

Dr. Joan Maloof



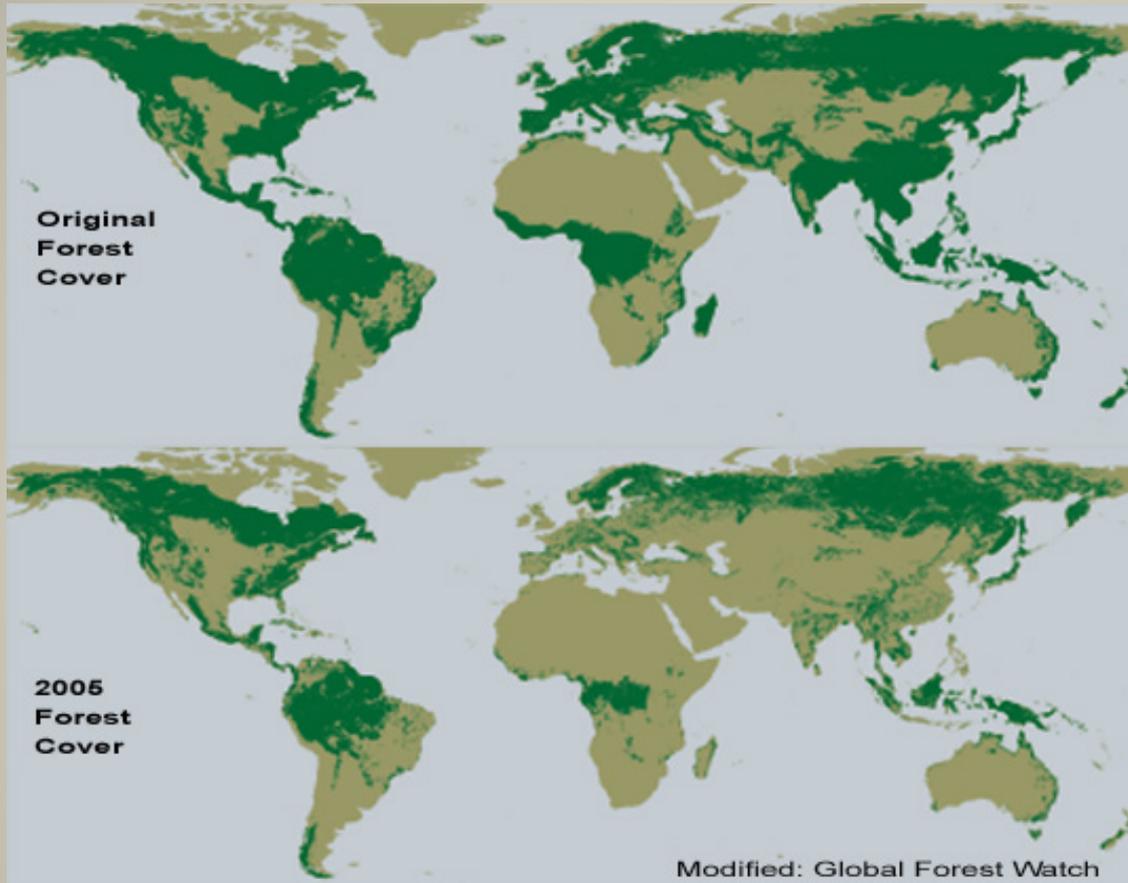
**OLD-GROWTH FOREST
NETWORK**

Linking remote sensing and carbon research with forest protection



Mohawk Trail State Forest

Forests used to cover 46% of the land, now only 30%



Globally, from 1990 to 2015 another 314 million acres of forest were lost

