# A HISTORY OF FORESTS IN THE US SOUTH





## THE GREAT AMERICAN STAND SERIES

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## CONTEXT

Our Southern forests are some of the most biodiverse in the world. They provide aesthetics, tourism, recreation, water filtration, waste treatment, regional climate regulation, and protection from extreme events. Yet we are rapidly degrading and losing our natural Southern forests, putting untold species and benefits at risk. How did we get here?



### **COLONIZATION AND FOREST DESTRUCTION: 1630-1920**

In the 1600s, there were more than a billion acres of natural forest in the continental United States, with roughly a third of those acres in the US South. Colonization and settlement, followed by rapid extraction of natural resources, destroyed over a hundred million acres of Southern forests and released massive amounts of carbon into the atmosphere in less than a hundred years.

#### **INDUSTRIALIZING OUR FORESTS: 1920-1953**

Facing a devastated landscape, the fledgling US Forest Service needed to learn how to grow straight "merchantable" trees quickly. By selecting the fastest growing trees to reproduce, the Forest Service transformed the science of growing trees in the United States in just a few short decades. However, growing trees is very different from growing forests, and continuous demand for forest products has led to growing plantations instead of forests.

### **COMMERCIALIZING OUR FORESTS: 1953-PRESENT**

Since 1953, the government has used various programs to pay landowners to plant pine instead of allowing natural forests to grow. We've transformed our economy to be reliant on extracting resources from our forests, instead of being reliant on our healthy natural forests to provide clean water, protection from storms, and a safe place to recreate. As a result, we've lost over 35 million acres of natural forest and gained over 40 million acres of pine plantation instead.

#### Southern forests have been logged at four times the rate of South American rainforests.

Natural forests give us significantly more value in fresh water, clean air, climate regulation, and wildlife habitats than plantations do. We have robbed future generations of healthy, natural forests for the convenience of disposable wood products.



#### WHAT MAKES A FOREST DEPENDS ON WHO YOU ASK

Industry—and the US Forest Service—would have you believe that a forest is "an area at minimum 120 ft wide, I acre minimum area, with at least 10% canopy cover" (canopy cover meaning that if you look up at the sky, 10% of it is covered by trees). Does that sound like a forest to you? There's a reason that the Forest Service is under the jurisdiction of the US Department of Agriculture: they view forests as a crop, a commodity to harvest. To make it even worse, when a forest is clear-cut, it is still considered "forestland" on paper, because they assume that someday it will grow back.

There is a world of difference between a plantation and a forest. Plantations are composed of only one tree species, and as a result, are often reliant on human intervention (like insecticide) to control pests. The "goal" of a plantation is to grow trees and make money.

In contrast, the "goal" of a forest is to support and sustain life. Forests have many tree species, herbs, insects, animals, and microbes that rely on each other to survive. Forests provide fresh water, clean air, food, climate regulation, and habitat for many species of plants, animals, and microbes. Forests give us a place to rest and experience the wonder of the natural world. Memories are not made in plantations. They are made by bird watching, hunting, and playing in forests.

# 10% CANOPY COVER is this a forest?

## NATURAL FOREST OR PLANTATION?



Because anything with trees is considered a "forest," the government paid landowners in the 20th century to plant pine instead of allowing natural forests to regrow. We've lost 33 million acres of natural forest and gained 40 million acres of pine plantations in the US South.<sup>2</sup> As a result, we have more plantations and less true natural forest than ever before. This has compromised forests' ability to provide natural air conditioning, flood control, and fresh drinking water.

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## **OUR FORESTS ARE GETTING YOUNGER**

Healthy, natural forests support biodiversity, store carbon, and clean our air and water. The older our forests are, the more benefits they can provide, but they can also be harvested in just 30-40 years to make lumber, paper, or other wood products. In the US South, more than half of our forests are less than forty years old, and many are degraded as a result of constant logging without proper regeneration. Southern forests are logged at a rate four times that of South American rainforests and face the highest rate of disturbance in the world.

If our forests were just left alone, they could continue storing carbon and removing it from the atmosphere, cleaning air, and providing fresh drinking water. They could house our many native species of plants and wildlife. They could provide recreation opportunities to children and adults alike. We risk all of these benefits by putting forest products before people.



### **OUR FORESTS ARE MORE THAN WOOD**

The forest product industry and our government would have you believe that forests are flourishing. They frequently mislead the public with graphs that do not show the loss of natural forest, the loss of old growth forest, or the loss of carbon resulting from industrial logging. Nor do they show the conversion of natural forest to pine plantations.



If we continue to excessively log our forests, we will lose out on a vast array of ecosystem services that forests provide, like fresh drinking water, clean air, regional climate control, and habitat for wildlife.

Standing forests are one of our best defenses against climate change. They are critical for clean water and clean air. Forests support our food system and protect our communities from natural disasters, like flooding. Unfortunately, our current economic system favors forest destruction over forest protection. **Together, we can make a change.** 

## WHERE TO GO FROM HERE

Want to grow your knowledge of forests? READ ONE OF OUR REPORTS:

THE GREAT AMERICAN STAND: US FORESTS & THE CLIMATE EMERGENCY

TREASURES OF THE SOUTH: THE TRUE VALUE OF WETLAND FORESTS



**INDUSTRY IMPACTS ON US FORESTS** 



NATURE'S SOLUTION TO CLIMATE CHANGE

BE A LEADER FOR FOREST PROTECTION IN YOUR STATE.

# **SIGN THE PLEDGE**



#### REFERENCES

#### I. Virgin Forest Maps (Page 2)

Historical maps come from:

Greeley, W. B. The Relation of Geography to Timber Supply. Econ. Geogr. 1, 1–14 (1925).

Modern day map is compiled by George Draffan, based on a map of the remaining roadless areas in The Big Outside: A Descriptive Inventory of the Big Wilderness Areas of the United States, by Dave Foreman and Howie Wolke (Harmony Books, 1992).

Link to source map and description: http://www.endgame.org/gtt-oldgrowth-map-us.html

#### 2. The Rise Of Pine Plantations (Page 5)

Data for this graphic come from multiple places, but it is really just a remade graphic from page 14 of the Great American Stand:

Moomaw, B. & Smith, D. The Great American Stand - US Forests and the Climate Emergency. (Dogwood Alliance, 2017). <u>https://www.dogwoodalliance.org/wp-content/uploads/2017/03/The-Great-American-Stand-Report.pdf</u>

Data were pulled from multiple versions / years of the Forest Facts & Trends Documents:

Oswalt, S. N. & Smith, W. B. U.S. Forest Resource Facts and Historical Trends - Metric. https://www.fia.fs.fed.us/library/brochures/docs/2012/ForestFacts\_1952-2012\_Metric.pdf

This document provided the majority of information on pine plantations:

Fox, T. R., Jokela, E. J. & Allen, H. L. The evolution of pine plantation silviculture in the southern United States. (2004).

#### 3. Forest Age Graphic (Page 6)

This pie chart comes from tabulated data available in:

Oswalt, S. N. & Smith, W. B. U.S. Forest Resource Facts and Historical Trends - Metric. https://www.fia.fs.fed.us/library/brochures/docs/2012/ForestFacts\_1952-2012\_Metric.pdf