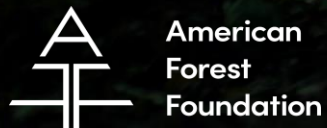


Family Forest Carbon Program

Presented By: Chris Zimmerman



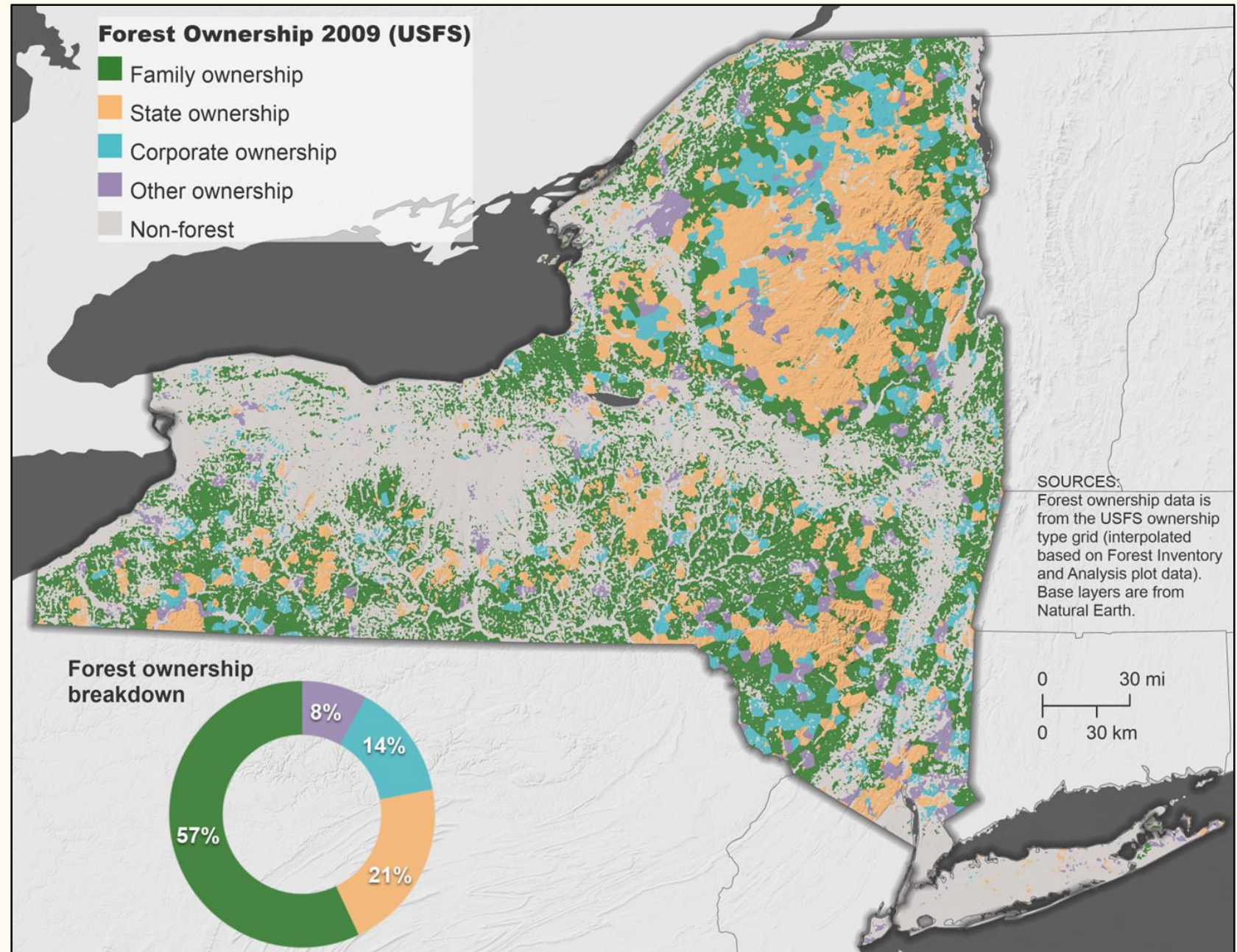
Program Led By:



New York State Family Forest Landowners

- 197,000 family forest ownerships totaling 9.3 million acres of forest.
- 16% of the ownerships have received forest management advice.
- 9% of the ownerships have a written forest management plan.

