A CULTURAL HISTORY of Longleaf

Ad Platt

Vice President for Operations, TLA

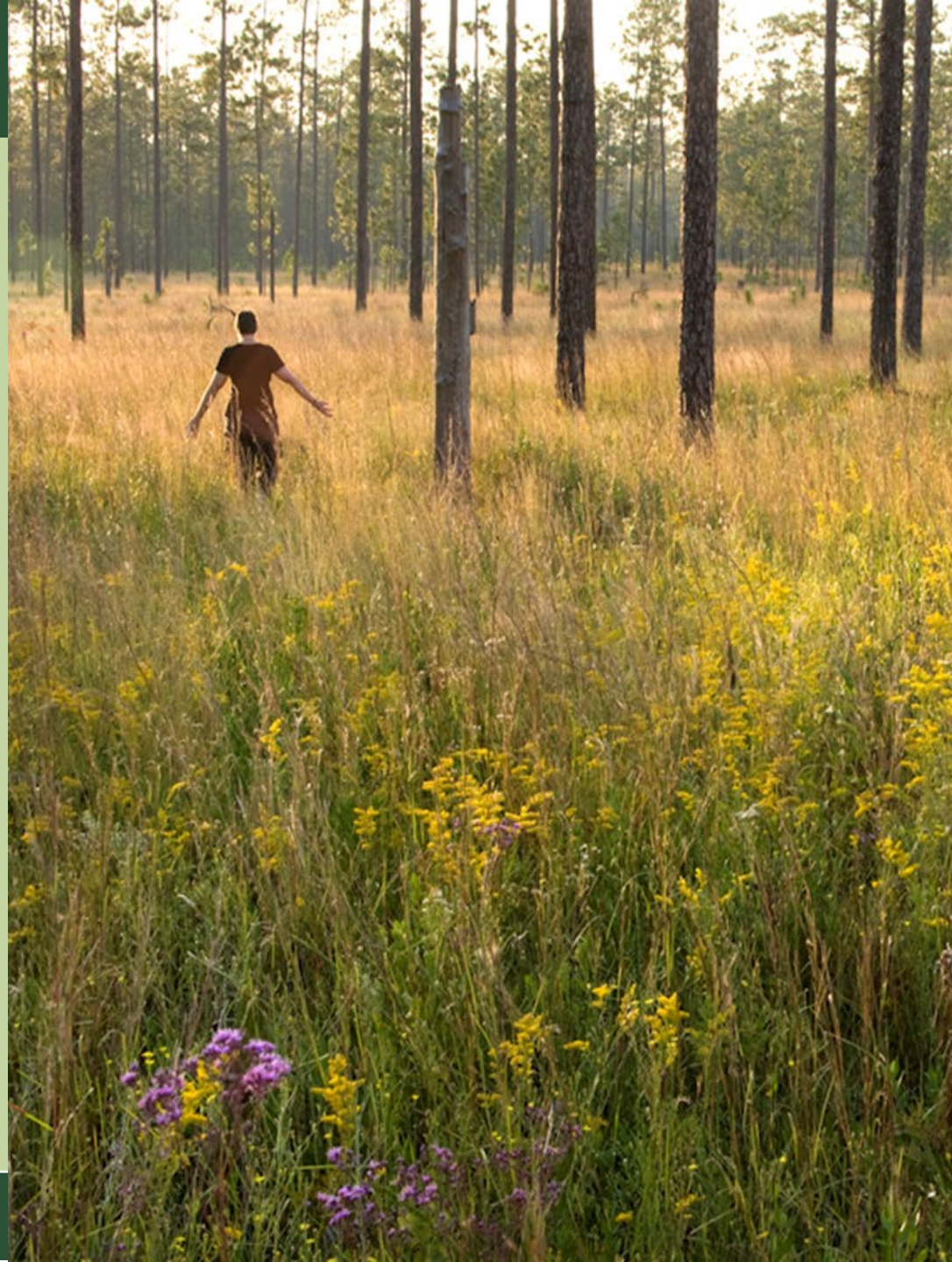
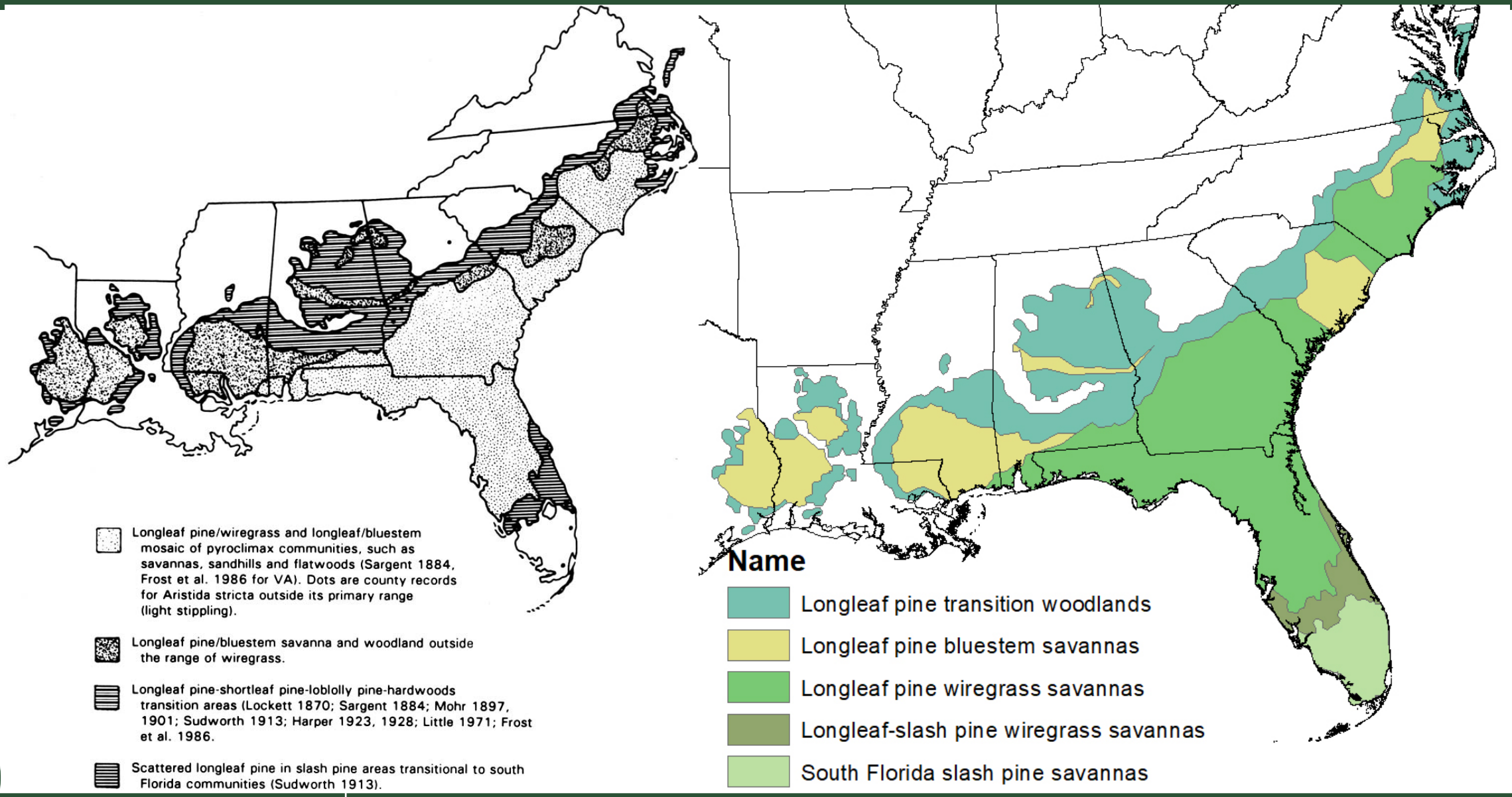
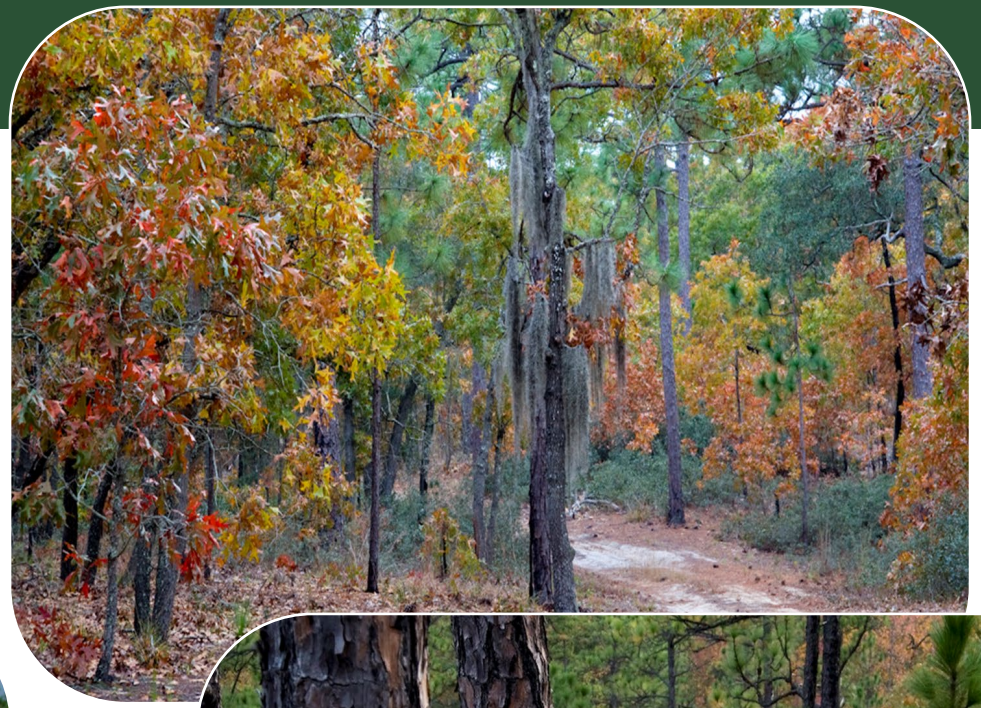
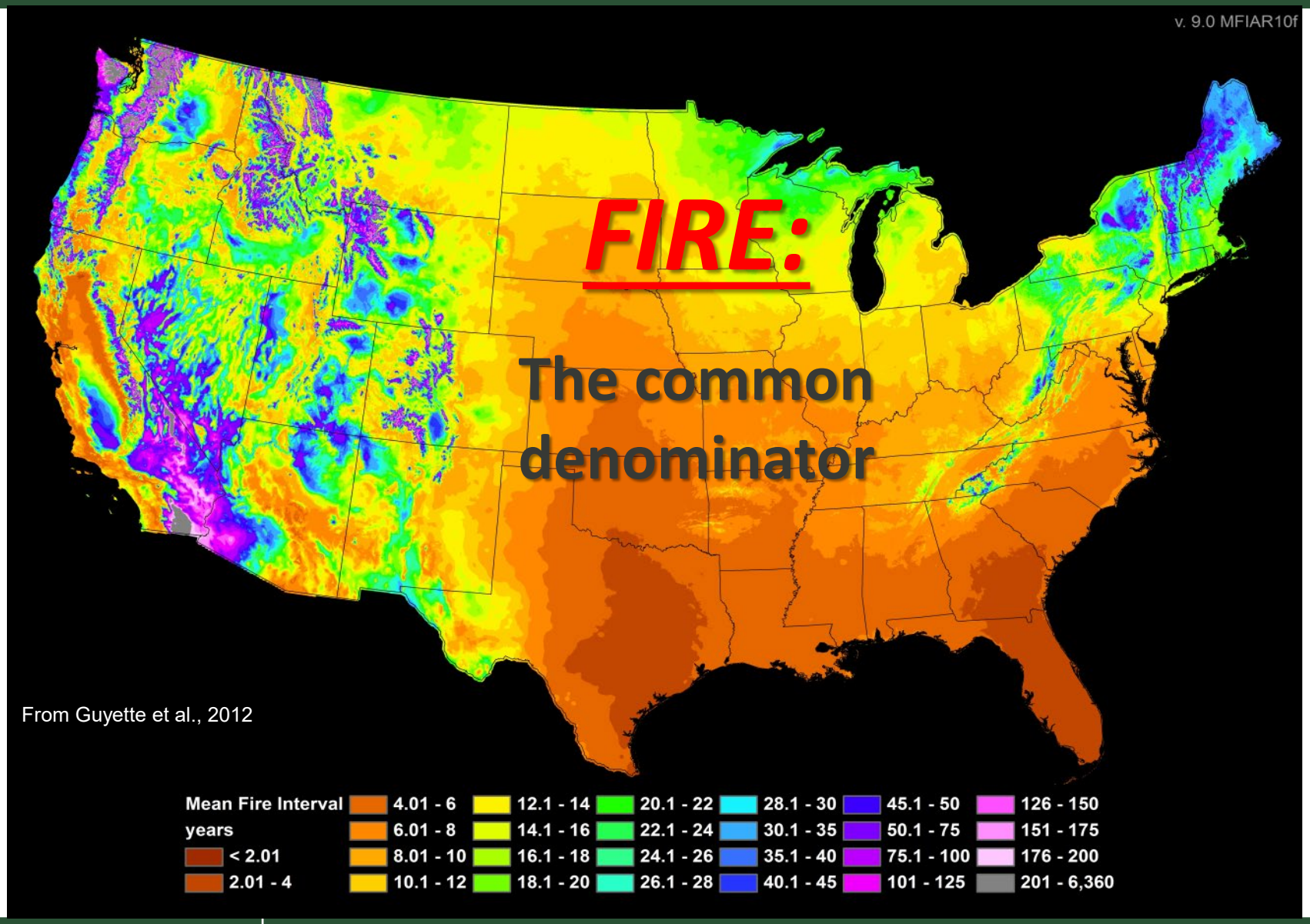


