



## Forest Health, Human Health

It's easy to see forests and human settlement in opposition: Once there was a primeval forest full of majestic trees; today, there's Boston. But a different way to look at it is that humans and forests have had a symbiotic relationship that's unfolded over millennia. In fact, if you went back 14,000 years to when the glacier started to retreat and the land that we know today as Massachusetts was born, you'd see humans and trees essentially showing up on the landscape together. We've been influencing forests, and forests have been influencing us, ever since.







## TIMELINE

14,000 YEARS AGO: Ice retreats. Early humans walk across the Bay to Martha's Vineyard and Nantucket, as 40 feet of sea level is still locked in northern ice.

13,000 YEARS AGO: An original boreal forest has established in Massachusetts. Humans hunt woodland small caribou in the region.

8,000 YEARS AGO: The deciduous trees we know today establish. Birch are among the first; chestnut among the last.

1,000 YEARS AGO: Sediment indicates widespread burning in lowland and Connecticut River Valley sites, mirroring Indian settlement patterns. Today, these sites contain a significant oak/hickory component.

400 YEARS AGO: Colonists arrive, and the conversion of forestland to agricultural land begins.

150 YEARS AGO: Peak agriculture; at this point farmland begins to be abandoned and the forest returns.



"Working with a professional forester and following a management plan has helped us to appreciate and enhance the benefits of our land, including its wildlife habitat potential. After 20 years as landowners, we continue to see the benefits of careful forest stewardship."

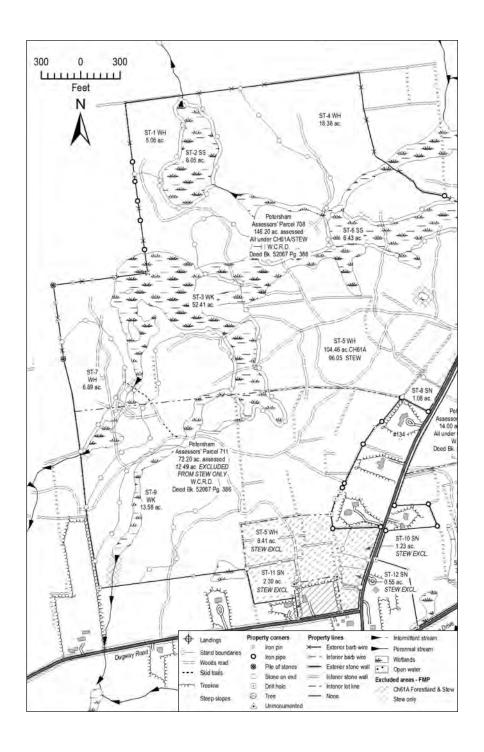
JUDY AND DUDLEY WILLIAMS, Plainfield, Massachusetts

It's also easy to consider our forest parcels small. One hundred, or 50. or 10 acres doesn't seem like much in the grand scheme of things. And yet put together, the 293,000-some forestland owners in Massachusetts iointly own about 1.6 million acres of forest. And the forest in western and central Massachusetts is part of the same forest that stretches across the Adirondacks, and northern New England, and northeastern Canada. This Acadian forest, as biologists call it, is 92,000 square miles in size - roughly equivalent to all of Great Britain. And its fate, and the fate of the 219 bird species and 58 mammal species - including us rural people whose lives and livelihoods are tied to the land – is all in the hands of the millions of family forest owners whose decisions have regional and global consequences.





Looking forward, humans and forests will only become more interdependent. Trees act as the lungs of the world, sequestering carbon and acting as a hedge against a warming planet. They provide us with food, and fuel, the literal roof over our head. In turn we've spent a hundred years learning how and why trees grow where they do; what they need; how we can improve tree vigor and forest health. The forest landowner, the sugar maple, the scarlet tanager, the beech, the forester and logger, and the deer - they're all components of the ecosystem we steward. Forest health, human health, the health of rural communities are all entwined.



# What to Expect From Your Forest Management Plan

A forest management plan serves as an assessment of your forest and as a plan of action. It will help guide you in the same way that a business plan guides a company: it sets a starting point, describes a vision, and then lays out objectives to get there.

The first part of a forest management plan, prepared after a forester has spent time on your land, will include:

- statistics regarding the size and species of trees growing there;
- an analysis of the soils and bedrock geology, which influence a property's capacity to grow trees;
- a map, indicating boundary lines and the location of key features such as wildlife habitat, invasive plants, wetlands, and vernal pools.

All of this is designed to paint a clear and accurate picture of the current condition of your forest. This part of the plan acts as a starting point, so to speak, and a benchmark by which to gauge progress.