National Woodland Owner Survey (USFS)



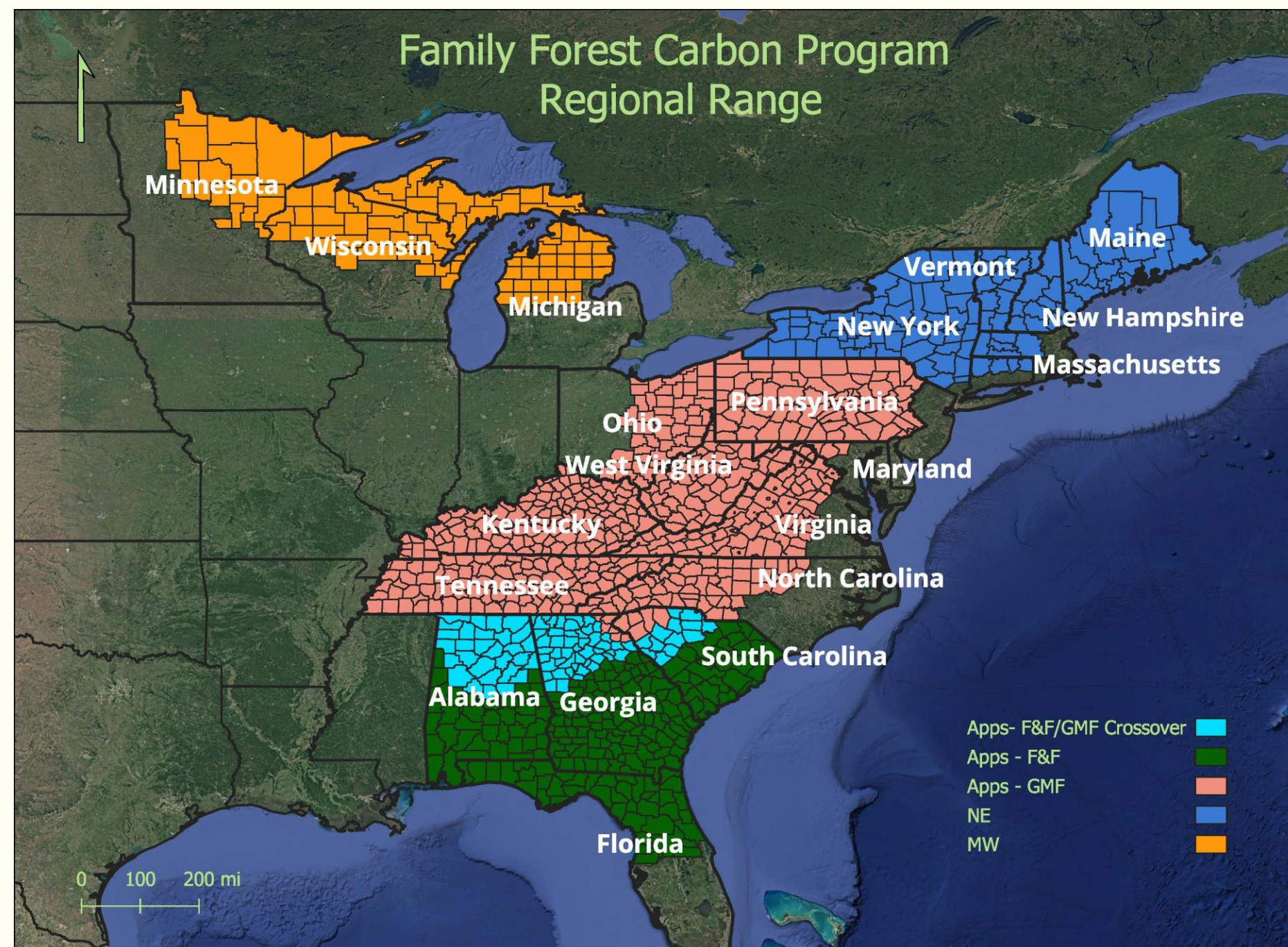
What is the Family Forest Carbon Program?

- Developed by the American Forest Foundation and The Nature Conservancy.
- The Family Forest Carbon Program brings together family forest owners to improve forest health, address climate change and support communities.