Photo: Eric Blackmore

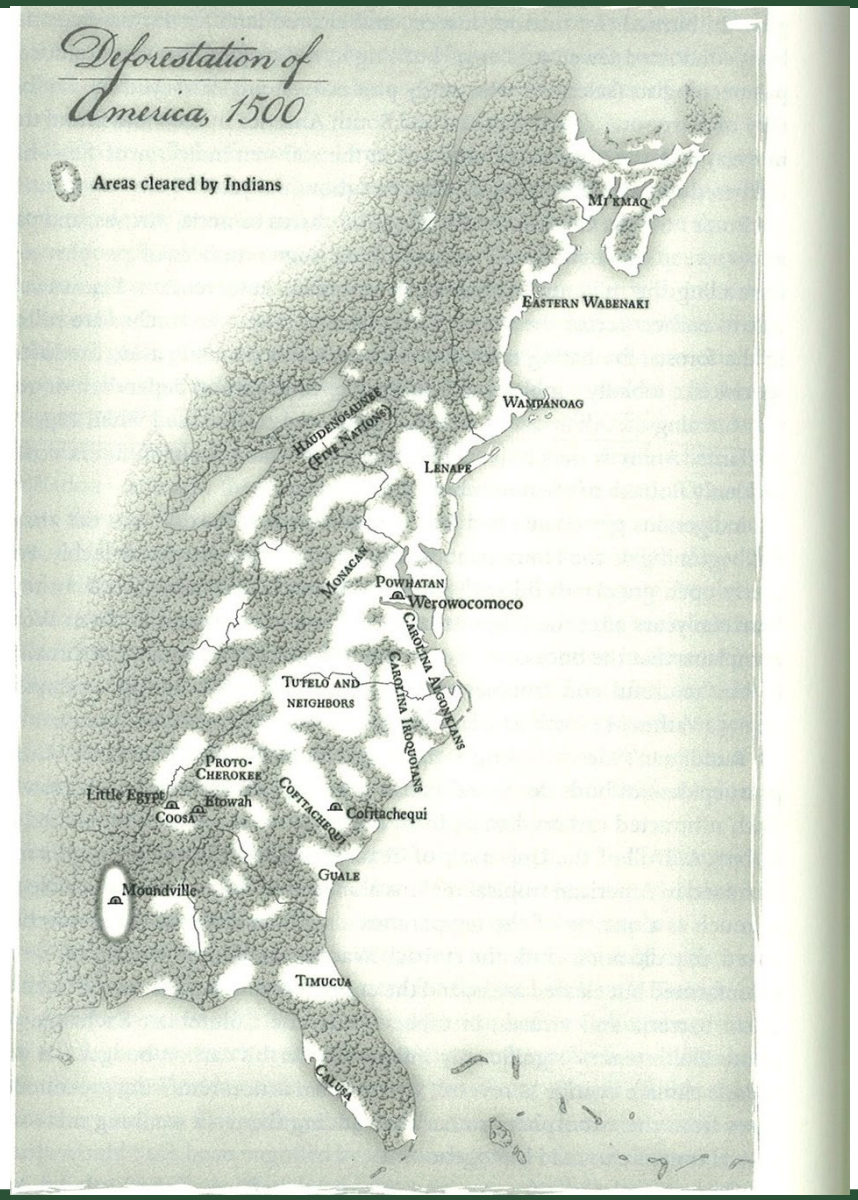

Longleaf pine/wiregrass and longleaf/bluestem mosaic of pyroclimax communities, such as savannas, sandhills and flatwoods (Sargent 1884, Frost et al. 1986 for VA). Dots are county records for Aristida stricta outside its primary range (light stippling).
Longleaf pine/bluestem savanna and woodland outside the range of wiregrass.
Longleaf pine-shortleaf pine-loblolly pine-hardwoods transition areas (Lockett 1870; Sargent 1884; Mohr 1897, 1901; Sudworth 1913; Harper 1923, 1928; Little 1971; Frost et al. 1986.
Scattered longleaf pine in slash pine areas transitional to south Florida communities (Sudworth 1913).
Name
Longleaf pine transition woodlands
Longleaf pine bluestem savannas
Longleaf pine wiregrass savannas
Longleaf-slash pine wiregrass savannas
South Florida slash pine savannas


LONGLEAF OCCURRED ON AN ESTIMATED 92 MILLION ACRES AT ITS PEAK, DOMINATING ON AN ESTIMATED 60 MILLION ACRES, PROBABLY THE LARGEST AREA ON THE CONTINENT DOMINATED BY A SINGLE TREE SPECIES.
The most diverse ecosystem in North America. The way much of the southeast used to look….
Photo: Tom Foster

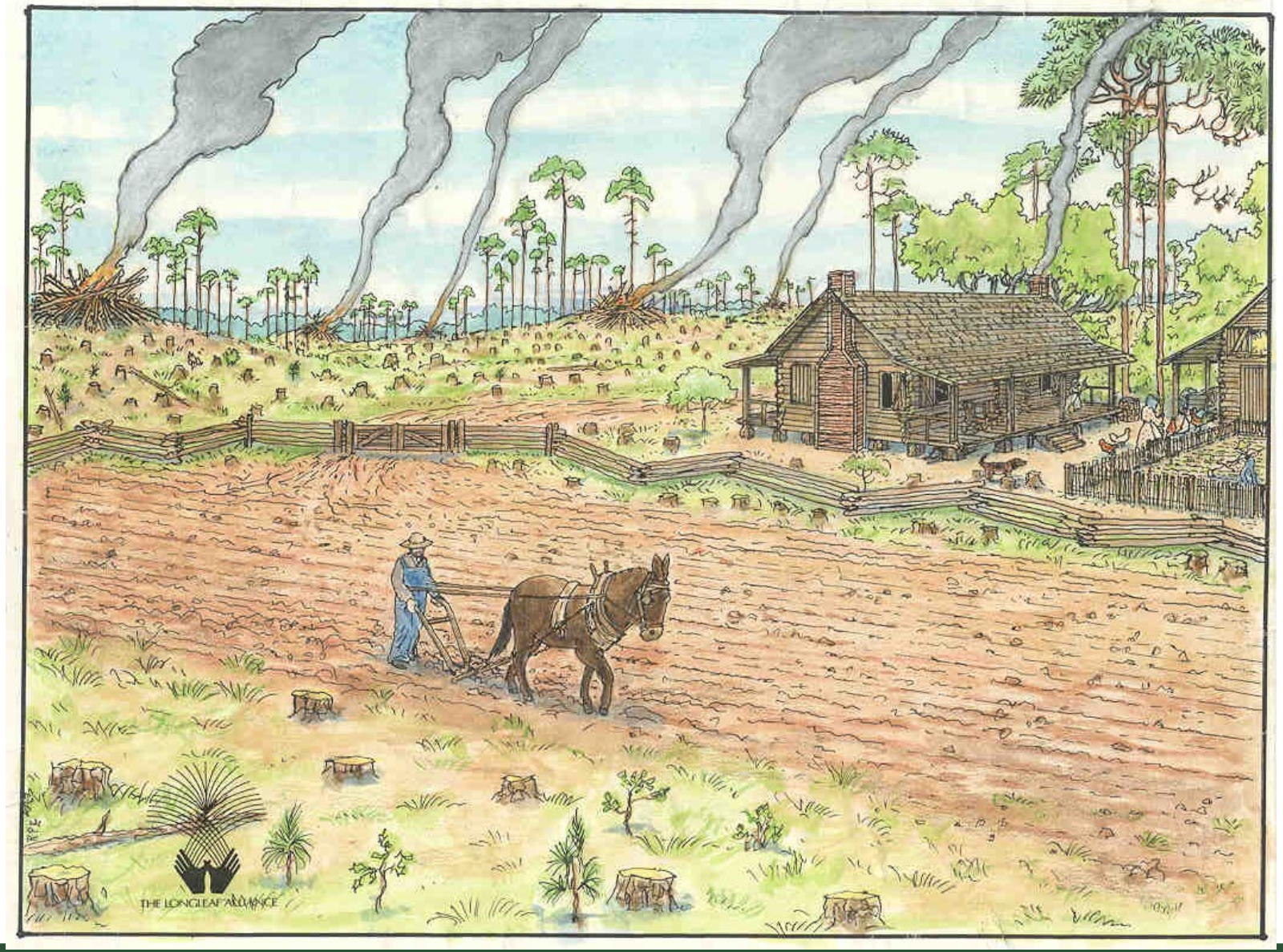



v. 9.0 MFIAR10f
FIRE:
The common denominator
From Guyette et al., 2012
Mean Fire Interval years
< 2.01
2.01 - 4
4.01 - 6
6.01 - 8
8.01 - 10
10.1 - 12
12.1 - 14
14.1 - 16
16.1 - 18
18.1 - 20
20.1 - 22
22.1 - 24
24.1 - 26
26.1 - 28
28.1 - 30
30.1 - 35
35.1 - 40
40.1 - 45
45.1 - 50
50.1 - 75
75.1 - 100
101 - 125
126 - 150
151 - 175
176 - 200
201 - 6,360

