



MASSACHUSETTS DEPARTMENT OF  
CONSERVATION AND RECREATION

# **Bureau of Forest Fire Control and Forestry 2021**





# DCR Bureau of Forest Fire Control and Forestry Programs

- Forest Fire Control (Dave Celino) (18 FTEs)
- State Lands Forestry (Tom Brule) (10)
- Service Forestry (Jennifer Fish) (13)
- Forest Markets and Utilization (1)  
(Sean Mahoney)
- Forest Health (Nicole Keleher) (35)
- Urban and Community Forestry  
(Julie Coop) (23)
- Forest Legacy (Lindsay Nystrom) (1)
- Land and Forest Stewardship (Mary Cardwell) (1)



# DCR

## Bureau of Forest Fire Control and Forestry

### Forest Fire Control Responsibilities

*Providing aid and assistance in the prevention, detection and suppression of forest fires to cities and towns since 1911.*



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# Importance of assisting other DCR Programs



# Forest Health Program

- The Forest Health Program utilizes multiple survey and trapping protocols to research insects and diseases impacting forest conditions. The program works in cooperation with state, federal, and municipal agencies to detect, manage, and treat biotic and abiotic factors that negatively impact Massachusetts' state forests.
- The Forest Health Program provides tree health care services for the DCR's state forests, parks, and reservations.

