional forester. You will likely also benefit from the expertise of other professionals, such as specialists in wetlands and wildlife or cultural history, but foresters are best at integrating other disciplines and generally have more experience in actually implementing plans in the forest. This package of skills and experience will be invaluable to guide both the planning and implementation of management on your town forest.

### **2. Identify Purposes and Goals: What Does Your Community Want from the Town Forest?**

This stage is about deciding on your community's goals for the forest—your broad reasons for owning the land—as well as determining your objectives, such as specific actions that will move you toward your goals. This can be a complicated and difficult step even for a single family's ownership of land. For town forests, it is compounded by the number and variety of "owners." First, you should create a way for people to learn about the forest and state their interests in it and desires for it. Then work to incorporate all of those varied and sometimes conflicting interests into a statement of purpose and outline of objectives. An organized process to develop a clear statement of purpose and priorities will go a long way toward preventing conflict and help reconcile potentially conflicting uses.

There are steps you can take to engage your community. Hold regular events in the forest and about the forest. Advertise these outings and meetings well, give lots of notice, and wherever possible, provide food. Do this over an extended period of time, perhaps over the course of a year or more even. Ask townspeople broad questions about what they want the forest to look like in the future, or what about it is most important to them. Find out how it is used now and how it might best be used in the future. Allow for an open process and take good notes. Identifying skilled individuals to help organize and facilitate this public input process will help engage participants.

### **3. Schedule Specific Management Activities: What Needs to Be Done, and When?**

This is a list of recommendations outlined by specific forest location and by date or implementation. It describes what needs to be done toward meeting your overall goals and it puts them on a schedule. Traditionally, this part of a management plan will prescribe silvicultural treatments—careful manipulations of forest vegetation. But there are many other management activities that can and should be included as well. These are diverse and wide ranging and might include things like location and rules for use of recreational trails, protection of historical artifacts such as cellar holes and stone walls, maintenance of boundary markers, and construction of access and parking facilities.

### **How to Find a Forester:**

Throughout this guide you will find references to the role a professional forester can play as technical advisor, consultant, project manager, and much more. To find a forester to work with your community—

1. Start with your county forester (complete listing in Chapter Eight).
2. If your county forester is unavailable to do the work in your community, he or she can help you find a professional consulting forester. To learn more on your own about this option, visit the Consulting Foresters Association of Vermont ([www.cfavt.org](http://www.cfavt.org)) and the Forest Guild ([www.forestguild.org](http://www.forestguild.org)) to find a description of services and contact information for local professionals in your area.





Remember, management planning is a process. Good town forest management planning takes time. It is not likely to happen in a few weeks—it'll probably be more like months, often longer. While it is true that the more involvement by community members, the better the plan is likely to be, it is also true that someone (or maybe a small group of individuals) needs to lead the process and see it through to completion of the written document. If a qualified and willing local citizen is not available, towns can ask their county forester for assistance and there certainly are many capable professionals available for hire. County foresters can help identify these professionals and they can also advise towns on the availability of grants and cost-sharing programs to pay or help pay for the creation of a management plan should the town choose to hire professional services.

Also, be prepared to hear many differing views, opinions, and desires from interested community members during the town forest management plan process. This can be one of the most challenging issues in town forest management. Certainly an open, dynamic public input process is an essential foundation. It is yet another reason to have the assistance of a knowledgeable local forester: not every desired use is appropriate on every acre of forest and some are inappropriate on any. An experienced forest professional can help evaluate these issues and help make wise choices, including designation of different parts of a forest for different uses or even to designate different forests for different uses should your town be fortunate enough to own more than one town forest.

### **C. How to Implement a Town Forest Management Plan**

Once the planning process results in the creation of a written management plan, it is time to begin implementing it. This is the all-important phase where you take all of your great ideas and turn them into reality! One of the best things about having a well-prepared town forest management plan is that it is, by design, an implementation plan. A good plan goes beyond merely describing the forest and listing a variety of recommended activities to actually explain how to implement those recommendations. It describes the work to be done, sets up a schedule for when it should be done, describes where and how it should be done, and can even suggest who should be involved in doing it and how to evaluate the work upon completion. In general, plan implementation has two major elements: 1) monitoring that allows your community to understand what is happening on the land, and 2) adaptive management that applies your management plan while making any necessary adjustments due to changing conditions identified in monitoring.

UVM/Vermont Town Forest Project  
Field Workshop, Jericho Research Forest





## ***Gaining Town Adoption of a Management Plan***

An important first step before diving into implementation is to have your municipality officially adopt the plan. Usually, this will involve the town's elected officials signing and dating the plan to signify their acceptance and adoption of the plan. In addition, some towns may choose to incorporate the management plan into the Town Master Plan. Both of these adoption steps help to codify the plan and give it authority. It is also useful to publicize the plan so that the community has a strong sense of ownership. This highlights the value in getting community engagement in development of the plan—if done well, the community will already be engaged before plan implementation has begun, and might even serve as a resource of volunteer energy for plan implementation.

## ***Town Forest Monitoring***

Healthy forest ecosystems are now recognized as being the foundation of a healthy forest economy and community. Aldo Leopold wrote that “Health is the capacity of the land for self-renewal” and that “Conservation is our effort to understand and preserve this capacity.” Ask forest managers what their top five or six forest conservation goals are, and most will list “a healthy forest” as one of them. Therefore, identifying and implementing practices that are needed to conserve forest health and then monitoring their impacts over time should be an important part of any town forest stewardship effort. Monitoring gives insights into the effectiveness of past forest conservation activities and helps to set priorities for the future. Forest health monitoring also gives citizens an important hands-on role in forest stewardship and enables citizens to develop insights into the functions and values of forests.

Despite its value and importance, forest health monitoring has not been widely and consistently practiced in Vermont's town forests. Successful models that do exist need to be identified, celebrated, and distributed and new approaches need to be designed, implemented, and evaluated. Assuming that you have used the process described above to develop a strong and clear management plan that lists forest health goals and objectives, identified threats, and proposed activities, creating a successful forest health monitoring program will require identifying your information needs and then investing the necessary time to gather and analyze targeted data.

The first important step to effective forest health monitoring is to have clear benchmarks that will help your community see how your forest is doing in terms of forest health. In 1996, the Vermont Forest Resources Advisory Council's Work Group on Sustainability published twenty-four “benchmark parameters of sustainability”. These benchmark parameters were selected because they provided reliable insights into the nine Principles of Sustainability adopted by the Northern Forest Lands Council (1994). In addition, the benchmarks were selected because data collection for many of them could be accomplished fairly quickly and with a minimum amount of training and expertise. Several of these can be used to gain insights into your town forest's health:

## **Plan Implementation**

### **Case Study:**

#### **Town of Stowe**

The Town of Stowe has a model management plan for its 2105-acre Sterling Town Forest that sits high above the community near the Morrisville line. The management plan calls for a balanced mix of active management for forest products, wildlife habitat management, and public recreation. The plan has been implemented with the help of chapter author Michael Snyder, who is a resident of Stowe. The Stowe Conservation Commission has led the effort by engaging the community around plan implementation. There have been demonstration logging jobs on the town forest using horse-drawn logging equipment. The recreation management plan has also been effectively implemented to facilitate a wide variety of recreation uses while protecting key assets on the town forest including an important stretch of the Catamount Trail.



### **To Learn More:**

**Contact Michael Snyder**  
[michael.snyder@state.vt.us](mailto:michael.snyder@state.vt.us)  
(802) 879-5694



- ▶ The condition of forest soils including levels of available calcium, available aluminum, surface erosion, organic matter, and soil compaction.
- ▶ The number of acres where short rotations, whole tree harvesting, and other forms of intensive biomass extraction are practiced.
- ▶ The condition of forested stream riparian zones including: species composition, canopy closure, and large woody debris extent.
- ▶ The condition of wetlands including species composition and tree size/class distribution.
- ▶ The biological diversity index of aquatic insect communities in wadeable streams and rivers.
- ▶ The chemistry of water in streams and rivers including: dissolved oxygen, pH, calcium, total suspended solids, and water temperature.
- ▶ Species richness as indicated by the number of trees of each species and the distribution of their diameters as measured at breast height.
- ▶ The health and vigor of the forest as indicated by the percent of trees within each crown condition class and listed by tree species and diameter classes.
- ▶ The abundance and distribution of exotic plants.
- ▶ The condition of all “very rare” (S1), “rare” (S2), and “uncommon” (S3) natural communities including their size and extent of human disturbance.

**Note:** you can find a list of additional indicators and measurements of forest health on the Internet. See our list of websites on Page 77.

Once you have identified forest health standards and benchmarks for your town forest, the next challenge is to consistently measure and gather information that will show how your town forest is doing relative to these standards. Page 77 of this guide has a list of websites with information on how to conduct forest health monitoring, including a link to the Vermont Monitoring Cooperative.

Beyond these existing resources, the University of Vermont is launching a new citizen training program called ***Town Forest Health Check*** to help equip community members for town forest monitoring. This new program will support community-led monitoring of town forests with four new tools:

1. A user-friendly list of ten potential forest health indicators for your town forest along with techniques for gathering this information for each stand and parcel.
2. Publication of the ***Town Forest Health Check*** as a guide for town forest stewards to use in assessing the ecological health of town forests.
3. Development of at least four areas within UVM's Jericho Research Forest that can serve as demonstration sites to show different forest types and various management techniques that your community might consider based on its goals and objectives.
4. Three or more workshops to train town forest stewards on the use of the ***Town Forest Health Check***.



### **Adaptive Management: Using Monitoring to Trigger Corrective Action**

A community must know how it will use information gathered from monitoring to benefit town forest health. The key to using the information you have gathered is to identify 'trigger points' and responses. Trigger points are predetermined values that suggest corrective action is needed. The actual condition of the forest resource and the degree of compliance with a best management practice are typical trigger points. For example, your town might decide in advance that if a management failure like gully erosion is detected on an access trail, or if monitoring observes that compliance with some other management objective falls below a certain percentage, then you will automatically take some corrective action. Deciding these precise trigger points will depend on your community's management objectives. A forester can be very helpful in guiding you through these decisions and setting up this response plan.

To help support this process, management plans should be designed and created as long-term planning tools with specific recommendations made on at least a ten-year schedule. This should include a schedule for revision because priorities, needs, and forest circumstances can and do change, sometimes quite suddenly. The plan must be rewritten periodically to evaluate, consider, and react to these changes. Perhaps even more importantly, good useable knowledge that comes from experience and lessons learned during the management of town forests should be incorporated back into subsequent revisions of each plan. Similarly, new information and scientific understanding can arrive after a plan is first written and such new insights should always be incorporated. This is the concept of adaptive management: "learning to manage by managing to learn." Adaptive management is an acknowledgement of some uncertainty about what policy or practice is best for any forest or forest part, and a commitment to plan, implement, monitor, evaluate, and adjust forest management accordingly. Town forest management plans should be designed and created as instruments of adaptive management.

### **D. Financial Resources and Technical Assistance for Town Forest Management**

There are many sources of excellent information about and assistance with town forest management planning and implementation. A great place to start is with your county forester, who is an employee of the Vermont Department of Forests, Parks, and Recreation. A complete list of Vermont's county foresters can be found in Chapter 8. Every town in Vermont has a county forester who is in theory available to help with town forests free of charge. County foresters can evaluate forest land, provide written information, lead walks and talks in and about the forest, map and inventory the property, write, help write, or just evaluate the management plan, and facilitate and oversee the implementation of the plan. However, since the State was forced to eliminate its municipal forester positions in the 1970's and their work fell to the county foresters, other demands on these professionals have increased also. Your county forester may have to refer you to other professional foresters who can meet your community's needs.

### **Town Forest Health Check**

To learn more about the **Town Forest Health Check** and how your community can get training to participate, please contact:

David Brynn, Director  
Green Forestry Education  
Initiative  
David.brynn@uvm.edu



David Brynn is calling you!

Fortunately, if state personnel cannot meet your needs, Vermont is blessed with an excellent group of private consulting foresters and other natural resource professionals working in most towns. These professionals will charge a fee that varies by individuals. You can obtain a list of those active in your town from your county forester or connect directly with the Consulting Foresters' Association of Vermont ([www.FAVT.org](http://www.FAVT.org)) and the Forest Guild ([www.forestguild.org](http://www.forestguild.org)).

The State is also a great source of contacts to help fund management planning and implementation on town forests, including its Trees for Local Communities (TLC) grant program run through the Urban and Community Forestry Program (see box). You can learn more about grant opportunities from your county forester, such as Wildlife Habitat Incentive Program funding from the federal government that can help pay for wildlife habitat improvement projects on town forests.



### **Trees for Local Communities (TLC) Grant Program**

The Vermont Urban and Community Forestry Program (UCF) offers cost-share grants through the Trees for Local Communities (TLC) grants program to help your community realize its goals for its town forest. Grants are offered in five categories: education, planning, planting, maintenance, and “mini.” Proposals can be up to \$4,000 for education, planning, tree planting, and maintenance and \$200 for mini grants. Many communities have used TLC funding to improve management of town forests, whether developing a new town forest management plan or implementing the plan through stewardship activities, such as invasive species eradication.

#### **To Learn More:**

Contact Vermont's UCF Program Coordinator  
Danielle Fitzko  
[Danielle.fitzko@state.vt.us](mailto:Danielle.fitzko@state.vt.us)  
(802) 241-3673

You can also learn more about  
the program on the web at  
[www.vtcommunityforestry.org](http://www.vtcommunityforestry.org)







# Chapter 4: Management Considerations for Town Forests

**A. Forest Economics**

**B. Timber Resources and  
Maple Sugaring**

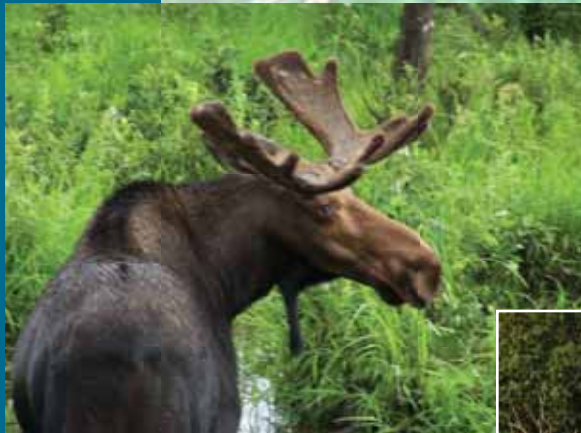
**C. Water Resources**

**D. Wildlife**

**E. Recreation**

**F. Forest Protection**

**G. Enforcement**





## Management Considerations for Town Forests

*Various Authors*

Vermont's forests are uniquely rich in public values and touch almost every aspect of life in the Green Mountain State. This green backdrop to life in Vermont provides us with clean water and air, diverse and abundant wildlife, and outstanding recreation opportunities within easy reach of all residents—our key natural resources and our quality of life. Our forests also contribute greatly to the economy and unique social fabric of our state through forestry, sugaring, tourism, and other forest-based economic activity. Vermont's forests contribute over \$1.4 billion each year to our state's economy through forest-based manufacturing and forest-based tourism and recreation! Just the sale of Christmas trees, wreaths, and maple syrup contributes \$18.6 million annually.

However, our forests need careful management and monitoring, especially our heavily used town forests that are often called upon to provide multiple public values. This chapter compliments the planning guidance from Chapter Three by providing your town with a comprehensive look at the values and potential community outputs that can be derived from your town forest. It will also cover how careful forest management planning and implementation can enhance these benefits.

Topics covered include:

- ▶ Forest economics
- ▶ Timber management and maple sugaring
- ▶ Water resources
- ▶ Wildlife
- ▶ Recreation
- ▶ Forest protection (insects, pathogens, invasive species)
- ▶ Enforcement



## A. Forest Economics

### *Deb Brighton, Vermont Family Forests*

Forests are priceless. Many of the most important services they provide—clean air, clean water, wildlife habitat, flood protection, scenery, and recreation—have no price recognized in the marketplace. These services are essentially provided to the public free of charge by landowners.

In 1939, Aldo Leopold wrote, “Overdrawing the interest from the woodlot bank is perhaps serious, but it is a bagatelle compared with destroying the capacity of the forest to yield interest.” The “interest” he was referring to was the sustained yield of timber and the “capacity of the forest to yield interest” is what we now call forest health. Today Leopold’s message is taking hold and we know that we cannot take healthy forests that endlessly deliver resources for granted. Whether we are managing for maple sugar, high quality timber, wood biomass energy, wildlife habitat, or recreation, we must conserve water quality, soil health, and native biological diversity as fundamental cornerstones to enable other forest uses. Putting healthy forests first is what it means “to see the forest for the trees!”

As a town considers the economic value in its forests, it is important to keep this basic principle of “sustained yield” in mind. The primary potential source of revenue likely to show up on the town’s books from a town forest would be a return from timber sales. Vermont Family Forests looked at the costs and returns of managing a typical 100-acre parcel according to VFF principles and estimated the net return to a municipality to be roughly \$10 per acre per year from timber sales (2005 dollars). Leasing out a promising sugarbush for maple syrup production is another potential source of revenue, although much less easily generalized than likely timber revenue. Finally, town forests have the potential to provide fuelwood which could become profitable in the future—at the present time the price that can be obtained for fuelwood only generally equals the cost of careful marking, administration, and road maintenance.

One reason that assessing these potential economic returns is important is to provide a complete economic picture for town taxpayers who are concerned about taking the forest land off the tax rolls. Because town land doesn’t pay property taxes, the municipal (not school) taxes that would ordinarily be paid on the land must be made up by other taxpayers in town. In a town with an average municipal tax rate of 50 cents, a 100-acre parcel listed at \$2,000/acre would pay \$10/acre in municipal taxes per year. Although the town would lose this amount in taxes, it would gain roughly the same amount from harvests. (The town would not lose school taxes as the school tax is essentially a state tax and removing land from the Grand List does not affect the school taxes in town.)

However, even these financial returns from careful forest management are minimal when compared to the value of all of the “services” your town gains from forests, like clean water, wildlife, and recreation. When choosing to purchase a town forest, your community should factor in the value of these services as part of the payoff, even if some of those services cannot be precisely valued in economic terms. It is when the cash value of town forests, such as timber receipts, and the non-cash benefits like water and recreation are added together that communities gain a true picture of the value of this community asset, or new investment if the community is purchasing the land. Increasingly, communities across Vermont are coming to see this blend of returns on their investment as a great choice for the future.