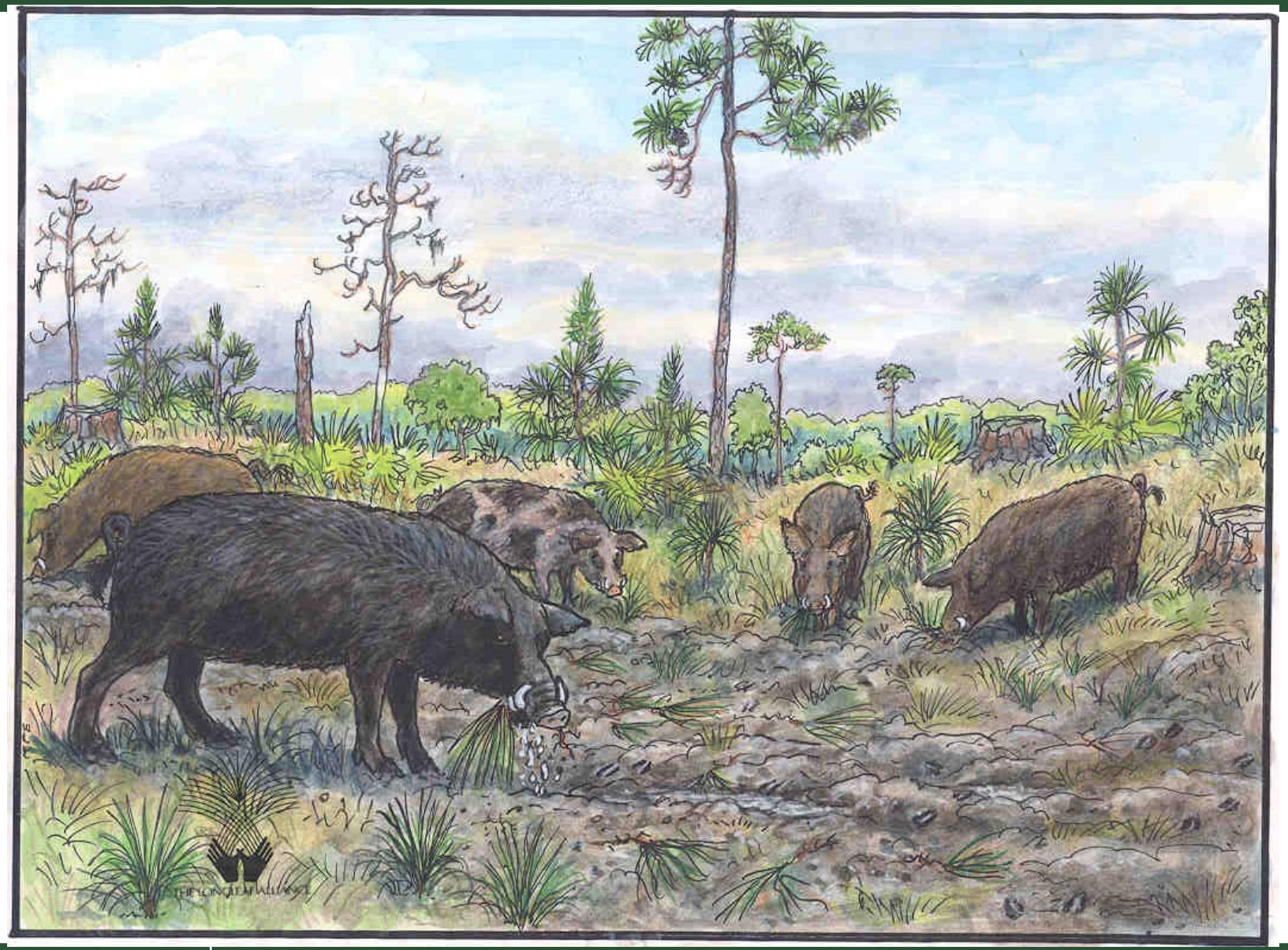
Lightning killed longleaf pine at Splinter Hill Bog Preserve, Brent Shaver, 2011


Deforestation of America, 1500
Areas cleared by Indians
Mi'kmaq
Eastern Wabenaki
Wampanoag
Haudenosaunee (Five Nations)
Lenape
Monacan
Powhatan
Werowocomoco
Carolina Algonkians
Carolina Iroquoians
Tutelo and neighbors
Proto-Cherokee
Little Egypt
Coosa
Etowah
Coftitachequi
Guale
Moundville
Timucua
Calusa

Early settlers practiced subsistence farming and made small clearings in the forest, using much wood for fences to keep their livestock OUT!



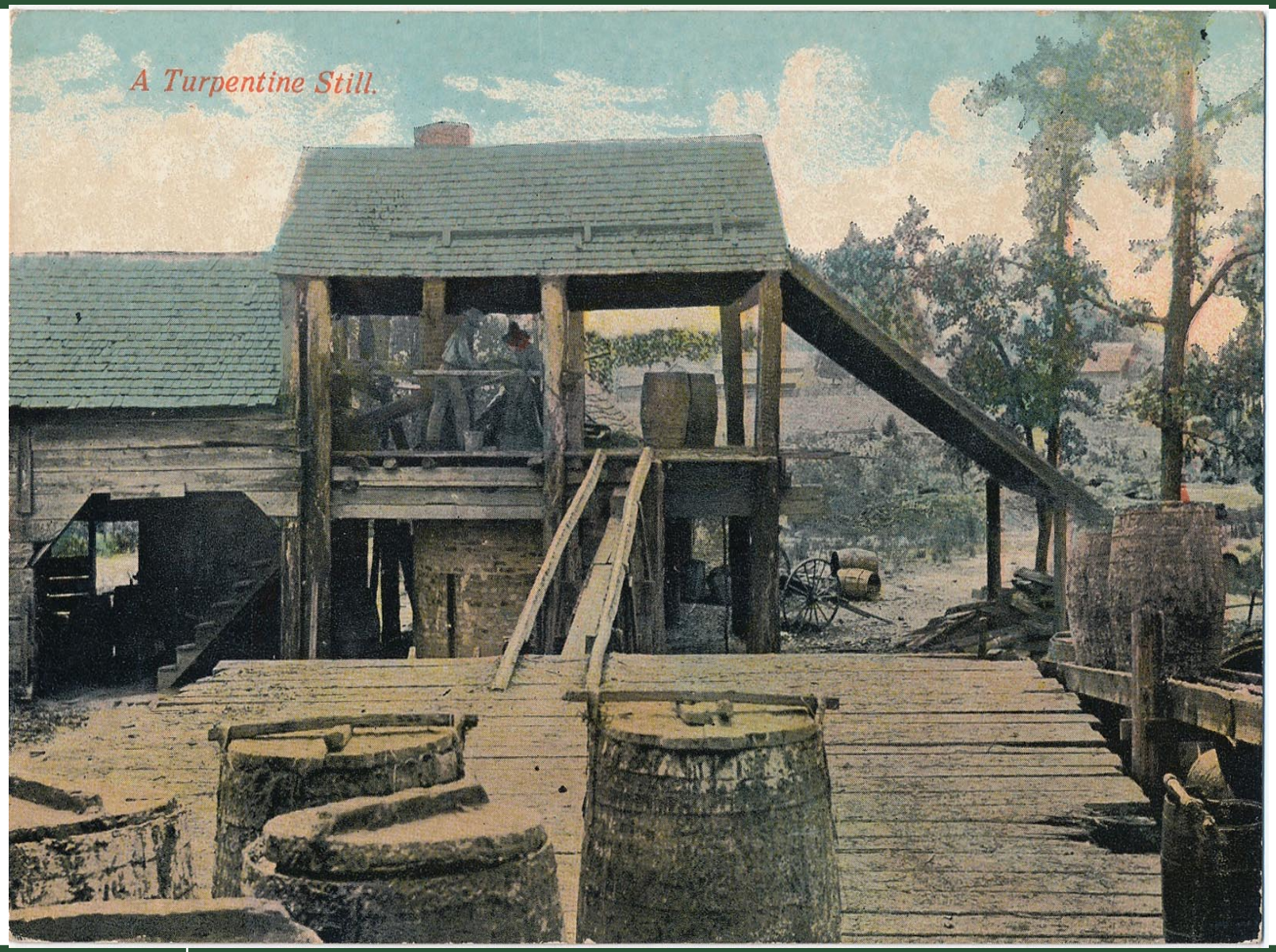
The early settlers also used fire extensively to improve grazing in the longleaf woods for cattle.



