

North Atlantic Fire Science Exchange Oak Capstone Workshop

Fire in Oak: Regional Differences, Local Applicability

Challenges for using fire in oak: Opportunities in Massachusetts

Westborough, MA

June 16, 2016



Challenges for using fire in oak: Opportunities in Massachusetts

- Planning
- Funding
- Oak
Regeneration



Planning

Natural Resources Conservation Service

- Environmental Quality Incentives Program
 - Eligibility
 - Privately held land

Department of Conservation & Recreation

- Forest Stewardship Program
 - Eligibility
 - Individuals, joint owners, groups and associations, non-profits, long term lease holders, corporations without publicly traded stock

Prescribed Burn Plan Grant Funding



Natural Resources Conservation Service

Natural Resources Conservation Service

- Environmental Quality Incentives Program
 - Eligibility
 - Private forest land
 - Private farmland



U. S. Fish & Wildlife Service



- Partners for Fish and Wildlife Program
 - Eligibility
 - Private or Municipal land within a New England Cottontail



Funding

MassWildlife Habitat Management Grant Program

➤ Goals:

- Improve habitat for game species and/or for Species of Greatest Conservation Need identified in the Massachusetts State Wildlife Action Plan (SWAP) (special emphasis on State-Endangered and State-Threatened Species).
- Expand public recreational opportunities for hunting, fishing, trapping, and other wildlife associated recreation on conserved lands.
- Eligible to owners of private or municipal conserved lands protected in fee or by a Conservation Restriction, land enrolled in Chapter 61,61A/B, or land under a current Landowner Incentive Program covenant



<http://www.mass.gov/eea/agencies/dfg/dfw/wildlife-habitat-conservation/habitat-grant.html>

Funding

MassWildlife Habitat Management Grant Program

- \$350,000 in FY2016
- 18 Projects
- 3 Prescribed Fire Projects totaling \$65,000



•**Brookfield and Ware** — The East Quabbin Land Trust: \$16,730 to use prescribed fire to restore Pitch Pine-Scrub Oak and wet meadow habitats on Frohloff Farm and Wendemuth Meadow Preserve.

•**Edgartown** — The Nature Conservancy: \$32,908 to conduct prescribed burns to maintain sandplain grassland habitat on the Katama Plains Conservation Area.

•**Nantucket** — MassAudubon: \$13,200 for prescribed burning at Sesechacha Heathland Wildlife Sanctuary to manage sandplain heathland habitat.

Funding

National Fish & Wildlife Foundation Grant Program



- **NFWF** provides funding on a competitive basis to projects that sustain, restore, and enhance our nation's fish, wildlife, and plants and their habitats (>\$1,000,000 in 2015).
- **NFWF** supports more than 70 grant programs to protect and restore our nation's wildlife and habitats.
- **Who Can Apply**
 - Federal, state, and local governments, educational institutions, and nonprofit organizations are welcome to apply twice annually for matching grants from our conservation priority programs.
 - For other funding opportunities, application timelines, scope and guidelines vary.

<http://www.nfwf.org/whatwedo/grants/Pages/home.aspx>

Funding

Natural Resources Conservation Service

- Environmental Quality Incentives Program
 - Eligibility
 - Privately owned forest land with a forest management plan prescribing the management

Department of Conservation & Recreation

- Community Forest Stewardship Implementation Grants
 - Eligibility
 - Town Forest or Water Supply land currently enrolled in the Forest Stewardship Program

Grant Funded Prescribed Burns

Photo:
NEFFM

DFW Funded
Pitch Pine Oak Woodland, Ware

NRCS Funded
Pitch Pine-Scrub Oak, Mashpee

Photo:
NEFFM

DFW Funded
Mafic Fen, N. Brook field

Photo:
NEFFM

NRCS Funded
Maritime Shrubland, Dartmouth



Contacts

- MassWildlife Habitat Management Grant Program
James Burnham, james.burnham@state.ma.us
617-626-1586
- NRCS Environmental Quality Incentives Program
Marianne Piché, marianne.piche@state.ma.us
508-389-6313
- Department of Conservation and Recreation Forest Stewardship Program
Michael Downey, michael.downey@state.ma.us
978-368-0126 ext. 129