## B. Timber Resources and Maple Sugaring

One important community asset in any town forest is its potential to produce timber, sap, and other marketable forest products. Generating municipal revenue through a timber sale or lease payments on a sugarbush is a great way for a town forest to “pay back” the community for any lost tax revenue resulting from municipal ownership and management costs absorbed by the community. It is also an important way that town forests can help sustain the forest-based economy in your community by creating new opportunities for foresters and sugarmakers.

Great stories abound of Vermont towns that have derived significant timber revenue from a town forest. One of the most remarkable examples is the Town of Goshen in Addison County. Goshen has generated more than \$250,000 of revenue from timber sales and a leasing operation to a local sugarmaker over the life of the town forest—just over two decades. The community has also used both revenue from these sales and timber from the town forest for town projects, including repairs to the town hall.

The Town of Hinesburg has also followed this model. Most recently, in 2007 Hinesburg conducted a logging job on its town forest to supply white ash for a new floor in the Town Hall. After having the wood milled locally, it has been installed as a reminder for all Hinesburg residents of that community’s connection to the woods.

The Town of Bradford in Orange County has had remarkable success with diverse timber sales off all three of its municipal forests. The sales have ranged from a recent sale off the Wright’s Mountain tract that generated \$16,000 while enhancing recreation and wildlife values to a series of small logging jobs that have generated \$60,000 over recent decades from the water and sewer lands that are owned by the community. Bradford’s timber sales are a great example of how a community can use logging as a tool to achieve a variety of goals—while some sales are dictated by current timber prices and revenue objectives, others are conducted more as a management tool to achieve a broad suite of forest stewardship goals for a particular parcel.





## ***Developing a Timber Sale***

A good place for a community to start in exploring the timber potential in its town forest is to contact your county forester. County foresters are designated by the State of Vermont as a resource for communities to receive technical assistance, and are extremely well positioned to help a community through every stage of assessing its land all the way to a completed sale. In some cases, the county forester might not have the capacity to work with a community due to other obligations. In that instance, a community is well-advised to find a professional consulting forester to fill the same role of technical expertise and guidance. Often the county forester can help a community find a professional forester, or you can contact one of the associations of professional foresters listed in Chapter Eight and the sidebar on page 19.

Working with a professional forester (county or private consulting), a community might consider the following series of steps:

- ▶ **Assess your town forestland:** A professional forester is trained to walk your land and to see its potential for timber production and extraction. It is important to note that both elements are important—your forest might have great timber but no feasible way to extract it at a reasonable cost given steep slopes, wet areas, or other access issues. On the other hand, your forest may have easy access, natural skid areas and log landings, but not have strong timber potential due to soils, species composition, or other considerations. A professional forester will see all of these complex dynamics and then help your community understand the resource it has and what its options are for tapping that resource for timber, sugaring, or other forest products.
- ▶ **Organize a community conversation:** Starting within the local body with oversight on your town forest, such as the select board, conservation commission, or forest committee, and possibly moving outward to engage the general public, your community will need to consider the assessment of your professional forester and decide what your goals are for the timber sale. Do you want to maximize timber revenue and use the most aggressive potential approach? Do you want to balance timber production with wildlife habitat considerations? Do you want to create logging roads and skid trails that also line up with your trails needs? These questions and many others will need to be considered before determining what your harvest plan should be. David Paginelli, Orange County Forester, put it well: “There is never just one ‘right’ harvest plan for any property. A community needs to always consider its overall goals and then find the approach that will best meet those needs. A county forester or other professional can be very helpful in translating a community’s goals into a harvest plan that will achieve them.”
- ▶ **Find a contractor:** A professional forester can also help your community take your harvest plan and put it out to bid in search of a contractor to conduct the harvest. Your community is likely to end up considering a number of possible bids and can draw upon the guidance of a professional to identify a contractor who will meet your objectives at a fair price.
- ▶ **Conduct the harvest:** A professional forester will likely want to be on site for at least some portion of the harvest to oversee the job and to make sure that the contractor will conduct the sale in accordance with your community’s expectations. This includes taking only the trees that are marked for harvest, complying with any specified protections of wet areas, deer yards, or other sensitive areas, and closing out the job in a manner consistent with your community’s expectation of overall appearance, condition of logging roads, and other considerations.

In addition to the emphasis in this subchapter on finding and using a county forester or other professional, it is worth adding an additional emphasis on community engagement. For some community members there might be concern about the impact of a timber sale on other values in the town forest that they hold dear. A timber sale on a town forest is an outstanding opportunity for members of your community to come together and better understand what timber harvest is all about and how it can help



advance forest management goals as part of an overall plan, not to mention earn revenue for your community! For that reason, communities should seriously consider the model of towns like Hartford, which invites community members to come out on the town forest and walk any timber sale in the presence of a forester after it has been marked (see Case Study on page 14). This provides a wonderful opportunity for a forester to explain what will be accomplished, answer questions, and enable community members to feel a part of the decision to employ active management. The Vermont Town Forest Project was founded in part on the belief that all Vermonters should be given an opportunity to interact more closely with our forest heritage through our town forests—the opportunity to see and understand a timber sale up close is an important part of this.

### ***Sugaring Opportunities on Town Forests***

It is worth making special mention of sugaring opportunities on town forests. Just as timber harvest is an important part of Vermont's working forest heritage, maple syrup production is another Vermont forest tradition that has helped define our state. For that reason, communities are encouraged to look at opportunities on town forests for sugarmakers, some of whom might have only limited access on their own lands and would appreciate the opportunity to lease access to a sugarbush on town forestlands. As mentioned above, Goshen is an example of a community that has had a long-standing leasing opportunity in the outstanding sugar maples on its town forest. Part of the tradition is that each of the community's few hundred residents get a small quantity of syrup as a "sweetener" in the deal! Your county forester or other professional forester can help identify sugarmaking opportunities on your town forest when conducting his or her overall assessment. For more information on sugarmaking in Vermont including local producers in your community who might be interested in leasing on your town forest, visit [www.vermontmaple.com](http://www.vermontmaple.com), the website of the Vermont Maple Growers Association.



## **C. Water Resources**

### ***Gary Sabourin, Vermont Department of Forests, Parks, and Recreation***

In the northeastern United States, over 50 million people depend on forests to provide clean reliable drinking water. Some of these watersheds are under public control but many are in private ownership. In the case of privately owned lands, this makes the public's water supply dependent on the decisions made by thousands of private forest landowners and communities. To remove this uncertainty, many towns in Vermont have chosen to purchase land around reservoirs and other public water supply sources for town ownership. Significant examples include the Town of Rutland and Town of Brattleboro, both of which own significant acreage in adjacent communities to conserve municipal water supplies.

The Vermont Department of Forests, Parks and Recreation works with towns to provide forest management assistance on municipal land. In order to comply with Vermont's Water Quality Statutes, loggers and forest landowners must follow responsible management practices to protect water quality. These practices are captured in Vermont's Acceptable Management Practices

(AMPs) that were developed by the Department of Forests, Parks and Recreation to prevent mud, petroleum products and logging slash from entering public waters. Vermont's water quality AMPs provide twenty-four practices that loggers and forest landowners should follow during, and immediately after, logging operations. AMP practices are primarily intended to address issues that might arise along truck roads, skid trails, stream crossings, riparian buffer strips and log landings. AMP methods have proven effective for maintaining water quality and minimizing soil erosion.

With these excellent benchmarks in place, the most important water protection step that a community can take is to assure that any logging operations, trail construction, or other activities taking place on the town forest are in compliance with Vermont's AMPs. This is another reason why having your county forester or another professional forester involved with any harvest operation.

Another important step for protecting water resources on a town forest is to create adequate buffers around key waterways and reserve areas, if necessary, to protect wetlands, headwater streams, springs, seeps, and other sensitive areas that contribute to water quality. In some cases management of these areas can even trigger state or federal laws beyond AMPs, such as the Clean Water Act, so it is important to get the input of a professional forester as your communities decides how to manage wet areas.

Finally, your community can take steps to protect water quality by removing potential hazards. One such example is when you have an old or eroding logging road. If the road is no longer needed for harvest activity, then a community might consider decommissioning the road so that the road does not erode and cast silt into a waterbody. In cases where the road is still desirable for logging and/or recreation, then a community should maintain all culverts and other sections of the road near waterbodies to assure that the road does not become a source of silt or even blockage of waterways as it erodes.



### To Learn More:

You can learn more about the specific Acceptable Management Practices for water protection and our program at [www.vtfpr.org/watershed/ampprog.cfm](http://www.vtfpr.org/watershed/ampprog.cfm). You can also contact your county forester who can help or will connect your community with a water protection specialist at the Vermont Department of Forests, Parks, and Recreation.



## D. Wildlife

*Jens Hilke, Vermont Department of Fish and Wildlife*

### **Understanding Your Town Forest as a Home for Wildlife**

Part of the thrill of walking through the woods is the knowledge that there's something "else" out there. In the winter, we see the tracks of wildlife species at home in the cold and snow. The streamlined efficiency of the coyote moving through the landscape in search of food noticeably contrasts with the roving explorations of fisher and weasels. Then in the spring and later into summer, we see browse and other sign on twigs and vegetation, showing that an even larger assortment of wildlife is actively using the forest. We hear the birds and insects and know that many creatures have made the place their home. Bear, moose, bobcat, coyote, fisher, mink, otter, chickadees, nuthatches, hawks, newts, and forest butterflies all can likely be found in your town forest.

It's difficult to quantify the habitat values of a particular piece of land, such as a town forest, without detailed scientific study. When an ecologist or wildlife biologist walks a piece of land, he or she can tell you something about the quality of the habitat based on signs they observe on the ground. Precise inventory of exactly what species are present on the land, takes more work. But based on general observations of wildlife sign, the natural communities present, and knowledge of local geology, topography, water resources and the size of a forested parcel, science can still tell us something of what species are likely to be found there. There is a direct correlation between the size of a forest and the diversity of wildlife species found there. Studies in Maine suggest that a several thousand-acre forest can sustain at least 39 different wildlife species plus myriad insect and other invertebrate species while a forest of 1–20 acres can sustain only 10 different wildlife species (Campoli et al. Above and Beyond. 2002). However, you should remember that wildlife don't understand property boundaries. If your town forest borders other forested lands, use the cumulative acreage in your wildlife habitat calculations. Town forests that border on or are connected to other habitat by some type of corridor are more likely to be able to support Vermont's large-ranged species like black bears and bobcats. Therefore, these lands are more likely to have greater species diversity and the wildlife populations within those forests are more likely to be stable in the long run. So, understanding and maintaining habitat connections between town forests and other adjacent and nearby forests are hugely important to consider in managing for wildlife species diversity within your town forest.

### **Wildlife Management Considerations**

In addition to looking at habitat connectivity, another important management consideration is the presence of important natural communities, such as wetlands, as well as rare, threatened & endangered species. These occur on a localized scale, but are important enough to warrant special management considerations. Individual wetlands can do much to provide habitat for a host of wildlife species and offer a variety of services to humans as well, such as improving water quality and flood retention. Similarly, rare species are of great concern for their contribution to biological diversity because of the crucial role they can play with other species relying on them for survival. It's best to incorporate all such elements in the overall management plan for your town forest.



Town forests are typically managed for an assortment of uses from hunting and recreation to logging and water quality. Managing these lands for wildlife habitat is a use that can be complimentary with many of these others but requires some coordination in terms of what is appropriate where. Much of this is site-specific and best guided by a town forest inventory that documents the ecological functions and features of your town forest, such as deer wintering areas, special natural communities, and rare plants and animals. Your inventory should also capture the extent of community use in the area and the types of recreation activities, including hunting. With this information in hand, a management plan can be created that balances the values of the community with ecological values.

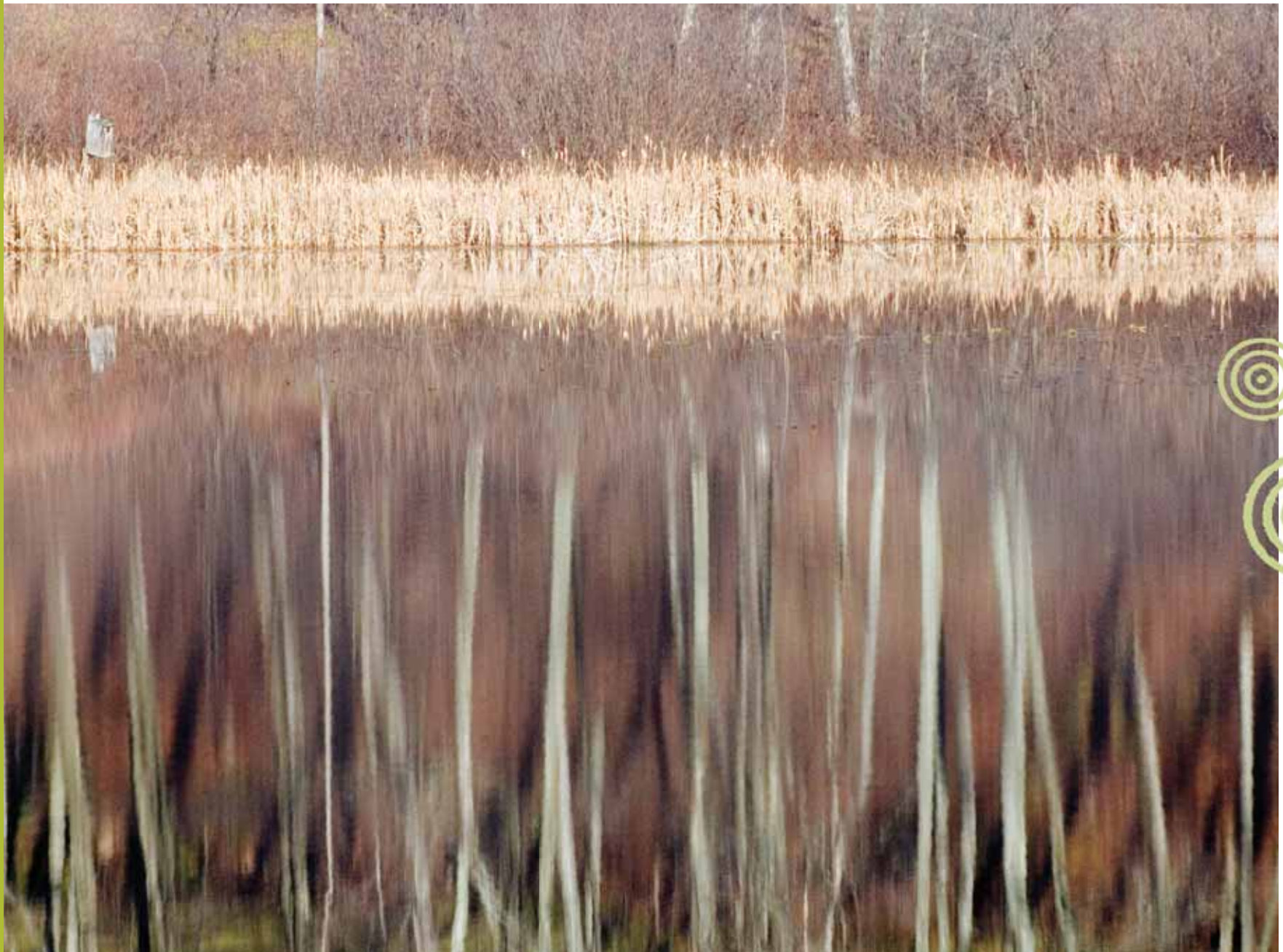
When developing management goals to improve wildlife habitat, it's important to consider improving the quality of the habitat. Because Vermont was a largely cleared landscape in the nineteenth century, its forests have grown back in relatively even-aged stands. As the landscape has aged, the general pattern isn't as diverse as it could be. Forest management activities can improve the quality of the habitat. A good forester or ecologist can point out areas where cutting is not appropriate such as wetlands and riparian areas or special natural communities, and can recommend which trees to cut on a rotation that keeps the resource available for the future. Selective logging and small patch cuts can create new food for some wildlife and create a mosaic of age classes in the forest that further contributes to improving the overall quality of the habitat. Decisions of how much to cut and where are site-specific and need to be taken in context of the larger landscape, but it is clear that there is much that can be done to improve the quality of the habitat through un-even aged management.

Town forests have a tremendous amount to offer wildlife and communities. They give townspeople the opportunity to see wildlife and experience habitat in a personal way, including a model of how to manage their own lands for wildlife. They offer an assortment of ecological functions from maintaining water quality to providing habitat and habitat connectivity for a huge diversity of wildlife species. Carefully managed in concert with surrounding lands, your town forest can provide a real asset to Vermont's wildlife.

### **To Learn More:**

Visit the Vermont Department of Fish and Wildlife on the Internet at [www.vtfishandwildlife.com](http://www.vtfishandwildlife.com) for information about the State Wildlife Plan and how your community can improve the value of your town forest for wildlife habitat.







## E. Recreation

*Linda Henzel, Vermont Department of Forests, Parks, and Recreation*

Town forests can provide a wide array of recreational opportunities. In Vermont there are many town forests that allow pedestrian activities such as walking, dog walking, running, hiking, snowshoeing, cross-country skiing, fishing, hunting, and picnicking. Biking and snowmobiling are also allowed in some town forests. In appropriate areas, horseback riding, camping, and off-road motorized activities are additional uses that some towns would like to offer. This subchapter presents tools that are available to towns for determining what types of recreation are appropriate and how to manage for recreation in town forests. Some of the biggest challenges are providing access, how to resolve competing recreational interests, and preventing and repairing damage from illegal activities.

### **Planning and Inventories**

It is important to understand the desires and needs of the people in the town and the types of recreational experiences that the forest is capable of supporting. Given the broad range of potential uses for your town forest, and the potential for competing or even conflicting demands on your town forest, it is very helpful to create a broad and open public conversation about the community's desired mix of uses and how to harmonize them. One example is around hunting: many communities offer hunting on their town forests, but this use must be carefully orchestrated with other uses to assure safety and a positive experience for hunters and other community members. There are a number of techniques a community might use to gather public input, including:

- ▶ Surveys of public opinion
- ▶ Predictions of future use (trends)
- ▶ Natural resource inventories

### **Resolving User Conflicts**

While town forests offer abundant recreational opportunities, problems can arise when these lands are sought by competing recreational users, especially when their desired uses are potentially incompatible. These recreational conflicts might include conflicts between recreational users, situations where demand for recreation could strain the capacity of town forest's natural resources or recreation infrastructure to provide for such use, or circumstances where other uses besides recreation, such as timber harvest, could impede recreational opportunities.