The second part of the plan involves establishing objectives and creating strategies for realizing them. This is where your plan becomes highly personalized. Three different landowners may have three different primary objectives for the same property. For one, the priority may be to manage in a way that maximizes timber value; for another, the goal might be to increase wildlife sightings; a third might be most interested in improving recreational access.

In reality, most landowners have multiple objectives, and many objectives are complementary. The specifics of your site – the microclimate, topography, soil makeup – may dictate or limit what type of tree species will grow well there, what wildlife are likely to call your woods home, or what sort of recreational access is possible. Working with a forester to create the plan will help you to be realistic about what's possible.



# Your Forester's Role in Creating a Management Plan

A consulting forester will be the author of your forest management plan. After spending time in your woods, they'll document what you have in terms of natural resources - from wildlife habitat to marketable timber and help you craft a plan for the land with your goals in mind.



You can expect your forester to do a lot of listening during the process of preparing your forest management plan, finding out what's important to you and then providing advice and options. Forestry is a complex profession, melding together the science, art, and business of managing forest ecosystems. Foresters are trained to think about the woods on a landscape scale, and to make decisions that will make sense over a long period of time. A good forester will have a degree in forestry (or some closely related field), as well as in-the-woods experience. The State of Massachusetts licenses foresters (see Resources section on page 12), a process that considers their educational background and professional experience, and also imposes requirements for continuing education. All of this helps to ensure that a licensed forester should possess the knowledge and qualifications to help you develop a sound management plan for your property.

It's easy to see the fee charged by a forester strictly as a cost, like paying a mechanic to fix your car. But in reality it is an investment – one that may well pay for itself several times over.

### Consider these facts:

- Hiring a forester to prepare a forest management plan can help you qualify for tax-saving programs and various cost-share programs.
- A forester can sit down with you to review the range of state and federal forest programs available to landowners, including cost-sharing programs that can help you pay for forest plans and management practices. Your forester will know the deadlines and how to fill out the paperwork required to qualify for these programs.
- In many cases, the fee paid to a qualified forester is more than offset by the greater revenue realized during a harvest and the increased value in the standing trees that are left behind.
- A forester can put your timber harvest up for bid and help match you
  with the right logger, which will make all the difference when it comes to
  ensuring the objectives of your management plan are realized. They'll
  also ensure that any harvest adheres to acceptable management
  practices and any local and state statutes related to timber harvesting.
- A forester can help you to understand your own property in the context
  of the surrounding landscape, and create a thoughtfully managed forest
  that meets your economic and ecological objectives.

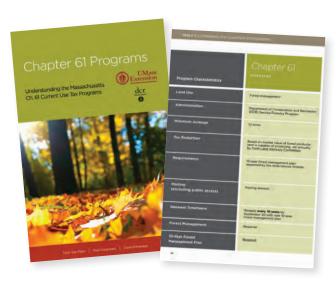
In Massachusetts, **service foresters** with the Department of Conservation & Recreation are available in each part of the state to assist private landowners in making educated, environmentally sound decisions about their woodlots. Landowners interested in taking the next step of actively managing their woodlot typically hire a **private consulting forester**, an independent professional who works directly for the landowner, and represents their interests, rather than those of a sawmill or other timber buyer. There are also **industrial foresters** working in the state, typically employed by a sawmill or other wood products manufacturer.

# Lower Your Property Tax Bill with Chapter 61 Current Use Program

If you own 10 or more contiguous acres of forestland - excluding your house site - your forest management plan will help make you eligible for Chapter 61, the state's Current Use program. By enrolling in Chapter 61, your forestland will be taxed as a forest and not as a hypothetical building lot. This typically results in at least a 75 percent reduction in your property tax bill.

Consider a hypothetical 50-acre woodlot in central Massachusetts. If it's not enrolled in Chapter 61, and it's valued at \$2,000 an acre, and the tax per acre is \$20, you're looking at a tax bill of \$1,000. If the same property is enrolled in Chapter 61, the value per acre drops to \$135 an acre, the tax per acre becomes \$3, and the annual tax bill would be \$150.

Other current use programs, Ch61A and Ch61B, are available for landowners engaged in the sale of some agricultural product (including forest products) on their land, or recreation. Only 5 acres are required to enroll; your forester can explain all of the specific details of each program.





"A lot of families don't sit down and have a real conversation about these things. It's hard. You don't want to focus on the fact that you're going to be gone, but you need to have these talks."

# Estate Planning: Protecting Your Legacy

Managing a forest is a long-term proposition, where it sometimes takes decades - even generations - to see the results of decisions and activities. Estate planning ensures the stewardship you've started will continue after you're gone.