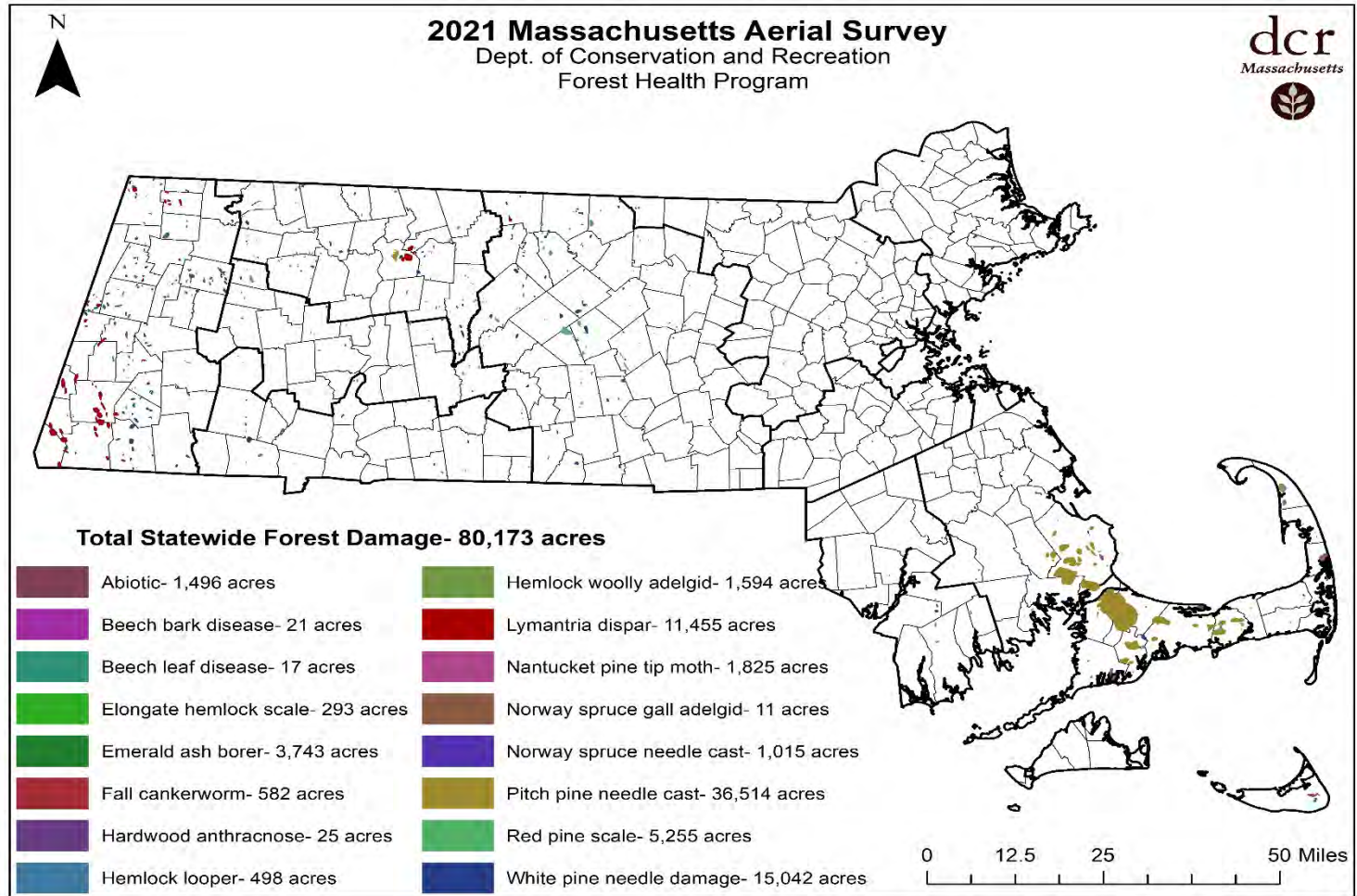


# Aerial view of 2011 tornado path



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# 2021 Aerial Survey





# Urban and Community Forestry

- Greening Gateway Cities initiative (30,000 trees planted)
- Coordinate Worcester County ALB reforestation program
- Annual urban challenge grants
- Provide technical assistance to municipalities and partner groups
- Tree Planting in DCR Parks



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# Service Forestry

## Protecting the natural resources of our forestland

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### Forest Cutting Practices Act

- Since 1943
- Purpose protect public values through water and soil conservation, habitat improvement while providing a continuing supply of forest products
- Oversight through permit review and field inspections

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### Current Use Ch61 Program

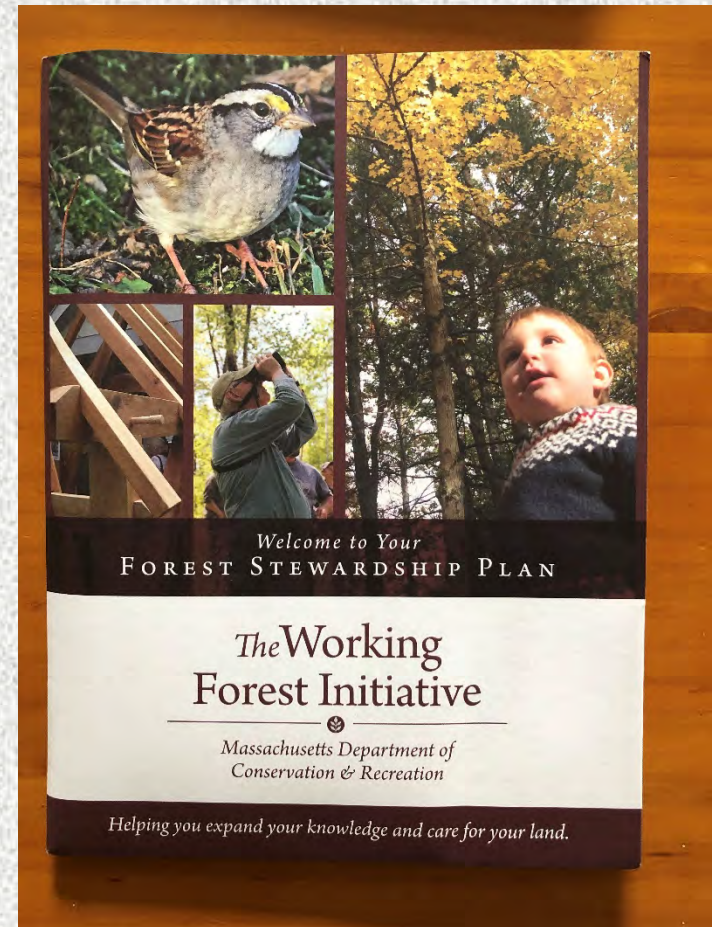
- Significant property tax reduction through commitment to sustainable forest management





# Service Forestry

- Working Forest Initiative
  - Stewardship plan cost share
  - Bird habitat assessment
  - Community stewardship grants
  - FSC certification
  - Conservation planning
- Provide technical assistance to landowners and municipalities in forest management, forest resource planning and forest protection.
- Help forest landowners make educated decisions about their forest lands.
- Administer Timber harvester licensing