Fig. 1 Original Forest Cover
Wicomico Co., MD

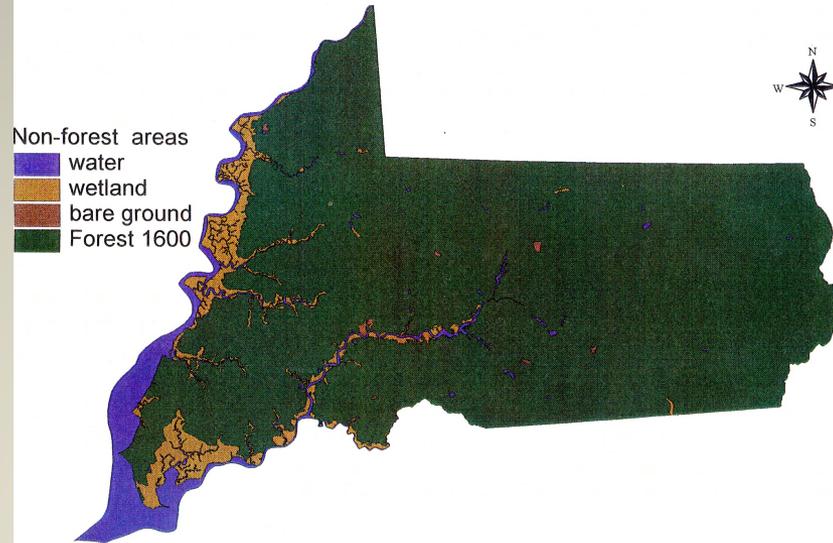
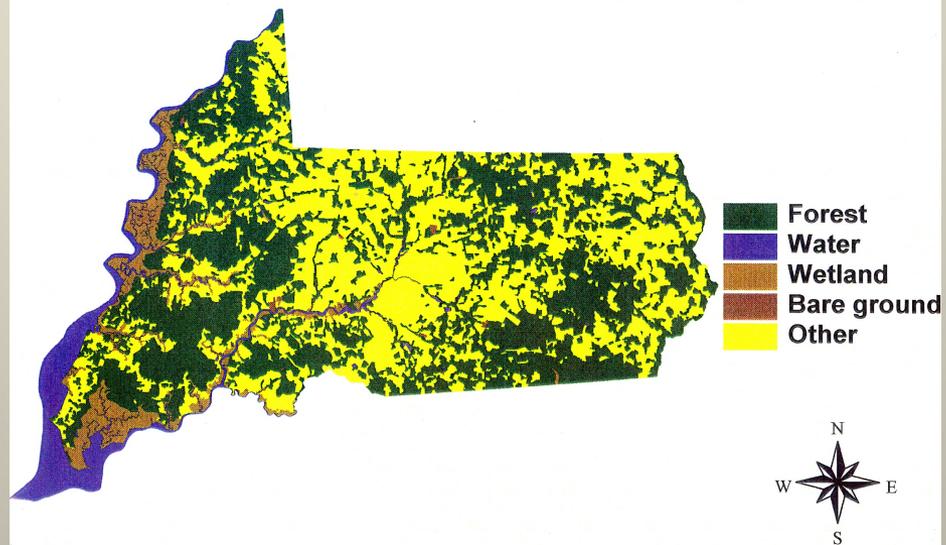
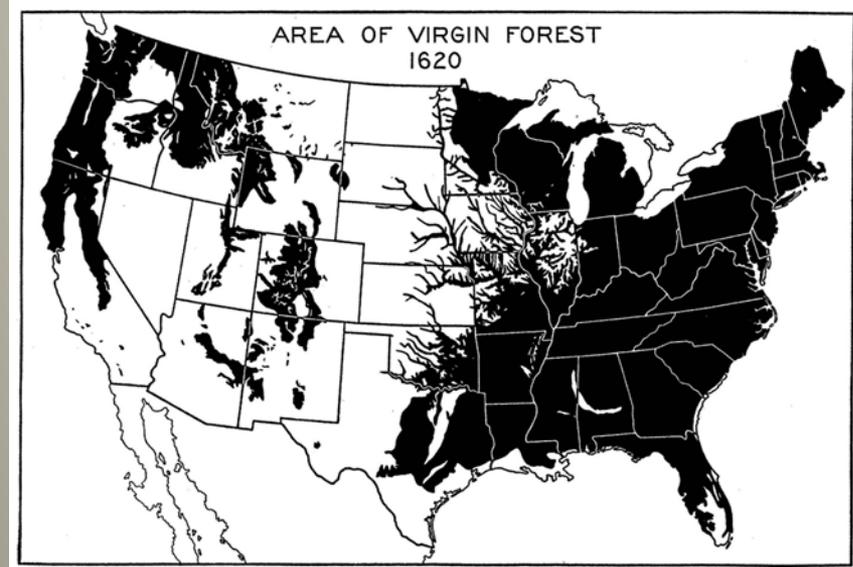
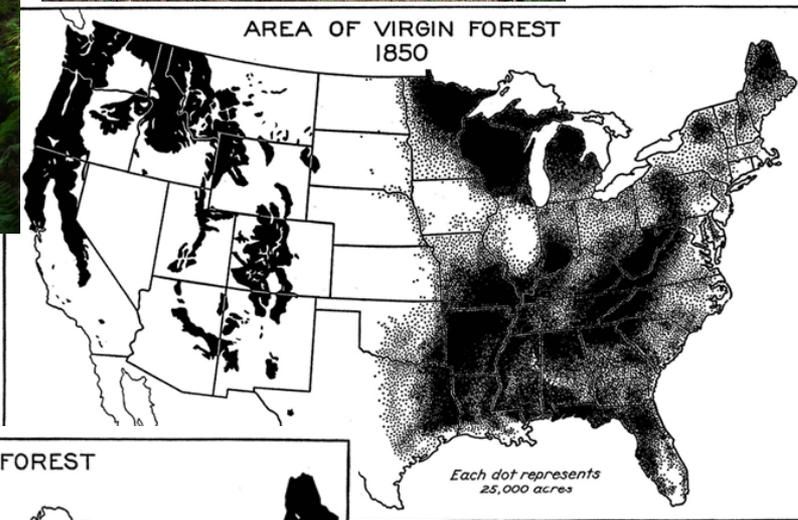
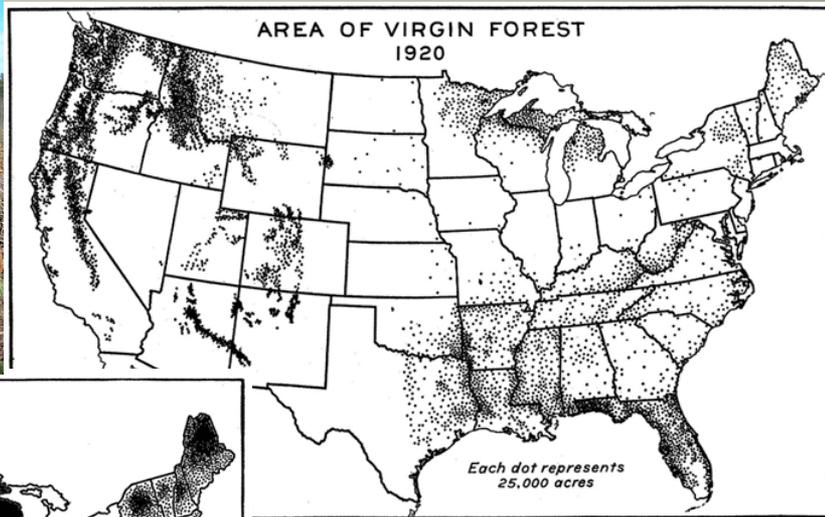


