

Implementing Natural Solutions to Climate Change

Mass Land Conference Webinar – April 16, 2020



Conservation is a Climate Action!

...Building resilience through land protection



PANEL:

Implementing Natural Climate Solutions

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Do you talk about climate change?

To Family, relatives?....

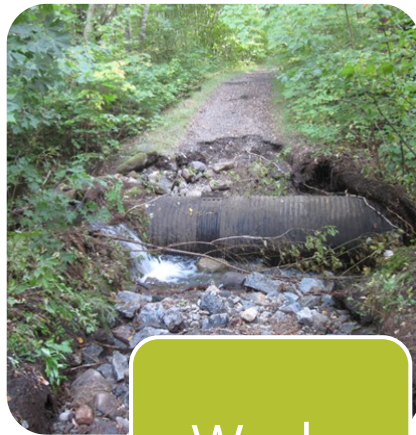
Friends or neighbors?...

Landowners, members, donors?

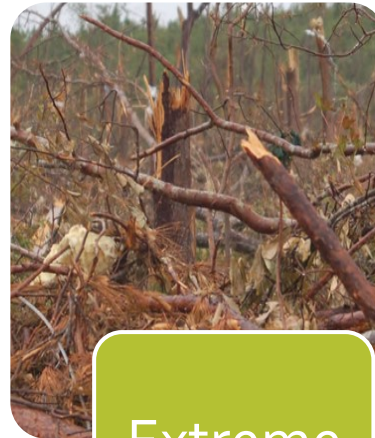
Finding common ground



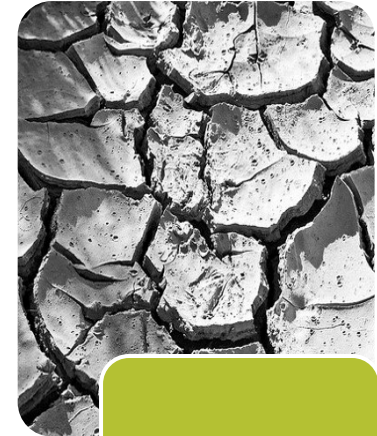
Early
bud
break



Wash-
outs



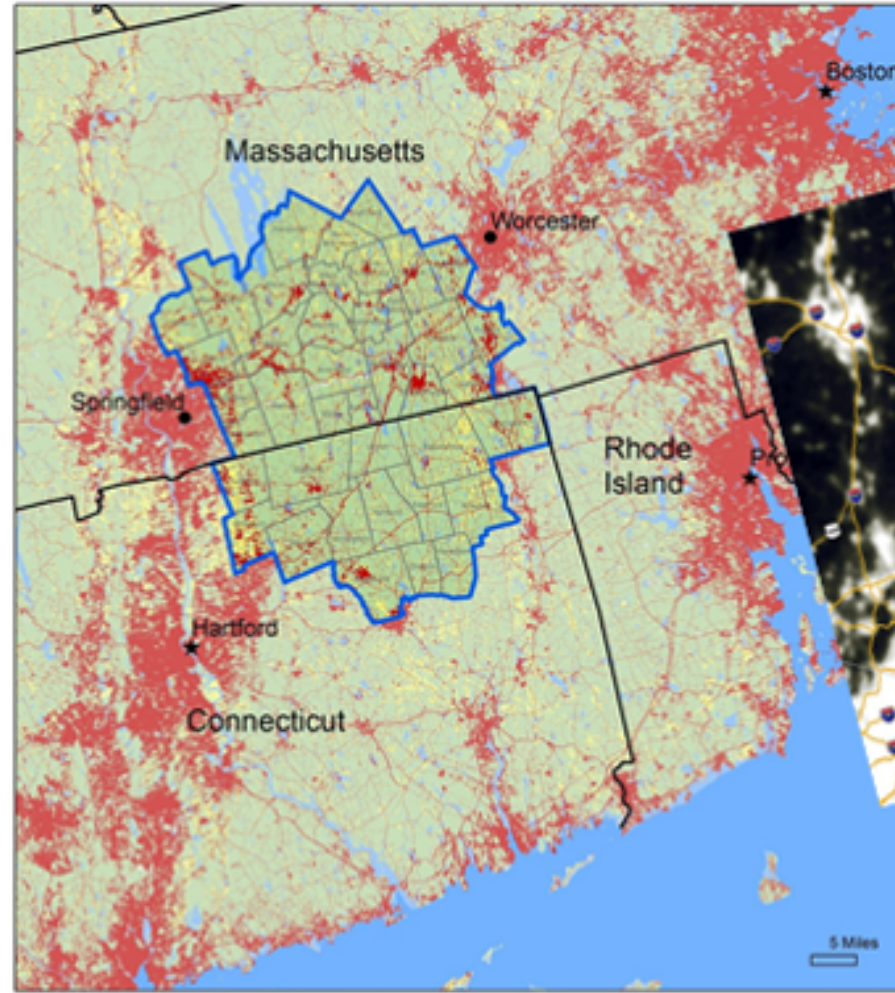
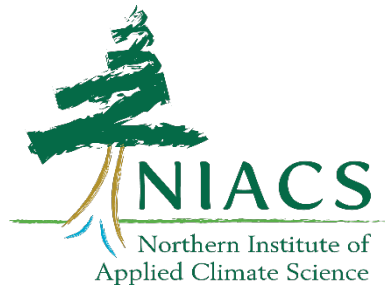
Extreme
weather



