

Safe Harbor Programs for Rare Wildlife in the USA

*Reducing conflicts
Improving outcomes*

Jim Cox

Tall Timbers Research Station & Land Conservancy

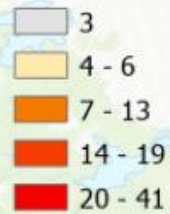
Tallahassee, Florida



- The Endangered Species Act (**ESA**) prohibits the **TAKE** of a listed species
- **TAKE** is defined to include “...*harass, harm, pursue, hunt, shoot, wound, kill, or collect...*” and also includes “....*significant habitat modification or degradation.*”
- **ESA** also protects the ecosystems upon which rare species depend

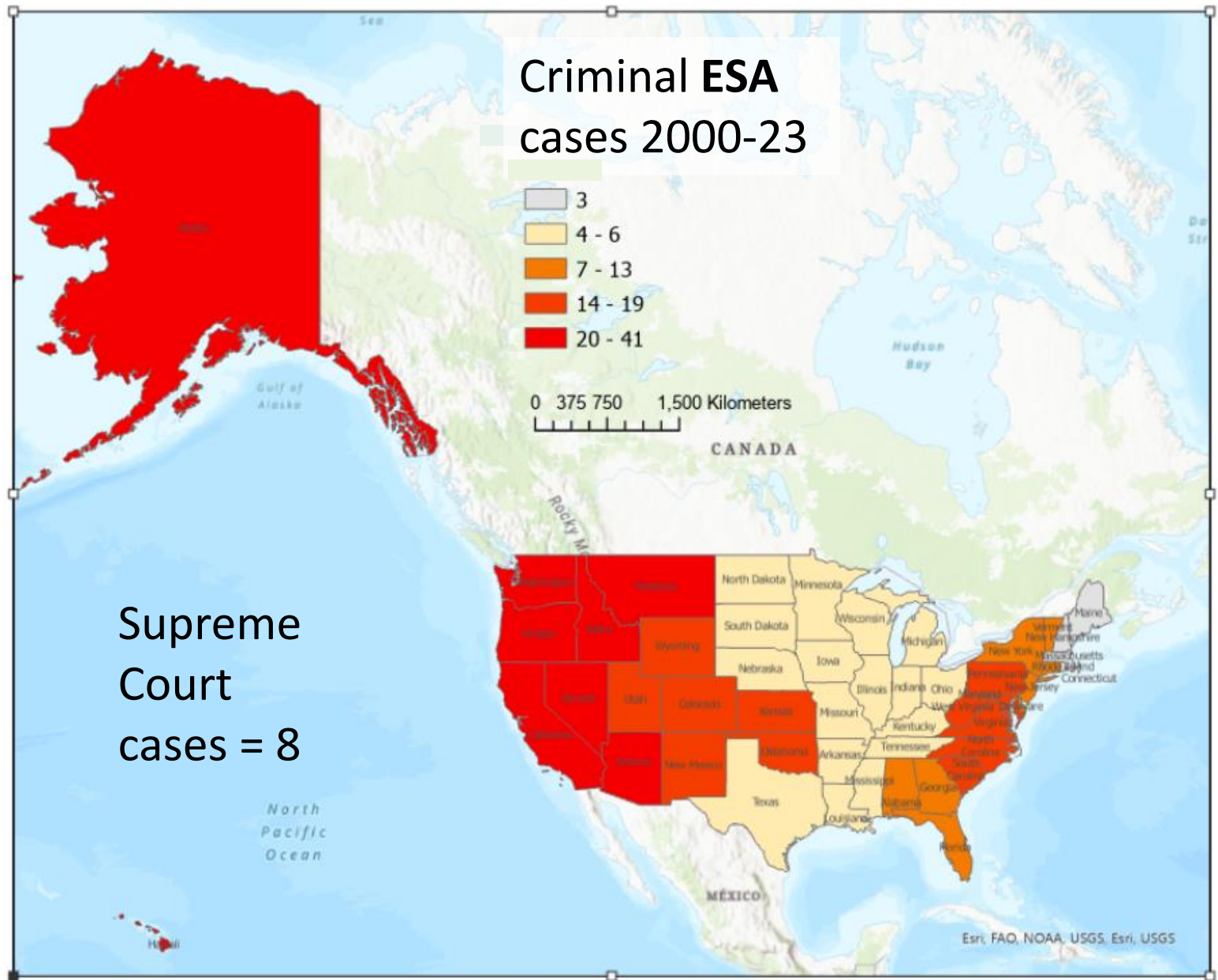


Criminal **ESA** cases 2000-23



0 375 750 1,500 Kilometers

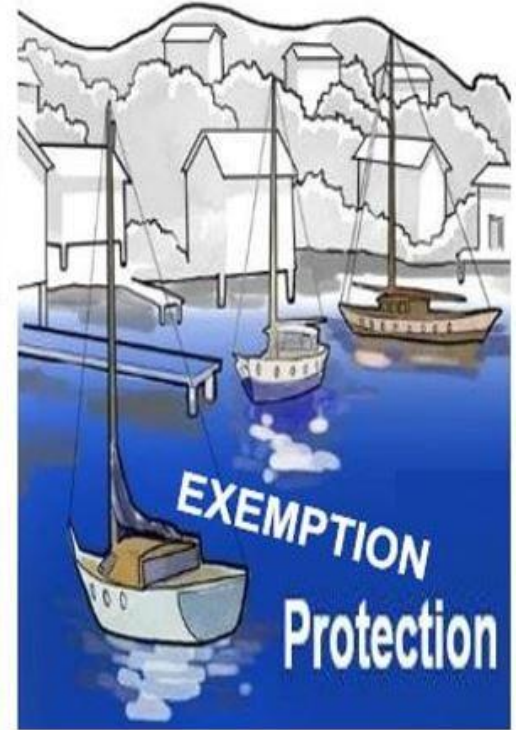
Supreme
Court
cases = 8



Safe Harbor

A provision that protects against liability when specified conditions are met.

Safe Harbor



Red-cockaded Woodpecker



Male

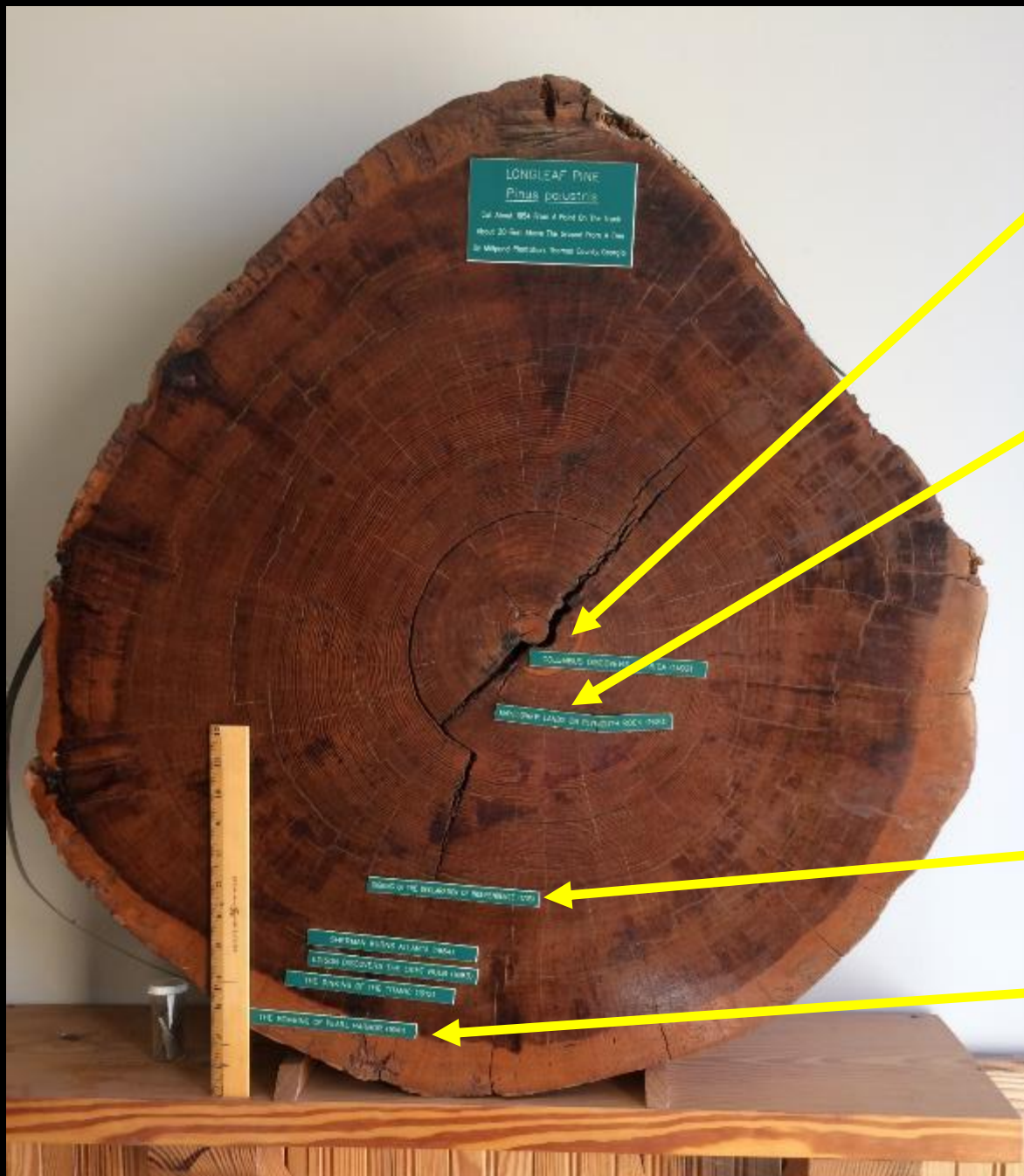
in southeastern
leaf pine



From Little, E.L., Jr., 1971, Atlas of United States trees, volume 1, conifers and important hardwoods: U.S. Department of Agriculture Miscellaneous Publication 1146.