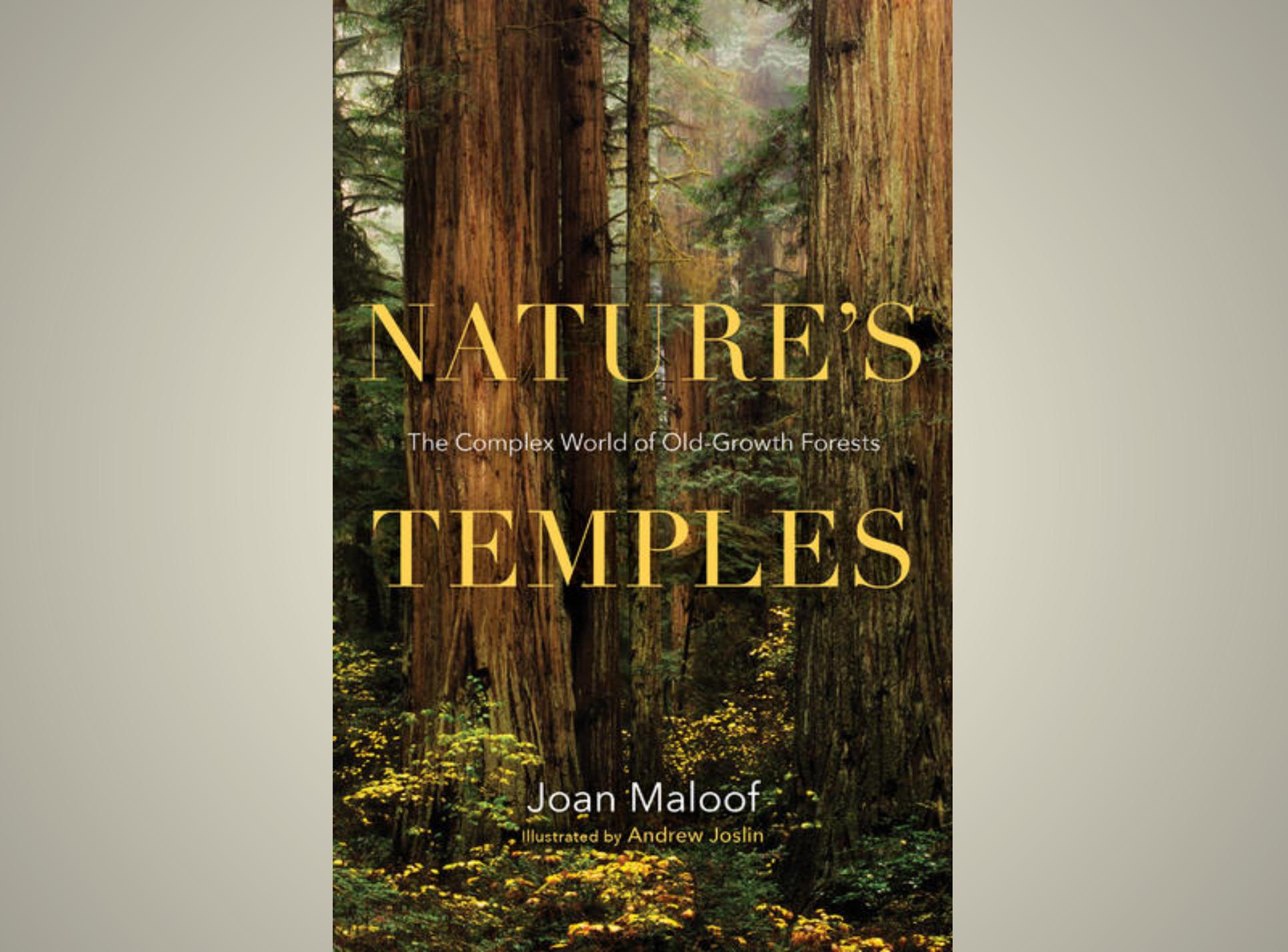
Fig. 3 1994 Forest Cover
Wicomico Co., MD



It is not just how much forest,
but what kind of forest.





A vertical photograph of a forest with large, ancient-looking trees and a path of yellow flowers. The trees are tall and have thick, textured bark. The forest floor is covered in green ferns and yellow wildflowers. The lighting is soft and dappled, suggesting a sun-dappled forest.

NATURE'S

The Complex World of Old-Growth Forests

TEMPLES

Joan Maloof

Illustrated by Andrew Joslin

**Old Growth in the East:
A Survey**

Mary Byrd Davis

Need:

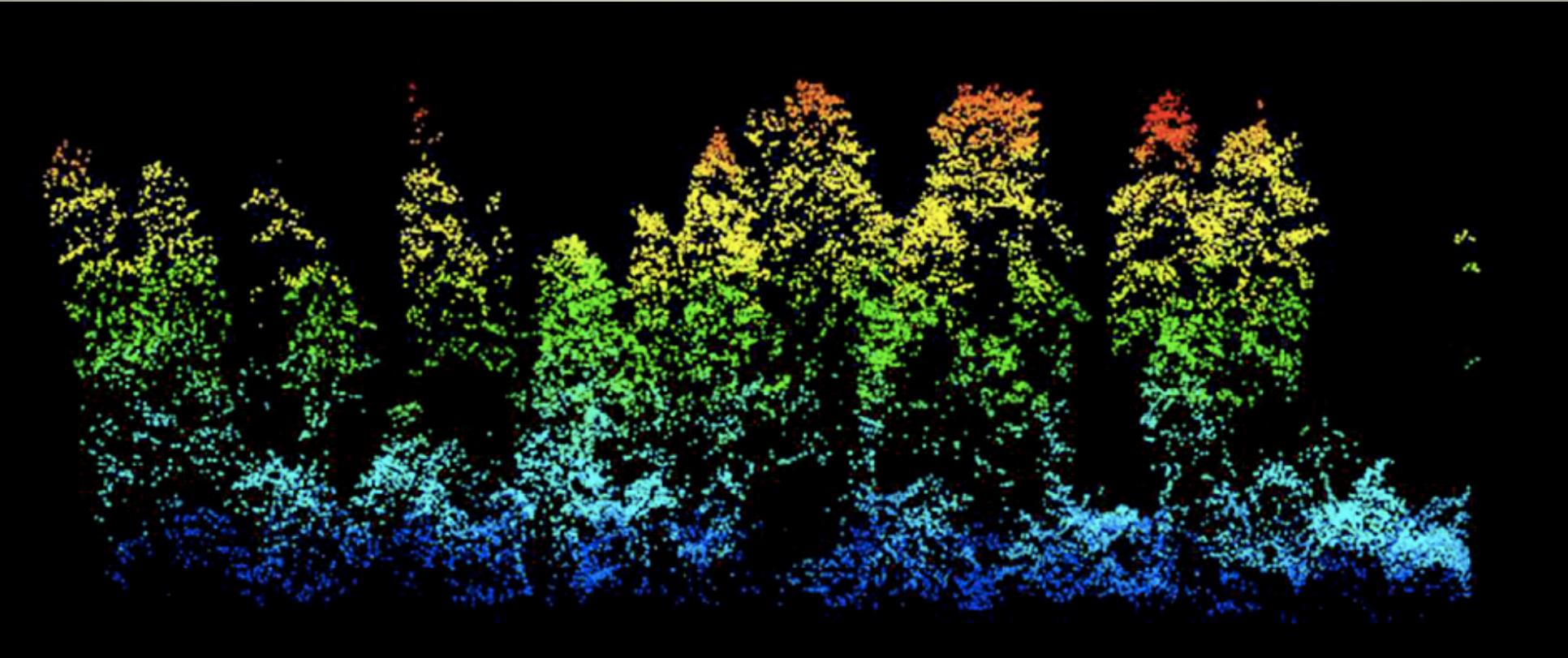
Compare Lidar and Satellite
above ground biomass estimates
-- to known old-growth forests.
(Create a 'signature')



