

# Breaking the mold of USFS publications

## FOREST ATLAS OF THE UNITED STATES

The United States has a tremendous forest resource—more than 750 million acres of native and planted forests managed by public and private landowners for forest products, recreation, wilderness, wildlife habitat, and many other purposes. Over the past 150 years, basic surveys of United States forests have evolved into a rigorous inventory program that we can use to share information about the value of these forests and the challenges that confront them. In the Forest Atlas of the United States, we explore these questions and many more:

- Where do forests grow and why?
- What disturbances affect forests?
- How do people benefit from forests?
- How might U.S. forests respond to climate change?
- What wildlife depends on forests for habitat?
- How might people affect the future of forests?



USDA



Forests worldwide are an important component of carbon stocks. Approximately 80% of global biomass is contained in forests, and forests significantly contribute to the exchange of gases and energy between the atmosphere and land surface. The map shows where, depicts extent and distribution of forest biomass in the United States. The map was created by modeling forest biomass data collected on approximately 400,000 Forest Inventory and Analysis (FIA) plots with every one hundred continuous geospatial predictor layers. At this time, no 3D forest biomass data is available for Hawaii.

Color represents low to high forest biomass in U.S. Color represents non-U.S. forest cover

# Outline

- Review team, progress
- Review current products & discuss direction
- Seek guidance on NSAT role and opportunities for (esp. for e-pubs)

# Current team



Source: State Library of New South Wales.

## Design/Editing

Mark Finco; Mary Carr;  
Linda Smith

## Tech Contributors

Ken Brewer; Tom Brown;  
Ken Cordell; Will  
McWilliams; Gretchen  
Moisen; Todd Morgan;  
Dave Nowak; Chris  
Oswalt; Michele  
Schoeneberger; Ty  
Wilson;

## Tech Leads

Brett Butler; Andrew Gray; Mark  
Nelson; Sonja Oswalt(2); Hobie Perry  
(2); Chris Woodall(2)

# Generic Development Process

- Concept
  - An idea
- Proof of Concept
  - Test of technical feasibility
- Prototype
  - Identification of stumbling blocks
  - Scoping issues
- Pilot
  - Production quality
  - Smaller scale
- Production

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} **Posters**

} **We  
Are  
Here**



# Past poster displays

- ✓ FIA Science Symposiums
- ✓ ESRI User Conference
- ✓ NASF Annual Meeting
- ✓ Society of American Foresters
- ✓ Pecora 18



Image courtesy: Lorri Peltz-Lewis

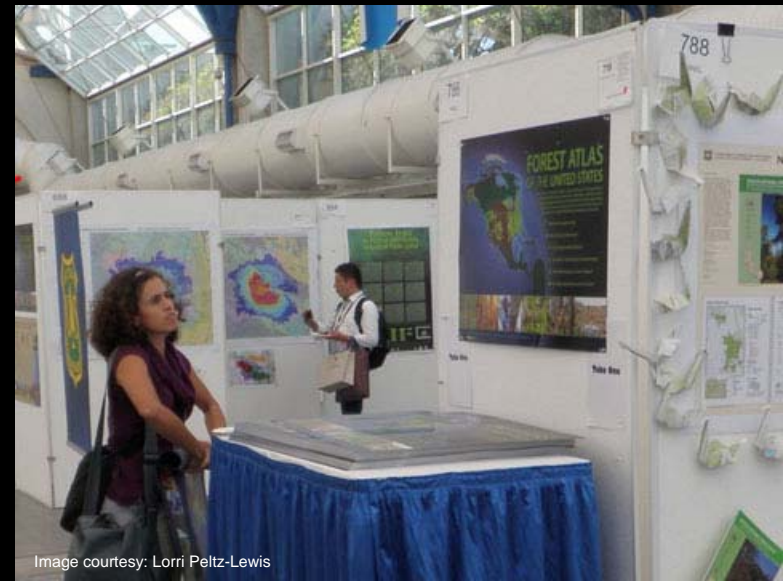


Image courtesy: Lorri Peltz-Lewis

A detailed close-up photograph of a mechanical watch movement. The image shows a complex arrangement of brass gears, levers, and plates, all intricately connected. The lighting is dramatic, highlighting the metallic surfaces and the precision of the engineering. The background is dark, making the golden-brown tones of the metal stand out.