There are a number of strategies that towns can use to avoid and resolve these types of conflicts. As a baseline of good practice, whenever recreation management issues are to be discussed or services changed, all stakeholders should be involved in those discussions so that potential conflicts can be resolved as early in the process as possible. Ideally, this will create opportunities for community members who use the same resources or locations to find ways of sharing, such as usage on alternating days or adjustments for time-of-day. If your community can develop a good track record using this kind of collaboration, you can build

on the successful resolutions of conflicts from similar situations. If your community has difficulty finding common ground, you might consider consulting another community that has had success in this area, such as the Town of Hartford, Town of Hinesburg, and other model communities mentioned in this guide.

Regardless of what approach you use, your community will benefit from having a standard procedure for examining the ecological, economic, and social impacts of any recreational uses proposed for your town forest.

### ***Developing Recreational Infrastructure***

When new recreational trails or other infrastructure are proposed for your town forest, your first step should be to coordinate these efforts with pertinent plans, including your town plan and applicable regional, transportation, and wildlife plans. This should be part of a comprehensive focus on minimizing impacts to wildlife and habitats, waters, and other natural resources as well as historic and cultural resources.

Good general rules of thumb for any project are to make sure that safe and pleasant public access points are provided and that the development of parking areas, trails, and other public amenities maintains the scenic character of the area. To accomplish this, be sure to follow laws and procedures for siting activities in safe locations, using proper materials and signage. Projects should also consider the needs of handicapped, youth, elders, those with low incomes, and people from a variety of ethnic groups. Communities should also be sure to design resources, facilities, and activities for the degree of anticipated use as well as the capacity of the parcel. Towns that charge impact fees for development may wish to earmark some of those funds for maintaining a town forest.

Finally, communities should be sure that every effort is made to communicate with adjacent landowners to resolve siting issues, recreational supervision and enforcement, and other likely concerns. While adjacent landowners will likely appreciate the public benefits of new facilities, they may have some reasonable concerns that a higher volume of public use could have unintended spill-over effects onto their land.



Mountain Biking on the Hinesburg Town Forest



## ***Managing for and Maintaining Recreational Opportunities***

Perhaps the greatest ongoing challenge for any community is to effectively implement its recreation plan. First and foremost, your community should seek to provide a safe environment for all users in your town forest. This can be accomplished through the use of effective design standards, education of users, and by good maintenance. Safety also requires careful monitoring of the town forest's use and condition, determining the carrying capacity of the resource, and setting up a reporting system for heavily-used and/or popular resources. If necessary, your community might consider allocating additional funds for law enforcement to police and should make arrangements for coordination with emergency service providers.

One job of town forest managers is to let users know how to properly use the town forest's recreational resources. Towns should consider signage, materials, and other strategies to communicate some core responsibilities of users, including:

- ▶ Encourage and show respect for the land, facilities, and other users.
- ▶ Follow laws and safety rules regarding proper equipment, attire, side of road, speed, number of users in a group, and the time of year and season.
- ▶ Stay in areas that are appropriate and designated for the activity.
- ▶ Inform motorized vehicle user groups that their members must have adequate insurance and proper registration, pass safety courses, and respect non-motorized trails and users.
- ▶ The responsibility of groups to enforce the rules with their members.

There are some other good principles to guide your management. You should structure activity and management of the property for the lightest impact on the land. Part of easing this impact is to carefully coordinate activities with user groups, and to encourage them to become watchdogs of conditions in popular areas. You might need to even retire or rest overused areas and/or divert use to other areas when necessary. You should also promote the use of environmentally-friendly equipment and maintenance techniques.

Finally, it is very important to establish a good line of communication with the community. You should publicize resources appropriately so that overuse does not occur and damage to fragile natural resources is avoided. If the area is extremely popular for a high impact activity like mountain biking, you might even consider setting up a space on a town's website or other Internet location to notify users when trails are closed due to weather conditions or overuse. You can also make great community connections by encouraging participation of volunteers in managing and maintaining the property. Both Stowe and Hinesburg have had great success engaging local mountain biking clubs to become trail stewards on their town forests, in the process creating a better opportunity for various uses and creating a broad group of dedicated supporters.



Craftsbury Town Forest





## To Learn More:

Visit the Vermont Department of Forests, Parks, and Recreation at [www.vtfpr.org](http://www.vtfpr.org). Additional information on using and managing town forests for recreation, including publications, websites, grant opportunities, and model communities can be found in Chapter Eight.

### F. Forest Protection (Insects, Pathogens, and Invasive Species)

Perhaps the greatest threat to Vermont's forests today comes from invasive plants, new or expanding insect populations, and forest pathogens that infect one or more tree species. Many of these invaders are newly arrived to Vermont or stand just outside our state. Once the new invaders get a foothold in one place they can become difficult or even impossible to totally eradicate. Constant vigilance and community labor will help keep your town forest and all of Vermont's forests healthy for the future!

Some of Vermont's existing and imminent forest health threats that your community should know about include:

- ▶ Common and glossy buckthorn (forest shrub)
- ▶ Honeysuckle (forest vine or shrub)
- ▶ Japanese barberry (forest shrub)
- ▶ Forest tent caterpillar (insect)
- ▶ Gypsy moth (insect)
- ▶ Emerald ashborer (invasive insect)
- ▶ Hemlock wooly adelgid (invasive insect)



Glossy Buckthorn

As with other management considerations in this chapter, a great place to start in assessing your forest's status with regards to forest health threats is with your county forester or a professional consulting forester. These professionals are trained to spot forest protection issues and to help develop a plan of action for eradicating invasive plants, pests, and pathogens.

Once a particular forest health threat has been identified, there are generally two types of treatment: mechanical and chemical. Mechanical treatment includes physically removing the problem by pulling up shrubs or understory plants, harvesting a stand of timber that has been compromised, or otherwise removing the problem. Chemical treatment might include injecting an invasive shrub at its roots with a chemical, spraying an area infested with an insect, or otherwise attempting to chemically repel the problem.

It is important for communities to understand that chemical treatment is a serious responsibility that brings with it some legal requirements. A pesticide applicators' license is required before herbicides may be used on town forests. You can learn more about these requirements on the Internet at [www.vermontagriculture.com/ARMES/pest.htm](http://www.vermontagriculture.com/ARMES/pest.htm) or call the Department at 802-828-3482.

Where the technique of eradication does not require a highly technical skill nor special equipment (e.g. protective masks for spraying), eradication of forest health threats can be a great opportunity to get your community involved in hands-on care for your town forest. The Town of Dorset is a great example—the Dorset Conservation Commission has had groups of more than twenty people come out to help eradicate buckthorn from its town forest.



Where professional expertise is required, a county forester or professional consulting forester can help your community write up a treatment plan, put it out to bid, and hire a contractor to come conduct the work. Importantly, a professional forester can assure that the job has been done correctly, and help bring the contractor back if necessary to remediate any mistakes. Given the inherent challenges in any treatment to eradicate invasive species, the expertise of a professional to oversee the work and seeking remediation is important and has been the difference between success and failure of a job in some communities.

### **To Learn More:**

For more information on invasive plants and insects in Vermont and resources to address them, you can visit the Vermont Department of Forests, Parks, and Recreation's website at <http://www.vtfpr.org/protection/idfrontpage.cfm> or the US Department of Agriculture's website at <http://www.invasivespeciesinfo.gov/unitedstates/vt.shtml>.

## **G. Enforcement**

*Brian Stone, Vermont Department of Forests, Parks, and Recreation*

This subchapter will help you understand how your community can evaluate the need for imposing and enforcing rules and regulations on town forestlands, as well as state laws regarding forest use and management that might apply to your town forest. Communities with town-owned forestland have similar responsibilities to private land owners or the State when it owns land—municipalities are the stewards of their ownership(s). This comes complete with a need for management plans, prescribed activities including harvesting, and all the other responsibilities that go with managing a parcel of forest land. These lands are subject to the same state laws, rules, and regulations as are other lands in Vermont excepting federally owned lands that operate under a different set of rules and enforcement.

### ***Creating an Appropriate Enforcement Plan***

Generally speaking, towns depend on their local law enforcement for administration and prosecution of the municipal laws, rules and regulations. In the case of state laws, it is the State's responsibility to enforce them. The one area not related to forest management that is generally incumbent on the towns to regulate is access by the public. Recreational uses are a major factor in the management of the land and towns should establish rules of use for the properties.

Enforcement of All-Terrain Vehicle (ATV) use on town-owned forestland is a particularly challenging recreational enforcement topic. ATVs have become a popular recreational vehicle in recent years. State law requires that any ATV owner who operates his or her ATV anywhere except on their own property must register their vehicle. In addition, written permission from any landowner on whose land an ATV operator is traveling must be carried on the operator's person. The rules & regulations pertaining to ATV use in Vermont can be found in the All-Terrain Vehicle Operator's Manual available from the Vermont Department of Motor Vehicles.

For private and public landowners, the wide-ranging capability and potential for unregulated use of these vehicles makes them a potential nuisance and many times destructive. As with snowmobiles, use on other than the owner's land is by permission only. In the case of municipalities, the managing unit of the town or city government is responsible for the designation of ATV trails. They may also wish to restrict the use of ATV's on municipal lands. Municipal and state law enforcement agencies are responsible for enforcement of the various laws and regulations. Municipalities are encouraged to become educated on (Title) 23 V.S.A. Chapter 31, Section 3501 through 3517, and Title 13, section 3705 {Crimes and Criminal Procedures (Chapter 81) Trespasses and Malicious Injuries to Property}, among other relevant regulations that pertain to ATV use.

### **Relevant Forest Laws of Vermont for Town Forests**

Municipal forests are defined in law. It is a tract of land owned by a municipal entity that is primarily devoted to producing wood products, maintaining wildlife habitat, protecting water supplies, providing forest based recreation and conservation education. It is not meant to include city parks devoted to various recreational activities or so-called green spaces around municipal buildings. It is recognized though not specified in law that municipal forests may come under the oversight (management) of the town or city government, school district, parks department, water district, conservation commission, or other government entity.

Municipalities may own forests that are located in or, in some cases, outside of the town boundaries. The municipal forest law allows for a vote of the citizens to determine if the municipality shall acquire the land. Many decades ago the Vermont legislature provided grants for such purchases. There have not been municipal forest grants in many years.

The law also provides that the Commissioner of Forests, Parks and Recreation may have the land examined to determine if the land is eligible for certification as a "municipal forest." This certification is not required and in recent years has been seldom invoked. The Department by policy recognizes the value of municipal forests regardless of their technical ownership or use as long as the uses are within the primary goals of the definition.

Activities on municipal forests must follow the state laws, rules and regulations that are applicable to all forestland in Vermont. Several of these laws that apply specifically to the management of municipal forests include:

► **Water Quality:** Harvesting operations, log jobs or other forestry related operations must follow the rules titled "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont." These rules provide guidelines and practices that will, if properly applied, prevent erosion and sedimentation in the forest. They are designed to keep the dirt out of the water. Logging contracts should require that contractors apply these rules in every harvesting operation. Although the logging contractor will apply the practices, the landowner, (i.e. municipality) is ultimately responsible. Failure to follow the rules creating subsequent water quality problems in the waters of Vermont may lead to enforcement actions. These enforcement actions may include requirements for substantial repairs and fines.







► **Heavy Cutting:** Landowners who are considering “clearcutting,” also known as “heavy cutting,” in excess of forty acres are required to submit a “Notice of Intent to Cut” to the Department of Forests, Parks and Recreation. There are a number of automatic exemptions for this program that may or may not apply to municipal forests, such as agricultural clearing, Act-250 clearing for development, and salvage operations. If the forest parcel has a management plan that meets and is approved by the Commissioner of Forests, Parks and Recreation or his designee, then the harvesting is issued a permit and the harvesting operation may occur.

► **Fire Law:** Forest fire laws are promulgated in statute and are regulated for the Department of Forests, Parks and Recreation and administered by the Town Fire Warden. See the Department web page for detailed description of the fire laws. Among other provisions, property owners (i.e. municipalities) are required by law to keep roads and skid trails clear of brush, tops and other harvesting debris to allow access in case of wildfire emergencies. Property owners are also required to maintain a brush and top free buffer along property lines. These buffers should be 50 feet along forested boundary lines and 100 feet from neighboring buildings.

► **Wetlands:** The Department of Environmental Conservation has regulations effecting harvesting and development in wetlands. Municipalities have specific wetlands rules that are applied through their individual subdivision regulations. There are also regulations that apply to the management of the municipal forests. Logging that complies with the Acceptable Management Practices (AMP’s) and the silvicultural standards for deer wintering yards is allowed in wetlands. Equipment maintenance including the changing or storage of oil, grease, or other petroleum products is restricted to log landings. Log landings may not be located within wetlands unless the ground is frozen or no fill is required. The restoration or upgrading of existing logging roads is allowed only for logging purposes and only if they are not increased in width by more than 20%. New logging roads are allowed in buffer zones but not in the wetlands. The removal of beaver dams is allowed to the extent necessary to prevent damage to existing logging roads or to ongoing logging operations. Logging in Class One wetlands, or wetlands with threatened and endangered species, requires a written plan approved by the Commissioner of Forests, Parks and Recreation. Minor wetland or buffer zone alterations are allowed where necessary.



Town forest invasive species eradicators in Hartford.



## **Invasive Species Case Study:**

### **Town of St. Johnsbury**

St. Johnsbury has a number of lovely town forests, including a 97-acre town forest parcel that sits near the center of town. It has been well managed for forest products and boasts a remarkable trail system created by forestry students from St. Johnsbury Academy under the tutelage of teacher Bruce Johnson. Unfortunately, the town forest has gotten an unwanted visitor: glossy buckthorn. This invasive plant can reach 15 feet in height and crowds out native vegetation. The Town Forest Stewardship Committee, led by Andy Fisher and other dedicated volunteers, has been consulting community members and forestry experts to come up with a response plan. The committee would like to use the least invasive method possible, but recognizes that simply pulling out the glossy buckthorn is unlikely to have a lasting effect and envisions that a chemical response will most likely be part of the solution. "We must get rid of the buckthorn," said Fisher, "and we are ready to go on a program with volunteers."

#### **To Learn More:**

Contact your county forester for help in assessing invasive threats and appropriate management techniques.





# Chapter 5: Town Planning for Town Forests

**A. Town Plans**

**B. Zoning Districts and Bylaws**

**C. Subdivision Regulations**

**D. Role of Municipal Boards**





## Town Planning for Town Forests

*Jamey Fidel, Vermont Natural Resources Council, Bill Rossmassler, Association of Vermont Conservation Commissions, and Bill Roper, Orton Family Foundation*

This chapter addresses community land use planning as it relates to town forests (i.e., town plans, zoning and subdivision regulations) and the role of municipal boards in such planning. While other sections focus on resource planning and management, the discussion below looks at what towns should consider and can enact as a regulatory framework for protecting or enhancing their town forests.

The basis for municipal land use planning is primarily found in Vermont’s “Municipal and Regional Planning and Development Act” (24 V.S.A 4301 et. seq.). The discussion below is meant to touch on the statute’s general intentions and guidelines. There are many technical provisions that are not covered and any town that begins to review and revise its town plan or zoning and subdivision regulations should consult with its attorney for more specific advice.

### A. Town Plans

Town plans typically capture municipalities’ visions for how and where they want to grow or not grow. They are adopted through a public process that solicits residents’ opinions and are meant to be the collective expression of municipalities’ intended development and the policies underlying this growth (or conservation). The zoning and subdivision regulations provide specific language for implementing the visions articulated in the town plans. Put differently, a town plan is the blueprint for a municipality’s future growth and development, and the zoning and subdivision regulations provide the detailed pathways to implement and enforce the vision.

If your town owns or intends to acquire a forest parcel, the town plan may already provide some guidance as to how such lands should be utilized, so take a look at what the town plan says. Before a town can really decide whether existing town plan language is adequate and appropriate, the forested tract should be well understood. There numerous questions that should be answered: What are the resources it provides? How is it situated in relation to other tracts of land? How is it accessed? How could or should it be used? All of these questions, among others, should all be considered by the town. Some forest lands in the past have been donated to towns, so a title search should be undertaken to determine whether there are any requirements that must be satisfied, as this may impact the language in the town’s regulations.

After a town has studied its municipally owned lands, which typically should include inventory, analysis and prioritization efforts, then it is ready to return to the town plan and consider whether existing language is adequate or needs revision. This language, while general in nature, must convey enough specifics for the zoning and subdivision regulations to follow. For example, does the town want to establish some policies around a minimum threshold acreage, a diversity of forest composition, a guarantee of access, or acceptable types of public uses or buildings? If the town is intending to purchase a forest tract, then the acquisition or donation’s goals and objectives can be wrapped into the town plan.



*In 1991 the town received a gift of 360 acres located on the southern portion of Scrag Mountain, including much of the summit. The 360 acre parcel provides recreation, wildlife, scenic and timber management benefits to the town. An additional 20 acre adjacent parcel was acquired by the town in subsequent years. The nature and location of the property, however, create limitations for multiple-use management of the parcel. Limited access, previous logging practices, and fragmented land ownership within nearby watersheds all present management constraints.*

*Opportunities to expand the municipal forest through the purchase or gift of land may exist. Any expansion of the forest, however, should be based on a comprehensive management plan for the municipal forest, and should result in the acquisition of those lands which will enhance the town's ability to manage the forest for a range of management objectives. Regardless of whether the forest is expanded, the acquisition of a better access for forest management and recreation from the Bowen Road and/or Palmer Hill Road should be explored with adjacent landowners.*

Assuming a town has formed a sub-committee focusing on its municipally-owned forest lands, this same group can review and improve, if necessary, town plan language. Vermont's Chapter 117 is very specific on the adoption of new town plans as well as zoning and subdivision regulations. The process must originate with the municipality's planning commission, or a petition if the planning commission is unwilling to lead the process, and then eventually the language will make its way to the select board. Public hearings must be held at both the planning commission and select board levels, so these public meetings should be coordinated with other town forest public outreach efforts for the smoothest and most logical sequence of public engagements. Since revisions may also be necessary to the zoning and subdivision regulations, the revision and adoption process could be orchestrated to include all town plan, zoning and/or subdivision revisions together. The adoption of land use regulations is a very technical process, so you should consult your municipal attorney throughout the process.