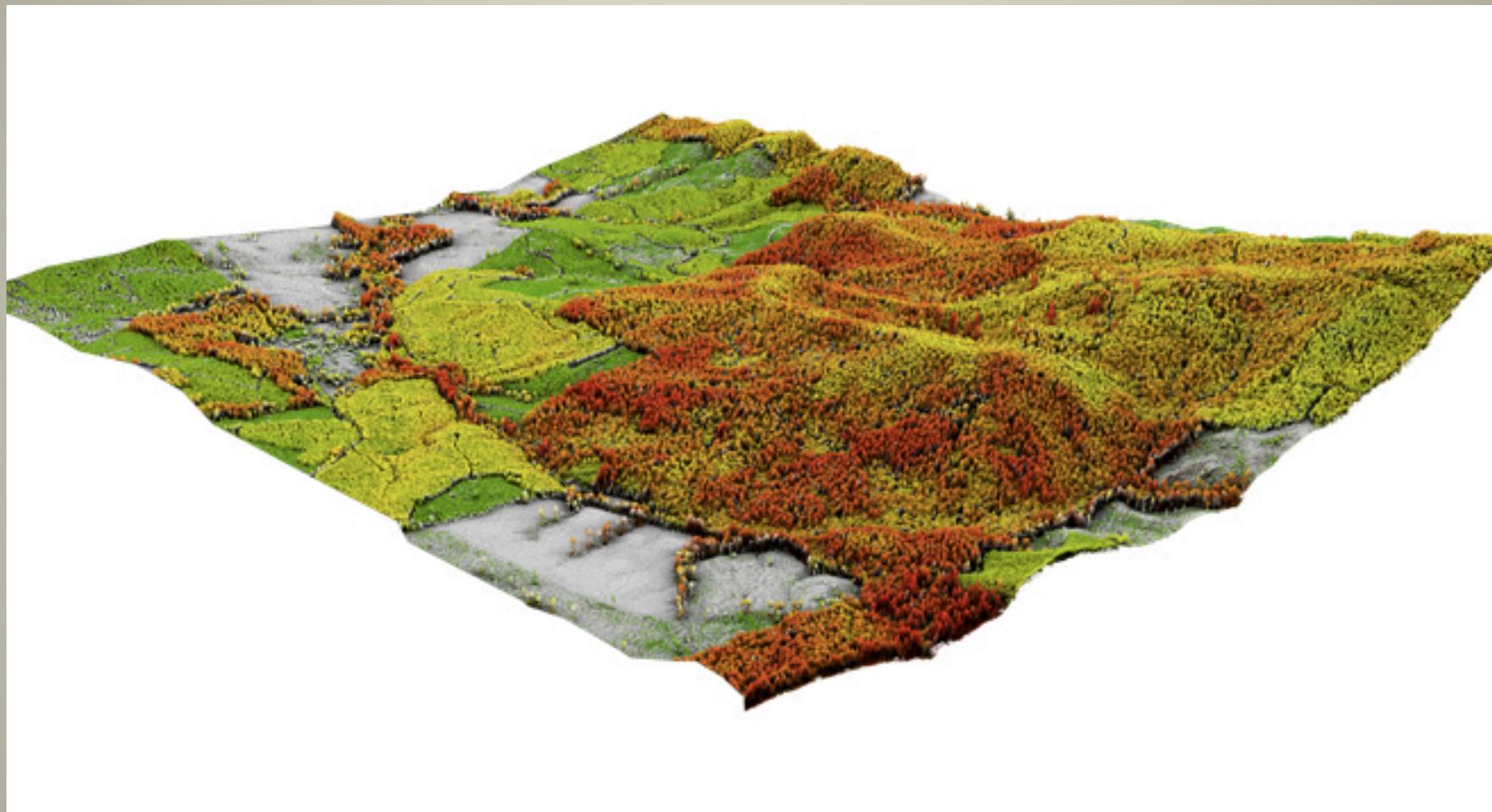
Result:

Maps of old-growth forest locations

(Ganguly-01)



They found that voles often nested in large trees in the interior of the forest, which aligned with previous research revealing a relationship between the species and the complex canopy and intricate structure of old-growth forests.





What can we do to reverse the destruction and improve our nation for future generations?



OLD-GROWTH FOREST NETWORK

Help us preserve and protect old-growth forests, one in every county where forests can grow.

Check our Blog for upcoming events

Sign up for our Newsletter



[Donate](#)



About Us

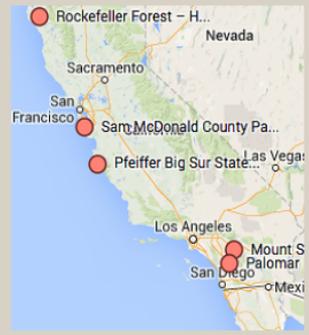


Joan Maloof, Professor Emeritus at Salisbury University, founded the Old-Growth Forest Network to preserve, protect and promote the country's few remaining stands of old-growth forest.

You can learn more about Joan and the Old-Growth Forest Network by visiting:

[The OGFN Story](#)

Forests



The preservation of unique and beautiful tracts of land as National Parks is often called America's Best Idea. **Now it is our turn** to ensure that future generations can experience native forests in their mature diversity and complexity.

On this site, you can search for forests in our Network: [Dedicated Forests](#), [Candidate Forests](#), [Community](#)

Get Involved



Volunteers are the heart of our organization. Find out some of the many ways you can apply your talents to help us fulfill our mission throughout the country. Contact [Susan Barnett](#) to learn more.

You may also elect to become a **Supporter**, **Nominate** a Forest, or become a **County Coordinator**, to serve as the local representative