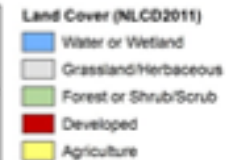
Moisture
stress

Landowner Outreach in the MassConn Woods

- Climate adaptation visits by NIACS-trained foresters (NEFF, American Forest Foundation, MassConn partnership)
- 102 private owner visits completed on combined 8100 acres in 38-town, 2-state region since 2016



MassConn Sustainable
Forest Partnership



MassConn Woods goal: Equip Foresters to be Adaptation Messengers

- Find trusted spokespeople
- Lead with politically neutral messages
- Focus on local impacts/responses

Considerations for Your Woodlot

The following are general recommendations to keep your woods healthy and able to adapt to changes into the future. While all of these actions are important, the checked recommendations are most applicable to your woods and your situation. To learn more, consult our fact sheet, consider working with a professional to implement these practices on the ground or visit our website at <http://mymassconnwoods.org/>.

Top Forest Stressors to Keep an Eye On	Extreme Weather Vulnerabilities
<input type="checkbox"/> Protect water and soils on your land	
<input type="checkbox"/> Improve ability of your trees to resist bugs and disease	
<input type="checkbox"/> Prevent and control non-native plants and weeds that threaten native plants and animals	
<input type="checkbox"/> Manage damage to young trees from excessive deer browsing	
<input type="checkbox"/> Prepare for big weather events by promoting strong, healthy trees in your woodlot	
<input type="checkbox"/> Respond quickly after big disturbance events to help your woods bounce back	
<input type="checkbox"/> Promote a diversity of tree species	
<input type="checkbox"/> Promote a diversity of tree sizes	
<input type="checkbox"/> Protect rare or sensitive plant & animal communities	
<input type="checkbox"/> Consider how your current trees will react to future conditions and which tree species you might want to promote	
<input type="checkbox"/> Monitor your woods and the effect of different management tactics	

Keeping Your Woods Healthy Through the Years Ahead

Whether you spend time outside in your woods, or just enjoy the beauty of your trees and wildlife from your window, you likely love your woods and want to keep them healthy.

Forests are always changing and adapting to new conditions. Some changes are as anticipated as the progression of green summer leaves to the bright red and gold of fall foliage, or annual waves of brightly colored migratory songbirds. Other changes in our woodlands are only visible when comparing differences across many years or decades.

Our climate is changing in ways that humans have never experienced before, resulting in rising temperatures and shifts in seasonal precipitation patterns. You may be noticing some of these changes in your woods – such as earlier dates for the first signs of spring leaf-out, unusual weather patterns, longer dry periods in summer, or even an increase in fast-growing, invasive plants such as poison ivy.



In particular, temperature and precipitation patterns in the MassConn region of northeast Connecticut and south central Massachusetts have changed over the course of our lifetime. For example, the heaviest rainfall events have increased 70% in the Northeast U.S. from 1950 to 2012 – more so than in any other part of the country! Additional changes are expected by the time our grandchildren are having grandchildren of their own.