**Columbus lands
in New World**

Mayflower lands

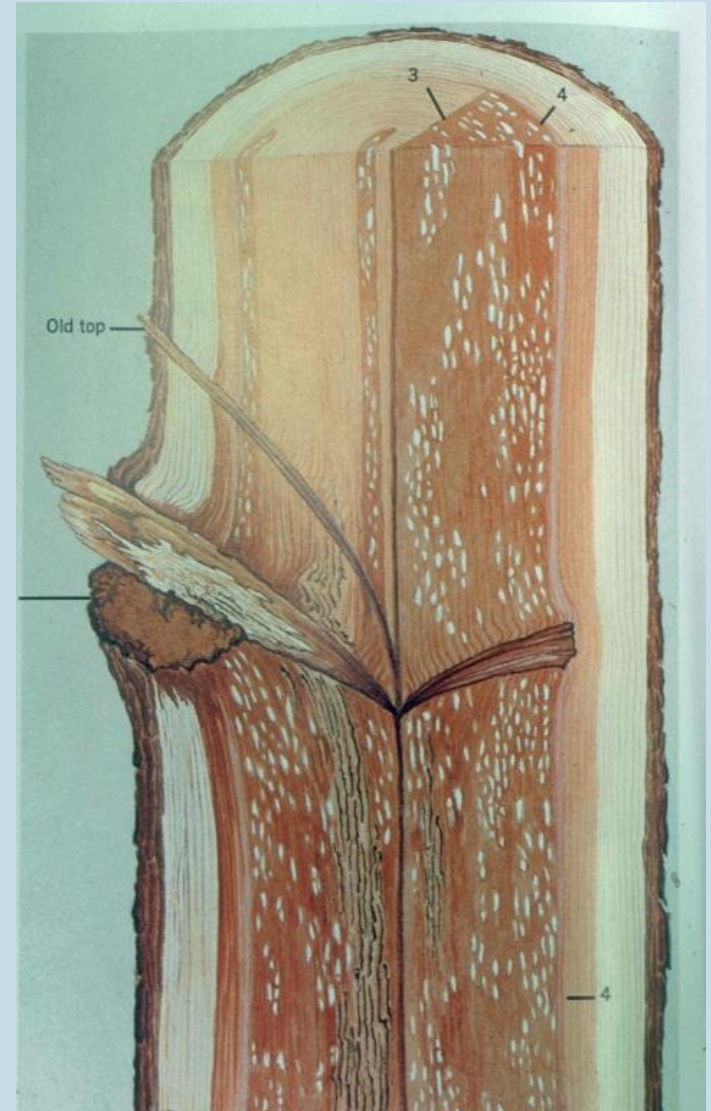
**Revolutionary
war begins in
USA**

**World War II
begins**





Initial “start”