Eligible Counties

The Family
Forest Carbon
Program is
currently
available in
20 states.





Healthy Forests for our Future:

A Management Guide to Increase Carbon Storage in Northeast Forests



Ten Climate-Informed Forest Management Practices



Purpose

Enable landowners and foresters to make climate informed decisions

Contents

10 forestry practices to:

- Increase carbon stored in the forest within 20 years
- Improve forest health and resilience

Protect forests

1. Avoid forest loss

Grow new trees and forests

2. Green developed areas
3. Reforest
4. Plant trees to increase forest stocking

Reduce stressors

5. Remove invasive vegetation
6. Protect seedlings and saplings from deer browse

Manage forests

7. Establish forest reserves
8. Increase time between harvests
9. Create gaps to promote regeneration
10. Retain more carbon in a thinning

Enhance Your Woodland

- Designed for landowners who want to actively manage forest.
- Enhance Your Woodland (EYW) provides landowners with annual payments, forestry expertise, and potentially timber revenue from future harvests.
- EYW is currently enrolling landowners with 30+ acres of forests.

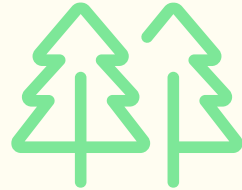


Enhance Your Woodland

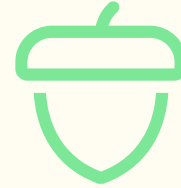
Eligibility and Landowner Benefits



**20-Year
Contract**



**30 Forested
Acres**
(Minimum)



**60 sqft/ac
8" QMD
2,000 MBF**



**Naturally Occurring
Maple-Beech-Birch
Forest Type**



**Payment:
\$200/ac.
\$10/ac./yr.**



**Sustainable
Harvesting is
Allowed**



**Yearly
Personal Use
Allowance**



**Free Forest
Management Plan**
(Updated Every 10 Years)

EYW Practice Specifications and Wildlife Benefits

- Must hire a qualified 3rd party forester to oversee harvest.
- May not remove more than 15% of the total basal area within the enrolled area.
- May not reduce the quadratic mean diameter beyond 10%.



Thinning, single tree selection, group selection, and small patch cuts.

- Promotes forest regeneration
- Increases structural complexity
 - Provides habitat for wildlife
 - Promotes resilience.

PREDICTED FOREST REGENERATION STATUS all tree species



The Nature Conservancy
New York

Data credits

Predicted Forest Regeneration Status grid modeled based on USFS FIA point data and interpolated across USFS mapped forest cover. Base Layers from Natural Earth.

Map credits

Created August 2020 by Chris Zimmerman, Rebecca Shirer and Shannon Thol of The Nature Conservancy in New York.

DEFINITIONS*

Failure

does not meet regeneration objective and is unlikely to result in a fully stocked stand

FAILURE | HIGH RELIABILITY

predicted failure regardless of model uncertainty

FAILURE | MODERATE RELIABILITY

predicted insecure with plus 1 standard error

Insecure

advance reproduction likely to fall short of the objective given normal seedling mortality

INSECURE | MODERATE RELIABILITY

predicted failure with minus 1 standard error

INSECURE | HIGH RELIABILITY

predicted insecure regardless of model uncertainty

Secure

sufficient regeneration to meet the objective of achieving a fully stocked stand

SECURE | MODERATE RELIABILITY

predicted insecure with minus 1 standard error

SECURE | HIGH RELIABILITY

predicted secure regardless of model uncertainty

Unclassified forest cover that could not be classified due to method limitations or high model uncertainty

*Adapted from Vickers et al. Ecological Indicators 96 (2019): 718-727.

0 25 mi
0 40 km



Growing Older Forests

- Deferred timber harvest for 20 years (extended rotation).
- Allows for some firewood harvesting.

GOF provides landowners with annual payments, forestry expertise and potential increased timber value.