Annual precipitation has increased by 2-6 inches in the MassConn Woods area, and is projected to rise at least another inch over the next 100 years. At the same time, extreme or very heavy precipitation events are expected to occur more often, and warmer temperatures will result in more rain than snow! This means your stream crossings and culverts will need to accommodate dramatically increased flow at times.

By the end of this century, average annual temperatures are projected to increase between 5 to 10 degrees Fahrenheit, increasing both the length of the growing season and the frequency and severity of extremely hot days!

Warmer temperatures, more variable summer rain and more summer moisture stress leading to potentially harmful droughts!

As conditions change, the MassConn area is expected to become less favorable for northern trees we are familiar with, and more favorable to typically southern tree species. This means that many common trees, shrubs, and herbs are likely to experience greater stress, and tree species more likely to be successful may have more opportunities!

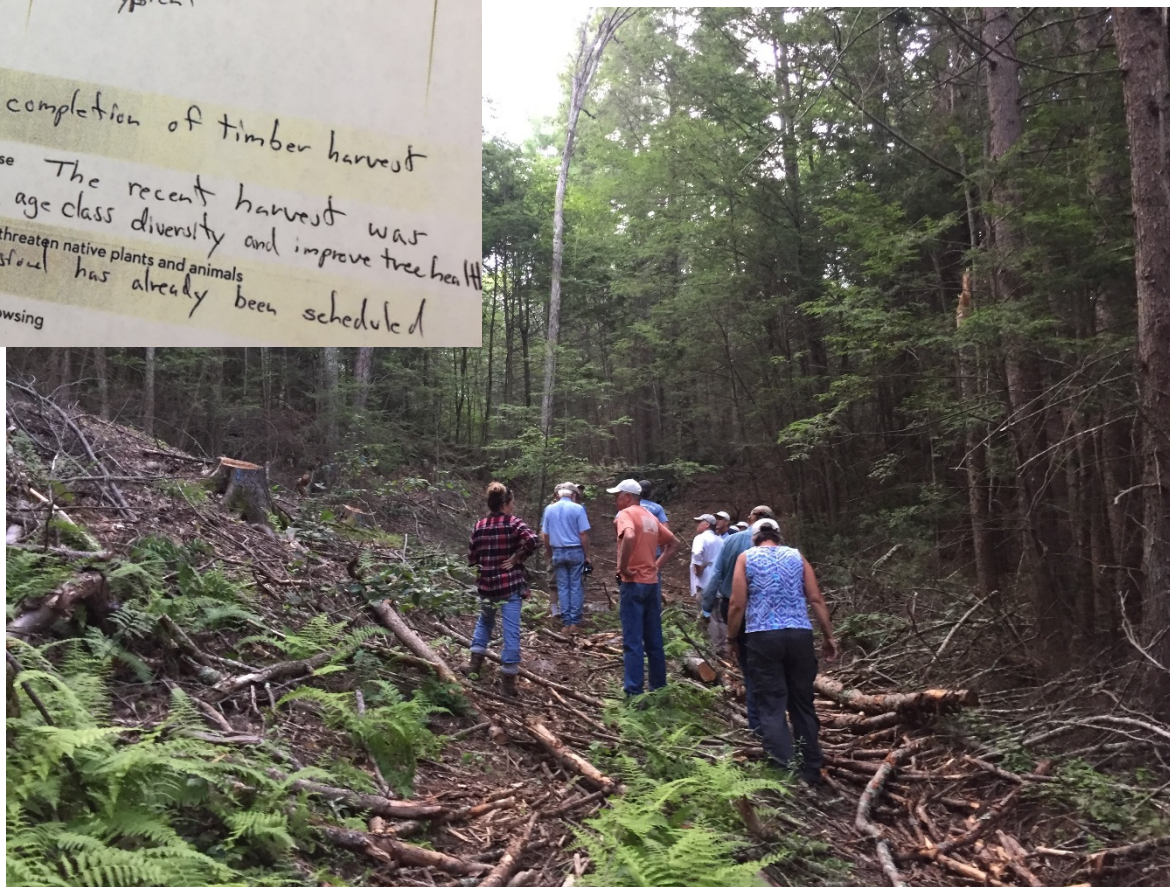
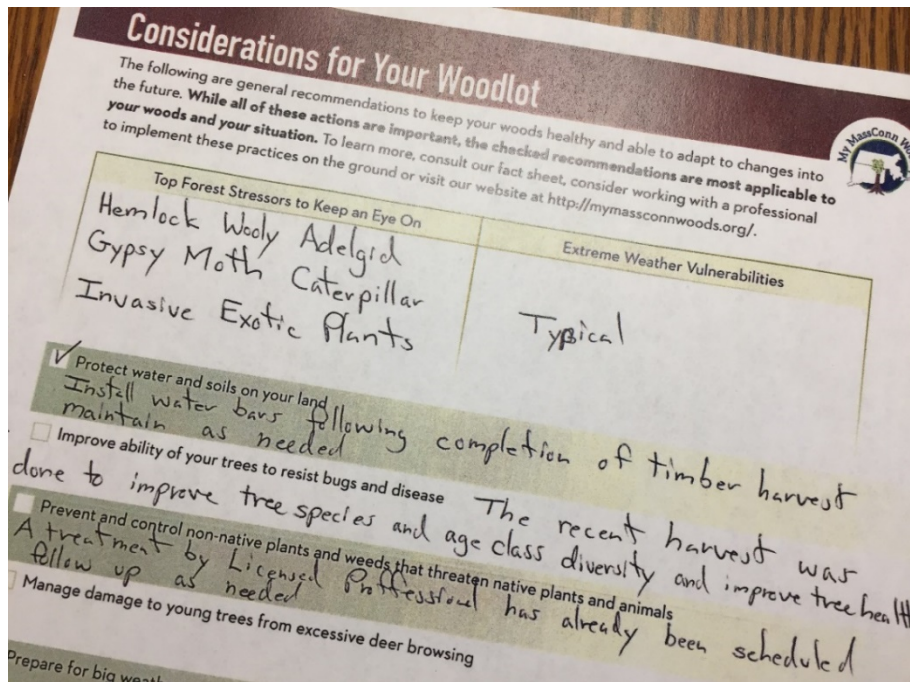