# Detailed Process Overview

- ✓ Outline
- ... Storyboarding
- ... Data Sharing
- Mechanicals
- Proofing/Printing



# PUSHING THE BOUNDARIES

History

Grows

Lives

Shapes

Benefits

Future

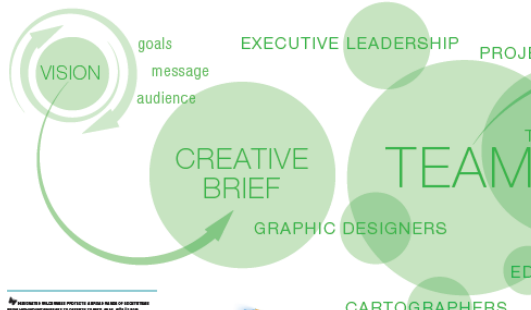
# FOREST ATLAS OF THE UNITED STATES

The United States has a tremendous forest resource—more than 750 million acres of native and planted forests managed by public and private landowners for forest products, recreation, wilderness, wildlife habitat, and many other purposes. Over the past 150 years, basic surveys of United States forests have evolved into a rigorous inventory program that are used to share information about the value of these forests and the challenges that confront them. More recent technological and methodological advancements make it

possible to create spatial products (maps) from the inventory data and other spatial data, such as digital elevation models and satellite imagery. The Forest Atlas of the United States uses these maps to highlight the value of our nation's forest in a highly graphic and novel manner. In the Forest Atlas of the United States, we explore these questions and many more. Where do forests grow? What else lives in forests? What shapes forests? What benefits do forests provide? What is in the future for our forests?

This project represents a strategic partnership between several different parts of the Forest Service, integrating FIA inventory data with remote sensing and GIS applications. Here we provide a sample of the content which will be included in the forthcoming atlas and highlight the use of maps, graphics, accessible text, and images to communicate forest monitoring information with the public.

## CONSULTATION



## EXPLORATION



## PRODUCTION



## DELIVERY





# Connections

1. Where Do Trees Grow?
2. What Else Lives in Forests?
3. What Shapes the Forest?
4. What Benefits Do Forests Provide?
5. What is the Future for Our Forests?
6. Reference Maps