## **B. Zoning Districts and Bylaws**

Zoning districts and bylaws can be very effective tools for guiding growth in an efficient manner while protecting valuable community resources, such as forestland. Whether a municipality is seeking to create a town forest or already has a town forest it is managing, zoning can help a municipality protect its forestland from being developed and/or impacted from neighboring development. Vermont law (24 V.S.A. sections 4405, 4407 and 4411) permits municipalities to create zoning districts and regulations as well as designated "Forest (Reserve) Districts".

### **Zoning Districts**

Municipalities have used various terms to identify districts in which they would like to protect forest resources, including but not limited to the following: Agricultural District, Conservation District, Rural Residential District, and Resource Overlay District. Unlike the Forest District, however, these other types of districts allow for residential and possibly other types of uses. If a municipality's desire is to create a district with the primary purpose of protecting and managing its forest resources, and especially if the municipality expects to be the owner of these lands, it is recommended that the municipality designate these lands as Forest District (24 V.S.A. § 4407(1)(B)).

In planning for and creating a Forest District, it is also important to consider the desired land uses and their associated districts of those lands abutting the Forest District. The prescribed uses for these abutting lands should compliment the goals and objectives the municipality has for the forestlands.

### **Zoning Bylaws**

In addition to establishing zoning districts to conserve and manage a municipality's forestlands, a municipality can create zoning bylaws as well. Bylaws can help a municipality to further detail what uses are permitted, conditional, and prohibited within the district. Conditional uses are permitted only by approval of either the municipality's board of adjustment or development review board.

Examples of permitted uses for Forest Districts may include but not be limited to silvicultural activities, such as timber harvesting, wildlife habitat improvement and tree replanting. Examples of conditional uses for Forest Districts may include but not be limited to the following: road and/or trail construction, certain types of recreational uses as specified, certain types of forest or recreationally related structures as specified, and other similar uses.

### Elmore Zoning Bylaws

#### *Forest District (FR) (pages 9-11)*

##### *A. Purpose*

*The purposes of the Forest District are: (1) to maintain existing land uses in the Worcester Mountain Range in a manner that preserves fragile features associated with high elevations, including steep slopes, soils unsuitable for on-site septic disposal, large areas of intact wildlife habitat, headwater streams and associated water supplies, and scenic resources; (2) to prevent undue financial burden on town services, including emergency services, utilities and road maintenance, by discouraging scattered development in areas with poor or limited access; (3) to protect the health, safety and welfare of Town residents by limiting development in areas characterized by poor site conditions and the lack of public access or services; and (4) to encourage traditional land uses to continue in the district while limiting incompatible uses.*

##### *B. Permitted Uses*

##### *C. Conditional Uses*

##### *D. Dimensional Standards*

##### *E. Supplemental Development Standards*

- 1. Residential Uses*
- 2. Placement of Structures*
- 3. Clearing and Landscaping*
- 4. Building Design*
- 5. Erosion Control*
- 6. Forest Management*
- 7. Site Restoration*





Bylaws for municipal forestlands may also reference other forest management related resources, such as forest management plans and best management practices for additional guidance on how these types of lands should be regulated.

### **C. Subdivision Regulations**

Subdivision regulations can also play a role in managing municipally owned forestland. Vermont law (24 V.S.A. sections 4402 and 4418) permits municipalities to adopt subdivision bylaws to guide community settlement patterns and ensure the efficient extension of services and facilities as land is divided and developed in a town. A municipality may regulate the subdivision of lots so as to consider the effects to municipal forests. The following offer several examples of the way in which subdivision bylaws can be relevant to planning for the management of town forests.

#### ***Policies for Land Abutting Municipal Forests***

Subdivision bylaws may include standards for the design and configuration of parcel boundaries and the location of associated improvements necessary to implement a town plan. (24 V.S.A. § 4418(1)(C)). If a parcel is going to be subdivided next to a municipal forest, the design and configuration of the parcel boundary and the location of improvements such as roads can be designed according to standards that compliment the management of municipal forests. Furthermore, subdivision bylaws can include standards for the protection of natural resources and cultural resources and the preservation of open space, as appropriate in the municipality (24 V.S.A. § 4418(1)(D)).

#### ***Access***

Subdivision bylaws may include standards to protect existing access or to create new access to municipal forestland through the subdivision of property on land adjacent to town forestland. Access might be important for public use and enjoyment of municipal forestland or for the facilitation of timber harvesting or habitat improvement on municipal forestland.

#### ***Town of Bennington Subdivision Standards***

*(D) Forest Resources. Subdivisions of land located within the Forest Reserve District shall, to the extent practical, be configured to allow for ongoing forest management of the parcel after subdivision. Lot boundaries and development envelopes should be laid out to avoid unnecessary fragmentation of distinct timber stands, and provision for forest management access should be a consideration of the final plan.*



## Town of Bennington – Land Use and Development Regulations

*Table 3.15 Forest (F) DISTRICT (A) Purpose: The purpose of the Forest District is to provide for commercial forestry uses and the protection of timber and wildlife resources in the Town's major forested areas. The land is generally characterized by steep grades, the absence of permanent structures for year-round or sustained use and the absence of improved roads. (B) Allowed Uses – with Zoning Permit: The following uses are allowed with the approval of the Administrative Officer in accordance with Section 10.3: (1) Forestry (C) Allowed Uses – with DRB Approval: The following uses are allowed with the approval of the Development Review Board in accordance with Article 6: (1) Accessory Use/Structure (see Section 5.3) (2) Public Facility (see subsection (E)) (3) Seasonal Camp (see subsection (E)) (4) Telecommunications Facility (see Section 5.19)*

### **Promoting Additions to Municipal Forests with Willing Applicants**

Subdivision regulations in tandem with the municipal plan may encourage additions to municipal forests through the subdivision process where an applicant is willing to donate land that would otherwise be conserved as open space for the protection of natural or cultural resources.

### **Prohibiting Subdivision in Municipal Forests through Zoning and Subdivision Bylaws**

Subdivision regulations may complement the creation of Forest Districts which permit commercial forestry and related uses, but prohibit all other land development (24 V.S.A. § 4414(B)(ii)). In the case where municipal forests are zoned as Forest Districts, subdivision bylaws may prohibit subdivision in municipal forests to safeguard the public uses of the town forest.



Participants at a Vermont Town Forest Project workshop in Craftsbury, Vermont.

## **D. Role of Municipal Boards**

The following are several examples of how specific municipal boards may have a role in the conservation and management of a municipality's forestlands.

### ***Planning Commissions***

Planning commissions are enabled via 24 V.S.A. § 4321 and can provide a vital role in planning for the conservation and management of a municipality's forestlands. As part of their planning process, many planning commissions inventory their municipality's natural resources, including forestlands, in order to better understand and inform their planning and policy recommendations. Ideally, this resource related information and the recommended policies are shared with the residents of the community through public involvement and input processes to solicit comments. Considering this input, the planning commission may incorporate the appropriate language into the municipal plan, zoning bylaws, subdivision regulations or other types of planning tools it is drafting for approval. In some municipalities, the planning commission may delegate some or all of this work to a conservation commission.

### ***Conservation Commissions***

Conservation Commissions are enabled via 24 V.S.A. § 4501 and often provide support services to the planning commission as noted above and/or to the municipality's legislative body upon request. In addition, depending on their priorities, conservation commissions may lead their own more comprehensive initiatives. Such initiatives may be focused on the municipality's forest resources directly, or the commission may work on other resource issues related to the forest, such as water, wildlife, recreation, education, etc. In a number of towns that have municipally managed forest lands, the conservation commission is often the entity responsible for the stewardship of the lands.

Conservation commissions also tend to be the entity the municipality's legislative body requests to administer a municipality's conservation reserve fund. (24 V.S.A. § 2804). Once established, conservation reserve funds may be used to conserve those resources a municipality deems significant and worthy of protection, such as municipal forestlands.

### ***Community or Town Forest Committees***

Community or town forest committees may operate in conjunction with either the planning and (or) conservation commission, the municipality's legislative body, or independently depending on the situation. If a town does not have a conservation commission, a community or town forest committee may fulfill a similar type of role as related to the municipality's forest resources. If a town does have a planning and/or conservation commission, the community or town forest committee may act as a "subcommittee" of one of the commissions.

### ***Tree Wardens***

Tree Wardens are another local resource that can be used to provide technical assistance to the boards and committees listed above. In a number of communities, the tree warden will sit on the community or town forest subcommittee of the conservation commission, which then provides support to the planning commission and the municipality's legislative body.







## Chapter 6: Engaging Your Community

- A. Town Forest Educational and Cultural Activities**
- B. Connecting across Generations: Youth-Elder Interviews**
- C. Town Forest Statement**
- D. Rediscovering Town Forests: Celebrations and Discovery Days**
- E. Community Stewardship Projects**
- F. Leveraging Community Interest and Awareness**

# Engaging Your Community through Town Forest Educational and Cultural Activities

*Tara Hamilton, Vermont Town Forest Project pilot project leader from Warren, Vermont*

## A. Town Forest Educational and Cultural Activities

One of the primary goals of the Vermont Town Forest Project is to deepen the connection between Vermonters and the forested landscape, and in the process to also bring community members closer to each other. Across Vermont, town forests are being used to help meet these goals by providing a place for community members to spend time in the outdoors and to work the land, most often side-by-side or in partnership with other community members. Town forests used well are true community rallying points.

To help Vermont communities mine this full potential from their town forests, the Vermont Town Forest Project has developed a series of activities that when undertaken in sequence are designed to: (1) create a renewed sense of connection to local forests and broader forested landscape, including state and national forests; (2) educate and engage citizens on forest stewardship and the components of sustainable forestry; (3) assure that each town forest is sustainably managed under a management plan; and (4) leverage activities to initiate town forest projects in other Vermont towns.

While each town engaged in increasing community involvement in the stewardship of its town-owned forests will develop its own unique set of initiatives to engage its community members, the menu of activities set up as part of the VTFP initiative include:

- ▶ Youth-Elder Interviews between local school children and older residents with a strong connection with the woods
- ▶ Citizen-led creation of a “Forest Statement”
- ▶ A Town Forest Celebration or Discovery Day
- ▶ Stewardship Listening Sessions
- ▶ Implementation of one or more stewardship priorities in that community’s town forest as determined during Stewardship Listening Sessions

If successful, these activities should produce some very positive outcomes in the community’s relationship to its woodlands and generate new community activities in the woods. We have seen as outcomes increased participation in forest stewardship activities on town-owned lands and private forests alike, development of new community-driven and sustainable town forest management plans for town forests, and community-led implementation of these plans through hands-on forest management activities.

The Vermont Town Forest Project strongly believes in the value of Vermonters engaging in these activities in the woods, and see this unique kind of community partnership and engagement as an important counter-balance to cultural forces that are changing our communities. The mere existence of a town forest does not guarantee that it is serving as a community rallying point—cultural and educational activities are central to bringing out this potential. Furthermore, just the opportunity for children to use a town forest does not guarantee that they will choose the forest over the Internet. Cultural and educational activities give them the exposure and support to take advantage of their forest opportunities.





This chapter is intended to serve as a “recipe book” for the menu of community engagement activities described above. In order to provide some real world examples, this chapter will use our experience with the Vermont Town Forest Project’s pilot project in Warren as an example of what is possible and how each step can build on another. The Warren project was funded by the National Forest Foundation and co-sponsored by the U.S. Forest Service as a way of helping communities in or adjacent to the Green Mountain National Forest to better understand forest management and to broaden community dialogue about forest issues.

## **B. Connecting across Generations: Youth-Elder Interviews**

One way to encourage appreciation of and involvement with our local forests is to build on a multigenerational awareness of the importance of the forested landscape to the character of the local community. Providing an opportunity for local children to connect with folks who have developed a deep appreciation of the woods in various ways opens a door that not only fosters respect for older generations but also enables a wonderful learning opportunity.

Organizing a day when school kids can sit down with elders from the community and ask them questions about the woods can be a fun and enriching way to do this. The children can learn about traditional Vermont ways of making a living from the woods and enjoying the woods. They also come to appreciate how Vermont’s woods have changed over the years and the role that people and communities have had in shaping their forests. While improving their listening, investigative and problem-solving skills, the kids are exposed to various values that a forest provides a community and pay tribute to the wisdom of our elder generation. Often we have found that this experience is as enriching for the storytelling elders as for the listening children—it is a great opportunity for older community members to share their wisdom and perspectives that they really enjoy.

Beyond the experience of the day itself, valuable end products often include:

- ▶ Photos of the students and elders engaged in conversation
- ▶ Lists of questions developed by the kids to glean information from the elders about their experiences
- ▶ Written transcripts or recorded versions of the interviews
- ▶ Essays written by the kids based on the interviews, which can inform other future forest-based engagement activities or management planning efforts

### ***How to: Youth-Elder Interviews***

The objective is to get school children and older folks together in the same room talking about the woods, so getting both the students and the elders to participate is key. The first step is to present the idea to someone who represents a subset of the community’s youth, such as an elementary school teacher or principal, local scout troop leader or a church youth group. Finding someone receptive to the goals of the project is vital. In the case of working with a local school, the teacher may want to work the student-elder get-together into the curriculum, so initiating a conversation with the teacher with enough lead time is important.



Youth-Elder Town Forest Interviews at Warren Central School



Once you have gained the enthusiasm of a group leader, teacher or principal for the concept, the details of the project must be worked out collaboratively, such as whether any days in the woods can be scheduled before the interviews, the date of the interviews, details of lunch, how long the interviews will be, etc. Working together with the student leader encourages buy-in and ensures the interviews work well for their larger objectives and can be accommodated by already existing schedules.

Connecting with elders in town can be initiated by placing a press release about the project in the local paper inviting folks with strong connections to the woods to come forward. This can be augmented with inquiries to local historians, town clerks, neighbors, and others who can help compile a group of possible participants. It is generally not difficult to come up with list of people who would be interesting to interview. A phone call explaining the goals of the project and that their interviewer will be 9 to 11 years old is usually enough to lure them in. A diverse group of adults who understand the values of the forested landscape by virtue of having worked or recreated in the woods, or made a living using wood products, will provide balanced input. These folks can be cabinetmakers, mill workers, loggers, foresters, naturalists, trail builders, sugar makers, and others who work in the woods or have a strong connection.

The interviewing activity can be structured in many ways. Following are some suggestions for a successful day:

- ▶ Set up details with teacher or other youth group leader making clear the goals of the project and possible uses of the interviews/essays.
- ▶ Prime the group: set up a naturalist to take the kids on a walk in the woods a few days prior to the interviews. The focus can be products that come from the woods, wildlife habitat, tracking, trees—anything that engages the kids and encourages them to see what is there.
- ▶ Ask a teacher or youth group leader to work with kids to come up with a list of interview questions that have meaning to them, and will also provide the insight from the elders you are seeking.
- ▶ Invite a storyteller to come before the interviews start to get everyone “into the mood.”
- ▶ Arrange for lunch for the whole group so kids and elders can eat together before sitting down to talk.
- ▶ Arrange for other adults/parents to assist with interviews by being scribes, etc.
- ▶ After the interviews take place, follow up with the teacher to get kids’ essays, inquire if a follow-up visit makes sense, and provide back for the class a typed-up report that includes the kids’ work.

***Some additional suggestions:***

- ▶ While 3<sup>rd</sup> and 4<sup>th</sup> grade kids have a great inquisitive attitude and love the interview exercise, 5<sup>th</sup> or 6<sup>th</sup> grade kids might in some cases be better able to process the interview answers into essays that are more insightful for the town’s overarching forest management objectives.
- ▶ Kids do have a hard time asking questions, listening to the answers and writing down the most relevant aspects of the conversation. Possible solutions are to have a tape recorder for each interview so the kids don’t have to worry about writing everything down, or have an adult scribe to capture the comments, which the kids can then translate into essays later. Some schools are even recording interviews to develop podcasts. This is a great way to work education on new technology into the project.



- ▶ Make sure the teacher or other engaged adult knows that while the interview process is very valuable, that one goal of the project is to have the kids process what they learned by writing essays or papers about the experience and documenting what they learned from the elder they interviewed.
- ▶ Groups of 2 or 3 kids seem to work best, allowing for a range of interview abilities and interests and enabling a group project.

### ***Final products: Youth-Elder Interviews***

In addition to the essays themselves, which can be compiled into a fun booklet showcasing the interviews and photos, each young person's essay will be compiled with the others into a draft statement on the importance of the community's local forest. This statement can also be informed by follow-up conversations with the elders by reconvening them to fine-tune information gleaned from the interviews, as well as other sources of community input on forest management issues.

Sample youth-elder essays are included in Chapter Eight.

### **C. Town Forest Statement**

The young people's essays, based on the material from the elder interviews, can then become the starting point for a draft document that begins to reflect a community's vision for its town forests and other forest resources. This document can be rewritten and refined first by the elders who participated in the interviews and then by different groups in the community in various public venues. The goal is to gradually arrive at a statement that accurately reflects a localized land ethic that will inform how residents want their community forests to be managed and stewarded. Ideally, the statement will become a touchstone document that the community uses as a guide for writing or revising management plans for the town's forest and for conducting other forest-related activities.

#### ***How to: Town Forest Statement***

The draft statement can be processed and refined by various groups or committees in town such as the planning or conservation commissions, local recreation groups, and the original group of elders interviewed by the students. Noting that it is a "working document" allows community members to feel that editing it is an ongoing process and that their input matters.

Describing the process and goals of arriving at such a forest "resolution" in the local paper and other public documents can help spread the word and encourage all town residents to think about the importance of forests to the community.

Feedback should be invited and encouraged, and incorporated into a final forest statement or resolution on the importance of a community's forested landscape to the character of the community. Community members can be persuaded to participate by emphasizing that this is one means to have your values and visions incorporated into a town planning effort.

To heighten the exposure of this forest resolution throughout the community, one idea is to post it around town accompanied by a photographic essay that illustrates its principal points and vision. The key is to really get it out there so that it sparks community conversation and draws in new participants. Having a local group (such as the conservation commission, the group of elders themselves, or ideally the select board) "adopt" the statement may help solidify its role in guiding management decisions and will help assure this "air time" for the statement.





Possible issues related to “adopting” a forest statement such as this include:

- ▶ It may be difficult for an entire community to all get behind one “statement” or “resolution” about how a town-owned resource should be managed, let alone arriving at one vision for forest management or a forest ethic.
- ▶ Bringing people together to try to arrive at a collective vision may require a skilled facilitator.
- ▶ It may not be necessary (and even feel disingenuous) to collectively arrive at a vision, since different community members may have many different ideas that are better expressed in a different format.