Considerations for Your Woodlot

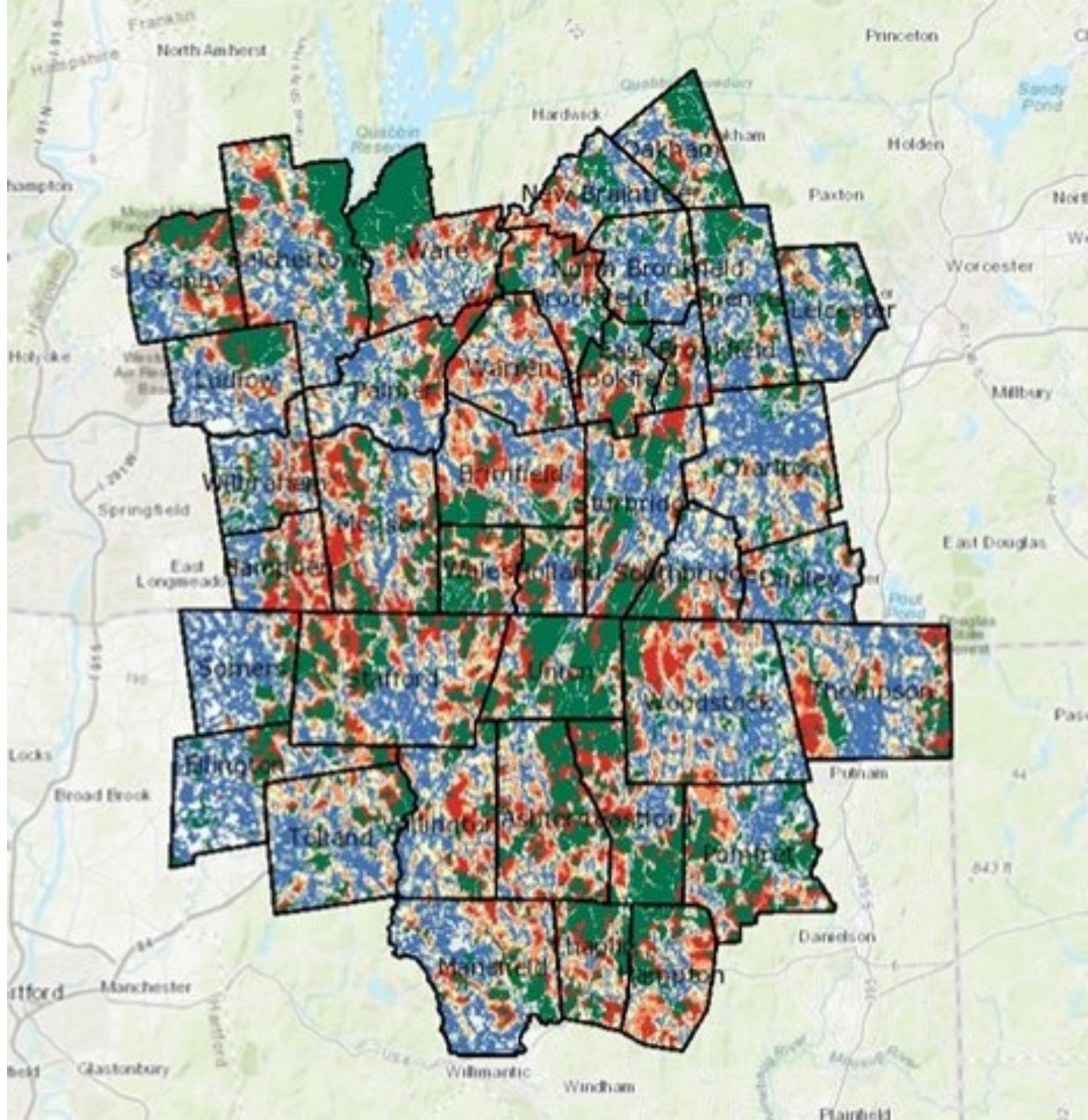
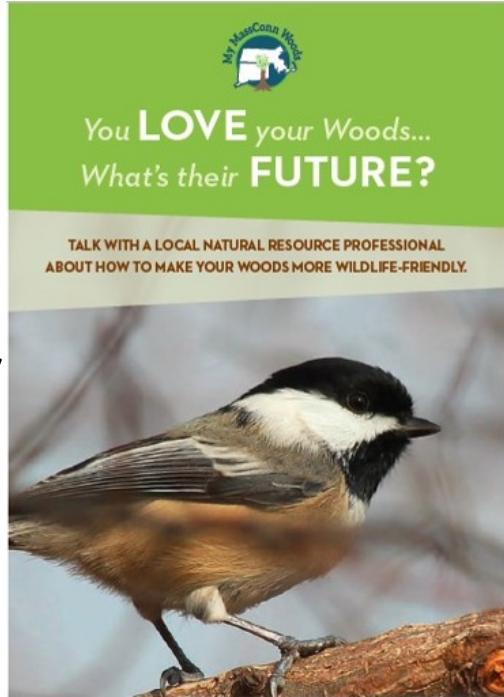
Southbridge/Dudley, MA
Opacum Land Trust
140 acres

Climate-Informed Practices:

- ✓ Treated/removed invasives (12 acres - barberry, knotweed, multiflora rose)
- ✓ Timber harvested to diversify age classes & species (40 acres)
- ✓ Clear-cut with reserves for wildlife habitat (4.5 acres)



- MassConn ecological priorities – Red = top 20%
- Tool for strategic landowner outreach: 25+ acres, high-ranking parcels for conservation/resilience