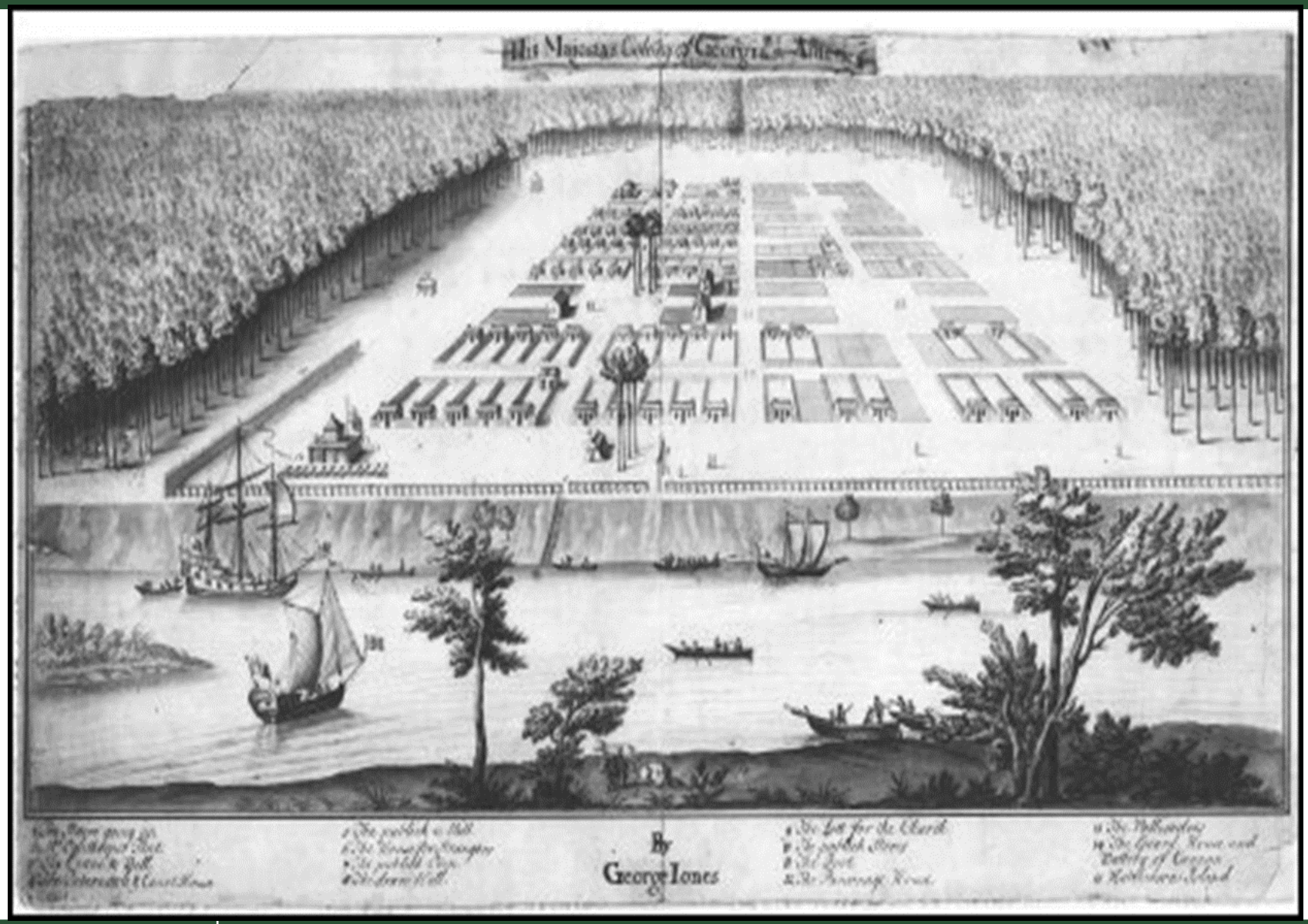
Naval stores were the Nation's first export industry.

Early 20th century

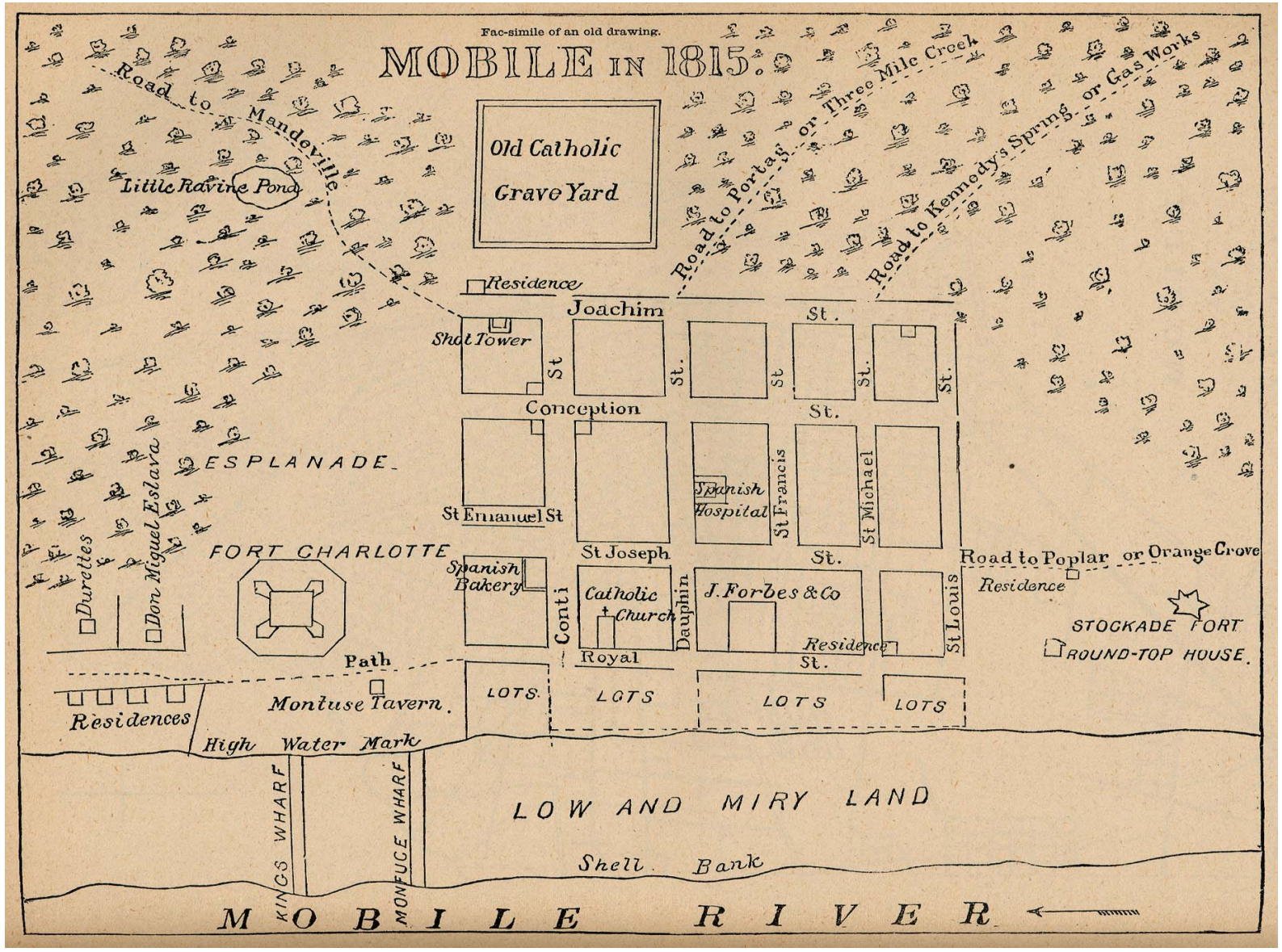
Photo: **Provided by John McGuire, Ocilla, Georgia. Postcard**: JCH


A Turpentine Still.

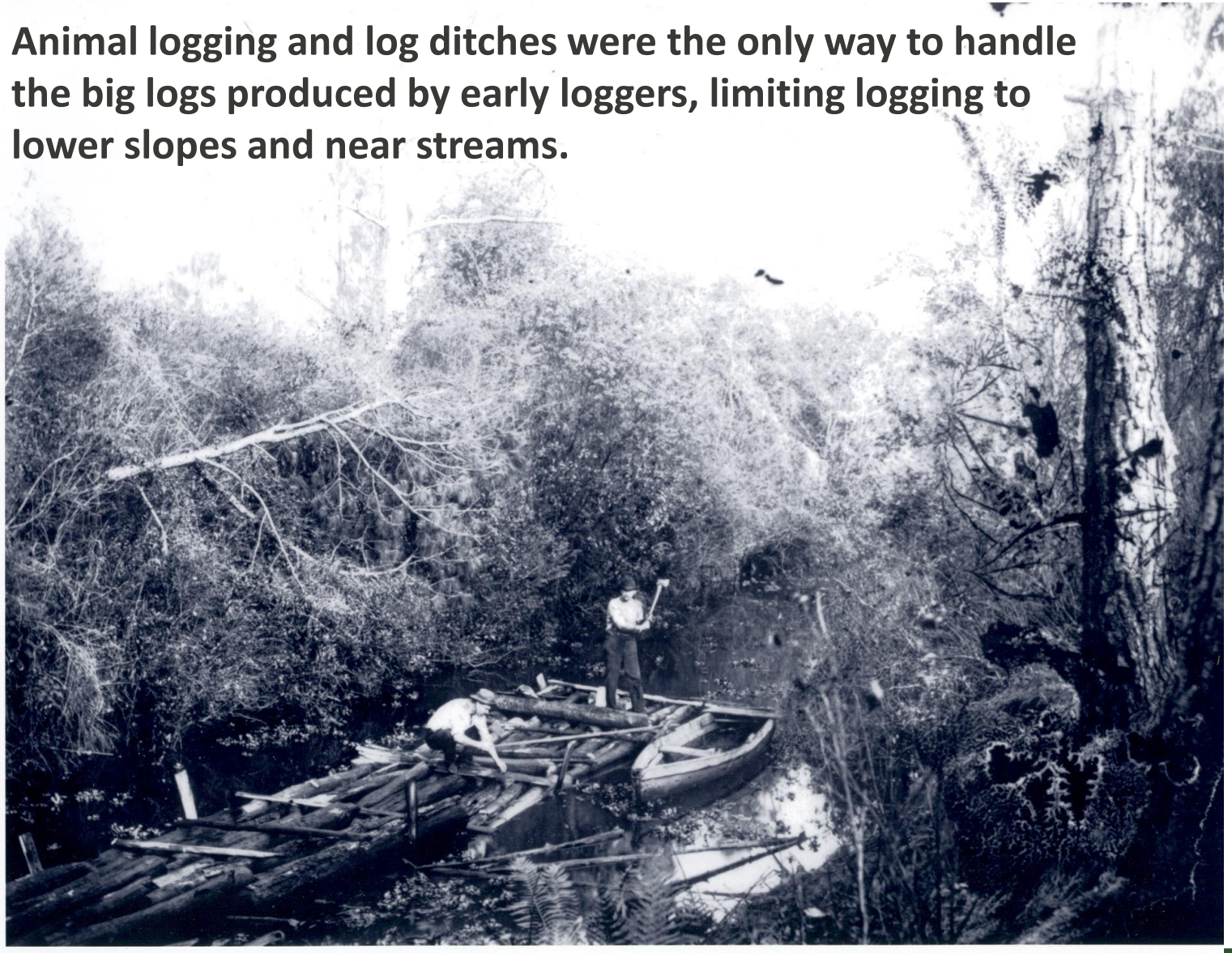
The Longleaf Forest as a barrier – Savannah in 1726



- Charleston
- Savannah
- Richmond
- Mobile
- Atlanta
- Williamsburg



Animal logging and log ditches were the only way to handle the big logs produced by early loggers, limiting logging to lower slopes and near streams.