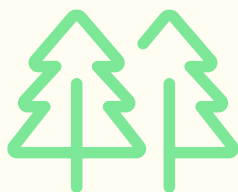
GOF is currently enrolling landowners with 30+ acres of forests

Growing Older Forests

Eligibility and Landowner Benefits



**20-Year
Contract**



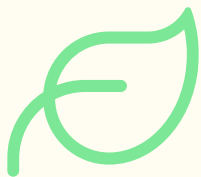
**30 Forested
Acres**
(Minimum)



**60 sqft/ac
2,000 MBF
8" QMD**



**Naturally Occurring
Maple-Beech-Birch
Forest**



**Timber Harvests
are deferred**



**Yearly Personal
Use Allowance**



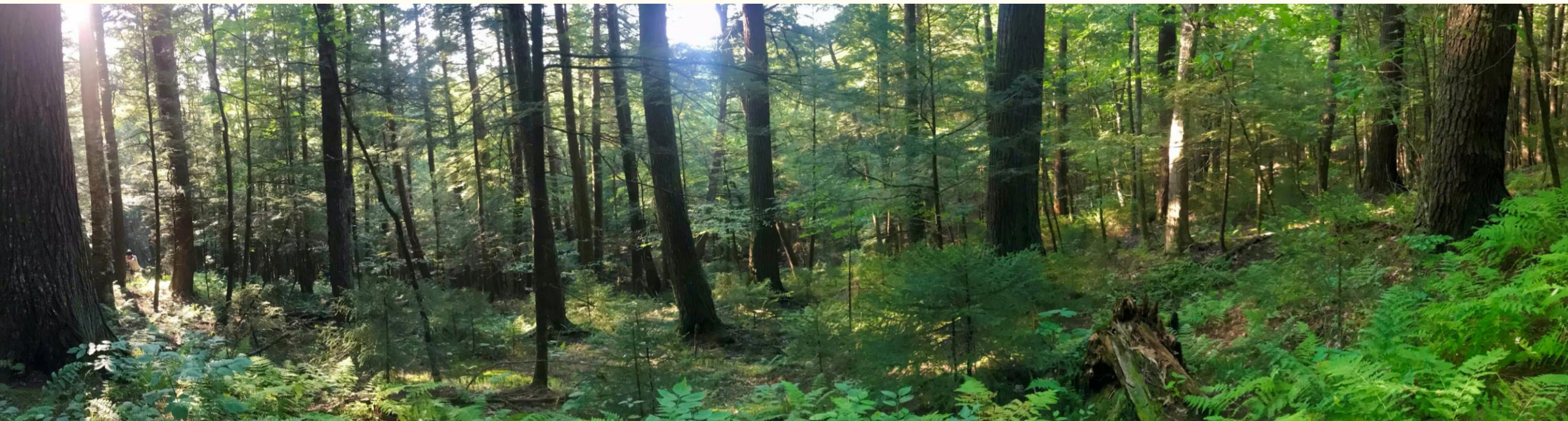
**Free Forest
Management Plan
Updated Every 10
Years**



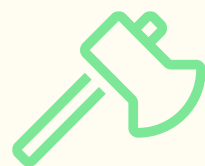
**Payment:
\$300/ac.
\$15/ac./yr.**

GOF Practice Specifications and Wildlife Benefits

- Extended rotation for 20 years.
- Promotes the growth of large trees and increases the amount of carbon stored.
- Benefits wildlife by growing large-diameter trees, snags, and large downed logs.