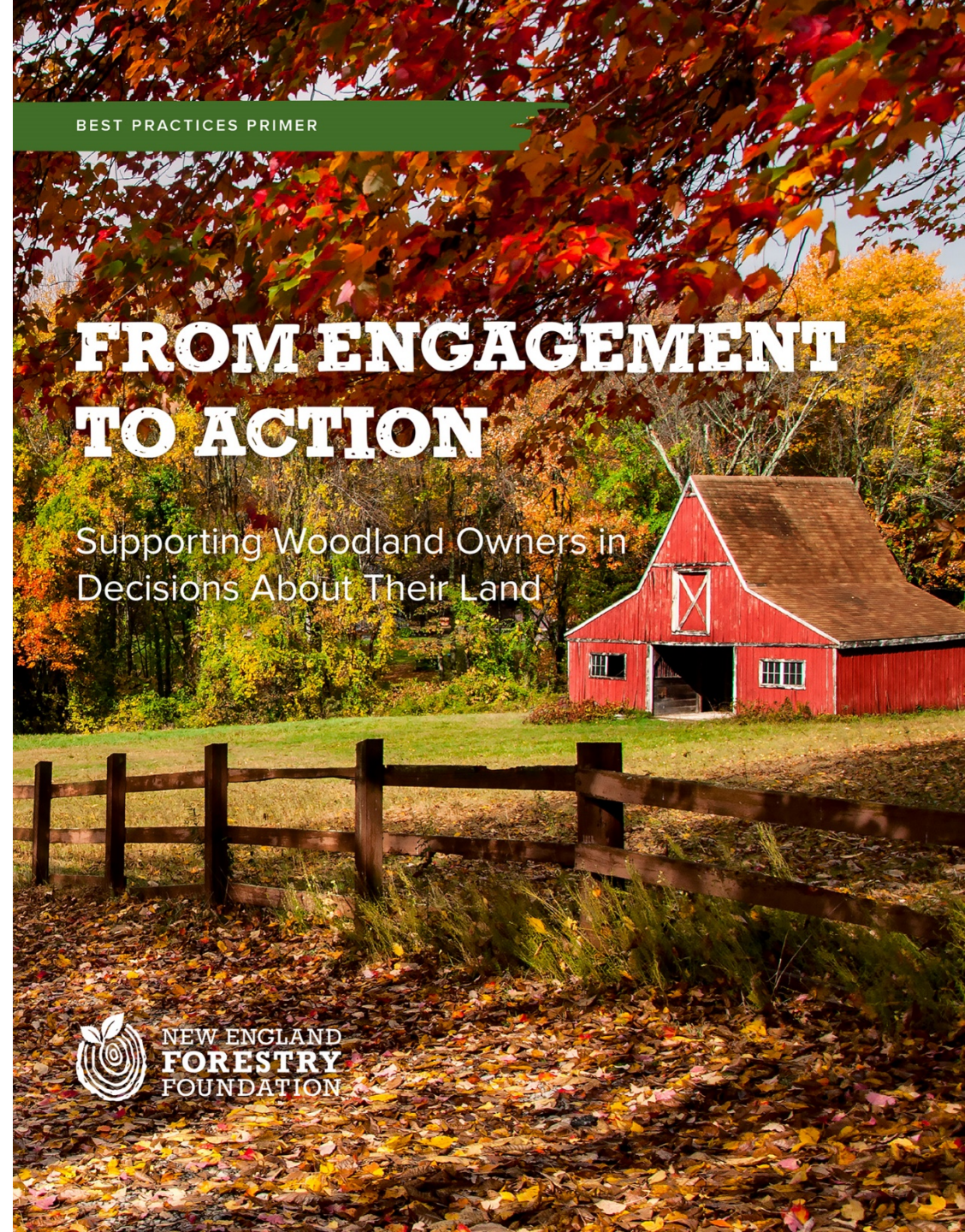


From Engagement to Action...

- NEFF report on importance of strategic and sustained outreach to landowners not already plugged into peer networks

Available for download from
NEFF's web site:

[https://newenglandforestry.org/
connect/publications/from-
engagement-to-action/](https://newenglandforestry.org/connect/publications/from-engagement-to-action/)



The crucial private landowner audience...

- **215,000 private New England woodland owners of 10+ acres**
 - **MA: 26,000 ownerships**
- Owners of undeveloped lands – whether permanently protected or not – will decide the future of our forests
 - Will we manage with exemplary forestry, for forest carbon and resilience?



Connecticut
landowner
200 acres

A

\$ 2018

Applies for conservation easement funding, negotiations underway



2017

Adopts climate-informed management plan and begins work on controlling invasives



August 2016

Attends Norcross climate-informed forestry walk
Signs up for free forester visit during event



November 2015

Attends workshop about conservation funding programs



June 2015

Inquires about land trust visit card through neighbor and receives visit

Patterns of Landowner Engagement Over Time

Steps

on the pathway...