Atlanta, GA – ca 1864, National Archives

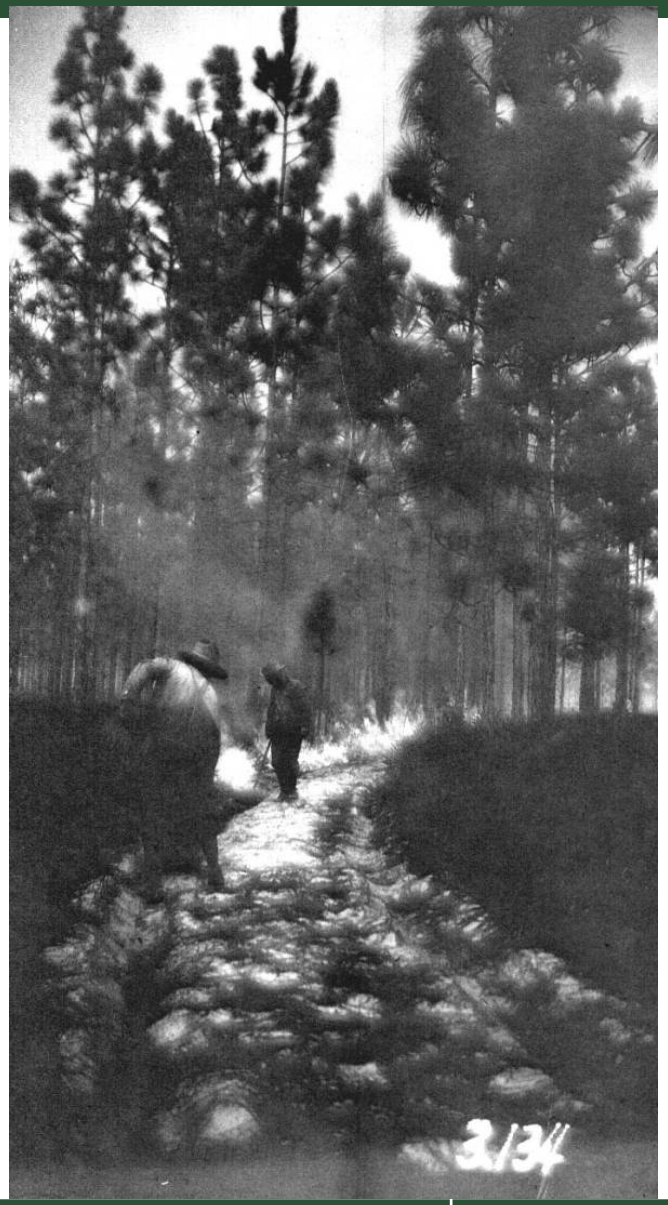

4
TONY HOWE

High wheel cart
("go-devil") near Jasper, Alabama,
1899.

Photo: Carl Alwin Schenck Collection, Special Collections Research Center, North Carolina State University Libraries, Raleigh, North Carolina

The advent of steam logging hastened the exploitation of the longleaf forest.

By the mid-1900's, over half of the longleaf forest was gone, cutover and converted to other land uses.

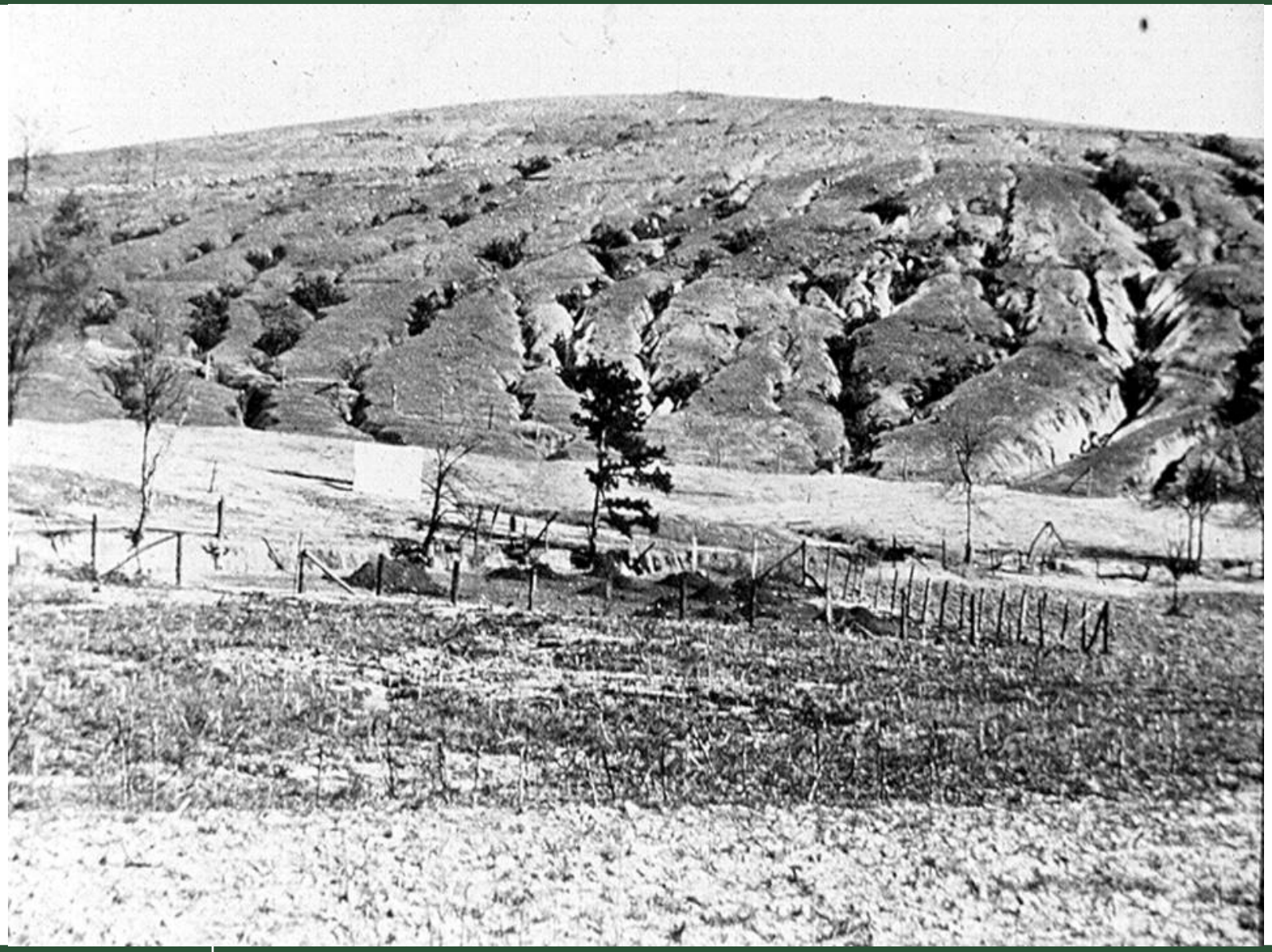


"promiscuous burning
for forage improvement
at the expense of other
forest values"

Annual fires eliminated each crop of newly germinated seedlings.

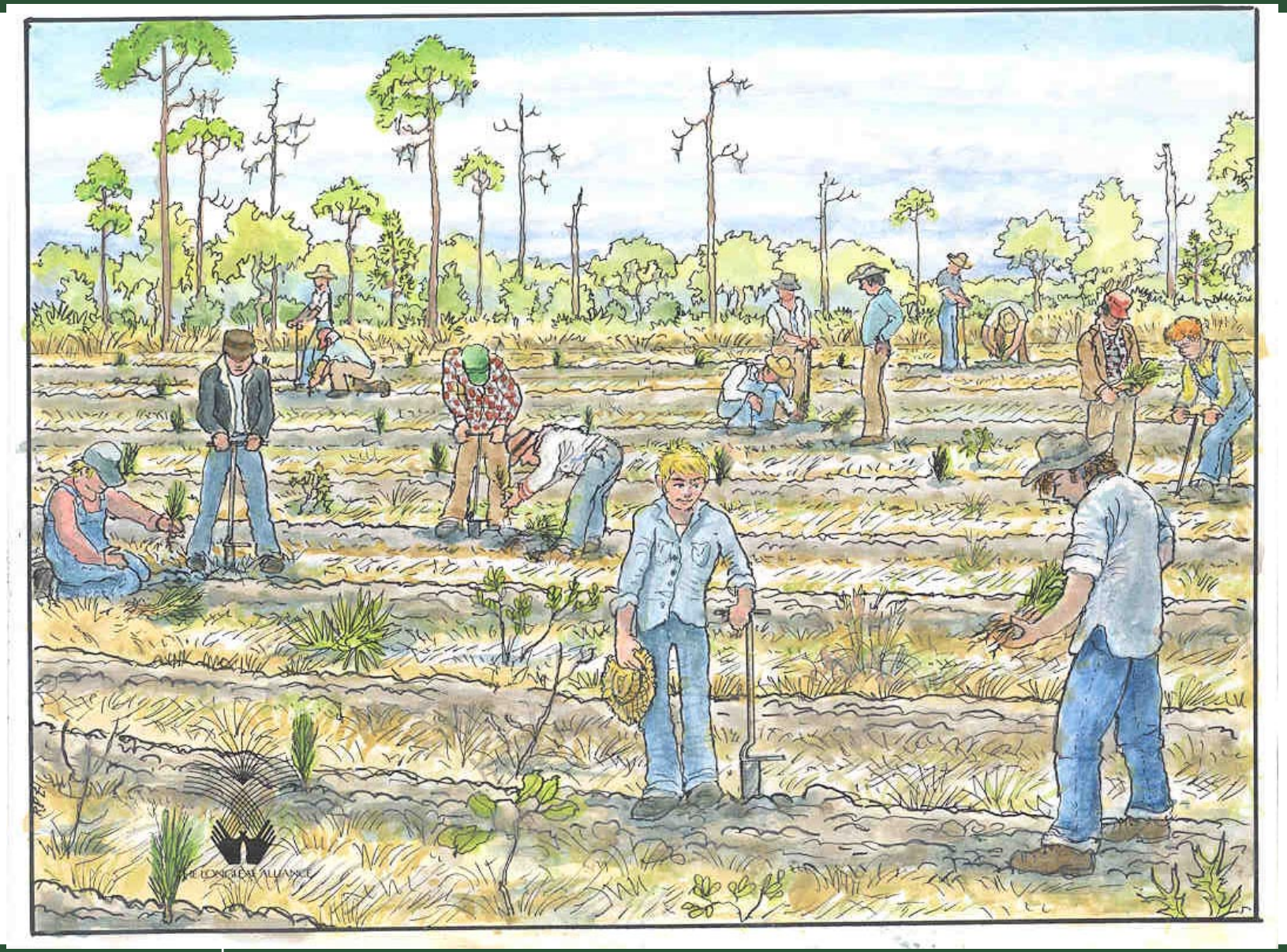
KING COTTON!!