### ***Final products: Town Forest Statement***

Chapter Eight includes Warren’s Town Forest Statement.

### **D. Rediscovering Town Forests: Celebrations and Discovery Days**

Hosting a town forest discovery day or forest celebration is a fun way to increase awareness about the town’s locally owned forested resources and to encourage more use and appreciation of the nearby woods. It can also provide an opportunity for people to learn something new about the woods they may be able to utilize on their own property as well as to generate interest in community stewardship of town-owned lands.

This event can highlight the great opportunities that the town forest provides citizens for reconnecting to the woods. It will also ideally lead to community interest in further managing and utilizing these great resources. This increased interest will lead to more tuned-in engagement when decisions about management of these lands are processed.

#### ***How to: Town Forest Celebrations and Discovery Days***

These celebrations are meant to inspire and excite community members about the woods, and about their town-owned forested resources in particular.

Scheduling a day or an afternoon of interesting and varied workshops and guided walks in the town forest that will appeal to a wide spectrum of folks is one way to increase woods awareness. These talks can be focused on forest management considerations, natural history, sugaring, birding, tracking, geocaching, or any other topic that might entice folks to come out for a couple hours. The goal is to help deepen appreciation for the value and richness of our forest traditions and our own forests as a wonderful community resource, so the range of possible topics is endless.

To solidify a good turnout, sending invitations to specific people is key. These would include the students and elders who participated in your interviews (and those who were invited but couldn’t make it), as well as various town board members. Also important is making sure that the local school(s) is aware of the event by putting up posters about the day at the school and submitting a notice to the school’s newsletter. Another way to engage the school community is to work with a teacher to have one of the workshops relate to their current curriculum, or if relevant, have a class “host” one of the workshops.



Things to keep in mind when scheduling an event like this:

- ▶ Schedule around possible conflicts such as sports games, church, and other, larger community-wide events. Consult a local community calendar if there is one.
- ▶ Limit the timeframe to a half-day as most people are busy and, while very interested, they may not be able to devote a whole day to one event.

### ***Final Products: Town Forest Celebrations and Discovery Days***

Schedules and workshop descriptions of several forest discovery days are attached in Chapter Eight.

## **E. Community Stewardship Projects**

Given that one of the goals of the VTFP is to involve the community in stewardship of our town forests—as well as to develop a sustainable forest management plan for each town forest – an important community engagement exercise is to solicit input from the public on what is important to them about these lands and their stewardship priorities. Providing an opportunity for the community to reflect on how the town forestlands have been used in the past and voice how they might best be stewarded into the future enables a more informed approach to managing the town forest that reflects community goals, rather than a narrow vision that might be put forth by a town board without the advantage of community input.

One way to do this is to hold a series of “listening sessions” that provide background on the forests, discuss how/if they are being managed now, and most importantly provide an opportunity for attendees to offer opinions on how they should be managed into the future. Inquiring about current and future uses and management objectives and developing a list of priority stewardship projects funnels visions and goals into tangible tasks that the community can get involved with.

### ***How to: Community Stewardship Projects***

These listening sessions should be advertised as expertly facilitated public forums that will include presentations by knowledgeable residents or relevant experts who have or are currently collecting data about the town’s natural resources.

It is important to offer presentations wherein attendees will feel like they are both learning something and provided the opportunity to offer their opinion.

Advertise the meetings in any media available, including:

- ▶ Newspapers
- ▶ Local radio public service announcements and interviews
- ▶ Posters/flyers
- ▶ Email lists (grassroots & subscribed such as Chamber of Commerce)
- ▶ Interactive opportunities such as farmers’ markets

- ▶ School bulletins
- ▶ Town and other connected groups' web sites
- ▶ Event calendars

### ***Final products: Town Forest Stewardship Projects***

Based on input from these sessions, the town conservation commission can adopt a set of priority activities for the town forest. These activities will be determined by each community based upon specific community values as determined through the listening sessions and other past community input. These stewardship priorities can be multiple-use in nature and scope but should be connected with the town's goals and visions for its town-owned forests.

If a town forest management plan exists, the conservation commission can ask the county forester, or contract with a consulting forester, to revise the plan based upon the listening session outcomes. If a town forest management plan does not exist, the conservation commission will ask the county forester, or contract with a consulting forester, to write a plan based upon the town's forest resolution and the listening sessions outcomes.

Finally, towns can adopt an implementation timetable for putting the new stewardship priorities into play. The conservation commission or some other appropriate municipal entity can then work with local leaders, technical experts and Vermont Town Forest Project partners to begin work on the ground to implement a stewardship priority.

Examples of what towns have accomplished are truly inspirational. In the Town of Goshen, citizens have long worked together to manage the Goshen Town Forest that lies adjacent to the Green Mountain National Forest. The town has had marvelous success with generating logging revenues that have funded town projects and also a sugaring operation that makes free maple syrup available to every town resident. It is not a coincidence that Goshen is also the home of the non-profit Moosalamoo Association that has collaborated so successfully with the staff for the GMNF in supporting its management. Moosalamoo Association volunteers do important work as citizen stewards on the national forest, conducting management activities from apple tree release to trail improvement.

The Town of Sharon, in partnership with VINS and others, has created an excellent model of field education for students to help them learn about everything from forestry and forest stewardship to wildlife and habitat management through field education in the Sharon Town Forest. Students write essays recommending stewardship priorities for the town, based on what they have learned.

In Warren, the stewardship priority was to complete assessment of the various features and resources of the two town-owned forests in the Village. Among the assessments completed or now underway are bird habitat, timber, wildlife habitat, natural communities, and a trail design plan. Community members will build and enhance trails on the two parcels after the applicable town boards have approved the trail design.

Sample listening session agendas and stewardship priorities are included in Chapter Eight.





## F. Leveraging Community Interest and Awareness

One of the most essential things to do is leverage your hard work by making sure community members who participated in the event feel recognized and those who were not able to attend get a sense of the activity and energy in your town forest. This subsection captures some of the unique issues and strategies connected to gaining press in each stage of the progression of activities described in this chapter.

Articles in the local paper can pique interest about the project leading up to the town forest interviews, and then also report on the success of the day by providing photos and fun quotes from the kids and elders on what they learned. By ensuring that follow-up articles with great photos are in the local paper(s), the wider community can be kept up to speed on the initiative. Bringing kids together with older folks is always a community crowd pleaser. In a press release reviewing the student-elder day, the next upcoming related event should be highlighted and the connections made clear as one event progress to the next.

In seeing press about the student-elder interviews, other educational professionals from other towns may be interested in replicating the project in their town. Similarly, educators or youth group leaders involved in the project can spread the word about the project to other educators and leaders such as through scout leader meetings, church get-togethers, and educational workshops and conferences.

It is extremely important to get solid press coverage and public notice connected to any meetings to develop your town forest statement. This will assure broad input and most importantly avoid the sense that anyone was intentionally excluded from the conversation.

Even if community members were not able to attend a town forest discovery day or celebration, they can still be connected to the event through a news story or other follow-up coverage that builds awareness of what occurred. Making folks feel like they were they can be hugely valuable in building momentum forward from a town forest event. The sense that “something is happening” around the town forest makes community members more inclined to attend future activities.

For other cultural and educational resources through the Vermont Town Forest Project partners and the work of many other great organizations around Vermont, please see Chapter Eight.





## Educational Activities Case Study:

### Town of Putney

The Town of Putney has done a model job of using its town forests as an educational resource for local students. The town owns multiple forests, including the high elevation Putney Mountain parcel where local students have constructed an interpretive trail. A particular hub of local activity is the School Forest parcel adjacent to the Putney Central School. For the past three years the Putney School Forest Committee has organized and led six-week spring and fall programs in the School Forest. These take place after school, two days a week, from 3 to 5 pm and are open to all students in grades 2 through 6. Activities have included building six new trails, installing an information kiosk, constructing a lean-to hideout, playing woodland games, maintaining the trail system, and enjoying camp fires and swims in Sacketts Brook. The School Forest Committee has also developed and led a snowshoeing activity as part of the school-wide Winter Sports Program. During January and February, students in grades 4 through 6 snowshoe the School Forest trails, identify and follow animal tracks including mouse, fox, turkey, otter, and deer, build and use a group hideout, play games on snowshoes, construct "quinzees" (snow houses), and eat 'smores around a campfire.

#### To Learn More:

Visit Putney Central School on the web at [www. Dover.net/~putneyc/](http://www. Dover.net/~putneyc/)



## Chapter 7: Creating a Town Forest

**A. Overview of a Community Conservation Project**

**B. Success Story of a Vermont Town Forest Acquisition**





## Creating a Town Forest

While slightly more than half of Vermont communities already have a town forest or other significant municipal forestland, the Vermont Town Forest Project has discovered great interest among those communities that do not yet have a town forest in pursuing purchase of a new town forest. We have also discovered significant interest among communities that already have a town forest in purchasing additional land for town ownership. This locally controlled solution to keeping key forest parcels forested and open for public access is gaining momentum statewide.

This chapter is designed to help your community understand the action steps and strategies that are involved in town forest acquisition projects. Perhaps above all, the primary success strategy in most communities has been to engage community members early and often in the process. There are natural concerns and questions that arise along with any town purchase, whether a piece of land or a new fire truck. Keeping community members engaged and informed throughout the process can play a key role in avoiding misunderstandings or uninformed opposition. Another overarching success strategy is for a community to take on a non-profit partner organization, such as the Vermont Land Trust or the Trust for Public Land. These and other non-profit land trusts and conservancies have not only deep expertise in the legal side of purchasing land for community ownership, but equal skills in helping to build community support and fundraising strategies so that communities do not need to bear the financial costs alone.

### A. Overview of a Community Conservation Project

This overview of how to pursue community projects such as town forest acquisitions is excerpted from Vermont Land Trust's publication, "Community Conservation Projects." This excellent publication provides a helpful summary of what kinds of parcels will make for successful projects and what your community will need to commit to and have in place to succeed. It also provides a helpful overview of the skills and resources that Vermont Land Trust can bring to a project. (The full publication is available for download from the Vermont Land Trust's website at [www.vlt.org/Community\\_Land\\_brochure.pdf](http://www.vlt.org/Community_Land_brochure.pdf).)

#### ***"Definition of a Community Project***

Vermont Land Trust (VLT) actively seeks to serve communities that have identified lands of great community importance and notable natural resources. The most successful community projects involve land that:

- ▶ Helps preserve a sense of community or local heritage, such as a hay meadow that forms a scenic gateway to a village; or land where community members gather for public events;
- ▶ Is valuable for recreation, such as ball fields, swimming holes, or trails; or
- ▶ Connects people to nature, such as a town forest used by school groups or local residents for nature study, wildlife observation, or general enjoyment of the outdoors.



Beyond the land conserved, successful conservation projects:

- ▶ Generate local enthusiasm for and participation in the conservation effort
- ▶ Benefit a broad public
- ▶ Include plans for long-term ownership and management of property
- ▶ Support a community's vision of its future

### ***The Role of the Community***

The sustaining vision and the motivation for a conservation project must come from the community. VLT joins communities to conserve land only when a local group is an enthusiastic partner in the effort. A local group may be made up of elected town officials, a local conservation group, or interested volunteers. In addition, a community must confirm that conservation of the land is in accordance with a Town Plan or other community planning efforts. While VLT can lend significant expertise to the acquisition or protection of the property, the motivation, knowledge, and insight of local residents make community members uniquely suited to contribute to the project's success in the following ways:

- ▶ Provide first-hand knowledge of the land and its context
- ▶ Provide access to local sources of information or assistance
- ▶ Raise awareness about the project
- ▶ Plan for future ownership management, or use of the land
- ▶ Initiate and organize neighborhood or town-wide meeting
- ▶ Identify supporters and potential donors
- ▶ Carry out local fundraising
- ▶ Lead local publicity and celebration efforts

### ***The Role of the Vermont Land Trust***

Depending on the needs of the community, VLT can:

- ▶ Research and inventory natural resources
- ▶ Develop project design and conservation plans
- ▶ Coordinate appraisal work and conduct mapping
- ▶ Negotiate with landowners
- ▶ Apply for public or foundation funds
- ▶ Assist with local fundraising
- ▶ Maintain the accounts, including contributions and costs
- ▶ Do legal work, for example, draft purchase agreements and assist with title searches and closing procedures
- ▶ Assist with priority-setting, planning, and publicity strategies
- ▶ Provide perpetual stewardship for the conservation easement on protected land



Virginia Stranahan Town Forest, Marshfield



## Getting Started with VLT

The Vermont Land Trust's involvement often begins when an individual calls VLT concerned about an important piece of land in town. Sometimes the call is prompted by an impending sale or transfer of the property, while other times it follows a community planning process that has identified land that contributes to the town's scenic landscape, local economy, or community life. Through the initial conversation, subsequent discussions, and a site visit, pertinent information is shared and the conservation opportunity is assessed. Often a local group is organized to lead the conservation work. Before the project proceeds, an informal working agreement is prepared that describes the roles and responsibilities of the community group as well as VLT staff.

## A Community Project in Your Town?

Community projects are often complex undertakings that take months to complete. However, people who organize to identify their special places and take action to save them realize a great sense of accomplishment, ownership, and peace of mind. If there is a parcel of land in your community that seems particularly important, call the Vermont Land Trust. Your actions may well lead to the conservation of land that will enrich your community for generations to come.

## For More Information, Contact:

### Vermont Land Trust

8 Bailey Avenue, Montpelier, VT 05602  
(802) 223-5234  
(800) 639-1709  
[www.vlt.org](http://www.vlt.org)

We will put you in touch with the VLT regional director nearest your community."

*Excerpt reproduced with permission from Vermont Land Trust.*



## To Learn More:

You can find a complete list of land trusts working in your area by visiting the Land Trust Alliance on the Internet at [www.ltanet.org/findalandtrust/](http://www.ltanet.org/findalandtrust/)

## Creating a Town Forest:

### Town of Marshfield

The 621-acre Virginia Stranahan Town Forest in Marshfield was conserved in October 2007 with the Vermont Land Trust. This conservation effort was made possible by the Stranahan Trust, the support of the Vermont Housing and Conservation Board, and the generous support of 104 private donations. The Town of Marshfield will steward the land with a forest management plan that balances the use and protection of the many resource values of the property, including timber, wildlife habitat, historic features, hunting, trail-based recreation, and agriculture.



## To Learn More:

Visit Vermont Land Trust at  
[www.vlt.org](http://www.vlt.org)





## B. Success Story of a Vermont Town Forest Acquisition

Vermont has many great examples of communities rallying together to support acquisition of a new town forest, including the recent creation of a new town forest in the Town of Marshfield thanks to the work of the Vermont Land Trust. Another exciting recent example has been the work of the Trust for Public Land (TPL) and the Upper Valley community of West Fairlee to purchase a new 1800-acre town forest, with an eye to eventually connect with adjacent municipal lands in Bradford and Fairlee into a larger Brushwood Community Forest. This project is notable on many levels, perhaps foremost for the skillful way that Patricia Ayres Crawford of the West Fairlee Select Board and other community leaders worked with community members to patiently build deep support for the project. It is also notable for linking together adjacent communities through town forests—the West Fairlee Town Forest has led to new community conversations among the three communities and created opportunities for collaboration on stewardship and other matters.

The Trust for Public Land brought important resources and skills to enable this project to succeed, including local and national connections that enabled West Fairlee to raise public and private funding of \$2 million for this project. A full \$1.5 million of this amount was secured through a Forest Legacy Program grant that TPL and the Vermont Town Forest Project have helped West Fairlee obtain with leadership from the State of Vermont and Vermont's congressional delegation, most notably Senator Patrick Leahy. The story of West Fairlee highlights how success building support from the bottom up can produce valuable new town forests for communities that are willing to make the commitment of time and energy. This overview of the project is excerpted from TPL's excellent publication that it recently completed with its partners in the Community Forest Collaborative entitled, "A Community Investment Strategy: Community Forests."

### ***"West Fairlee Town Forest: Brushwood Community Forest Initiative***

*This conservation effort will ultimately create a 3,400 acre contiguous block of working forestland to be managed as a regional resource.* — Forest Legacy Application, July 2006

On October 12, 2006, Patricia Ayres Crawford, chairman of the board of selectmen in West Fairlee, Vermont, received word that the West Fairlee Town Forest project had just been selected as Vermont's No. 1 priority project for consideration under the Forest Legacy Program. This news offered welcome support for the town's effort to purchase ten privately owned parcels of land to establish a 1,172-acre West Fairlee Town Forest. Moreover, it helped to launch the Brushwood Community Forest Initiative, which, in addition to establishing the West Fairlee Town Forest, seeks permanent conservation of the Town of Bradford's municipal water district lands (591 acres) and consolidation of these properties with the Fairlee Town Forest (approximately 1,700 acres) into a 3,400-acre contiguous block of working forestland that would be managed regionally.

The Brushwood Community Forest Initiative represents a unique application of the Community Forest Model and demonstrates the potential role of community ownership and management in:

- ▶ "Defragmenting" productive forestland
- ▶ Conservation of larger landscapes
- ▶ Permanent conservation of existing municipal lands
- ▶ Regional cooperation in resource conservation

In addition, the Brushwood Community Forest Initiative highlights the critical role that supporting institutions and public funding programs play in assisting communities to acquire, own, and manage forestland.

### ***The West Fairlee Town Forest Project***

A West Fairlee municipal forest located along the Fairlee-West Fairlee town line was originally proposed in 1971 by the Orange County Natural Resources Technical Team (NRTT) in order to “consolidate the three properties into a [single, expansive] tract in public ownership. Good accesses are provided to the proposed site from Fairlee, Bradford, and West Fairlee over existing town roads and its location offers a central base for an all-purpose recreational trail system covering all areas in the forest complex. It is the recommendation of the NRTT that this site be acquired by the Town of West Fairlee with the assistance of state and federal funding programs.”

The NRTT recommendation also states that “this type of land form, in addition to wild streams, abandoned farmland in transition, and varied forest types, provides the basis for an excellent multiple-use municipal forest.”

While West Fairlee does not have a town forest, the idea has “always been around town” in part because of the experience in neighboring towns and in part because people in the community value their natural resources. In the 1980s the idea was proposed and “everybody wanted to do it. ...[but] didn’t want to take land off the town’s tax rolls.”

