



### Harvest Time

Trees have been commercially harvested in Massachusetts for the past 350 years - it was once the only reason to own forestland. And the vast majority of the state was cut. The forests we have today are a direct reflection of this. While there may be pockets of old-growth here and there, for the most part the 400-year-old, 200-foot-tall white pines are gone. So, too, is the vast pitch pine plain that once existed around Springfield and Chicopee; also the chestnut forests where early-summer blossoms turned the canopy into a white-capped sea. Today's forest is relatively young – the trees in the stand are about the same size and height. Oak, hickory, and cherry are less common than they were in the past. Red maple and beech are more prolific.

Today, timber harvesting is still an important part of the Massachusetts economy, but it's rarely the only focal point for landowners, most of whom also value their properties for the recreational opportunities, wildlife habitat, and environmental benefits that they provide. The good news is that all of these other objectives are often perfectly compatible with managing for high quality timber. In fact, they are often interwoven. Even if you're not directly interested in timber, a harvest will likely need to be conducted at some point in order to accomplish your other management goals.





# The Many Uses of Wood

When the time comes for a harvest, it's important to have a firm grasp of the basics. Growing sawlogs and veneer is typically the most profitable forest management activity, helping to pay the property taxes and other maintenance costs, and making forestland ownership possible in the first place.

But it's important to remember that there's more than one product in a tree.





It's also important to remember that managing for timber isn't as simple as going out and cutting down the largest, straightest, most valuable trees. In fact, to maximize the timber value in your forest, you'll usually need to first leave the best trees standing, instead removing the twisted, stunted, and less commercially desirable ones in order to give the higher-value timber more room and light to grow.

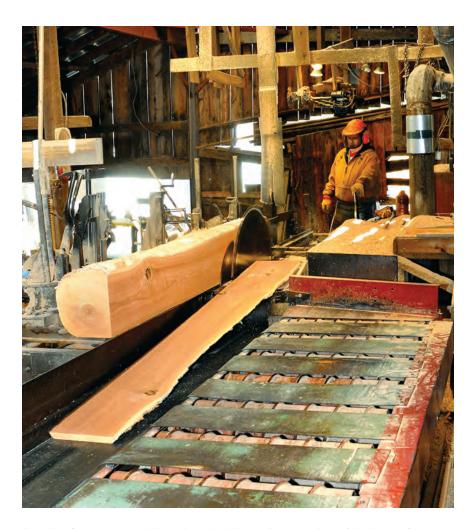
Unless your land has been managed for years without a harvest, it may be some time before you can count on a lot of income from the sale of high-value sawlogs. Forest management is a long-term proposition, and managing for timber is perhaps the longest-range objective of all. A tree puts on most of its growth in the last third of its life. Cut it too soon and you won't capture this value.



When considering the potential of your woodlot to produce timber, your forester will look at what species of trees your land grows well. Management activities – which range from thinning to burning to doing nothing – can then be directed to encourage these species.



Prescribed fires, like this one, are used to help sustain and promote pitch pine populations in various parts of Massachusetts.



Another factor to consider when deciding what species of timber to focus on are local markets. Your land may grow pine very well, for instance, but if there's no demand in your local area for it, it may not make sense to focus a lot of resources on growing it. Your forester will know what species of wood are most sought-after, which markets and buyers are seeking certain kinds of logs, and what makes the most economic sense to manage for. You might look at your forester as an asset manager, someone who stays abreast of these trends and manages your portfolio in a way that's sustainable over time by minimizing risk and maximizing return.



## Steps of a Timber Sale

- **1. Consultation**. Before you begin, remember that it is important to seek the services of a professional forester. As part of your forest management plan, you and your forester should identify areas to harvest; typically, this involves preparation of a map and flagging the woods to let the logger know where property lines are and any wet or sensitive areas to avoid with equipment. In some cases, the forester will mark individual trees that should be harvested.
- 2. Determine how timber will be valued and choose a logger. Depending on the situation, a forester will either put your wood out to bid, meaning you get a lump sum for the wood, or the price will be based on mill tally, where you'll get a percentage of every log sold or a percentage of the total receipt.
- 3. Contract. The landowner is responsible for making sure a harvest meets all relevant local and state laws, so a good contract is important to make sure your goals and legal obligations are met. Your forester should prepare a contract that spells out who's selling the timber, who's buying it, and who's administering the sale. It should lay out approximate dates, the units of measure used to estimate the value of the wood (if necessary), and a price and payment schedule. It should identify where and how trees are marked, the landing site, and how the roads and landings should be left after the job. It's often a good idea for the seller to require a security deposit and require that the logger be insured; both things can be addressed in a good, comprehensive contract.
- 4. Monitor. Your forester should visit the harvest site regularly to ensure that the objectives are being met and best management practices are followed, including stopping work if weather conditions warrant to avoid damaging the land. When the harvest is over, they'll evaluate the site and confirm that things are put to bed properly.