Cotton farming without terraces, lime, or fertilizer on H.E. soils



Soils worn out, farms failed, and were abandoned

The CCC, and SCS, helped people and land begin to recover



The Dixie Crusaders
1926

ORIGINAL

L. K. KIRKMAN

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"OUR PAPPIES BURNED THE WOODS"

And Set a Pattern of Human Behavior in Southern Forests That Calls for New Methods of Fire Prevention

By JOHN P. SHEA

Psychologist, United States Forest Service

(Photographs by the Forest Service)

"Pappy" and sons—residents of a national forest in the South. "Their strongest law is the custom of their forefathers," says the author

"WOODS burnin' 's right. We allus done it. Our pappies burned th' woods an' their pappies afore 'em. It war right fer them an' it's right fer us."

So spoke a lean resident of the piney woods—one of hundreds I interviewed in the course of a six months' study last year during which as a psychologist I was supposed to find the "inner-most" reason why inhabitants of the forest lands of the South cling persistently to the custom of burning the woods.

"Fires do a heap of good," continued my "patient." "Kill th' boll weevil, snakes, ticks an' bean beetles. Greens up the grass. Keeps us healthy by killin' fever germs."

When I asked if more timber growing on unused lands might make living better for the local people he allowed not. "Might hol' the floods a mite and make a few more squirrels," he conceded, "but it ud make living harder and we'd see more rattlesnakes."

These homely words sum up a long accepted explanation of the annual fires that for more than a century have characterized the land and social economy of our southern states. The extent of the annual burnings, the harm they do and the barrier they raise to sucessful forest culture throughout the South are well known to federal, state and private forest agencies. On their walls hang maps and records showing that approximately one-half of the forest fires occurring yearly in the United States are recorded in the eleven southern states. And what is more challenging is the fact that over ninety per cent of these southern fires are caused by the hand of man. The average southerner is inclined to accept the record and the practice as a sort of birthmark upon the land about which little can be done. Outsiders visiting or motoring shocked and appalled by the miles of fire running free in the woodlands and the palls of smoke that dull the sun and often make motoring hazardous.

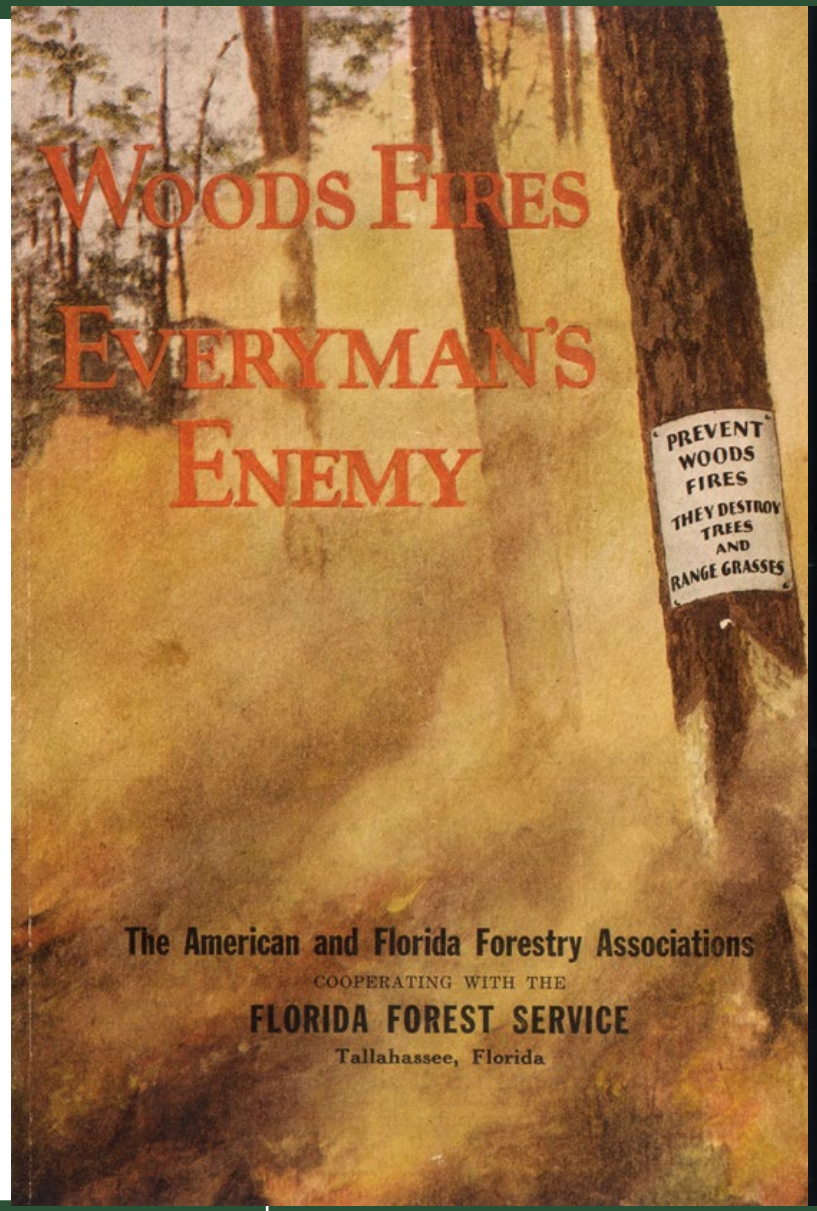
"Why," they demand, "cannot these fires be stopped or controlled?"

The question is one with which all forest agencies have been at grips for the past twenty years. Hundreds of thousands of dollars of public and private funds are spent annually in efforts to prevent the fires and to extinguish or control them after they have been set by unseen hands. Progress has been made but all too slowly, as evidenced by the fact that each year the number of man-caused fires remains at an appalling height. Prevention efforts have been predicated largely upon educational activities but results indicate that these educational serums either have been too dilute or have not reached the blood-stream of the fire-minded population.

Seeking a new educational approach, the federal Forest Service last summer decided to delve deeper into the human or social roots of the woods-burning problem. It was hoped that here might be found a point of vaccination that with an improved educational serum would reach the germs of the woods-burning desires. Accordingly, a unit of a National Forest in the Deep South

American Forests 1940 46: 159-162, 174

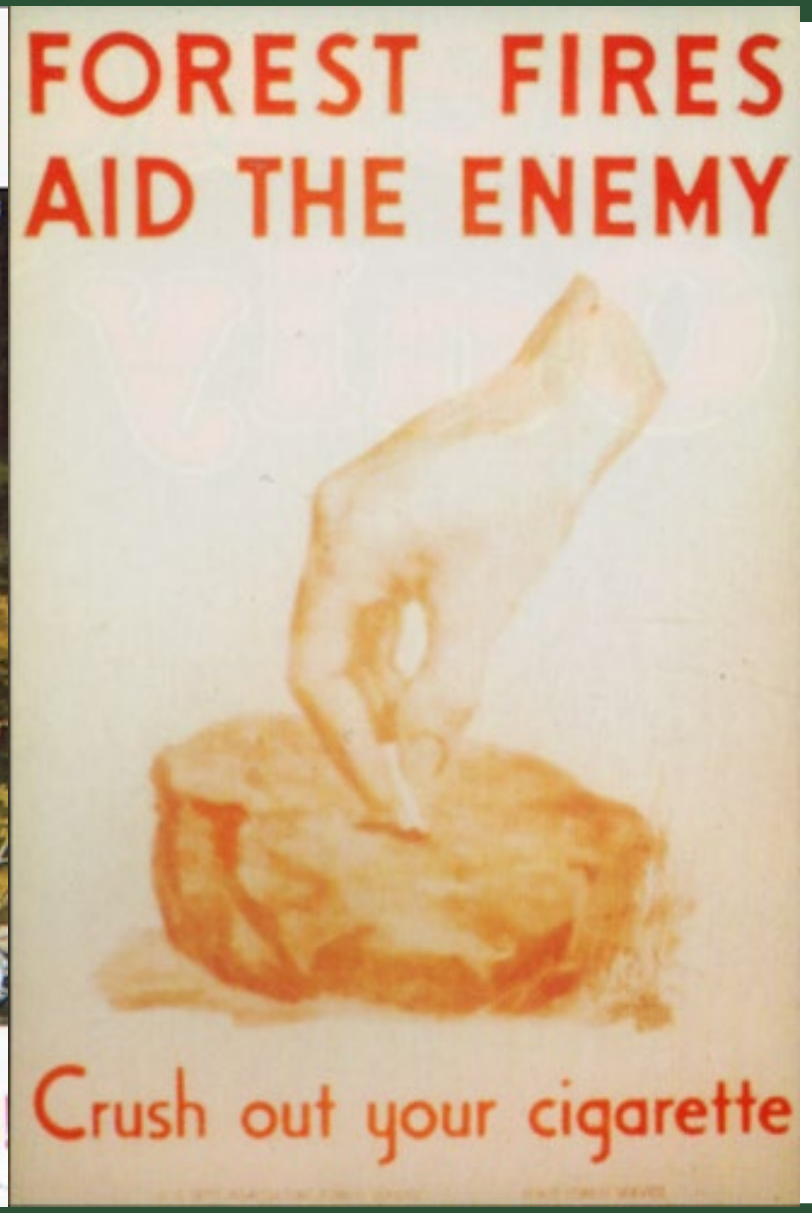
APRIL 1940 - ??


WOODS FIRES
EVERYMAN'S
ENEMY
PREVENT
WOODS
FIRES
THEY DESTROY
TREES
AND
RANGE GRASSES
The American and Florida Forestry Associations
COOPERATING WITH THE
FLORIDA FOREST SERVICE
Tallahassee, Florida


DEATH RIDES
THE FOREST
WHEN
MAN IS
CARELESS

!"