When Patricia Ayres Crawford and her husband, Dave, purchased 150 acres and moved to West Fairlee, they began to explore opportunities to conserve their land, including town ownership. The Town of West Fairlee, however, did not have a conservation commission. For many people, the Crawfords included, there is considerable skepticism about long-term conservation for a town forest that is managed solely by a board of selectmen that has many competing demands on its time and for town resources. Without at least a conservation commission, town ownership of the Crawford land would not ensure the kind of protection Patricia and Dave were seeking.

Patricia was quickly becoming an active member of the community, including running for and winning a position on the board of selectmen. While she had the town forest idea in mind, many issues and other projects would require her time, as well as influence future possibilities for a town forest. At the outset, there was a significant issue related to town taxes. For West Fairlee, with little industry and no retail industry, the cost of community services falls squarely on the shoulders of property owners. In addition, a new state law enacted in 2002 (Vermont Act 60) and intended to address school funding issues resulted in significant increases in local property taxes. This had a double impact for conservation in the town. First, and perhaps foremost, any project that would require financing from the local tax base would certainly go nowhere. Increasing taxes, however, were also putting pressure on landowners to subdivide or sell land, creating both a conservation challenge and an opportunity.

At the same time, the town needed to update its master plan. In preparation for that process, a townwide survey was prepared and circulated in the summer of 2004. Included in the survey was the following question: “Should the town work with landowners to conserve land?” In response, “86% of people said yes.” In addition, “no other question had the same response rate.” As a result, the updated master plan includes new language in the section on recreation that reads: “the town should create a town forest” and makes reference to the survey. Patricia Ayres Crawford and native resident Fred Cook also began efforts to talk with individual landowners who either owned important parcels of land or might be interested in conservation. In addition, there were growing



efforts to engage the community in appreciating and conserving the town's resources. The conservation commission linked the programs for the monthly speakers series to the town forest project and sponsored events such as a "green up day," walks on the Rivendell Trail, and a "poetry" hike. These events began to attract wider community participation and interest in the town's natural resources. When, in 2005, town residents were asked to vote to establish a conservation commission, they did, and enthusiastically so. Not only was the vote unanimous but also, as the story goes, by the close of Town Meeting, 11 people had volunteered to serve on the newly established nine-member commission.

Two weeks after that Town Meeting, the Vermont Association of Conservation Commissions held its annual meeting and conference. Patricia Ayres Crawford attended the meeting and heard presentations by Jad Daley of the Northern Forest Alliance's Vermont Town Forest Project and a representative from The Trust For Public Land (TPL). The presentations both reaffirmed, for Patricia, the currency of her idea and offered potential help in her efforts. She contacted TPL, and in July 2005 Jad Daley from the Vermont Town Forest Project and Rodger Krussman from TPL met with the West Fairlee Conservation Commission.

For Rodger, this project offered an opportunity to create a Community Forest by amassing a number of parcels of private land that could demonstrate the potential of the Community Forest Model to "defragment" productive forestland—a major issue in the region's forested landscape. Rodger, Patricia, and Fred set to work on a West Fairlee Town Forest project by identifying potential parcels of land that could be assembled into one large parcel. Patricia and Fred had tried, on a number of occasions, to enlist private landowners in the project without success. When Rodger joined the effort, he brought TPL's stature as well as professional experience in meeting and negotiating with landowners. This proved to be enough to secure commitments from some landowners—and enough to leverage discussion with others.

For Patricia, and the Community Forest project, the value that TPL brought to the project included a capacity to negotiate options on easements and fee purchases, to develop publicity materials to expand public awareness of and support for the project, to assemble the Forest Legacy application, and to promote the project within state agencies and congressional offices. By December 2006 TPL had purchased the first property, had contracts on three properties, was negotiating with three landowners, and had initiated discussions with four other landowners.

During the same time period, the town had voted to approve the project and establish a West Fairlee Town Forest; the application had been submitted to the Forest Legacy Program and received the top ranking for the State of Vermont; at least one public meeting had been held to engage community feedback on the purpose and management of a town forest; and over \$100,000 had been raised locally toward the effort.

### ***Expanding the Vision: The Brushwood Community Forest Initiative***

The idea to expand the project beyond the West Fairlee Town Forest evolved from conversations between Patricia Ayres Crawford, Jad Daley from the Vermont Town Forest Project, Orange County Forester Dave Paganelli, and Rodger Krussman from TPL. Although Patricia had the larger landscape in mind, her immediate focus was to fill "a gap" in conserved lands in West Fairlee. Rodger, who had had earlier experience with community forests and had played a valuable role in connecting conserved land across a larger landscape, saw the pieces that could create a mosaic of conserved land in the three towns. There was definitely added value in expanding the project beyond a single town forest project:





1. A 3,400-acre project would present a stronger application to the Forest Legacy program.
2. A larger regional project would expand access to more funding sources.
3. A project that brought in assets of three towns would encourage cross-town discussions that could expand regional cooperation in other areas.

For all, the opportunity to link the Fairlee town forestlands, a new West Fairlee town forest project, and the Bradford water and sewer commission lands would not only add value to the project, but would also offer another model for the role and value of community ownership of forestland.

### ***Funding the project***

If there was one thing upon which everyone in all three towns could agree, it was that the Brushwood Community Forest Initiative could not move forward if it were to count on an appropriation from town budgets or require any municipal bonding that would have implications on the tax rates in the towns. In fact, discussion of a West Fairlee town forest or the idea of Brushwood Community Forest would never get off the ground in any of the three communities.

The West Fairlee Town Forest and the Brushwood Community Forest Initiative, however, had some characteristics that TPL felt made it a strong candidate for funding under the Federal Forest Legacy Program. The project could be described within the context of a larger landscape with high conservation values, it was a community-based initiative, and it was located in an area described by the United States Forest Service as “threatened forestland.”

The project budget for the Brushwood Community Forest Initiative is \$2 million, which includes acquisition costs to purchase both conservation easements and land in fee (\$1.5 million); project costs, including survey, legal, and professional staff (\$300,000); and stewardship costs (\$200,000). An application for \$1.5 million was prepared and submitted to the Forest Legacy Program, leaving an additional \$500,000 that would have to be raised through land value donations and private donations to satisfy the matching requirement under the program. Of that, \$250,000 would have to be raised from individuals within the three towns. According to Patricia Ayres Crawford, they are “committed to private fundraising.” This commitment is founded on the recognition that many people in addition to town residents will be using the forest and that town residents will be committing significant volunteer time to the project and in managing the forest. They decided that fundraising should be based on people’s capacity and willingness to contribute voluntarily. To date, the strategy is showing impressive results. Over \$100,000 has been raised. Individuals from both West Fairlee and Fairlee have committed \$25,000. Five thousand dollars of a \$13,000 state grant from the Vermont Housing and Community Affairs for planning in West Fairlee was allocated to the town forest project.

The potential funding from the Forest Legacy Program offered something else. If town funding had been a requisite for success of the Brushwood Community Forest Initiative, it would have been impossible to have even preliminary discussions about the potential of the initiative. The ranking of the application and the possibility of external funding for the project created a climate in which people could have discussions about the project and could work to build public support from individuals within each of the towns. In addition, the matching requirement of the program presented an incentive to undertake some level of fundraising at the local level.



Patricia Ayers Crawford in the  
Brushwood Community Forest

## **Building Support**

The West Fairlee town forest is being constructed because of the leadership and vision of people within the town supported and assisted by professional staff from The Trust for Public Land. Though Patricia and Fred always had in mind the big picture of establishing a larger Community Forest, the description of the project evolved as smaller efforts to engage people in conserving important resources in town gained interest and participation. The survey, walks, cleanup days, master planning process, and informal meetings and discussions between people in town led to the formation of the conservation commission and laid the groundwork for meetings with landowners, public meetings, and a potluck dinner to discuss the idea of a community forest and secure public support for a West Fairlee town forest. In March 2006 West Fairlee residents were asked for support of the project and, with a unanimous vote at town meeting, they gave it.

Concurrently, Patricia and Rodger began to meet with people in Fairlee and Bradford to describe the opportunity for a regional conservation initiative and to help build public support in those communities for the Brushwood Community Forest Initiative. For a long time, the Bradford Conservation Commission had been interested in protecting the municipal watershed lands. In 2004 Nancy Jones, chair of the Bradford Conservation Commission, convened a meeting to which were invited members of the Bradford Water and Sewer Commission, members of the select boards of the towns of Bradford, Fairlee, and West Fairlee and the Upper Valley Land Trust. The outcome of the meeting was an agreement to develop a joint proposal between the Upper Valley Land Trust and the three towns for funds to acquire development rights. The proposal was not funded. But that was not the only setback. The conversation awakened some strong sentiments in town concerning property rights, the federal government, and any effort that would result in Bradford “losing control” of the land.

In 2006 the conservation commission invited Rodger and Patricia to brief the Bradford Water and Sewer Commission about the Brushwood Community Forest Initiative and the important role of the Bradford Water and Sewer Commission lands in the initiative. By then, the Forest Legacy application was sufficiently well along that they could offer the potential for money. If the Water and Sewer Commission wanted to sell the land, there would be substantial revenues; if it wanted to sell the development rights, there would not be as much, but there would be some. The board was willing to listen and consider. It is anticipated that members of the Conservation Commission, supported by Patricia and Rodger, will continue discussions and education about the initiative with members of the Water and Sewer Commission and Bradford residents. A recent Bradford Conservation Commission event offered a strong signal that the community was behind the initiative. In planning its annual meeting and auction for 2007, the commission had pledged that half the proceeds would go to the Brushwood Community Forest Initiative. Commission members communicated that pledge to all donors for the auction and to all those who bought tickets and auction items. One hundred thirty people attended the event (more, as Nancy Jones put it, “than attend town meeting”), and the commission raised \$6,400 of which \$3,200 will go to support the Brushwood Community Forest Initiative. When asked if she thought the initiative would be successful, Nancy Jones replied, “Oh yes ... and it blows my mind ... I admire Patricia Crawford for thinking big.”

The Town of Fairlee poses more complex challenges. There have been recent and quite contentious debates in the town over planning and zoning. Initial efforts to engage the Town of Fairlee have included the following:

- ▶ A meeting with the Fairlee Town Forest Advisory Board in May 2006
- ▶ A meeting with the Fairlee Select Board in the fall of 2006
- ▶ Informal discussions with other leaders in town to build support for the project

The town currently is divided, and while Patricia and Rodger received a positive reaction from the town forest board, they were advised to move slowly and not push for votes at town meetings or organize town-wide public meetings. There are, however, individuals within the town who have made generous pledges to the fundraising effort and/or have expressed their interest and commitment to the initiative. Efforts within Fairlee will focus on meeting with individuals, working through the town forest board, and building support slowly over time...

### **Next Steps**

While everyone waits for a decision on funding from the Forest Legacy Program, there are many other activities under way:

**Commitments on land.** TPL is continuing its effort to secure commitments on the various parcels of land. It has purchased one property, has contracts on three other properties, is in negotiations with three landowners, and is in discussion with four others (including the Bradford Water District).

**Fundraising.** Fundraising is under way both within each of the three communities and by TPL. It is expected that \$500,000 will be raised from a combination of individual donations and grants.

**Public support.** While the Town of West Fairlee has already voted to establish a community forest, there is ongoing work to secure the approval of the Bradford Water and Sewer Commission and the Town of Fairlee to include those lands in the Brushwood Community Forest Initiative. This requires continuing discussion with town boards, educating board members and town residents on the goals and opportunities of the initiative, and scheduling votes by appropriate town boards.

**Management and governance.** The goal is to establish a management and governance structure for the Brushwood Community Forest that will include representation from each of the three towns and will be vested with the authority to make management decisions. Under the Vermont state statute governing town forests, any town that owns forestland may request management assistance from the County Forester. In this case, Dave Paganelli, the Orange County Forester, has worked with the Bradford Water District, is familiar with the other parcels, and is strongly supportive of the Brushwood Community Forest project. In a letter of support for the Forest Legacy application, Dave wrote: "In my eighteen years as Orange County Forester I have seen no other project that has this much potential to preserve productive working forest and keep such a large acreage open for public recreation. It is clear to me that this project would have a significant positive impact on the communities involved." For Robert Nutting, chair of the Bradford Water and Sewer Commission, the important thing is that management will be in "local control."

It is hoped and expected that the Brushwood Community Forest Initiative will be completed by the spring of 2008..."

*Excerpt reprinted with the permission of the Community Forest Collaborative. For a copy of the full publication contact Marcy Lyman of the Quebec-Labrador Foundation at [mlyman@qlf.org](mailto:mlyman@qlf.org) or download a pdf at: [http://www.tpl.org/content\\_documents/community\\_forests\\_report\\_webversion.pdf](http://www.tpl.org/content_documents/community_forests_report_webversion.pdf).*

### **Go to the Source:**

Patricia Ayres Crawford has generously offered to share her insights with other community leaders. Patricia can help your community understand the process that West Fairlee has used to gain community buy-in throughout the development of the Brushwood Community Forest.





## Chapter 8: Appendix/Resources

- A. County Foresters**
- B. State Resources for Town Forests**
- C. Town Forest Contacts**
- D. Supplemental Chapter Materials**



## A. County Foresters

Vermont's county foresters are state employees under Vermont's Department of Forests, Parks, and Recreation who are available to provide information, technical assistance, and outreach to the people of Vermont about managing and stewarding forestland. They can often provide direct support or guidance to communities who want to take an active role in managing their town forests, or can help a community find a professional forester if the county forester is unable to provide the services requested. County foresters are a great first stop when your community is looking to take on a new project related to your town forest.

### **Nancy Patch**

Franklin & Grand Isle Counties  
278 S. Main, Suite 2  
St. Albans, VT 05478  
(802) 524-6501

### **George Buzzell**

Orleans County  
P.O. Box 490  
Newport, VT 05855  
(802) 334-2091  
george.buzzell@state.vt.us

### **Ray Toolan**

Lamoille County  
29 Sunset Dr. Suite 1  
Morrisville, VT 05661  
(802) 888-5733  
raymond.toolan@state.vt.us

### **Mike Snyder**

Chittenden County  
111 West Street  
Essex Junction, VT 05452  
(802) 879-5694  
michael.snyder@state.vt.us

### **Matt Langlais**

Caledonia & Essex Counties  
1229 Portland St., Ste. 201  
St. Johnsbury, VT 05819

(802) 751-0111

matt.langlais@state.vt.us

### **Russ Barrett**

Washington County  
5 Perry Street  
Barre, VT 05641-4265  
(802) 476-0172  
russ.barrett@state.vt.us

### **Chris Olson**

Addison County  
68 Catamount Park, Suite C  
Middlebury, VT 05753-1292  
(802) 388-4969  
chris.olson@state.vt.us

### **David Paganelli**

Orange County  
5 Perry Street  
Barre, VT 05641-4265  
(802) 476-0173  
david.paganelli@state.vt.us

### **Eric Hansen**

Rutland County  
271 North Main Street, Suite 215  
Rutland, VT 05701  
(802) 786-3853  
eric.hansen@state.vt.us

### **Jon Bouton**

Windsor County  
220 Holiday Drive, Suite 5  
White River Junction, VT 05001  
(802) 281-5262  
jon.bouton@state.vt.us

### **Bill Guenther**

Windham County  
11 University Way, Suite 4  
Brattleboro, VT 05301  
(802) 257-7967  
bill.guenther@state.vt.us

### **Sam Schneski**

Assistant County Forester  
Windham & Windsor Counties  
100 Mineral Street, Suite 304  
Springfield, VT 05156-3168  
(802) 885-8823  
sam.schneski@state.vt.us

### **Nate Fice**

Bennington County  
478 Shaftsbury SP Rd.  
Shaftsbury, VT 05262  
(802) 375-1217  
nate.fice@state.vt.us



## B. State Resources for Town Forests

### Vermont Urban and Community Forestry Program

The Vermont Urban and Community Forestry Program offers competitive cost-share grants through its Trees for Local Communities (TLC) grant program. Grants are offered in five categories: education, planning, planting, maintenance, and “mini.” The maximum funding available for proposals is \$4,000 for the core categories and \$200 for mini grants. Many communities have been successfully developed management plans for their town forests utilizing a TLC planning grant. For more information, contact Danielle Fitzko at 802-241-3673 or visit [www.vtcommunityforestry.org](http://www.vtcommunityforestry.org)

### Vermont Recreation Trails Grants

The Recreation Trails Grant Program helps to create and maintain trails and greenways in Vermont and provides up to 80% of the cost of acquisition, development, and maintenance of recreation trails. Funds are available to municipalities and nonprofit organizations. For more information, contact Sherry Winnie at 802-241-3690 or [sherry.winnie@state.vt.us](mailto:sherry.winnie@state.vt.us) or visit [www.fpr.org/recgrant/index.cfm](http://www.fpr.org/recgrant/index.cfm).

### Vermont Forest Legacy Program

Forest Legacy is a federally funded program designed to conserve forestland, with money available to landowners or government entities who qualify and are willing to participate. Specifically, as part of the Forestry Title of the 1990 US Farm Act, Forest Legacy has the purpose of “ascertaining and protecting environmentally important forest areas that are threatened by conversion to non-forest uses and, through the use of conservation easements and other mechanisms, for promoting forest land protection and other conservation opportunities.” The program has been used in Vermont for town forest acquisitions. For more information, contact Kate Willard at 802-241-3697 or [kate.willard@state.vt.us](mailto:kate.willard@state.vt.us) or visit [www.vtfpr.org/lands/flp.cfm](http://www.vtfpr.org/lands/flp.cfm)

### Vermont Housing and Conservation Board

The Vermont Housing and Conservation Board (VHCB) makes loans and grants to nonprofit organizations, municipalities and state agencies for the acquisition of land and for the purchase of conservation easements. It is funded by law through a portion of the property transfer tax and has been Vermont’s most reliable source of conservation funding for projects like farmland conservation and acquisition of town forests. All conservation projects are protected in perpetuity. For more information, contact Karen Freeman at 802- 828-5067 or [kfreeman@vhcb.org](mailto:kfreeman@vhcb.org) or visit [www.vhcb.org](http://www.vhcb.org).