Red heart fungus



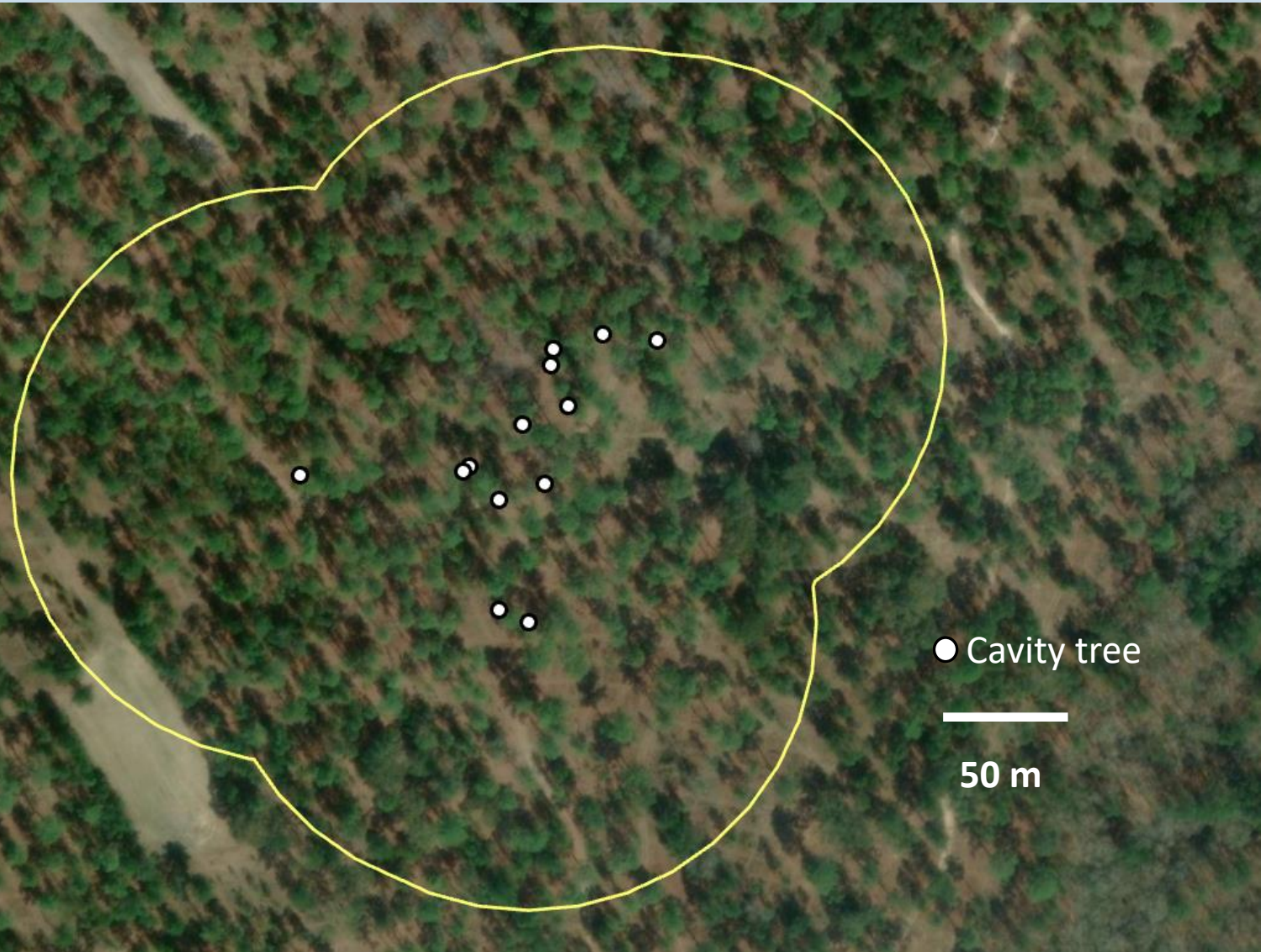




**27 species use cavities created
by Red-cockaded Woodpeckers**

Cluster of Cavity Trees

(territory
center)



Breeding Group



+



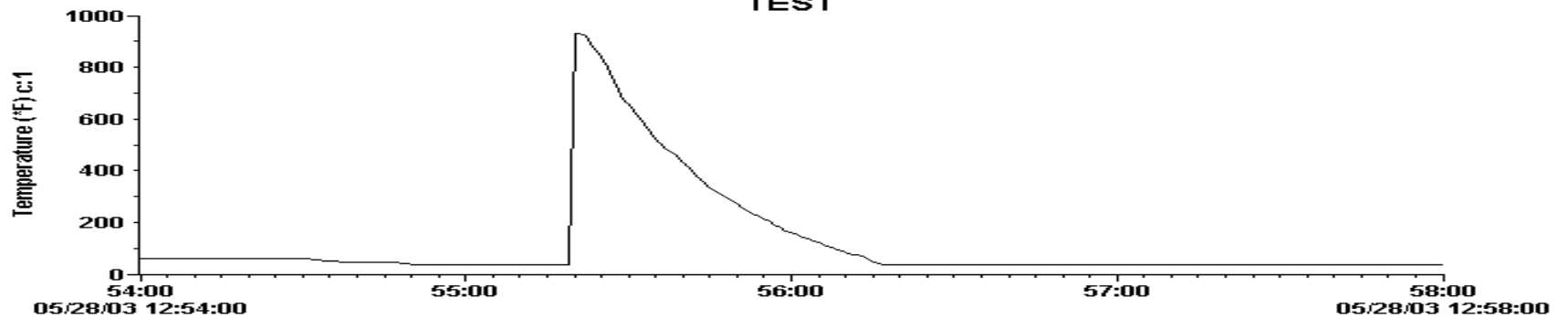
0 - 4 male offspring the
'help' for 1-3 years