A MATCH CAN BE
A DEADLY MISSLE
SMOKEY
Remember:
ONLY YOU CAN PREVENT WOODS FIRES

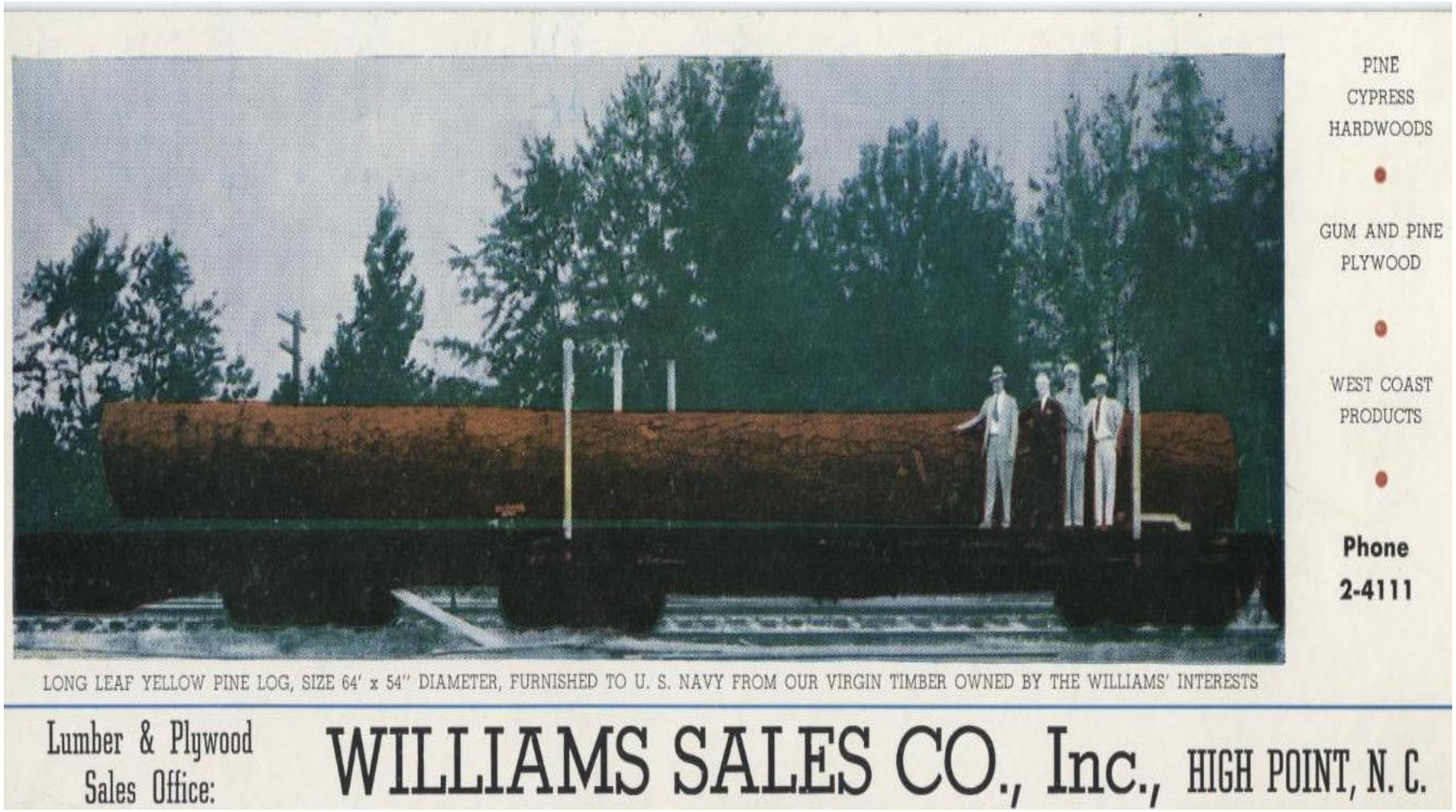

FOREST FIRES
AID THE ENEMY
Crush out your cigarette

Disney's Bambi delighted…

…and traumatized a generation of young Americans.

There was still some big timber left into the 1940's.

Fifty-four inches in diameter and 64 feet long!



Fast growing loblolly and slash pine suited the needs of the pulp and paper industry better than the native longleaf.

Forestry schools responded by emphasizing industrial forestry techniques.

Until incentive programs, landowners were offered little encouragement to manage longleaf pine by service foresters and consultants.

Seems like ancient history – what does this mean to me today?

Taking fire out of the longleaf forest

is like taking rain out of the rain forest

-- Larry Landers

A Culture Of Fire

DANIEL L. HEBARD
1500 WALNUT STREET BUILDING
PHILADELPHIA, PA.

424 University Farm Place
October 20, 1939

Division of Wildlife Management

October 18, 1939

Mr. Daniel L. Hebard
1500 Walnut Street Building
Philadelphia, Pennsylvania
Madison, Wisconsin.

Dear Mr. Hebard:
Dear Mr. Leopold -

My statement that the Club had lacked a clearly defined land policy was intended as a criticism of the membership rather than of the officers. It seemed pretty clear to me that the Club had never threshed out the question of what it was there for, and certainly no set of officers could pursue a policy without a mandate from the members. I am note sure that the members have really made up their minds even at this time what they wish the club to be. I seized the opportunity to lay a general proposal before them. Naturally I bent the proposal to cover the things I am interested in.

My visits to the club were too short to allow me to check up on the Ford logging. I have no reason to doubt that your appraisal of it is correct. However, I did check up on the logging at Dukes and was pleased with it. I admit that my suggestion of teaming up with the Ford organizati... was premature in the sense that I had not satisfied myself of the quality of their work.

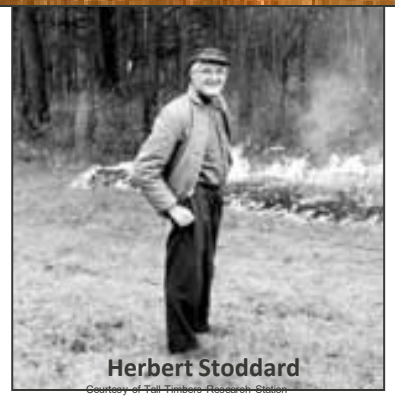
I am glad you share my impressions of Smith. I am anxious to meet Manville, and he is coming down here next week to talk over his plans. He was selected by Dr. Dice and I have no opinion of what sort of fellow he is.

I have just spent several days with Stoddard and came away with a conviction that he has been too modest about the conservation methods he has worked out for the Southeast. They are commonly regarded as applicable only to game preserves, but in my opinion he has developed principles which are equally applicable to lumber company holdings, national forests, and all other owners of coastal plain longleaf. It is a great satisfaction to me to know of your confidence in Stoddard. I of course am biased, for he is one of my closest personal friends. I am lecturing to my students Monday on the Stoddard method of handling Southeastern pine lands.

As you say, letters are inadequate as a means of talking over these questions. I was awfully sorry not to be able to come up last summer, and so was Stoddard. We both had our hands too full to arrange a date at short notice. You may be assured, however, that I am as anxious as ever to meet you and to thoroughly discuss all these questions.

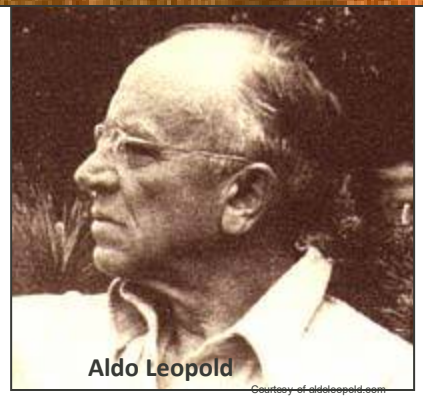
Yours sincerely,

Aldo Leopold
Professor of Wildlife Management



Herbert Stoddard

Courtesy of Tall Timbers Research Station



Aldo Leopold

Courtesy of aldoleopold.com

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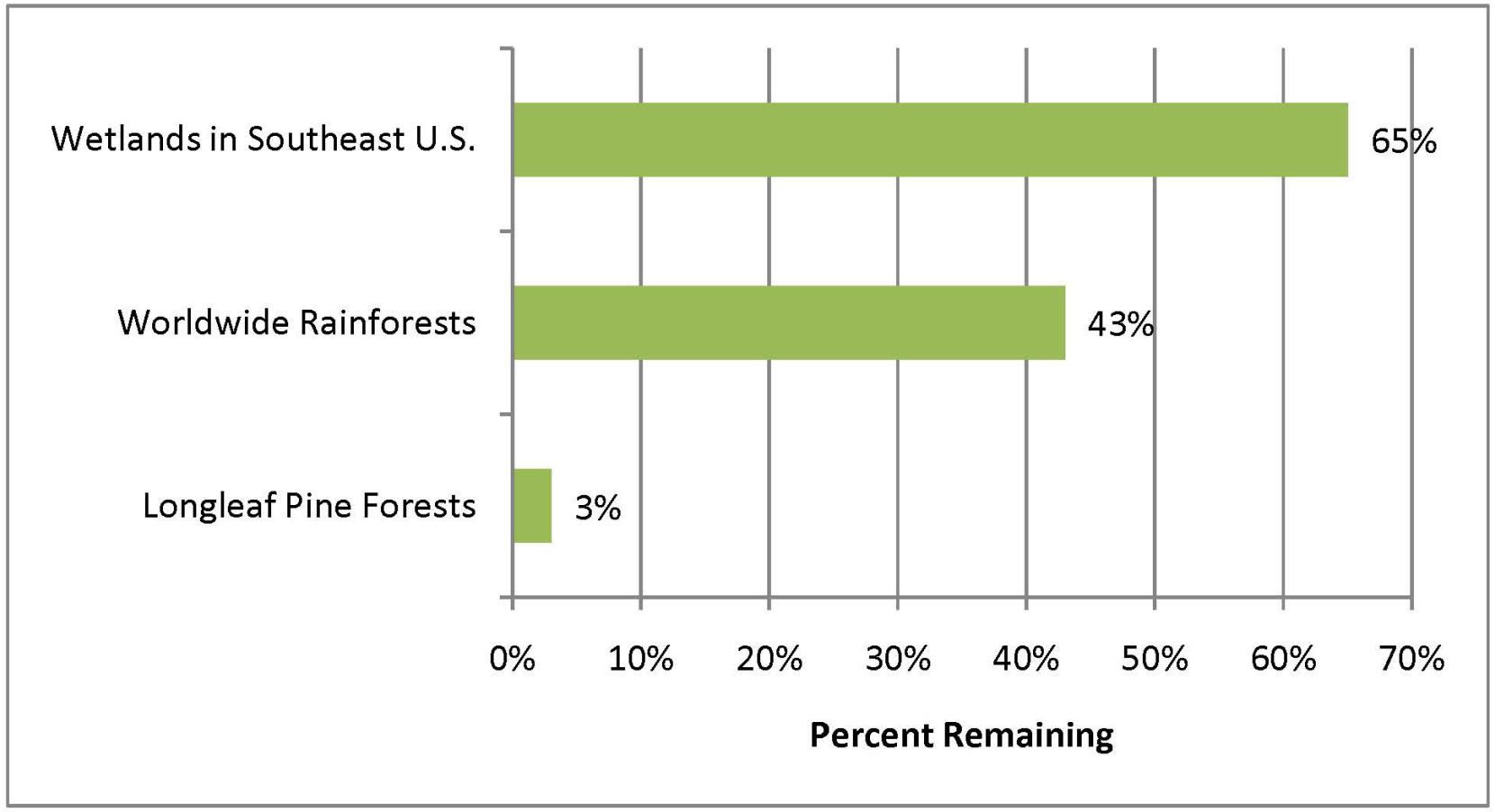
Some of the best remaining longleaf forests were protected and are now managed to produce bobwhite quail.