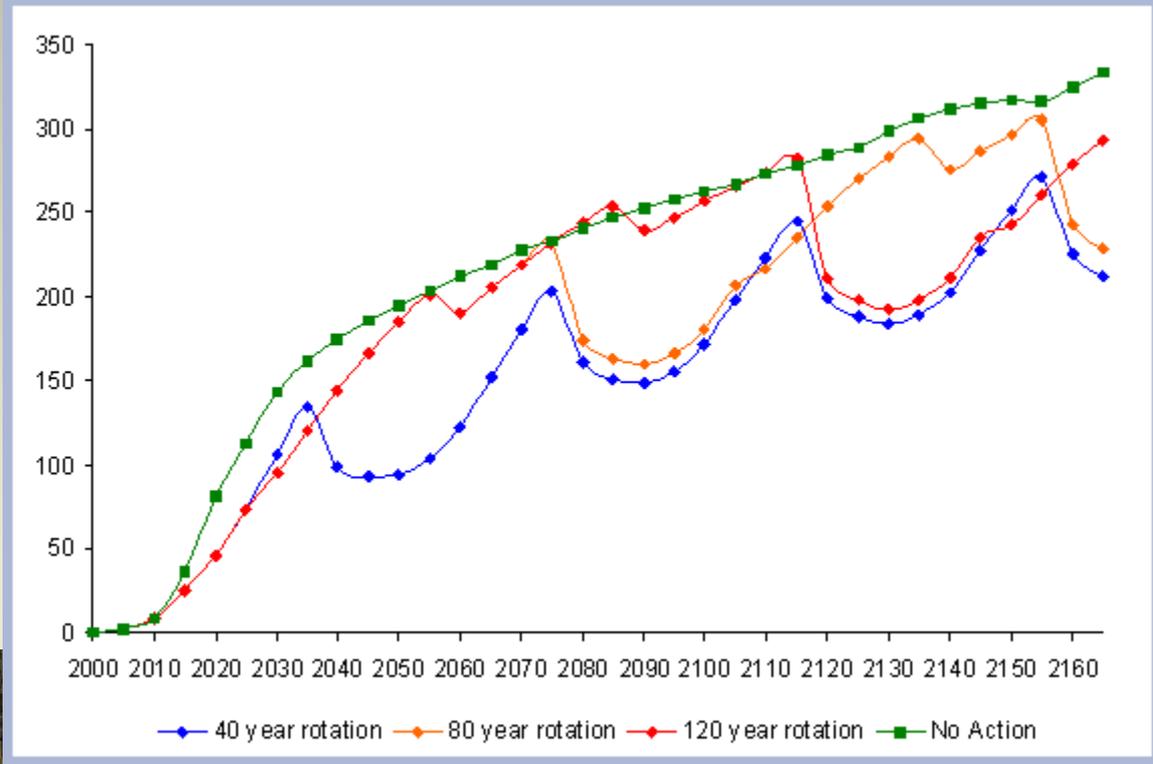
Joan of Arc



Joan of Bark?



Carbon sequestration is higher in unlogged forests



Old-growth forests as global carbon sinks.

Nature, September 11, 2008, Luysaert S, Schulze E, Grace J, et al

This paper shows that old-growth forests are usually carbon sinks. Because old-growth forests steadily accumulate carbon for centuries, they contain vast quantities of it. They will lose much of this carbon to the atmosphere if they are disturbed, so carbon-accounting rules for forests should give credit for leaving old-growth forest intact.

Need:

Maps showing relationship of carbon flux to forest height/ biomass/ age.

Result:

Can show change over time and aid in visualization of the importance of older forests.



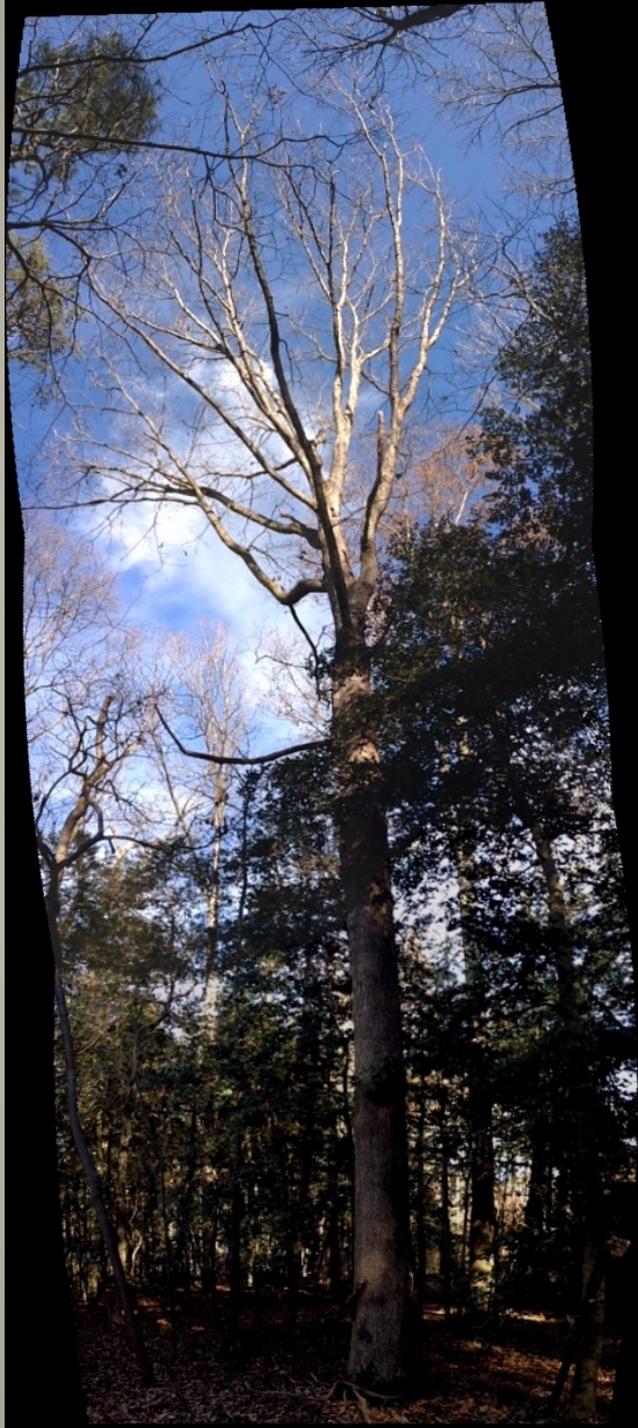
(Hurtt-03 project)

Wicomico County, MD

14 acres of forest in the “Metro Core”



