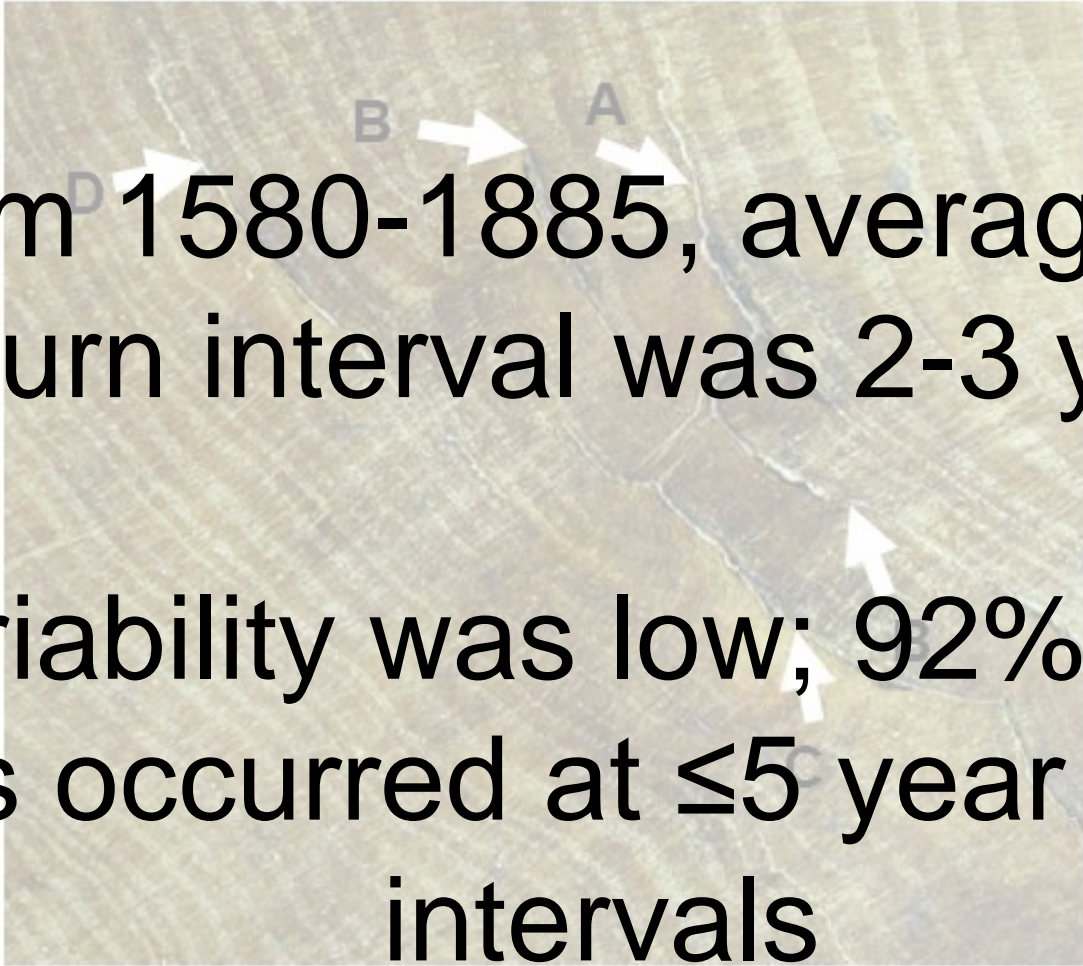
Woodpecker Habitat Needs

- Mature pines (≥ 70 years)



TEST





From 1580-1885, average fire-return interval was 2-3 years

Variability was low; 92% of all fires occurred at ≤ 5 year return intervals

Figure 2.7. Example of a sequence of fire scars. The first scar in this sequence A: is a curl scar from 1719; followed by B, a well-developed distortion scar from 1722; C, another distortion scar from 1728; and, finally, D, a minor distortion scar from 1732.