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# STATE LANDS FORESTRY

## The Management Forestry Program

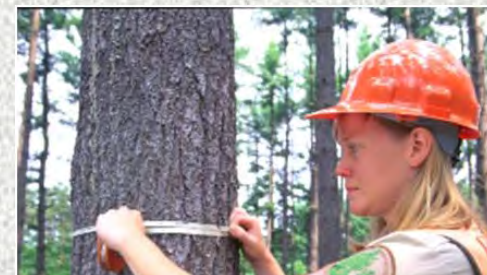
### Mission of Forest Management on DCR Woodlands

- demonstrate exemplary forest management practices
- manage carbon stock
- to produce wood products
- protect water quality and enhance supply
- create diverse habitats
- provide recreational opportunities

**Manage** – Actively manage State Forests for a variety of ecosystem services

**Monitor** - Inventory State Forest Resources. What tree species; how big; how old; how fast or slow is growth; how healthy?

**Maintain** – Property boundaries and forested recreation facilities. Help address encroachments. Assist State Parks with forested infrastructure on State Forests. Respond to natural disturbances on DCR properties



# STATE LANDS FORESTRY

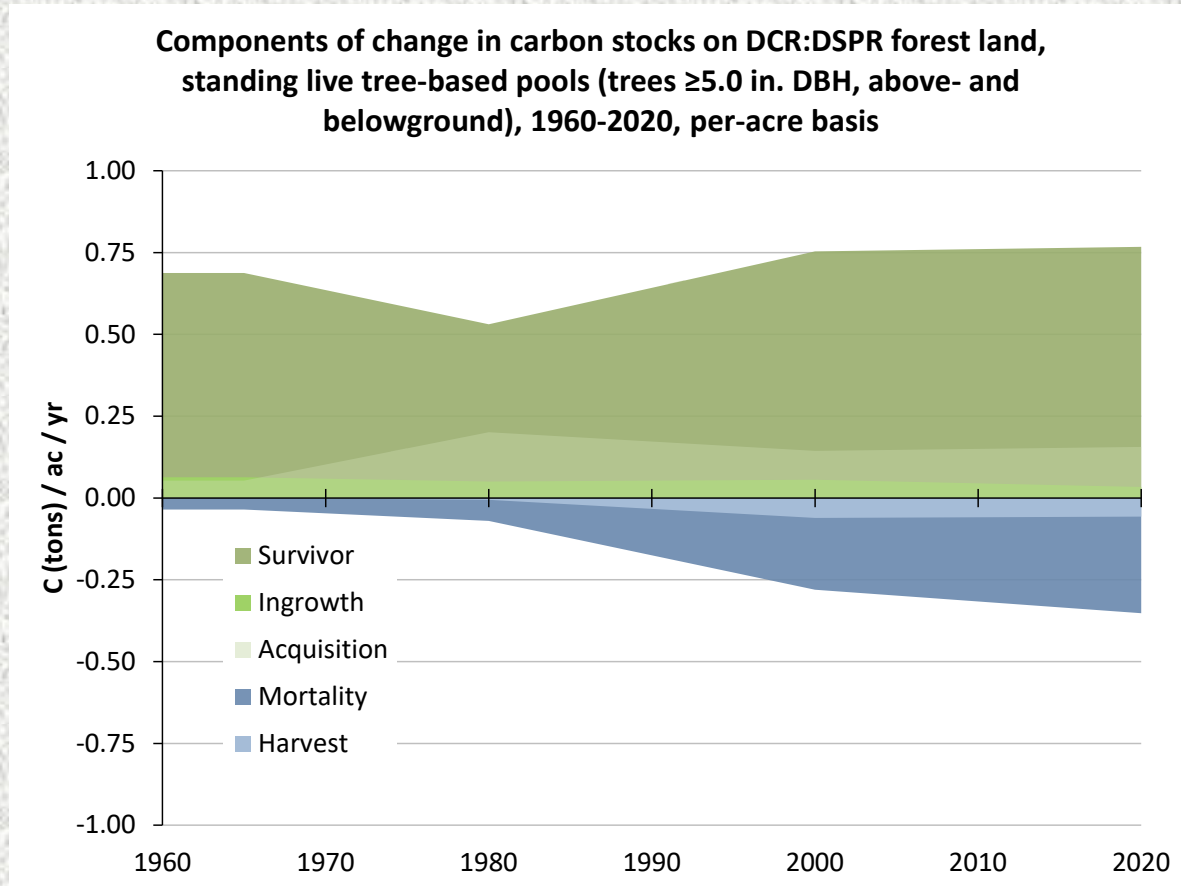
## Continuous Forest Inventory

- The Continuous Forest Inventory (CFI) program, established in the late 1950s, has measured the dimensions, characteristics, and fate of over 100,000 trees; and other vegetation, stand, and forest characteristics on over 2,000 sample plots across the land base.
- CFI provides the foundation for DCR's decision making processes, telling us about the status and trends associated with forest health, carbon storage, growth, yield, and mortality; helps to identify threats and opportunities with respect to forest management; and gives us the information needed to model stand and landscape responses to different forest management scenarios.