Massachusetts
landowner
11 acres

B

\$ 2016

Develops forester plan for Massachusetts policy (Ch. 61) that saves landowners money on property taxes



Spring 2015

Calls to respond to postcard offering a free visit from land protection specialist



February 2015

Attends Monson estate planning forum, where experts walked landowners through planning for the future of their land



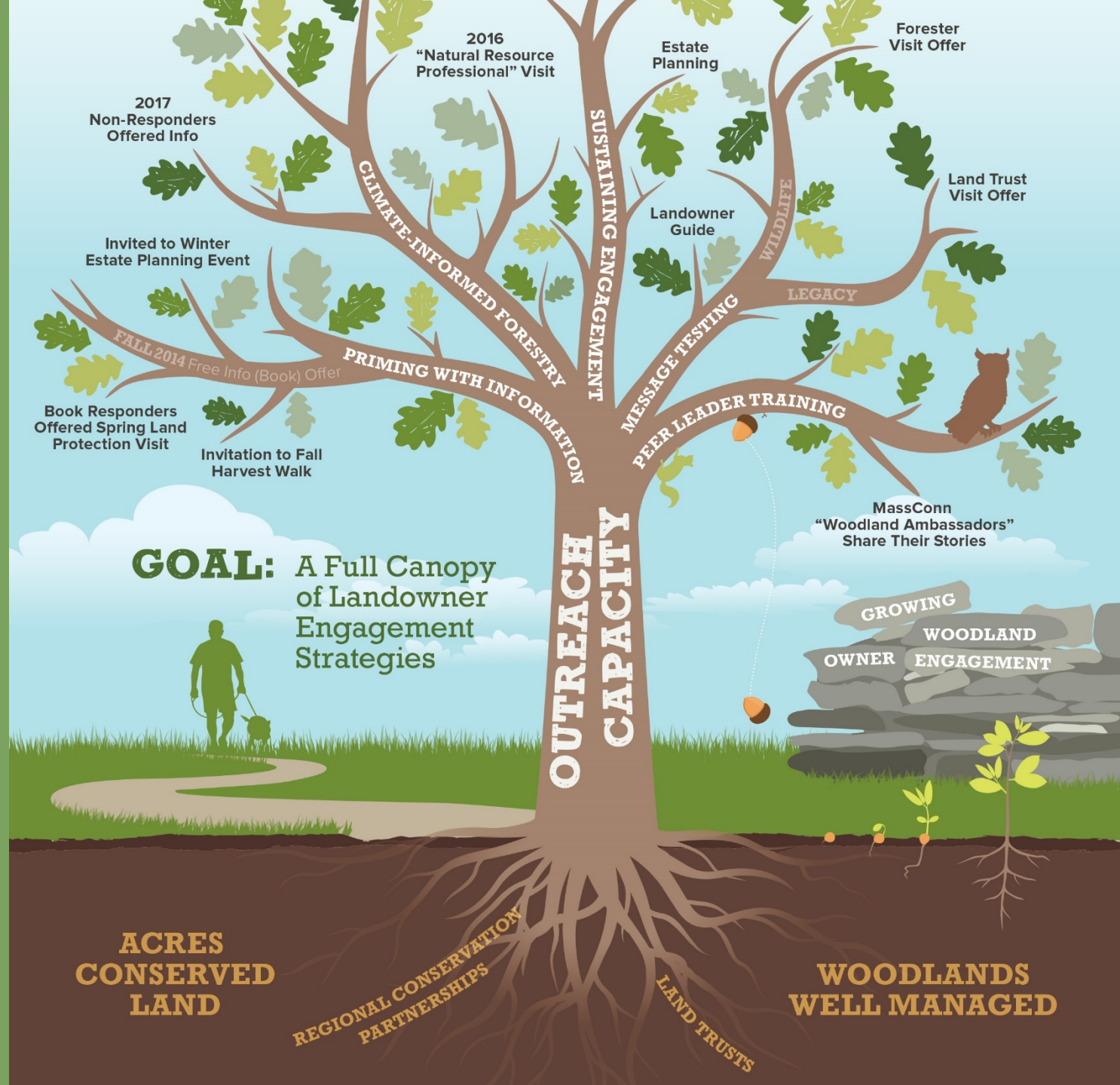
November 2014

Attends Norcross woods walk about how forest management can benefit wildlife habitat