### Become a Vermont Tree Steward

Each winter, the UVM Extension and VTFPR offer “Stewardship of the Urban Landscape: Tree Steward Training” for urban and community forestry volunteers around the state. The program is offered at multiple locations through VT Interactive Television (VIT). The eight-week program helps empower citizens to become stewards of our urban and community forests by educating them on topics from tree planting, care, and maintenance to municipal forest management and conservation planning. The course also offers sessions on working effectively within the community and connects participants to a network of community forestry resources. For more information, please visit [www.uvm.edu/extension/soul/](http://www.uvm.edu/extension/soul/) or e-mail [soul.treesteward@uvm.edu](mailto:soul.treesteward@uvm.edu) or call toll free 1-866-860-1382.





## C. Town Forest Contacts

### Vermont Organizations

Technical Assistance	Educational Assistance	Financial Assistance	Organization
X	X		*Association of Vermont Conservation Commissions: <a href="http://www.avccvt.org">www.avccvt.org</a>
X	X		*Audubon Vermont: <a href="http://vtaudubon.org">vtaudubon.org</a>
X	X		*Biomass Energy Resource Center: <a href="http://www.biomasscenter.org">www.biomasscenter.org</a>
X			*Catamount Trail Association: <a href="http://www.catamounttrail.org">www.catamounttrail.org</a>
	X		*Center for Whole Communities: <a href="http://www.wholecommunities.org">www.wholecommunities.org</a>
X	X		*Green Mountain Club: <a href="http://www.greenmountainclub.org">www.greenmountainclub.org</a>
X	X		*Middlebury College: <a href="http://www.middlebury.edu">www.middlebury.edu</a>
X	X		*University of Vermont: <a href="http://www.uvm.edu">www.uvm.edu</a>
X	X		*Vermont Coverts: <a href="http://www.vtcoverts.org">www.vtcoverts.org</a>
X	X	X	*Vermont Department of Fish and Wildlife: <a href="http://www.vtfishandwildlife.com">www.vtfishandwildlife.com</a>
X	X	X	*Vermont Department of Forests, Parks, and Recreation: <a href="http://www.vtfpr.org">www.vtfpr.org</a>
X	X		*Vermont Family Forests: <a href="http://www.familyforests.org">www.familyforests.org</a>
	X	X	*Vermont Humanities Council: <a href="http://www.vermonthumanities.org">www.vermonthumanities.org</a>
X	X		*Vermont Land Trust: <a href="http://www.vlt.org">www.vlt.org</a>
	X		*Vermont Natural Resources Council: <a href="http://www.vnrc.org">www.vnrc.org</a>
X	X		*Vermont Woodlands Association: <a href="http://www.vermontwoodlands.org">www.vermontwoodlands.org</a>
X			*Vermont Youth Conservation Corps: <a href="http://www.vycc.org">www.vycc.org</a>
X			Consulting Foresters Association of Vermont: <a href="http://www.cfavt.org/">www.cfavt.org/</a>
		X	The Freeman Foundation: <a href="http://www.freemanfoundation.org/">www.freemanfoundation.org/</a>
X	X		*The Green Forestry Education Initiative: <a href="http://www.uvm.edu/envnr/greenforestry/">www.uvm.edu/envnr/greenforestry/</a>
		X	* The Windham Foundation: <a href="http://www.windham-foundation.org/">www.windham-foundation.org/</a>
X	X		University of Vermont Extension: <a href="http://www.uvm.edu/extension">www.uvm.edu/extension</a>
X	X	X	Vermont Agency of Agriculture, Food and Markets: <a href="http://www.vermontagriculture.com">www.vermontagriculture.com</a>
X	X		Vermont Association of Conservation Districts: <a href="http://www.vacd.org/">www.vacd.org/</a>
X			Vermont Association of Planning and Development Agencies: <a href="http://www.vapda.org">www.vapda.org</a>
		X	*Vermont Community Foundation: <a href="http://www.vermontcf.org/">www.vermontcf.org/</a>
X	X		Vermont Invasive Plants: <a href="http://www.vtinvasiveplants.org/">www.vtinvasiveplants.org/</a>
X	X		Vermont League of Cities and Towns: <a href="http://www.vlct.org">www.vlct.org</a>
X	X		Vermont Planners Association: <a href="http://www.vermontplanners.org">www.vermontplanners.org</a>
X	X	X	Vermont Resource Conservation and Development Programs: <a href="http://www.vt.nrcs.usda.gov/rc&amp;d/">www.vt.nrcs.usda.gov/rc&amp;d/</a>



Technical Assistance	Educational Assistance	Financial Assistance	Organization
----------------------	------------------------	----------------------	--------------

### Regional Organizations

X	X		* Community Forests Collaborative: <a href="http://www.northernforest.org">www.northernforest.org</a>
X	X	X	*Northern Forest Alliance: <a href="http://www.northernforestalliance.org">www.northernforestalliance.org</a>
	X		*Northern Woodlands: <a href="http://www.northernwoodlands.org">www.northernwoodlands.org</a>
	X		Invasive Plant Atlas of New England: <a href="http://nbii-nin.ciesin.columbia.edu/ipane/">http://nbii-nin.ciesin.columbia.edu/ipane/</a>
	X		Society of American Foresters, New England: <a href="http://www.nesaf.org/">www.nesaf.org/</a>
	X		Society of American Foresters, Green Mountain Division: <a href="http://www.gwriters.com/saf/">www.gwriters.com/saf/</a>

### National Organizations

	X		*Forest Guild: <a href="http://www.forestguild.org">www.forestguild.org</a>
		X	*Orton Family Foundation: <a href="http://www.orton.org">www.orton.org</a>
X	X		*Trust for Public Land: <a href="http://www.tpl.org">www.tpl.org</a>
	X		*U.S. Forest Service, Green Mountain National Forest: <a href="http://www.fs.fed.us/r9/gmfl/">www.fs.fed.us/r9/gmfl/</a>
	X		American Forests: <a href="http://www.americanforests.org">www.americanforests.org</a>
	X		Communities Committee: <a href="http://www.communitiescommittee.org">www.communitiescommittee.org</a>
	X		Community Forestry Resource Center: <a href="http://www.forestrycenter.org">www.forestrycenter.org</a>
	X		National Arbor Day Foundation: <a href="http://www.arborday.org">www.arborday.org</a>
	X		Society of American Foresters: <a href="http://www.safnet.org">www.safnet.org</a>
	X		State Natural Resources Agencies: <a href="http://www.stateforesters.org">www.stateforesters.org</a>
	X		TreeLink Website and List Serves: <a href="http://www.treelink.org">www.treelink.org</a>
	X		*USDA Forest Service: Urban and Community Forestry Program: <a href="http://www.fs.fed.us/ucf/">www.fs.fed.us/ucf/</a>
	X		USDA Forest Service: North Central Research Station: <a href="http://www.ncrs.fs.fed.us">www.ncrs.fs.fed.us</a>
	X		USDA Forest Service: Northeast Research Station's Urban Natural Resources Institute: <a href="http://www.unri.org">www.unri.org</a>
	X		USDA Forest Service: Northeastern Area Urban & Community Forestry: <a href="http://www.na.fs.fed.us/urban">www.na.fs.fed.us/urban</a>
	X		USDA Forest Service: State and Private Forestry: <a href="http://www.fs.fed.us/spf/">www.fs.fed.us/spf/</a>

\* Vermont Town Forest Project partner or financial supporter

## E. Supplemental Chapter Materials

**Chapter 3:** Table of Contents from Westminster Town Forest Management Plan ►

### Chapter 3: Forest Health Monitoring Websites

Indicators and measurements that can be found on the Internet:

- Forest Sustainability and Planning:  
<http://na.fs.fed.us/sustainability/index.shtm>
- Forest Inventory and Assessment, Program Features:  
<http://fia.fs.fed.us>
- Forest Health Monitoring, Forest Health Indicators:  
<http://fhm.fs.fed.us>
- Forest Health Monitoring, Forest Health Indicators:  
<http://fhm.fs.fed.us/>
- Forest Inventory and Assessment, Program Features:  
<http://fia.fs.fed.us>
- Forest Sustainability and Planning:  
<http://na.fs.fed.us/sustainability/index.shtm>
- Natural Resource Conservation Service (NRCS):  
<http://www.vt.nrcs.usda.gov/>
- Northeast Decision Support (NED):  
<http://www.fs.fed.us/ne/Burlington/ned>
- River Network, River Watch:  
<http://www.riverwatch.org/index.cfm>
- Vermont Monitoring Cooperative:  
<http://sal.snr.uvm.edu/vmc>

## TABLE OF CONTENTS

<b>I. LOCATION MAP</b> .....	4
<b>II. OVERVIEW</b> .....	6
Property Description.....	7
About this Management Plan.....	7
Access.....	8
Boundaries.....	9
Management Goals.....	10
Nongame & Natural Heritage Program.....	10
Recreation.....	11
Timber resource.....	11
Unique Natural Communities.....	12
Wildlife.....	13
Recommendations (property wide).....	14
<b>III. FOREST MANAGEMENT UNITS: Existing Conditions &amp; Planned Management Activities</b> .....	15
Management Unit Number: 1.....	16
Existing Conditions.....	16
Planned Management Activities.....	22
Management Unit Number: 2.....	24
Existing Conditions.....	24
Planned Management Activities.....	29
Management Unit Number: 3.....	30
Existing Conditions.....	30
Planned Management Activities.....	35
<b>IV. SUMMARY OF PLANNED MANAGEMENT ACTIVITIES</b> .....	37
<b>V. SOILS MAP</b> .....	39
<b>VI. TOPOGRAPHIC MAP</b> .....	41
<b>VII. FORESTLAND AT A GLANCE</b> .....	43
<b>VIII. STATISTICAL SUMMARY</b> .....	45
<b>IX. GLOSSARY</b> .....	47
<b>X. FOREST MANAGEMENT MAP: SEE ATTACHED</b> .....	51
 <b><u>TABLE OF FIGURES:</u></b>	
Table 1- Parcel Information.....	7
Figure 1- Land Management categories.....	7
Figure 2- Tree Species Present Property Wide.....	12





## Recreation Management Case Studies and Resources

American Council of Snowmobile Associations. [www.snowmobilers.org/resources.asp](http://www.snowmobilers.org/resources.asp)

Forest Landowner's Guide to Internet Resources. [www.na.fs.fed.us/pubs/misc/flg/index.cfm](http://www.na.fs.fed.us/pubs/misc/flg/index.cfm)

Haas, G.E. and M.D. Wells. Estimating Future Recreation Demand: A Decision Guide for the Practitioner. U.S. Department of Interior, Bureau of Reclamation, Office of Program and Policy Services, Denver, CO, September 2006.

Hubbard, B. and D. Faircloth. Recreation Options for Your Forestland. University of Florida Cooperative Extension Service, 1993. [www.sfrc.ufl.edu/Extension/pubtxt/ssfor4.htm](http://www.sfrc.ufl.edu/Extension/pubtxt/ssfor4.htm)

National Community Forest Center, Northern Forest Region. Choices and Challenges in Town Forest Management: Report from A Community Forest Workshop, 2003, [www.yellowwood.org/publication.htm](http://www.yellowwood.org/publication.htm)

North Carolina Cooperative Extension Service, North Carolina State University. Recreational Forest Trails: Plan for Success. [www.ces.ncsu.edu/nreos/rrea/rectrailstoc.html](http://www.ces.ncsu.edu/nreos/rrea/rectrailstoc.html)

Vermont Agency of Transportation. Vermont Pedestrian and Bicycle Facility Planning and Design Manual, 2003.

Vermont Department of Forests, Parks and Recreation. Vermont Outdoor Recreation Plan, 2005-2009. [www.vtfpr.org/recreation/SCORP/index.htm](http://www.vtfpr.org/recreation/SCORP/index.htm)

Vermont Trails and Greenways Council. Vermont Trails and Greenways Manual, September 2005. [www.vttgc.org/resources.htm](http://www.vttgc.org/resources.htm)

Bangor City Forest, Bangor, ME. Contact City of Bangor Public Services Division, 207-992-4514, [www.cityforest.bangorinfo.com/city\\_forest\\_report.html](http://www.cityforest.bangorinfo.com/city_forest_report.html) and [www.oronobogwalk.org/](http://www.oronobogwalk.org/)

China School Forest, China, ME. Contact Anita Smith, China Middle School, 207-445-2065, [asmith@china.k12.me.us](mailto:asmith@china.k12.me.us)

Groton Town Forest, Groton, MA. [www.nemba.org/ridingzone/Groton\\_Town\\_Forest.html](http://www.nemba.org/ridingzone/Groton_Town_Forest.html)

Hillsboro Town Forest, Starksboro, VT. Contact Robert Turner, 802-453-2171, [rjtco@gmavt.net](mailto:rjtco@gmavt.net)

Hinesburg Town Forest, Hinesburg, VT. [www.fotwheel.org/hinesburg.php](http://www.fotwheel.org/hinesburg.php)

Lyme Town Forest, Lyme, NH. Contact Lyme Conservation Commission Chair, 603-795-4639

Stow Town Forest, Stow, MA. [www.nemba.org/ridingzone/Stow\\_Town\\_Forest.html](http://www.nemba.org/ridingzone/Stow_Town_Forest.html)

Virginia Urban Archery Season. [www.dgif.virginia.gov/hunting/urban\\_archery.asp](http://www.dgif.virginia.gov/hunting/urban_archery.asp)



Chapter 6:  
Event Agenda  
Samples

## WARREN FOREST DISCOVERY DAY

SUNDAY, SEPTEMBER 17, 2006  
12:30 – 4:00  
Eaton Forest  
Behind the Warren School

### SCHEDULE

12:45 **Welcome by Jad Daley, Vermont Town Forest Project**

12:50 **Suggestions on How to Enjoy The Day**

1:00-2:00 **Choose one workshop from the following choices:**  
*Time for Me to Fly* with Audubon Vermont's **Bridget Butler**  
*Forest Health, Wealth and Taxes*, with Washington County Forester, **Russ Barrett**  
*Who might be sharing our back yard?* with naturalist **Carol Thompson**  
*Learn How to use a GPS Unit*, with geocache enthusiast **Rosario Swafford**  
*Fairy House Building*, with Spring Hill School's **Laura Mangano**

2:00-2:30 **Take a break and enjoy some great food from The Wooden Spoon!**

2:30-3:30 **Choose one workshop from the following choices:**  
*Jays of the Northern Forest* with Audubon Vermont's **Bridget Butler** (inside)  
*Forest Management and the Land Ethic*, with the Forest Guild's **Bob Peralchi**  
*Who might be sharing our back yard?* with naturalist **Carol Thompson**  
*Geocache Treasure Hunt*, with educator and geocache enthusiast, **Rosario Swafford**  
*Story Telling and Story Pouch Making*, with story teller, **Judy Wilms**

3:30 **Closing Activities**

**Story Telling Circle**  
**Judy Wilms** will tell a really great story at the end of the afternoon to close out the day. A fabulous storyteller, Judy's gift of engaging her audience is remarkable. Stay till the end and be sure to catch her!

OR

**Hike up Warren Pinnacle**  
 Join a guided backcountry bushwhack up Warren Pinnacle with neighbor **Jim Edgcomb**. There is no trail on this side, so please be prepared for an interesting adventure. This is not a stroll in the woods! Allow for two hours round-trip.

**Other Fun Things To Do**

**Self-guided "Un-Natural" Nature Trail Hike**  
 Train your eagle eyes! Try to find all of the "unnatural" objects hidden along the trail. Keep track of them as you go and see how many you can find. A list and a map will greet you at the end so you can see how well you did! An Audubon Vermont activity.

**Migrating Bird Bracelet** craft project, also from Audubon Vermont. Learn about birds that migrate in Vermont, and bring home a bracelet!

The Vermont Town Forest Project is sponsored by the National Forest Foundation, the Vermont Humanities Council, the Bunting Family Foundation, the Sudbury Foundation, the Urban and Community Forestry Program – State of Vermont, the Lintilhac Foundation, the Vermont Community Foundation, and the Merck Family Foundation.

## SAVE THE DATE! Saturday, October 14th

# Mad River Valley Town Forest Celebration

Saturday, October 14, 2006, 12:30 - 4:30 p.m.

**WHERE**  
 Fayston Elementary School and the adjacent town-owned "Chau Brook" parcel

**DID YOU KNOW?**

- Our four towns own hundreds of acres of forest land here in the Valley.
- These lands offer fantastic opportunities for walking, running, mountain biking, skiing, snowshoeing, hunting, fishing, and other activities.
- Deer, bear, foxes, owls, woodpeckers, nerts, and many other kinds of wildlife depend on these forests for food and shelter.
- The trees on these lands can provide municipal revenue through sustainable timber harvests.
- These forests offer ideal outdoor classrooms for kids and adults.
- We need your help in caring for these valuable community assets!

**LEARN**

Come learn about the Valley's town forests and enjoy the magic of fall in the Vermont woods! Local leaders from Fayston, Moretown, Waitsfield, and Warren will be on hand to share exciting information about what's happening with town forests in each of our communities. Then, for most of the afternoon, local and regional experts will lead a variety of fun, hands-on field activities. Preliminary topics include:

- Finding Yourself in the 21st Century - Getting started with GPS (Global Positioning Systems)
- Seeing the Forest and the Trees - Looking at the forest through a forester's eyes
- Whose Home is This? - Getting to know the trees, tosters, and other things that live in our woods
- If You Build It, They Will Come - Designing, building and maintaining a new trail

Free and open to all ages. Great local food!  
 Rain or shine. Dress warmly with stout footwear. No dogs, please.  
 For more information, please contact Phil Huffman: 496-4565, phuffman@madriver.com

## WARREN FOREST STATEMENT<sup>1</sup>

~ Based on ideas, input and observations generated in June 2006 when 3<sup>rd</sup>/4<sup>th</sup> grade students from the Warren School interviewed local elders with strong connections to the woods ~

There is a palpable concern that people in Vermont, and elsewhere in the country, are gradually losing the relationship with the forest that has sustained and shaped our way of life. The goal of this project in Warren was to capture and share the voices and thoughts of people who have been living in Warren a long time and other people who work with wood for their livelihood as a way of gathering a range of perspectives on what the woods mean to the variety of people who live here. We hope that revealing the thoughts of these resident elders will provide a lens through which we can focus our future conversations about the town's forests and their management.

### Context

Warren's history as a mill town, closely tied to the surrounding forest, has shaped its past and present settlement pattern. While settlement first began up on the more fertile plateau of East Warren, the Village ultimately became the nexus of activity as dams were built, mills appeared, and the supply and service establishments required by the mills came into the picture. The peak of the waterpower era was around 1889, with sawmills, cider mills, clapboard mills, gristmills, clothespin and butter pail factories along the Mad River, Lincoln, Stetson, Bradley, Clay, and Freeman brooks<sup>1</sup>. Timber from Warren's woods supplied many of these mills.