Without
regular
fires,
hardwoods
take over

Photos from
a research
plot where
fires were
suspended
in 1966



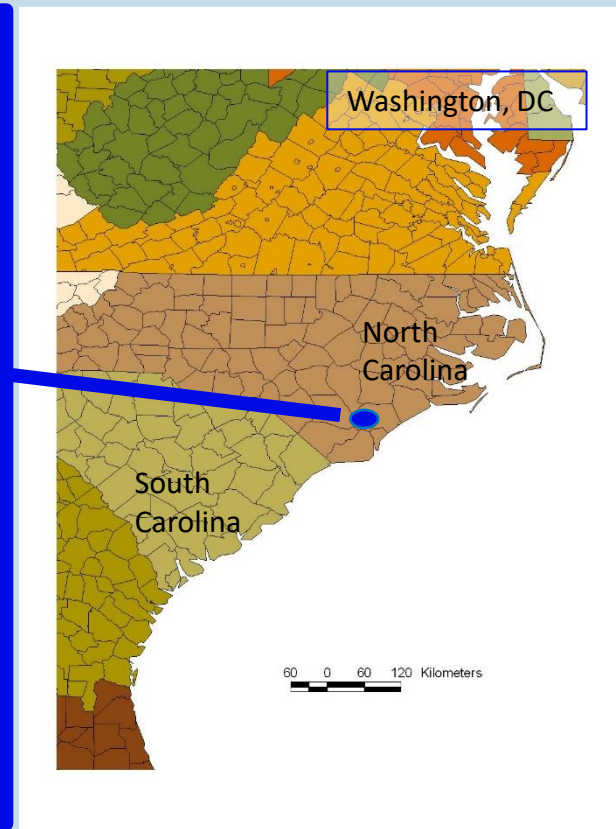
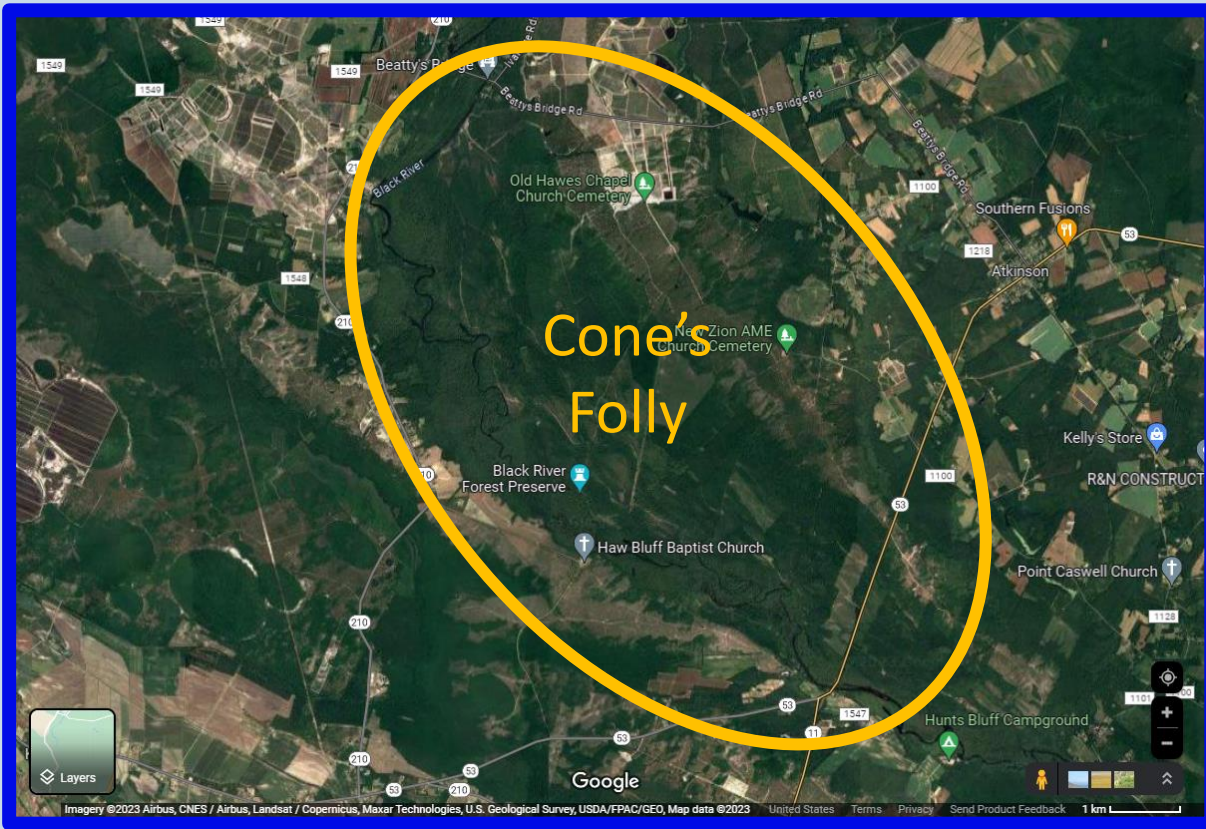
Woodpecker Habitat Needs

- Mature pines (≥ 70 years)
- Frequent prescribed fire (≤ 3 years)
- Sparse hardwood midstory

Cone's Folly

Birth of the Safe Harbor Program







“Cone’s Folly”

A 2,500 hectare tract

Consisted of young, short-rotation pine forests and 80 hectares of forested wetlands in 1930’s



Restorative Management on Cone's Folly



Bobwhite Quail

Prescribed fires applied regularly to promote quail and other game species

Tree harvesting conducted on a 70-80 year rotation

Annual timber cuts applied to small 10-15 hectare units (*<5% of timber stands in any given year*)





Red-cockaded
Woodpeckers
discovered on
Cone's property in
1970's

Birds posed no
obvious problem
because Cone did
not plan to harvest
timber



- Cone's plans changed in 1979. He wanted to harvest in areas with woodpeckers
- At that point, the woodpecker had expanded significantly – a biologist hired by Cone found 12 territories on the property
- Based on the recovery plan developed for the woodpecker in 1979, 440 hectares were now off-limits for timber harvest