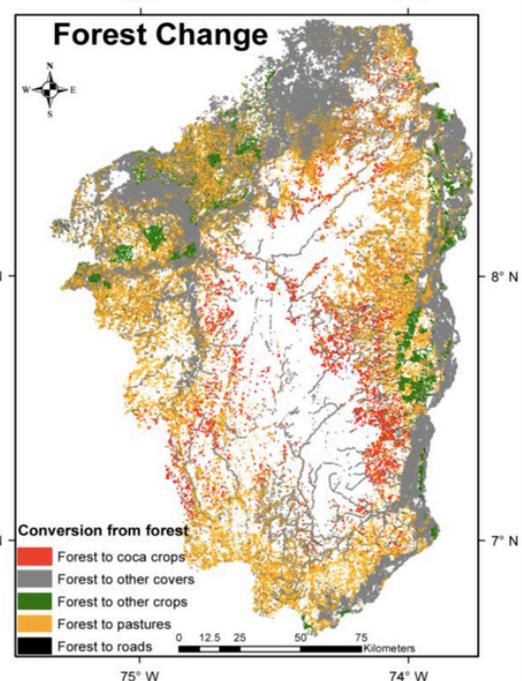
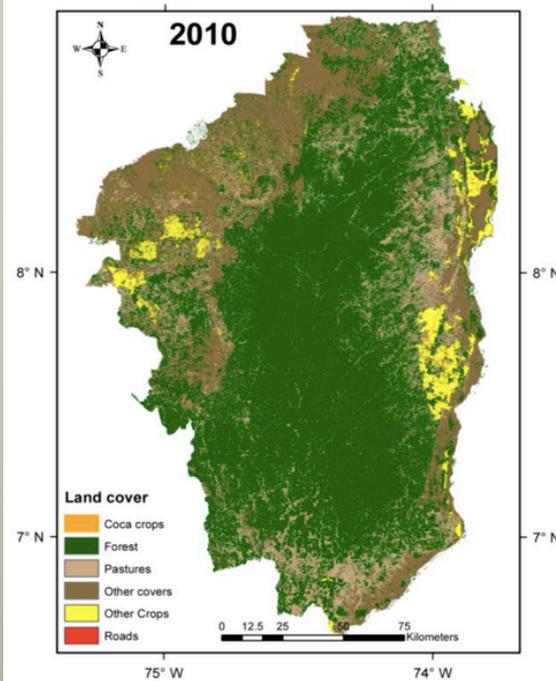
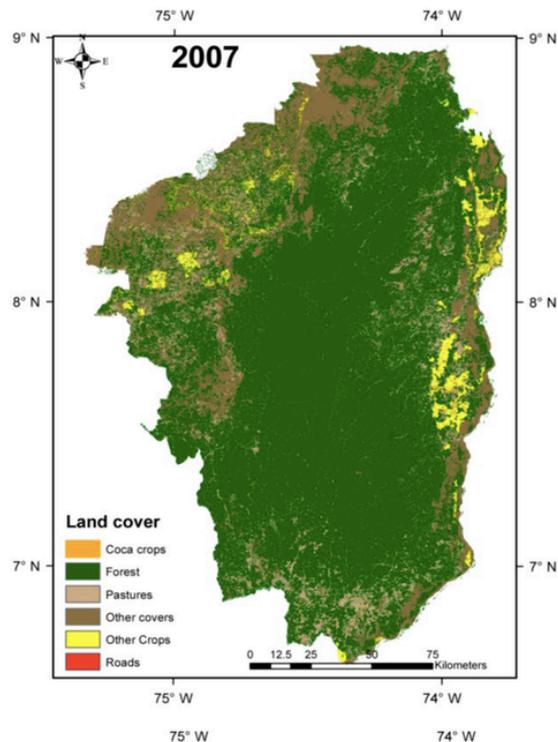
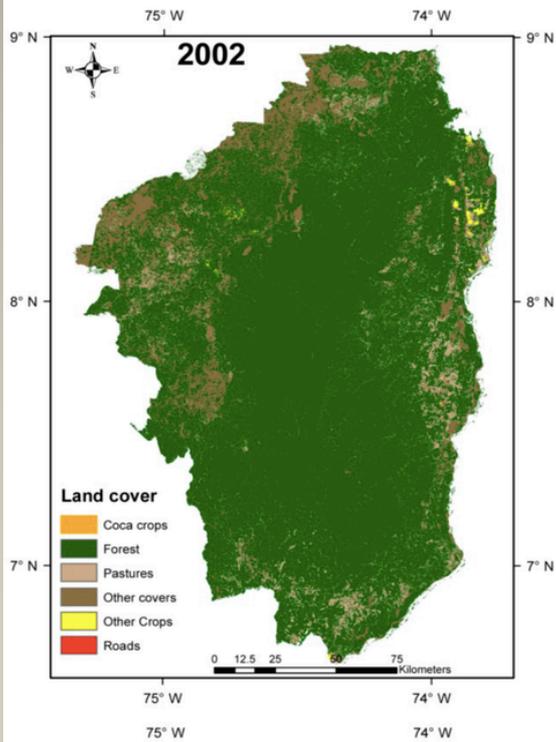
The Lorax



Joan Maloof







Need:

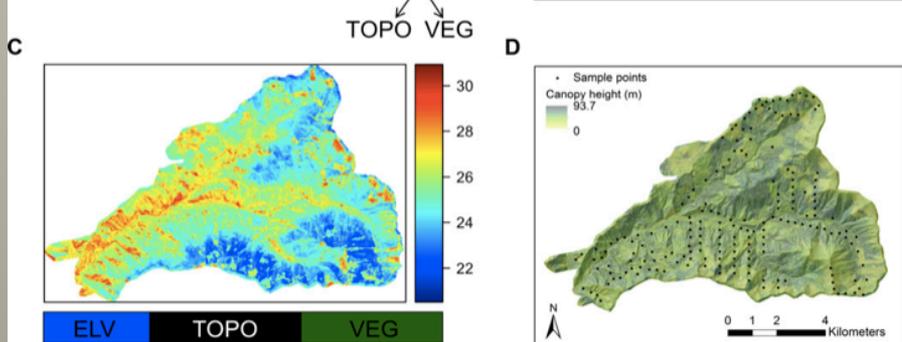
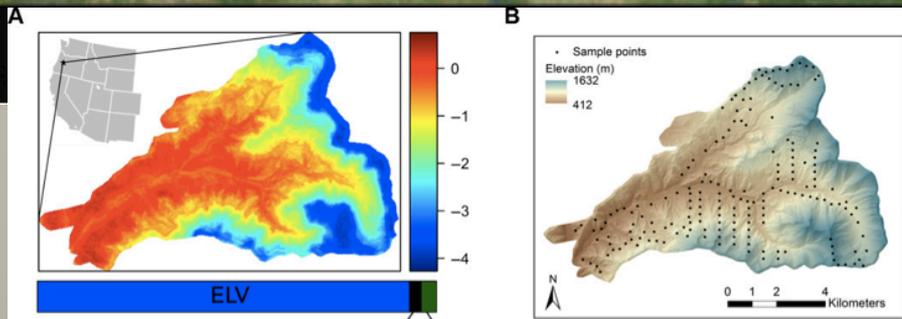
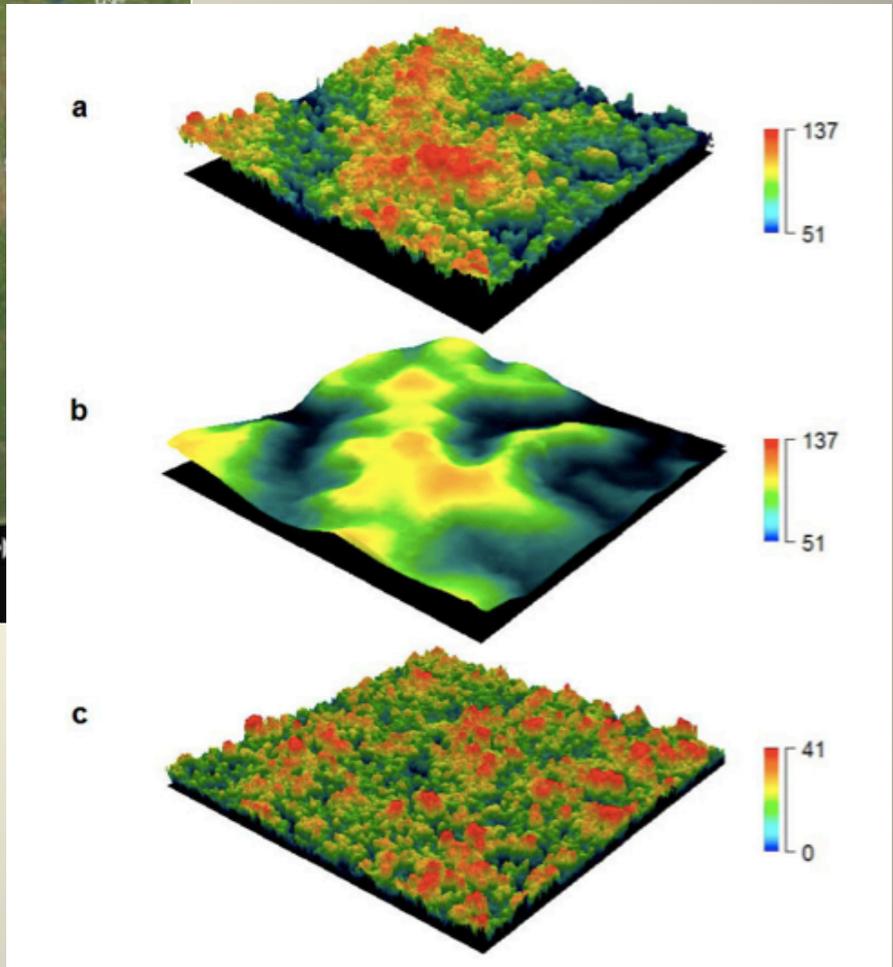
Make carbon flux and/or carbon stock maps readily available at the appropriate scale.
(example: state, county, municipality, parcel)

Result:

Better informed
policy decisions.

(Dubayah- 04, Hurtt-03;
Escobar-02)





Crystal Spring Forest, Annapolis, Maryland Slated for development



Kona, Hawaii



Need:

Remote sensing for carbon market credits

Result:

Creation of a carbon revenue stream is incentive for landowners to keep forests intact.



(Dubayah-04 project; Cook –B-03)

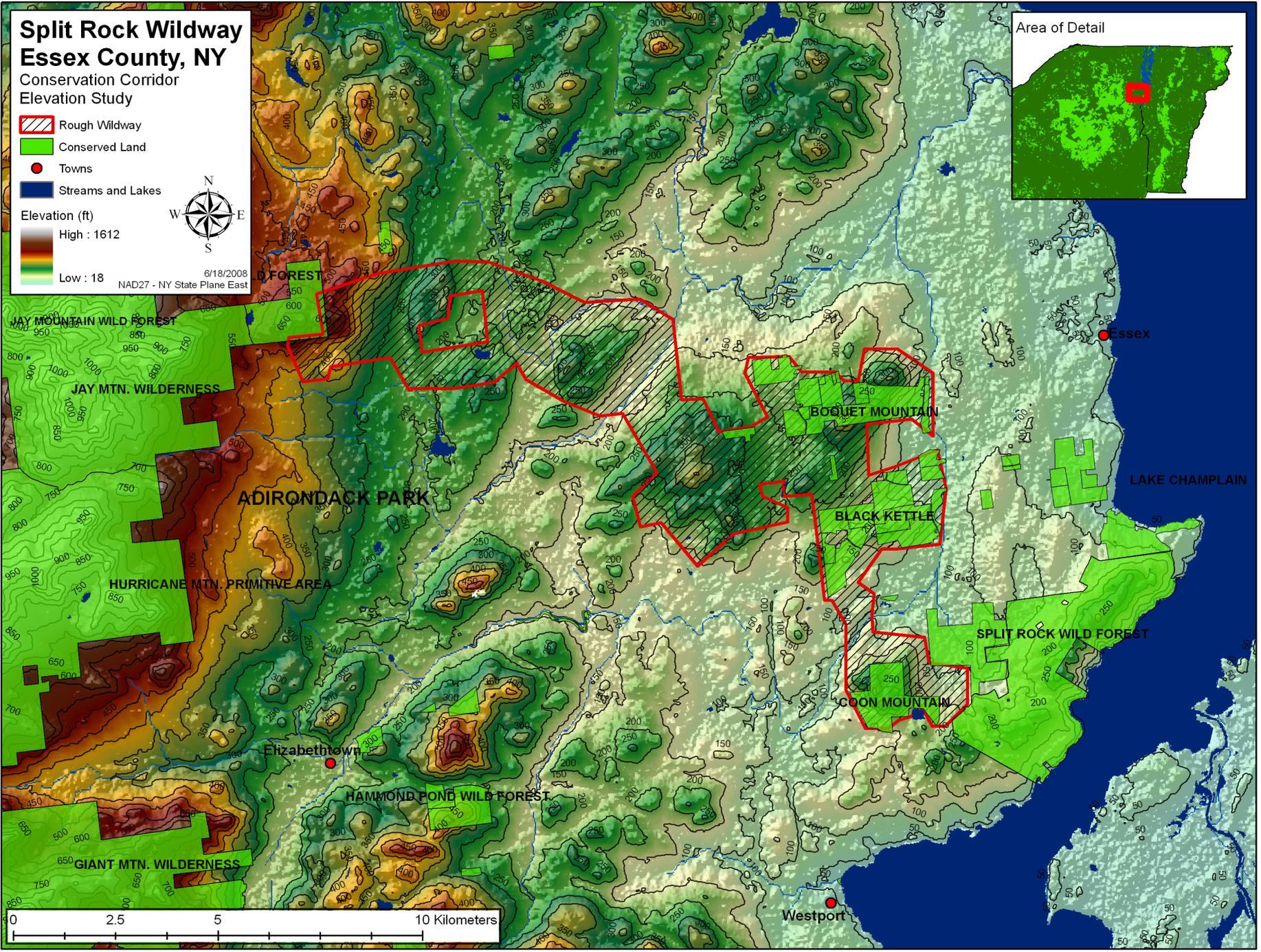
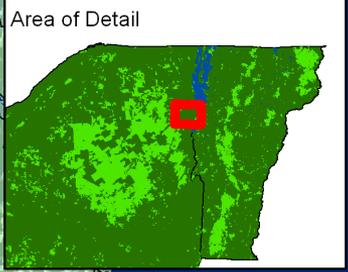
Split Rock Wildway Essex County, NY Conservation Corridor Elevation Study