Much of Warren was deforested by the end of the 1800s. Since then a lot of the farmland has been abandoned and the forest has grown back. Forests once again cover approximately 85% of Warren's landscape. The trees in the forest are generally larger than at most times in the past century. At the same time there are more houses. These house lots have taken up some of the forest but have not offset the additional forest that has grown back in the last 100 or so years on abandoned farmland. The northern section of the Green Mountain National Forest includes approximately 7,200 acres in Warren. The town itself owns approximately 225 acres of land comprised of approximately 17 different parcels. Of these, four have forest resources: Eaton (78 acres); Old Gravel Pit (78.3 acres); Old Dump (7.2 acres); and Cemetery Buffer Lands (22.3 acres).

Many people still live and work in close connection with the forest. Forest-dependent livelihoods in Warren and the surrounding area include:

- Toy manufacturing
- Furniture making
- Lumber and bowl manufacturing
- Sawmill work
- Logging
- Sugaring
- Forest management
- Tree planting
- House (and tree house) building
- Natural and ecological research and other science-based pursuits
- Bridge and trail building
- Hunting
- Outdoor education, including animal tracking, adventure pursuits (such as guiding) and other place-based education

---

<sup>1</sup>This is intended to be a working document and will be discussed and refined during the management plan drafting process.

<sup>2</sup>Excerpt from Warren's Town Plan





So, among us we have toy makers, furniture and cabinet makers, bowl and clapboard millers, sawyers, loggers, foresters, sugarers, tree planters, house builders, tree house builders, housing contractors, carpenters, hunters, trappers, fishers, trail and bridge builders, educators, animal trackers, and scientists.

Important physical products and ecosystem services that Warren’s forests provide include toys, houses, tree houses, paper, maple sugar products, lumber, firewood, oxygen, clean water, erosion control, wildlife habitat, bird corridor and habitat, food such as meat and mushrooms, and opportunities for hiking, camping, hunting, biking, skiing, wildlife viewing, rock collecting, etc.

Non-physical benefits and connections to the forest include:

<b>Common heritage</b>	The fact that we all live in or close by a forested landscape provides a common bond and a shared sense of responsibility and stewardship for the woods’ longevity and health.
<b>Insight</b>	That comes from, for example, planting a tree and harvesting it in one’s lifetime.
<b>Gratification and fulfillment</b>	From watching something grow; from getting to know something intimately.
<b>Appreciation</b>	There are lessons learned over time by people who have planted trees, watched them grow and harvested them in our lifetimes. We respect these people and are lucky to have them in our midst. We as a community acknowledge the value of the same person/family managing woodlands over a lifetime.
<b>Care</b>	The need for stewardship and protection of resources and natural features.
<b>Connections</b>	Seeing that all parts are linked; changing one thing changes others; that the forest is much more than trees.
<b>Quiet, solitude, reflection</b>	The stillness we sometimes find in the woods may make us good listeners to our fellow citizens, perhaps priming us for participating well in our much-valued democratic processes, such as town meeting.
<b>Trust and faith</b>	Forests generate a sense of security by being there continually.
<b>Intuition/sixth sense</b>	Fostering the ability to see more than what you see with your eyes.
<b>Smells and other senses</b>	Forests and forested landscapes are appealing to us: they can smell nice, be beautiful, make us feel good, etc.
<b>Quality of life</b>	Forests are directly related to our quality of life.

In summary, we as a community, individually and collectively, continue to rely on wood in our everyday lives, including heating with wood; building, restoring, and renovating our houses; and using any number of wood and paper products on a day-to-day basis. Many of our friends and neighbors continue to make a living from the forest and wood-based products. Their work contributes to the local economy and utilizes a renewable resource.

### Challenges

One of our biggest challenges is how to engender the appreciation and respect most of us have for the woods while faced with a continual stream of new homeowners, seasonal owners, and visitors. Our population is rising dramatically and has increased from 469 to 1681 between 1960 and 2000. New people need places to live so we expect more of our forestland to be developed into house lots. Also of note is the fact that 62% of Warren’s housing units are designated for seasonal dwellers. These statistics demonstrate that we are in a trend that will bring more people and more development to Warren and that many of these people will not have historical ties to the forest, nor work in a forest-based profession.

These demographic changes also challenge us to find ways to continue New England’s tradition of not posting lands so that people may make use of forestlands for various recreational pursuits. This idea of all sharing the benefits of “the commons” as a community is significantly threatened by continued fragmentation of woodlands and lack of understanding or appreciation of the communal benefits of



having access to our more remote forestlands. The fragmentation of woodlands creates smaller parcels, which is connected to the related challenge of managing forests across parcel boundaries to serve regional needs such as bird and other wildlife habitat and migration needs. This fragmentation is also evidenced by a lower participation in the state's Use Value program<sup>3</sup>

## **Vision**

Our vision for the future is that we, as a community, individually and collectively, will continue to rely on wood in our everyday lives, including heating with wood; building, restoring, and renovating our houses; and using any number of wood and paper products on a day-to-day basis. Many of our friends and neighbors will continue to make a living from the forest and wood based products. Their work will continue to contribute to the local economy as it utilizes our most valuable renewable resource.

Warren's Town Plan acknowledges the significance of the interplay of natural and cultural factors in our lives, and how this provides us with a certain sense of place that pervades and enriches us as individuals and as a community. We all appreciate how important forests are to us and that we have a history of caring for and protecting these lands. This land ethic, grounded in forests being such a constant in our lives, has helped us develop qualities of trust and faithfulness that extend to our community. The people of Warren love this town and the forests that help make it the special place it is to us, and our visitors. While each of us values the forests of Warren in our own way, we all agree that the special sense of community and richness of life we find in Warren will only be available for future generations if we care for and nurture these lands.

We would like to see the people of Warren maintain close working ties to the forested landscape because without those ties, as we noted above, we won't be the same kind of community nor be able to maintain that special sense of place. While we acknowledge that more and more people are connected to the forest through recreational pursuits and hope that this continues, we hope we can maintain the working aspect of our forest and jobs as well. Our vision for our overall forest base is that we will maintain this foundation, and that the forest stands will continue to grow in a healthy condition. We hope the trees on these lands will grow larger and more valuable. Moreover, we envision that these lands will be carefully managed and sustainably harvested whenever and wherever it is appropriate for the landowner and the ecological needs of the parcel.

## **Pledge**

The forests (and trees) in Warren will continue to grow, as is their inherent nature. We as self-appointed stewards will ensure they are carefully managed and harvested to continue to contribute to the regional economy, and to foster forest health and certain types of wildlife habitat. We will also acknowledge other community goals and needs -- including leaving some parts of the forests "unmanaged" or "wild" to allow for the benefits that this type of forest may provide, and managing some parts to accommodate various recreation opportunities, including developing a more extensive trail network.

As we move forward in managing and stewarding our forests, we will recognize that management of public resources encompasses an emotional and potentially volatile set of issues -- because so many of us care so much about the economic, recreational, ecological, and cultural opportunities they provide for us. We as a community therefore will continually strive to educate each other on the roles, benefits, and need for various -- and at times seemingly conflicting -- uses such as logging, motorized vehicles, horses, mountain bikes, wilderness, different wildlife habitat needs, permanent conservation, etc. We will assess and inventory the specific pieces of forestland in question - - and determine uses that are appropriate for a given piece of land. We embrace the need for balance. The goals will include striving for a diverse forest. As we develop management plans, and take actions on our town-owned forests, it is critical to encourage dialogue on how the forests should be used and stewarded.

<sup>3</sup> In the Use Value Program, landowners are taxed at a lower rate (for its "current use") if their forest or agricultural land is managed according to a plan approved by the county forester.

We will take the opportunity to utilize our town-owned lands as educational tools. We will debate and publicize the value and goal of proposed cuts, and use timber harvests (if we choose to do them) as opportunities to model well thought-out management approaches. Our forests will be used to develop public education models showcasing wise forest management. Our forests can illustrate the potential of similar properties so that everyone can have the opportunity to see it and learn from it. It would be great to strive for timber from town-owned land being used for community projects, such as a needed structure or as firewood (the sale of which could fund community-supported projects).

### **Notes on the Process**

Third and fourth grade students from the Warren School interviewed adults (affectionately referred to as “elders”) who work or have worked in the woods or with wood products. In teams of twos and threes the students interviewed elders from the town about their lives and the woods. During the student interviews the elders shared their thoughts on the future of Warren’s forests. The adults provided answers that covered perspectives on the overall forest cover of Warren as well as specifically on town-owned forests. These interviews have been made into a booklet and are available upon request. The adults reconvened during the summer to further discuss some of the ideas generated during the interviews. These interviews were a project of the Vermont Town Forest Project, a statewide effort that is bringing people together in many towns around the state to find ways to maintain our close connection with forests and to encourage wider community participation in caring for them.





Chapter 6:  
Stewardship  
Listening Sessions  
Materials

Sample Flyer from Stewardship Listening Sessions

**WARREN LISTENING SESSIONS ON STEWARDSHIP OF TOWN-OWNED LANDS**

PARCELS TO BE DISCUSSED  
EATON • COATES ("GRAVEL PIT" PARCEL) • RIVERSIDE PARK  
Facilitated by Phil Huffman

**Agendas**

**WEDNESDAY, OCTOBER 25**  
5:30 – 7:30  
WARREN TOWN HALL  
BOTTOM FLOOR

**COATES AND EATON PARCELS**

- PRESENTATION BY STEVE HAGENBLUCH, VERMONT AUDUBON
- DISCUSSION ON PUBLIC USE AND MANAGEMENT OF COATES AND EATON PARCELS
- GENERATE LIST OF INITIAL STEWARDSHIP PRIORITIES, BRING TO MEETING ON THE 30<sup>th</sup>

**MONDAY, OCTOBER 30**  
5:30 – 7:30  
WARREN TOWN HALL  
MAIN FLOOR

**RIVERSIDE PARK & FINALIZE STEWARDSHIP PRIORITIES**

- PRESENTATION BY MIRANDA LESCAZE, FRIENDS OF THE MAD RIVER
- DISCUSSION ON PUBLIC USE AND MANAGEMENT OF RIVERSIDE PARK
- RECAP OF EATON & COATES PARCELS DISCUSSION & PRESENTATION BY RUSS BARRETT, WASHINGTON CO. FORESTER
- ID STEWARDSHIP PRIORITIES, AND NARROW DOWN TO ONE ACTION ITEM

**Purpose of the meetings:**

- To present preliminary data from assessments currently underway on various resource values including riparian, timber, ecological features, and bird habitat.
- To initiate a dialogue among participants about how these parcels can be better utilized by the community and to discuss various management considerations.
- To arrive at a list of stewardship priorities for the parcels, and to choose one to focus on in the near term. A grant from the Northern Forest Alliance will cover costs associated with this project.

**Other notes of interest:**

- We will bring the results of these listening sessions to the charette the PC is hosting on November 4<sup>th</sup>.
- The most important stewardship priority arrived at by the group will receive grant funding from the Northern Forest Alliance toward its implementation.
- Community input from these meetings will also help to inform the management plan drafting process for each of the three parcels.
- People who are not able to participate in the meetings will be given the opportunity to share their thoughts via email and/or a form they can fill out.

Snacks provided, of course! Questions, please call 490-3873.

Made possible by a grant from the National Forest Foundation and sponsored by the Northern Forest Alliance and the Vermont Town Forest Project. Organized by the Warren Conservation Committee.

Sample Agenda from Stewardship Listening Sessions

Warren Listening Session #2 – October 30, 2006

- 5:30-5:40 Welcome and context
- WCC welcome and perspective
- background on NFA/VTFP and NFF grant
- 5:40-5:45 Meeting overview
- 5:45-6:00 Presentation: history and values of Riverside Park – Miranda Lescaze
- 6:00-6:20 Group discussion: use and management of Riverside Park – Phil facilitates
- existing and potential uses
- issues/concerns
- opportunities
- compatibilities
- conflicts
- solutions
- 6:20-6:25 Transition to Eaton and Austin parcels
- 6:25-6:35 Presentation: forest inventory of Eaton and Austin parcels – Russ Barrett
- 6:35-6:45 Recap of 10/25 group discussion on use and management of Eaton and Austin parcels
- 6:45-6:55 Additional discussion on use and management of Eaton and Austin parcels
- 6:55-7:25 Identify forest-related stewardship priorities for Eaton, Austin &/or Riverside Park
- introduction and recap of 10/25 ideas for Eaton and Austin
- group discussion: clarify existing ideas and add new ones, including for Riverside Park
- dot exercise to identify priorities
- summary of priorities
- 7:25-7:30 Wrap-up and next steps

## Sample Stewardship Priorities

STEWARDSHIP IDEAS	ACTION ITEM/DELEGATE TO...
<b>River-related/Riverside Park</b>	
Re-establish riparian buffer (may need to bring in better soil to facilitate this)	Meet with FMR/get grant to do work
Extend rock veins further downstream	Meet with FMR/get grant to do work
Build a meditation labyrinth	Discuss with CC/SB/FMR/etc.;
<b>Trail-related</b>	
Research possible extension of Mad River Path from <b>Riverside Park</b> in both directions, though north has more immediate opportunity	Discuss with MRPA/SB/MRWCP
Ensure forest management plans articulate that logging activities result in good trail network (i.e. skid trails will be converted to trails after logging is completed)	Convey to Russ for forest plan; include in final management plan
Research specifics on parcel north of Riverside Park	Meet with MRPA/SB
Build/expand trail networks on <b>Eaton and Austin</b> parcels after natural community work is completed	Hire trail development specialist; draft a trail plan; should take place
Better maintain existing trail on Eaton parcel	Discuss with MRPA
<b>Other Recreation-related</b>	
Develop geocaches on either or both parcels	Work with Roarke Sharlow; incorporate into plans
Research ATV use on parcels as well as policies used by other towns on use	WCC?
Develop sledding hill at gravel pit	Recreation Committee?
<b>Stewardship – General</b>	
Use management of town lands as model and educational resource for good stewardship	Incorporate this goal in management plans
<b>Forestry practices/Timber harvesting</b>	
Research 3 <sup>rd</sup> party certification of sustainable forest management and timber harvesting	Include in final management plan
Conduct a timber harvest for local use, which would be managed according to assessment and recommendations spelled out in forest management plan	Include in final management plan
<b>Habitat</b>	
Manage parcels for birds listed in Audubon Vermont's list of migrating neotropical birds into plan	Include in final management plan; incorporate Audubon's report
Research exiting wildlife habitat and how to enhance it	Underway with Arrowwood



Renewable Energy	
Research/explore potential expansion of town forest from Eaton north to Kingsbury Bridge – as source of biomass for local energy needs and as location for new road connecting airport to Sugarbush Access Road, and as location for Mad River Path, and to get traffic out of Village	Came up at charrette as well
Evaluate potential for renewable energy development from board members who work in this area	Hire specialist to assess potential; ask for input
Education	
Explore how to make both parcels as relevant as possible to town for diverse purposes; tie them to Village life to a greater degree (under Compatibility of Uses as well, below)	Incorporate into final management plan
Build more awareness and appreciation of both parcels	Incorporate into final management plan
Include school community in discussions on use and stewardship of land discuss with school	Incorporate into final management plan;
Use management of town lands as model and educational resource for good stewardship plans	Incorporate this goal in final management
Remediation/Restoration	
Improve management of gravel pit on Austin parcel to control erosion, etc.	
– Follow “BMPs” – best management practices Address existing water quality issues (erosion) along trail/skid road in Eaton parcel	Discuss with road crew; Selectboard Work with MRPA; include in Trail Plan
Communication/Compatibility of Uses	
Non-forested related ideas	
Resolve issues regarding proposals for housing and/or other development on <b>Eaton</b> parcel before taking other actions (e.g. facilitate communication among boards on proposed uses of parcel & what others are proposing/thinking regarding possible development; figure out how best to decide as a community whether Eaton should be built on; can it accommodate development and also serve as a “town forest”?, etc.)	How best to address? Convene meeting for all town boards? Implement better Discuss with SB.  Communication methods among boards?
Pursue housing and sewage capacity studies near pond on <b>Austin</b> parcel and revisit earlier studies done on <b>Eaton</b>	Pass to PC.
Complete assessments of resources and opportunities for a range of potential activities (water supply, sewage capacity, housing/development potential, etc.) before long-term decisions are made.	Pass to PC; meet with them on these issues



**Chapter 6:**  
Sample Youth-Elder  
Interview

"We had a fun time interviewing Kathleen Diehl. She works for the Green Mountain National Forest. She has worked here for 25 years. Kathleen takes care of land for animals to live in.

"She enjoys walking in the forest and looking for animals. She thinks ferns and wildlife are cool to look at. Since she has been here, more forests have grown in. Unfortunately, there are fewer birds. The woods in Warren are important because the trees give air and the leaves filter the air. Kathleen thinks they should put more trails in the forest.

"The woods are important because they help clean the air. You can heat and build homes with wood. There are also homes for wildlife. She knows 20 types of trees. Her favorite tree is white oak."

– Ally B. and Morgan P., Warren School



John McClain being interviewed by students of Warren's 3rd and 4th grade class.



Kit Hartshorn sharing stories of her wooden buttons with members of Warren's 3rd and 4th grade class.



**Vermont Town Forest Project Supporters:**

Kendall Foundation

Lintilhac Foundation

National Forest Foundation

State of Vermont, Urban and Community Forestry Program

Sudbury Foundation

Vermont Community Foundation

Wildlife Conservation Society

Wildlife Opportunities Fund

Windham Foundation



**Northern Forest Alliance**

32 Park Street

Stowe, VT 05672

[www.northernforestalliance.org](http://www.northernforestalliance.org)



Photo Credits: Jay Ericson, Jerry Monkman, Jeb Wallace-Brodeur, Jad Daley, VT Dept. of Forest, Parks, & Recreation, John McKeith, Vermont Land Trust, Tara Hamilton and istock

Design: RavenMark, Inc.

Compilation and Editing: Jad Daley, Northern Forest Alliance

Printed by Queen City Printers, Inc

Printed on paper containing 30% recycled fiber, certified Environmental Choice, FSC Mixed and manufactured by Cascades using biogas energy. Vegetable based inks were used.