# Continuous Forest Inventory

All the support allows for things like...



...using models and algorithms that allow for apples-to-apples comparisons to FIA that leverage effort

# Forest Future Visioning and Landscape Designations



Massachusetts Department of Conservation and Recreation

## Landscape Designations for DCR Parks & Forests: Selection Criteria and Management Guidelines



March 2012



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# Forest Future Visioning and Landscape Designations

- Adoption of an Ecosystem Services Model
  - Biological/ecosystem diversity
  - Soil, air, water quality
  - Carbon sequestration
  - Nutrient cycling
  - Culture, history, spiritual values
  - Public recreation
  - Renewable wood products
- Landscape Designations and Management Guidelines

# Parklands

*70,000 to 90,000 acres*

- *Goal:* Focus on recreation, reconnecting people to nature while providing recognition of aesthetic and cultural values



- *Ecosystem Services:* provision of public recreation opportunities, protection of ecologically and culturally significant special places



# Woodlands

*100,000 to 150,000 acres*

- *Goal:* Demonstrate excellent forest management practices for landowners and the general public
- *Ecosystem Services:* protecting water supplies, early successional habitat, carbon sequestration through late successional habitat restoration, ecological restoration and sustainable production of timber for local markets



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# Reserves

*90,000 to 120,000 acres*

- *Goal:* Protect the least fragmented forested areas, representing diverse ecological settings and long-term evolutionary processes that can be monitored to assess and inform forest stewardship
- *Ecosystem Services:* biodiversity maintenance, nutrient cycling and soil formation, watershed protection, carbon sequestration; wilderness/spiritual values and recreation



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# Ecosystem benefits from forest management

- Demonstration forestry (Be leaders in exemplary forest management)
- Restoration of native ecosystems
- Wildlife habitat enhancement
- Managing for carbon
- Home fuel wood
- Recreational access improvements
- Restore fuel breaks in fire prone areas
- Diversify species and stand age structure
- Hazard tree removal
- Increase forest resilience from forest pest threats (EAB)
- Produce forest products
- Provide forest products payments to municipalities