Fall 2014

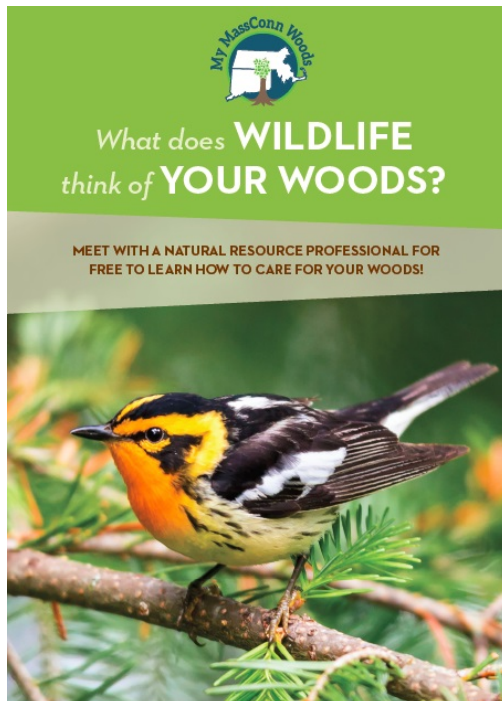
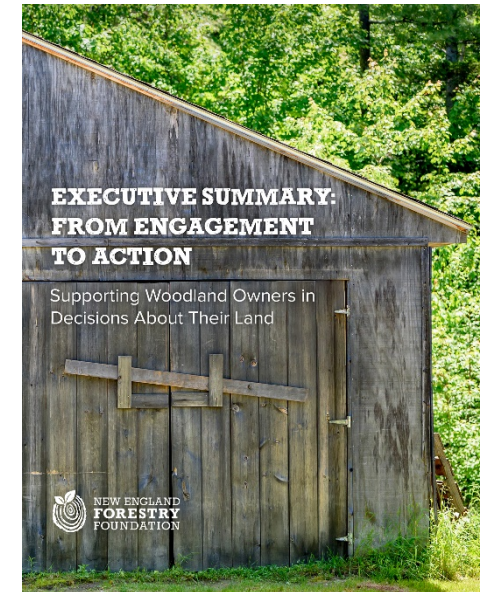
Returns postcard for free "More Than a Woodlot" book, an introduction to management



Key Resources

From Engagement to Action... Outreach report

[https://newenglandforestry.org/connect/publications/
from-engagement-to-action/](https://newenglandforestry.org/connect/publications/from-engagement-to-action/)



To access resources developed for the
MassConn Woods RCP, visit:

<http://www.forestadaptation.org/massconn>

LTA/ MA ECAN Climate Communications
recommendations:

<https://climatechange.lta.org/recommendations-for-communicating/>

Questions?



Communicating about Climate Change

... 5 Research-based Recommendations (MA ECAN)

1. Lead with politically neutral messages
2. Find trusted spokespeople to deliver your message
3. Focus on local impacts/responses, rather than causes
4. Avoid technical jargon – keep it simple
5. Use photos to tell a story: faces, people doing desired actions

<https://climatechange.lta.org/recommendations-for-communicating/>

Sources and Resources

- **LTA/ MA ECAN Climate Communications recommendations:**

<https://climatechange.lta.org/recommendations-for-communicating/>

- **Annotated references for climate communications practices:**

<https://docs.google.com/document/d/1ZGqs4hdGNkJRe287Z7MOSix2iW7bdt2Mpy1NOImOciU/edit>

- **Six America's Super Short Survey (SASSY!)**

<https://climatecommunication.yale.edu/visualizations-data/sassy/>

- **Urgency and Risky Words:**

<https://sparkneuro.com/case-studies/rebranding-climate-change/>

- **ecoAmerica – Let's Talk Climate: Messages to Motivate Americans:**

<http://ecoamerica.org/wp-content/uploads/2015/11/eA-lets-talk-climate.pdf>