NRCS Funded Oak Regeneration, Granville



Oak Regeneration, Phillipston WMA



Year 1



Year 2



Year 3



Forests of Massachusetts, 2014



Table 2.—Top 10 trees species by volume estimates, Massachusetts, 2009-2014

Rank	Species	Volume of live trees on forest land (million ft ³)	Sampling error (%)	Change since 2009 (%)	Volume of sawtimber trees on timberland (million board ft)	Sampling error (%)	Change since 2009 (%)
1	Eastern white pine	2,099.8	7.8	13.2	9,291.2	8.5	17.0
2	Red maple	1439.1	5.8	4.3	3018.9	8.6	7.5
3	Northern red oak	988.8	8.2	9.4	3,633.5	9.1	11.0
4	Eastern hemlock	858	10.3	7.5	2278.6	11.9	4.2
5	Black oak	353.6	10.5	8.8	1,120.0	13.6	14.7
6	Sugar maple	320.2	12.8	-3.5	788.4	15.5	-1.9
7	White ash	305.7	14.0	-0.9	993.2	17.7	2.3
8	Sweet birch	269.1	11.5	12.1	568.2	17.1	15.4
9	White oak	243.4	10.3	15.1	744.5	14.2	18.8
10	Scarlet oak	225.6	13.2	2.7	645.6	15.6	1.5
	Other softwoods	223.2	15.2	8.7	547.0	18.2	14.3
	Other hardwoods	1099.4	6.2	2.4	2840.6	9.2	6.3
	All species	8,425.7	2.4	7.3	26,469.6	3.5	10.9



Forests of Massachusetts, 2014

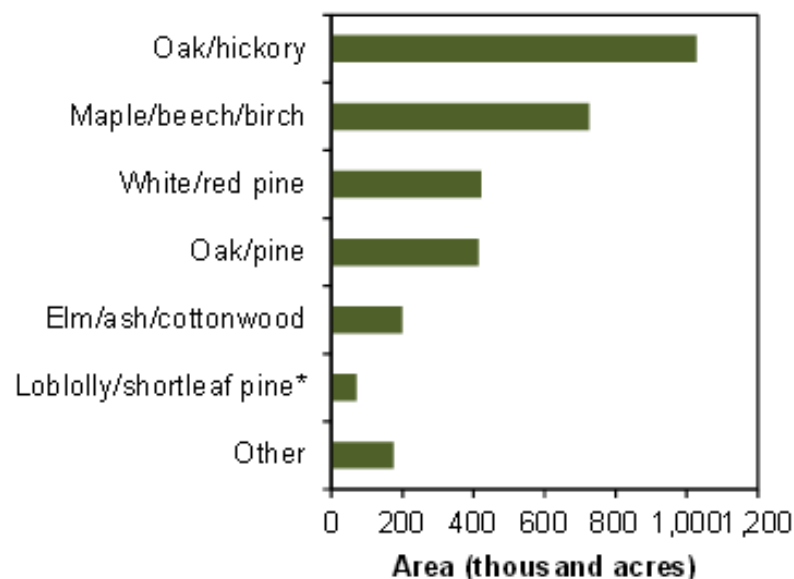
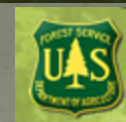


Figure 4.—Area of forest land by forest-type group, Massachusetts, 2009-2014. * Represented by the pitch pine forest type in Massachusetts.

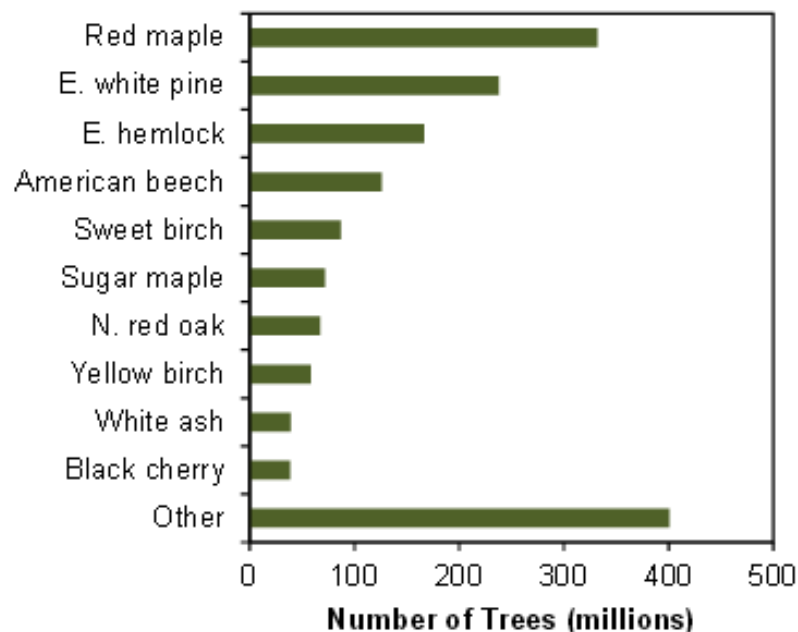


Figure 5.—Number of trees ≥ 1 in diameter by species, Massachusetts, 2009-2014.