Naturally, your land holds both personal and financial value. So a combination of documents (such as a will) and tools (such as conservation restrictions) may be needed to achieve your estate planning goals. Failure to plan can create added costs and conflict for your family. Take the first step by contacting one of the professionals listed on the Resources page of this guide. And for more detailed information, visit Deciding the Future of Your Land online at the UMass Extension website masswoods.org.



## Resources

The following resources can help you learn more about issues related to caring for your forest.

## MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION

There are 3.2 million acres of privately and publicly owned forest land in Massachusetts. Within the **Department of Conservation and Recreation**, the **Bureau of Forest Fire Control and Forestry** serves all of these owners and the forests they care for.

One important program for private landowners in the state is **Service Forestry** (also known as Private Lands Forestry), which provides technical and financial assistance to private landowners and municipalities in forest resource planning, forest management, and forest protection.

www.mass.gov/service-details/service-forestry

#### **MASSWOODS**

Directed by UMass Extension, the University of Massachusetts Amherst, and Mass DEC, masswoods.org is designed to assist landowners at critical decision-making times, such as during a sale of timber or when planning for the future of their forest. The site features an interactive map to direct landowners to local professionals including service foresters and licensed foresters, land trusts, estate planning attorneys, certified financial planners, certified public accountants, and appraisers.

## www.masswoods.org

### **FIND A FORESTER**

The State of Massachusetts provides a list of licensed foresters, including private consulting foresters, working in the state.

www.mass.gov/service-details/private-consultingforesters

### **TAXES**

Massachusetts Chapters 61 for forestlands, 61A for agriculture land, and 61B for recreational land, give preferential tax treatment to landowners who maintain their property as open space for timber production, agriculture or recreation. www.mass.gov/service-details/forest-tax-program-chapter-61

The National Timber Tax website contains information about your forestland related to federal taxes.

www.timbertax.org

#### **ESTATE PLANNING**

Just one of the many important educational components of masswoods (described earlier) is the "Protecting Your Legacy" program, which includes a wealth of information about estate planning, family communication, and land conservation.

### www.masswoods.org/legacy

The U.S. Forest Service offers the guide *Estate Planning for Forest Landowners: What Will Become of Your Timberland?* that provides information about the federal estate and gift tax law as it relates to estate planning for forest properties.

www.srs.fs.usda.gov/pubs/gtr/gtr\_srs112.pdf

#### GENERAL INFORMATION

Forests on the Edge, a program of the U.S. Forest Service, is designed to increase public awareness of the importance of conserving America's private forests.

## www.fs.fed.us/openspace/fote

Backyard Woods, a program of the Arbor Day Foundation, is designed to assist woodland owners with 1 to 10 acres of land. www.arborday.org/backyardwoods

The Family Forest Research Center conducts research on the social and economic dimensions of family forestry.

## www.familyforestresearchcenter.org

National Woodland Owners Survey is aimed at increasing our understanding of woodland owners.

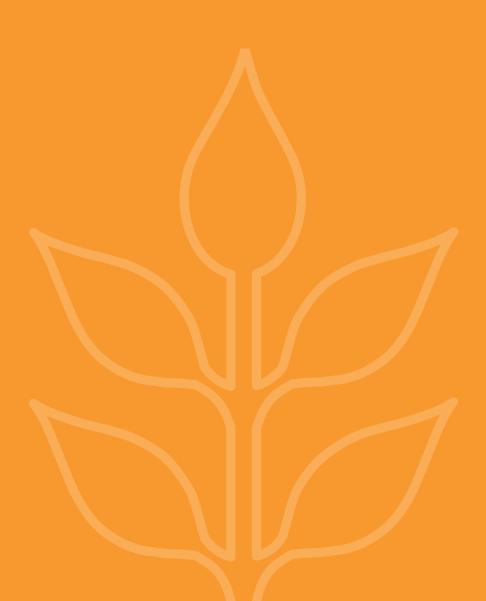
#### www.fia.fs.fed.us/nwos

**Our Changing Forest Resources**, a project of Harvard Forest, reports on how forests grow and change over time in response to different environments and land use.

www.harvardforest.fas.harvard.edu/schoolyard/ changingforests-resources

### **Photo Credits**

Cover: Michael Girardi, Northfield, MA; inside front cover: Randy Williams; page 1: public domain; page 2: Mass DCR, inset: courtesy of Judy and Dudley Williams, Plainfield, MA; page 3 woods: Jerry Michael/scarlet tanager: Flickr/Creative Commons; page 6: Susan Campbell; page 7: Susan Campbell; page 9 Chapter 61 booklet: UMass Extension/Mass DCR; page 10: Randy and Joan Walker, New Braintree, MA; page 11: Norm Eggert.



Northern Produced by the Center for Northern Woodlands Education, publishers of Northern Woodlands magazine.

www.northernwoodlands.org | (800) 290-5232