**Recovery Plan for the
Red-cockaded Woodpecker (*Picoides borealis*)
Second Revision**

Original Approved: August 24, 1979
First Revision Approved: April 11, 1985

U.S. Fish and Wildlife Service
Southeast Region
Atlanta, GA

Red-cockaded Woodpecker Recovery Team:

T. Beaty, U.S. Army
J. H. Carter, III, J. H. Carter III and Associates, Inc.
J. E. Cely, South Carolina Department of Natural Resources
R. N. Conner, U.S. Forest Service
R. Costa, Team Leader, U.S. Fish & Wildlife Service
S. J. Daniels, Primary Editor, U.S. Fish & Wildlife Service

296 pages



Immediate & Long-term Concerns

Cone requested a reduced tax assessment for his property since he could not use it in the manner intended

Cone sought compensation for lost property value (\$1.4 million) and began cutting timber



Immediate & Long-term Concerns

Cone requested a reduced tax assessment for his property since he could not use it in the manner intended

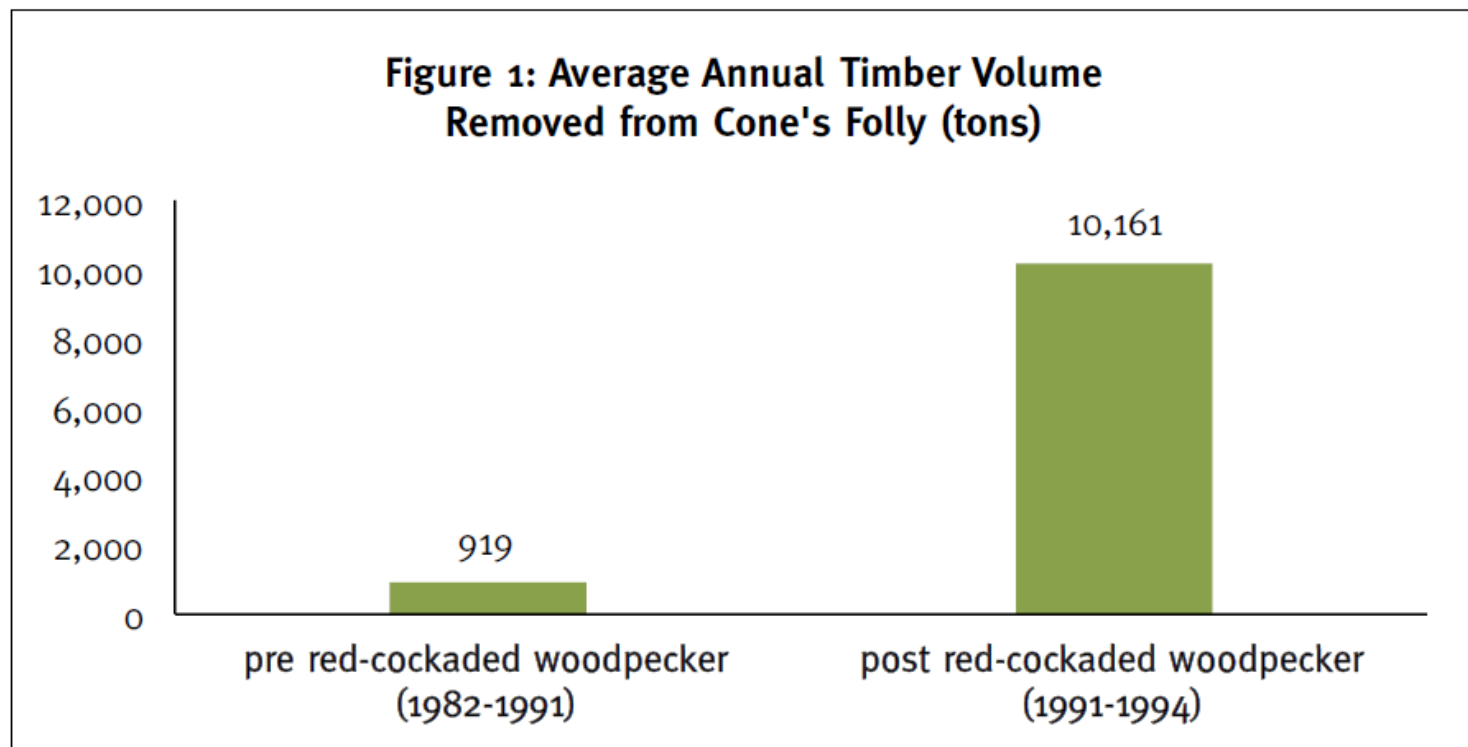
Cone sought compensation for lost property value (\$1.4 million) and began cutting timber

Cone sent registered letters to adjacent landowners informing them he would not be liable if woodpeckers took up residency (many also began cutting their timber)

Cone feared potential impacts for his children. The inheritance tax rate was 55% tax after a \$600,000 exemption for each heir.