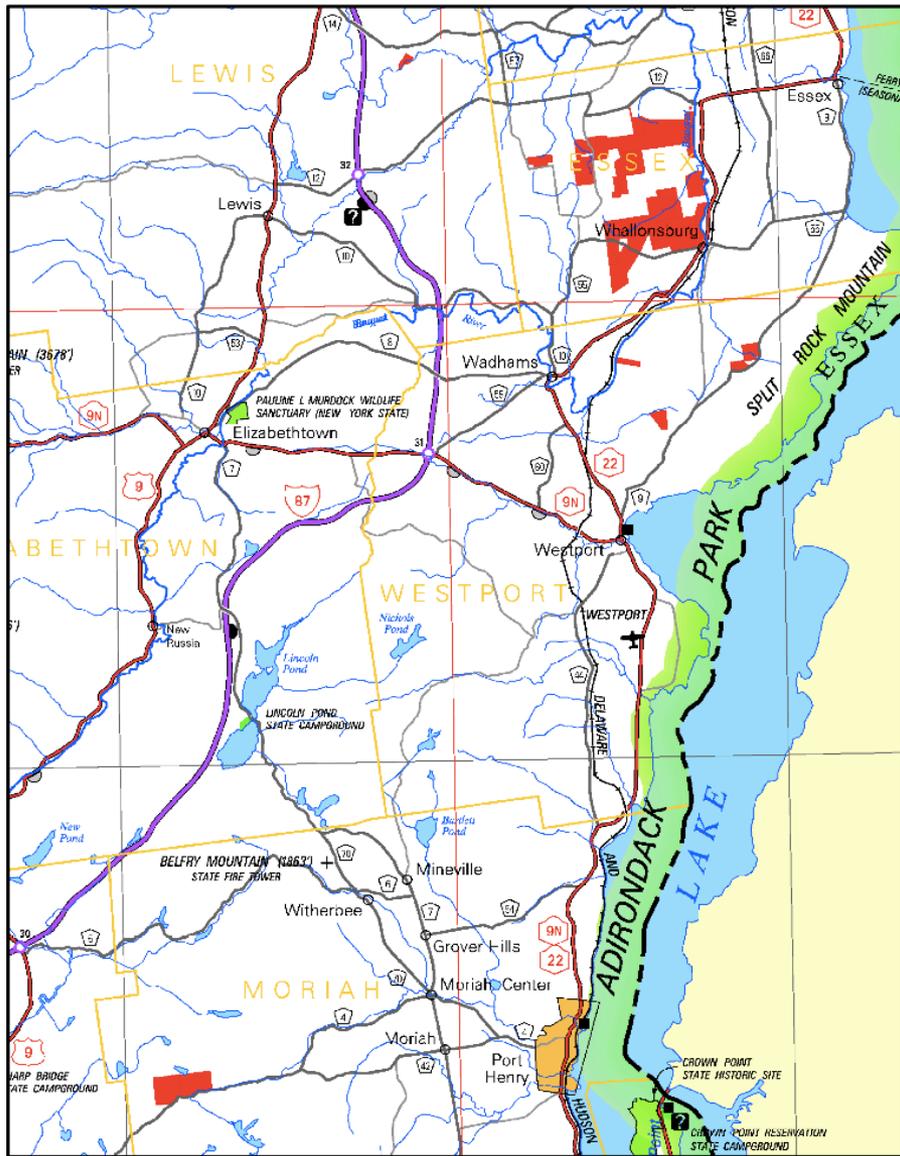
-  Rough Wildway
-  Conserved Land
-  Towns
-  Streams and Lakes

Elevation (ft)
High : 1612
Low : 18



6/18/2008
NAD27 - NY State Plane East





Eddy Foundation Lands
 Topographic Map
 Towns of Essex, Westport - Essex County

Legend
 Eddy Foundation Lands

The Nature Conservancy
 ADIRONDACK LAND TRUST

Map prepared by
 ANGLIS GIS
 © 2007
 Keene Valley, New York
 Copyright 2007 to The Nature Conservancy

0 0.25 0.5 1 1.5 2 2.5 3 3.5 Miles

1:100,587

DRAFT

Relative to other forest ownerships, the per-acre carbon stored on private lands (half of all forests) is significantly greater; trees are often older, and forests more structurally complex than intensively managed industrial timberlands.

The most significant expense involved in obtaining carbon credit dollars is the completion of detailed forest carbon inventories that meet the statistical requirements of carbon markets.

Important!

The interface should be HUMAN
and SCALE DEPENDENT



With the right data delivered the right way
NASA's Carbon Monitoring System could:

1. Help identify and protect old-growth forests.
2. Help inform local politicians and decision makers about the importance of local forests for carbon sequestration.
3. Help reward private forest owners for choosing not to harvest timber
4. Slow the biodiversity crisis.



OLD-GROWTH FOREST NETWORK

Dr. Joan Maloof; 410-251-1800; jemaloof@salisbury.edu

- ◆ **Compare Lidar and Satellite above ground biomass estimates to known old-growth forests to create maps of old-growth forest locations.**
- ◆ **Maps showing relationship of carbon flux to forest height/ biomass/ age. To show change over time and to aid in visualization of the importance of older forests. Make maps readily available at the appropriate scale.**
- ◆ **Remote sensing for carbon verification to aid landowners in entering the carbon market and keeping their forests intact.**
- ◆ **Deliver the data through a human interface.**

Questions?

www.oldgrowthforest.net



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Please share your contact information and consider a donation – we are a Network of people who care about our forests!