Those who still understood longleaf were disappearing as fast as the tree…

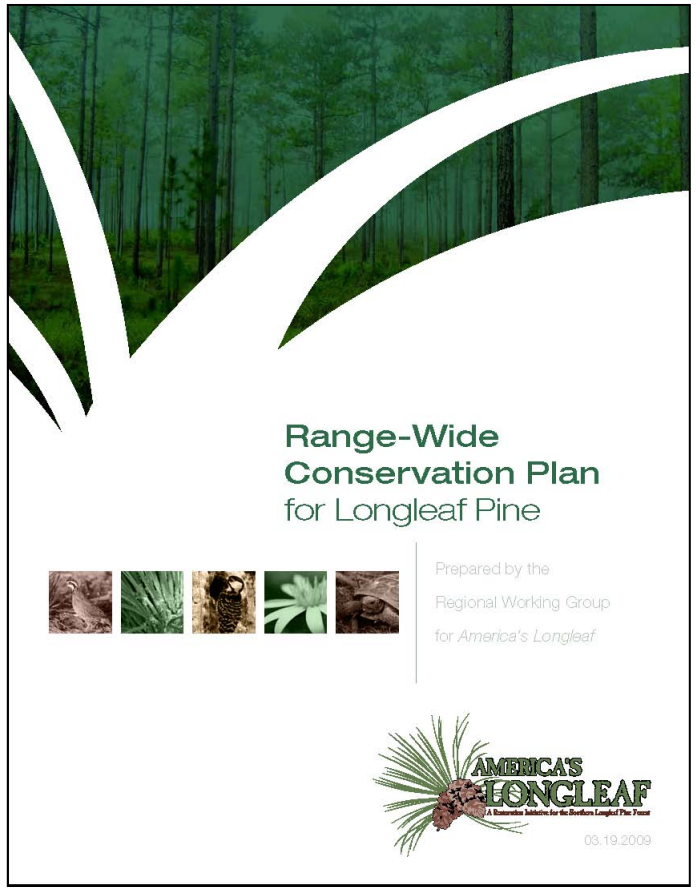
In 1995, when longleaf forests had dwindled to less than 3 million acres, The Longleaf Alliance was formed to be an advocate for longleaf retention and restoration, focusing on its ecological and economic values.

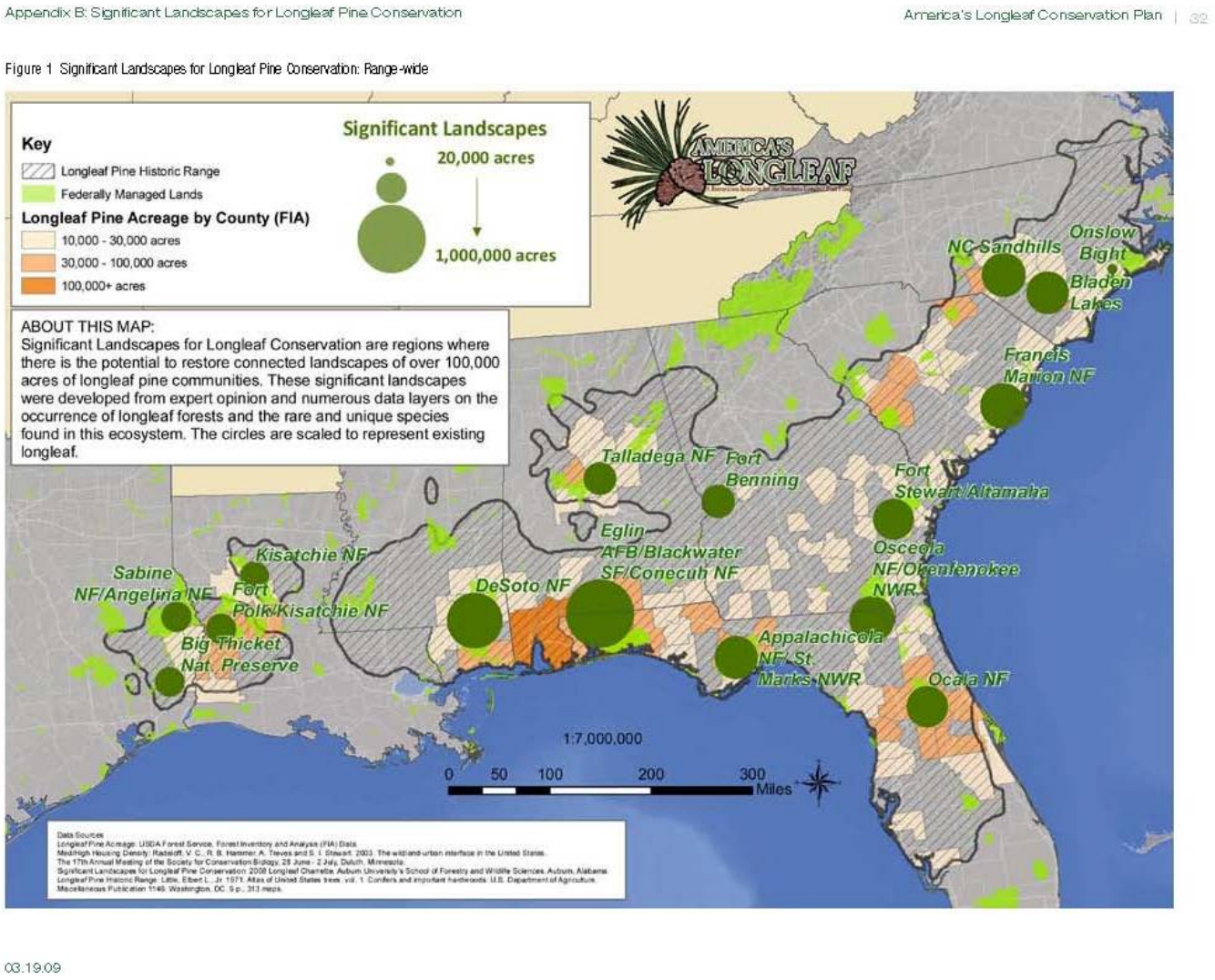
Percent Remaining of Threatened Ecosystems



Adapted from America's Longleaf – Range-Wide Conservation Plan for Longleaf Pine

2009 – America's Longleaf Restoration Initiative (ALRI) formed





Making progress - Longleaf for the Long Run

In the past 21 years, we have grown and sold 1.65 billion longleaf seedlings, enough to have planted an estimated 3.03 million acres.

If we conservatively assume that only 75% of those plantings were fully successful, we still should have established about 2.27 million new acres of longleaf.

The working estimate of longleaf acreage (prior to LEO) across the range is about 4.7 million acres, a net increase of an estimated 1.8 million acres.

Restoring Longleaf – two steps forward, one back?

- The good news!
  - We apparently enjoyed a net gain in acreage of around a 1.8 million acres.
- The bad news?
  - If the working estimate is accurate, we gained about 2.27 million acres of planted longleaf on cutover sites and ag fields but lost about 470,000 acres of existing longleaf…

The last virgin Longleaf stand in Alabama, today.

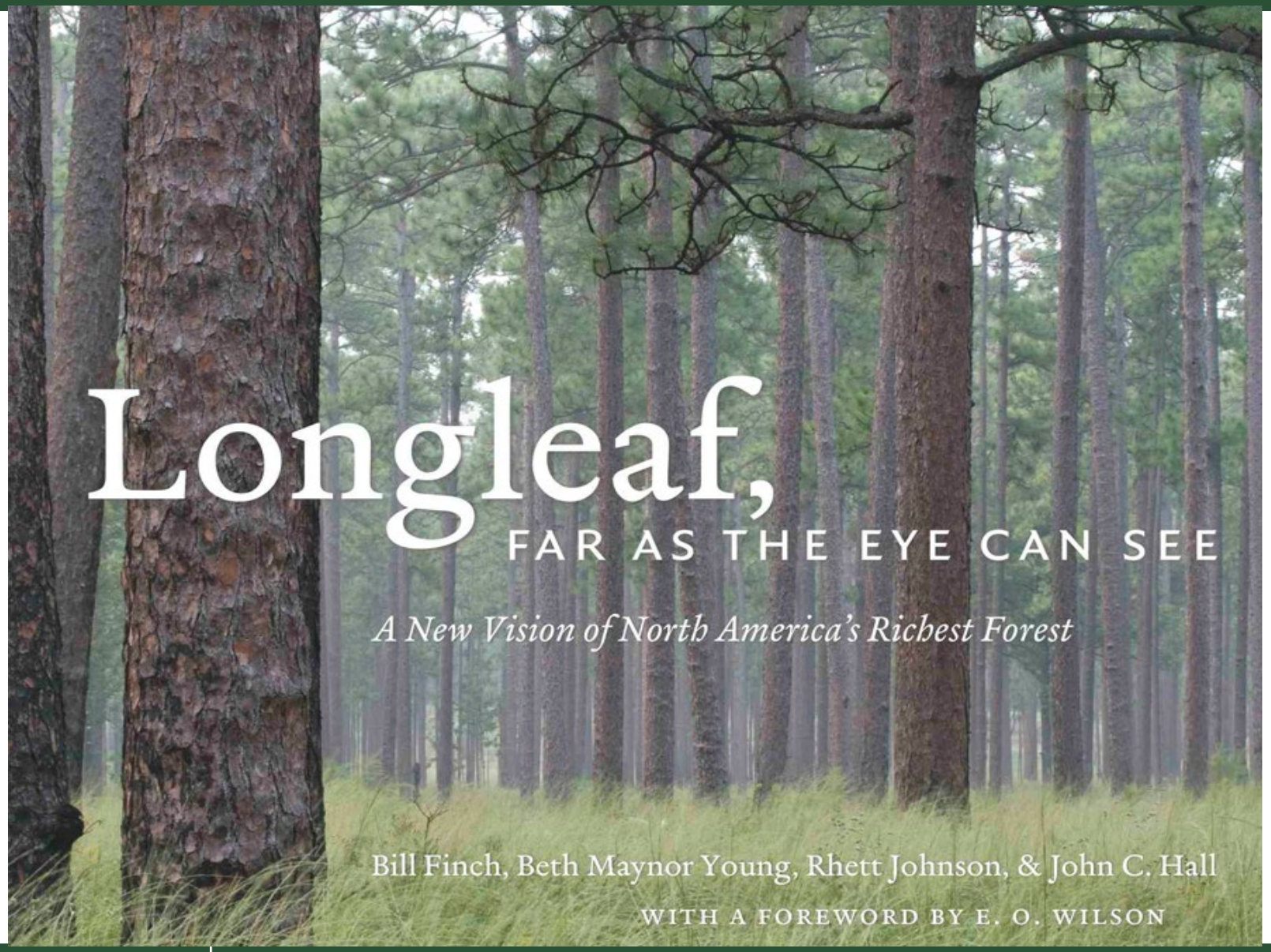
Longleaf for the Long Run

Restoration requires patience and persistence (and $$)

- It takes decades of dedicated management, including frequent fire, for planted cutover sites to recover some semblance of the ecological function of managed longleaf forests.
- It may take centuries and tens of thousands of dollars to establish functioning longleaf ecosystems on former cropland.
- Still, “better is better”!

Is this the twilight of longleaf…

…or the new dawn?


Longleaf,
FAR AS THE EYE CAN SEE
A New Vision of North America's Richest Forest
Bill Finch, Beth Maynor Young, Rhett Johnson, & John C. Hall
WITH A FOREWORD BY E. O. WILSON