### Non-Timber Forest Products

Timber has traditionally been the end-all-be-all forest product. And while forest management still mostly involves generating cords and boards, there's a whole suite of non-timber forest products that can generate an additional revenue stream from your land.

**Agroforestry** combines elements of agriculture and forestry in ways that are mutually beneficial. This can be done by tending beds of plants under a forest canopy, or introducing complementary tree species to an agrarian setting. Livestock can even be pastured in forest settings, provided best practices – such as frequent grazing rotation – are followed.

**Birch bark** can be harvested and sold by the sheet. Since removing the bark will kill the tree, this is done just prior to a scheduled timber harvest.

**Mushroom cultivation**, using trees harvested on site and kept under a shaded forest canopy, has grown in popularity recently.

**Maple sugaring** can generate money for a landowner passively, through a sugarbush lease, or actively, as a hobby or side business.

Other non-timber forest products include witch hazel, balsam brush, ginseng and other herbs, birch syrup, and lowbush blueberries.

Restaurants will often buy springtime ephemerals. Farmers, in places, may buy acorns to feed to hogs in order to increase the value of the pork. The markets for these items – which are used for food, medicines, and crafts – are themselves ephemeral and regionally specific. And, just as when harvesting timber, it's important when harvesting these wild plants to take a thoughtful approach and to keep sustainability in mind.

One new non-timber forest market that's just developing is the sale of **carbon credits**. At the moment this marketplace is primarily available only

to large landowners; their forestland is audited, its carbon storage potential quantified, and a long-term management plan is put in place that maximizes carbon storage. The landowner is then paid accordingly by those looking to offset their carbon usage. This marketplace is still in its infancy and is continuing to develop and grow.







### 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

Among the many resources included on the masswoods website is an updated Massachusetts Forestry Best Management Practices Manual that covers every aspect of a timber harvest or other management activity from planning to installing skid trails and buffers, from stream crossings to protecting endangered species, from control of invasives to timber harvester safety.

www.masswoods.org/sites/masswoods.org/files/pdfdoc-ppt/Ch61-Programs-Revised-2018.pdf

Also included at masswood.org (along with many other resources) is detailed information relating to:

The Massachusetts Forest Cutting Practices Act (Ch. 132); www.masswoods.org/sites/masswoods.org/files/pdf-doc-ppt/ForestCuttingPracticesAct\_Ch.%20132\_1.pdf

"What is a Fair Price for Your Timber?"; and www.masswoods.org/sites/masswoods.org/files/pdfdoc-ppt/FairPrice YourTimber 1.pdf

Common Elements of a Timber Sale Contract. www.masswoods.org/sites/masswoods.org/files/pdfdoc-ppt/CommonElements\_TimberSaleContract\_0.pdf

#### NON-TIMBER FOREST PRODUCTS

The Massachusetts Maple Producers Association is a nonprofit organization dedicated to the preservation and promotion of maple sugaring in Massachusetts.

#### www.massmaple.org

The Northeast/Mid-Atlantic Agroforestry Working Group focuses on educating, promoting and implementing agroforestry systems in the Northeast and Mid-Atlantic Region of North America.

#### www.nemaagroforestry.org

The National Agroforestry Center helps landowners put trees and other vegetation to work on their land.

#### www.fs.usda.gov/nac

Profitable Farms and Woodlands is a practical guide in agroforestry for farmers, ranchers and landowners from the U.S. Forest Service.

www.fs.usda.gov/nac/documents/morepublications/ profitable\_farms.pdf

Ecosystem Marketplace, a project of the nonprofit organization Forest Trends, is a leading source of information on environmental markets and payments for ecosystem services.

www.forest-trends.org/wp-content/uploads/imported/ ForestPES\_Final.pdf

The U.S. Forest Service offers this Assessment of Nontimber Forest Products in the United States Under Changing Conditions

www.srs.fs.usda.gov/pubs/gtr/gtr\_srs232/gtr\_srs232.pdf

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