# Forest Management Public Process

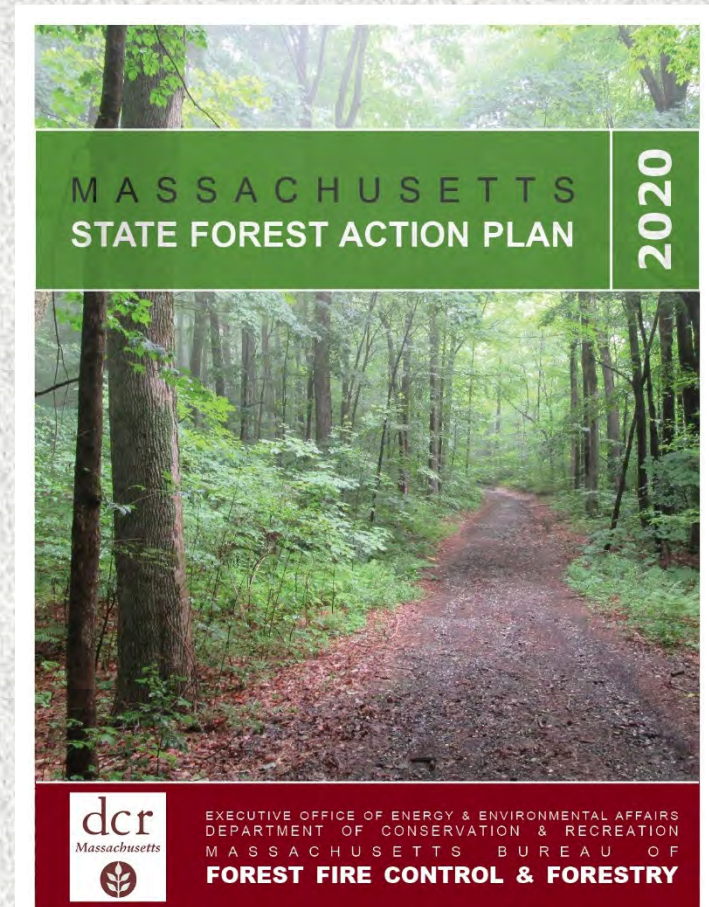
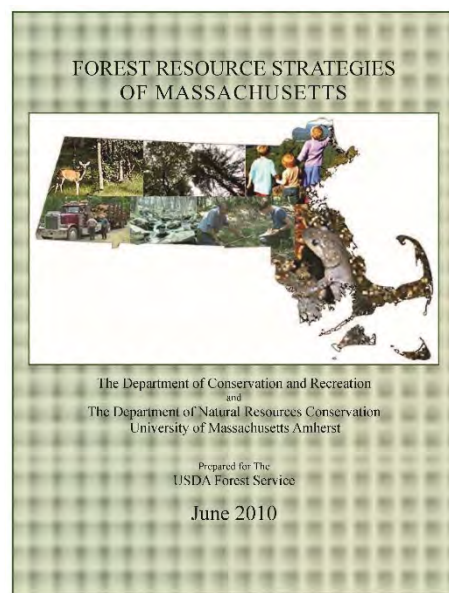
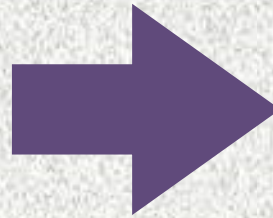
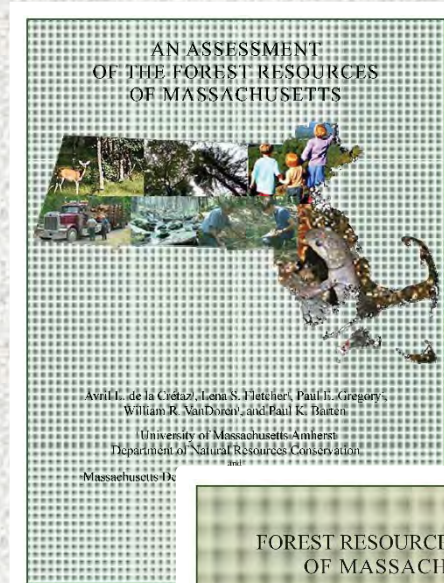
- Timber Harvesting Summary Document
  - Project proposals will be developed biannually
    - \* Consult with NHESP, DFW wildlife staff, DCR natural and cultural resource staff and DCR operations staff
    - \* Internal review and signoff of proposed projects
  - Posted on DCR Forestry Webpage for public viewing
- Public information meetings will be held on proposed projects
- Send letters to town selectboards asking if they would like a briefing on the project in their community. Notify legislative delegation for those areas
- Receive and respond to comments
- Prepare detailed silvicultural prescription documenting inventoried site level resources
- Conduct public site visit of planned harvest area.
- Prepare and file MA Cutting Plan



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# MA State Forest Action Plan-2020



# MA State Forest Action Plan-Goals

- Increase resistance and resilience of trees & forests to mitigate and adapt to the effects of climate change
- Manage forest ecosystem health & biodiversity
- Support & enhance forest economy
- Maintain & increase urban tree canopy
- Enhance the connection between forests & people
- Increase land base of conserved forests (keep forest as forests)
- Advocate for a legal & institutional framework pertinent for the conservation & management of trees & forests
- Maintain & enhance soil, water, & air resources
- Support the role and use of prescribed fire in the landscape
- Cultivate & support partnerships with forestry & conservation stakeholders



# Forest Resource Management Planning

- FRMPs are designed to guide the management of State Forests, Parks and Reservations and their associated natural resources.
- The purpose of each FRMP is to provide direction for the management of all resources by defining standards and guidelines for their management, address the forest resource management issues identified by the public particularly those included in the 2010 Forest Futures Visioning Process and the [Landscape Designation](#).
- Currently there are 4 District plans, and 1 draft district plan for the 8 districts.



# Forest Management Planning

- 2020- Discussions began on re-imagining our Forest Resource Management Plans
- December 2020 – Completion of State Forest Action Plan
- Spring of 2021 – Hiring of Tom Brule’
- Fall 2021 – Internal review of Landscape Designations
- 2022 – Work on template for next iteration of Forest Resource Management Plans



# Questions?



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