Personal Use Allowance



**5 cords for the
first 200 acres**



**No diameter
limit on
naturally
fallen or dead
trees**



**Standing live trees being
harvested for personal
use must be below 12
inches in diameter**

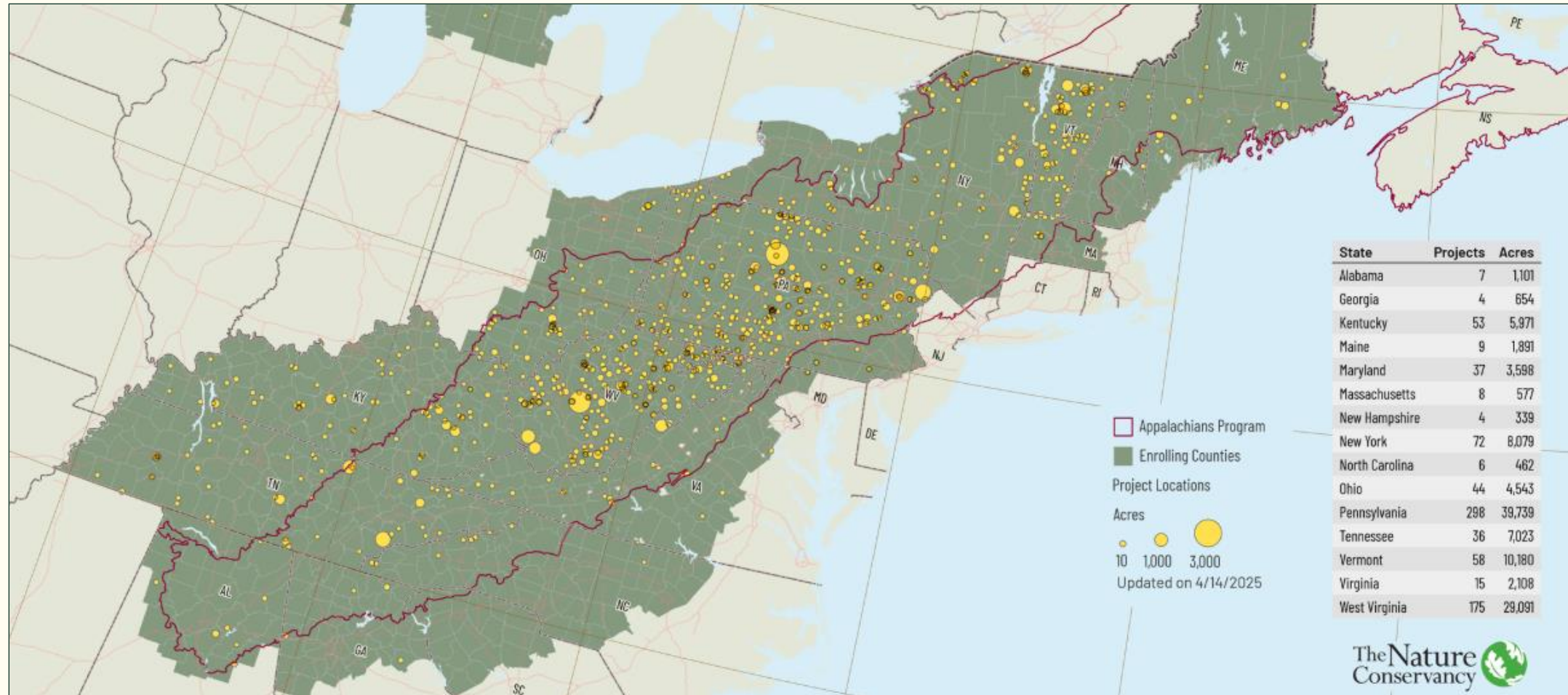


**Allowance can
be used to sell
firewood**

Personal Allowance					
Project Area Size (Acres)	30-199	200-299	300-399	400-499	500+
Max Cords Per Year	5	10	15	20	25

FFCP Enrollment

- Over 1,000 landowners enrolled, totaling ~ 140,000 acres.
- In NY, 88 landowners enrolled, totaling ~ 12,000 forested acres.



Dynamic Baseline - Calculating Carbon Benefit

1. Establish a dynamic baseline of highly similar forested properties outside the enrolled property.

DETERMINING A MATCH

Properties are matched based on a minimum of 14 variables,



= enrolled property



= enrolled property plots



= available plots



= matched plots used to form the baseline

2. Compare the carbon sequestered on enrolled properties (improved forest management) to the baseline of unenrolled properties.

3. Calculate carbon benefit at landscape scale.



American
Forest
Foundation

The Nature
Conservancy



Thank you!

Chris Zimmerman
The Nature Conservancy, NY
czimmerman@tnc.org

Get started at
familyforestcarbon.org

Program Led By:



Get started at familyforestcarbon.org



FFCP Integration with Prior Commitments

FFCP works well with many easements and other forestry programs.

Easements must not contain language that restricts harvesting, and the ability to harvest provides a pathway for landowners to enroll in programs that require harvesting.

Our staff will review any existing commitments and ensure compatibility.

Utility and gas line rights-of-ways typically pose no concern once they are established.

FFCP Extra Small Landowner Opportunity

Enhance Your Woodland and Growing Older Forests Practices

Northeast:

- Maine, New Hampshire, Vermont, New York, Massachusetts
- Enroll as few as 15 acres into the program and maintain all the same benefits.