# Where Trees Grow

**Topography**



**Climate**



**Soil**



**Species Ranges**



**Extent**



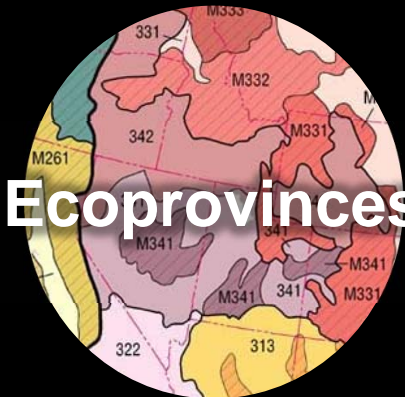
**Productivity**



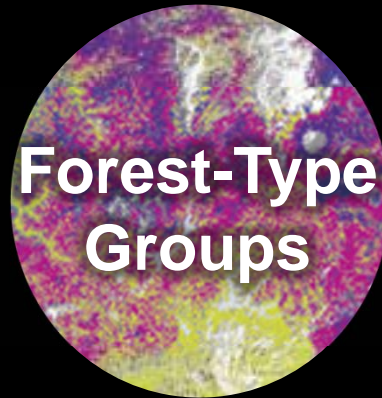
**Forests & Trees**



**Ecoprovinces**

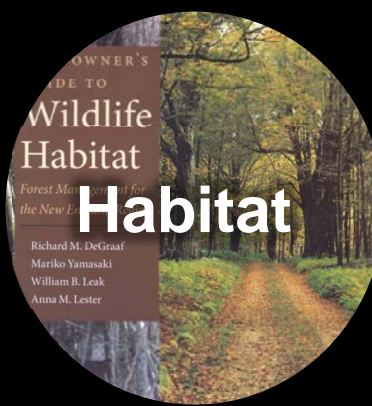


**Forest-Type Groups**

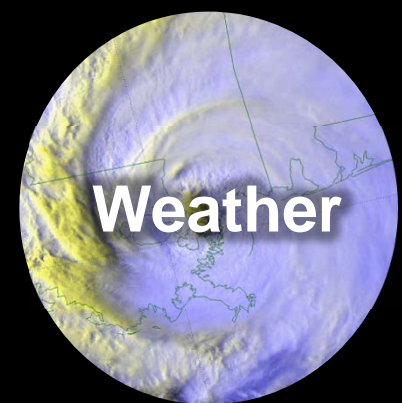




# What Lives in Forests?



# What Shapes Forests







**Benefits**

# Benefits (cont.)



# Future of Our Forests



Population



Ownership



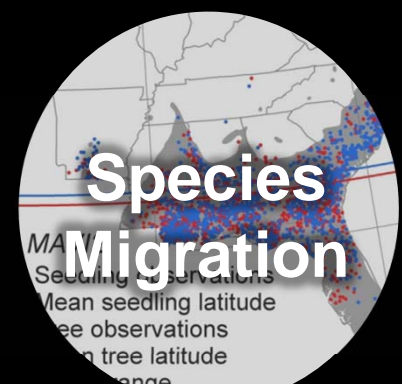
Land-use Change



Climate Change



Private



Species Migration

# Web delivery: A Partnership with RSAC

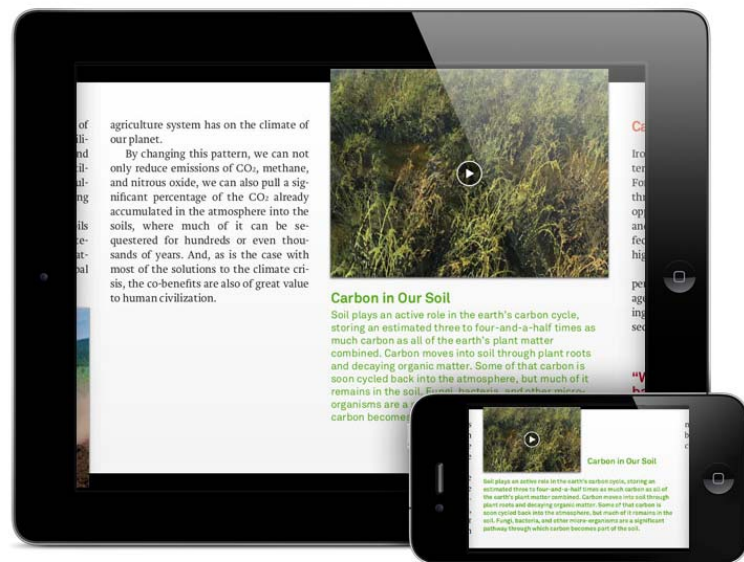
- Develop a proof of concept prototype that is:
  - Online
  - Easy to update
  - Interoperable
  - Cost effective
  - Efficient to develop
  - Versatile
  - Intuitive
  - Capacity-building
- Scoping exercise for production version
- Funding for roughly 8 weeks of RSAC time

*Moving Forward...*



# THE OUTER LIMITS... AN E-BOOK INTEGRATING:

- interactive maps;
- bird songs;
- pictures of pine cones and leaves;
- and more!



# We may review work in detail, as desired

- Tracking spreadsheet
- Storyboards

- Key words:
  - FPO
  - Textbook
  - Census Atlas
  - NGS

	Number	NEW Chapter	Feature title	Num Pages	Priority	Fold, OnDeck, Active, or Complete	Feature Lead	Outline Draft	Outline Review	Outline Approved	Map Sample	Graph Sample
14	1.04	Where trees grow	Productivity	2	3	H	Nelson, M	x	x	x	x	x
15	1.05	Where trees grow	Ecological provinces	2	3	H	Perry, H	x	x	x	x	x
16	1.06	Where trees grow	Current extent	2	1	O	Perry, H	x	x	x	x	x
17	1.07	Where trees grow	Species ranges	12	1	A	Wilson, T	x	x	x	x	x
18	1.08	Where trees grow	Seeing the forest and trees	2	2	H	Wilson, T	x	x	x	x	x
19	1.09	Where trees grow	Forest type-groups	2	1	O	Wilson, T	x	x	x	x	x
20	2.00	What lives in fores	Introduction	2	0	H		x	x	x	na	na
21	2.01	What lives in fores	Wildlife habitat-type	2	1	A	Oswalt, S; Nelson, M	x	x	x	x	x
22	2.02	What lives in fores	Forest birds	2	1	A	Oswalt, S; Nelson, M	x	x	x	x	na
23	2.03	What lives in fores	Reptiles & amphibians	2	2	H	Oswalt, S; Nelson, M	x	x	x	x	na
24	2.04	What lives in fores	Fish & aquatic species	2	1	O	Oswalt, S; Nelson, M	x	x	x	x	na
25	2.05	What lives in fores	Mammals	2	1	O	Oswalt, S; Nelson, M	x	x	x	lead1	lead
26	2.06	What lives in fores	Understory community (and role?)	2	3	H						
27	2.07	What lives in fores	Total diversity (biological hotspots)	2	3	H	Oswalt, S; Nelson, M					
28	3.00	What shapes the fr	Introduction	2	0	H	Moisen, G; Gray, A	x	x	x	na	na
29	3.01	What shapes the fr	Native insects and diseases	2	2	H	Steinman, J	x	x	x	x	x
30	3.02	What shapes the fr	Non-native insects and diseases	2	1	O	Steinman, J	x	x	x	x	x

A Content  
Spectrum



# Contact Information

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