“I cannot afford to let these woodpeckers take over the rest of the property. I’m moving to a 40-year rotation instead of a 75- to 80-year rotation” – Ben Cone 1980



Source: Gelbert and Company Consulting Foresters, Durham, North Carolina



Safe Harbor launches in 1995



Robert Abernathy
Longleaf Alliance

Ralph Costa
Federal Woodpecker Biologist
1990-2008



Under Safe Harbor

Property owner voluntarily agrees to implement one or more of the following

- Conduct compatible timber management that promotes mature trees
- Conduct controlled burns on a regular basis to provide potentially suitable habitat
- Reduce hardwood midstory for the time needed to provide potentially suitable habitat



ATTACHMENT D
TO
FLORIDA SAFE HARBOR MANAGEMENT AGREEMENT
Certificate of Inclusion
in the Florida Statewide Red-cockaded Woodpecker
Safe Harbor Agreement and Enhancement of Survival Permit

This certifies that (Property Owner's Name = Property Owner) Gem Land Company, the Property Owner (s) of the property located in Leon County, north of CR 12 and west of Beth Page Road with a northern boundary of the Florida/Georgia state line, and any future owner(s) of the property, are included within the scope of Enhancement of Survival Permit No. TE 113463-0, issued by the U.S. Fish and Wildlife Service (Service) on (Date) 05/19/2006 to the Florida Fish and Wildlife Conservation Commission (the Commission). This Certificate of Inclusion authorizes the Property Owner to conduct the activities that are specified in Safe Harbor Management Agreement (SHMA) No. 008 between the Property Owner and the Commission for the red-cockaded woodpecker (*Picoides borealis*) (RCW). The Property Owner, and any future owners of the property, are hereby authorized, subject only to the terms and conditions of the Permit and the terms and conditions of the SHMA, to engage in, implement, or otherwise conduct the activities specified in the SHMA on the property even though these activities may result in the incidental taking of the RCW. However, the incidental taking of the RCW shall not result in a diminishment of the Property Owner's baseline responsibilities on the property as specified in the SHMA.

Additionally, this Certificate provides the Property Owner with the following regulatory assurances:

"If additional conservation measures are necessary to respond to unforeseen circumstances, the Service may require additional measures of the Permittee (and/or participating Property Owners) only if such measures are limited to modifications within the SHMA's conservation strategy for the affected species, and only if those measures maintain the original terms of the SHMA (and Certificates issued therein) to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or financial compensation, or additional restrictions on the use of land, water, or other natural resources available for development or use under the original terms of the SHMA (and Certificates issued therein) without the consent of the Permittee (and affected participating Property Owner (s))."

The Service will have the burden of demonstrating that unforeseen circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of the affected species. The Service will consider, but not be limited to, the following factors:

CONTRACT
WITH
RED-CKADAED WOODPECKER SAFE HARBOR COOPERATOR
FOR
HABITAT RESTORATION AND IMPROVEMENT

STATE OF GEORGIA
COUNTY OF WALTON

THIS CONTRACT is made and entered into as of this ____ day of _____, 2007 by and between the **Georgia Department of Natural Resources** (hereinafter called the DEPARTMENT), and the **Red-cockaded Woodpecker Safe Harbor Cooperator** (hereinafter called the "COOPERATOR") whose name is _____

WHEREAS, The Georgia Department of Natural Resources, Wildlife Resources Division, through a grant from the U.S. Fish and Wildlife Service, has established a new incentives program to provide financial assistance to landowners who implement agreed-upon beneficial habitat management practices for red-cockaded woodpeckers (RCW) through Safe Harbor Management Agreements (SHMA), such agreements also providing significant management benefits to participating landowners, and such management practices to include determination and documentation of baseline RCW population responsibilities, prescribed burning, mechanical or chemical hardwood control, and artificial cavity installation, as further detailed in Appendix A, and;

WHEREAS, certain ecologically sound habitat management practices on certain tracts of private land can contribute significantly to the conservation of the State's rare wildlife species in ways that cannot be duplicated on state-owned lands (because certain rare wildlife species like RCWs do not currently occupy state-owned lands), thereby providing important benefits to the people of the State of Georgia; and

WHEREAS, The DEPARTMENT desires to engage the COOPERATOR to render certain services hereafter described in connection with the Red-cockaded Woodpecker Safe Harbor Agreement Incentive Program.

WITNESSETH:

FOR AND IN CONSIDERATION OF THE MUTUAL BENEFITS to the DEPARTMENT and to the COOPERATOR, the parties agree as follows:

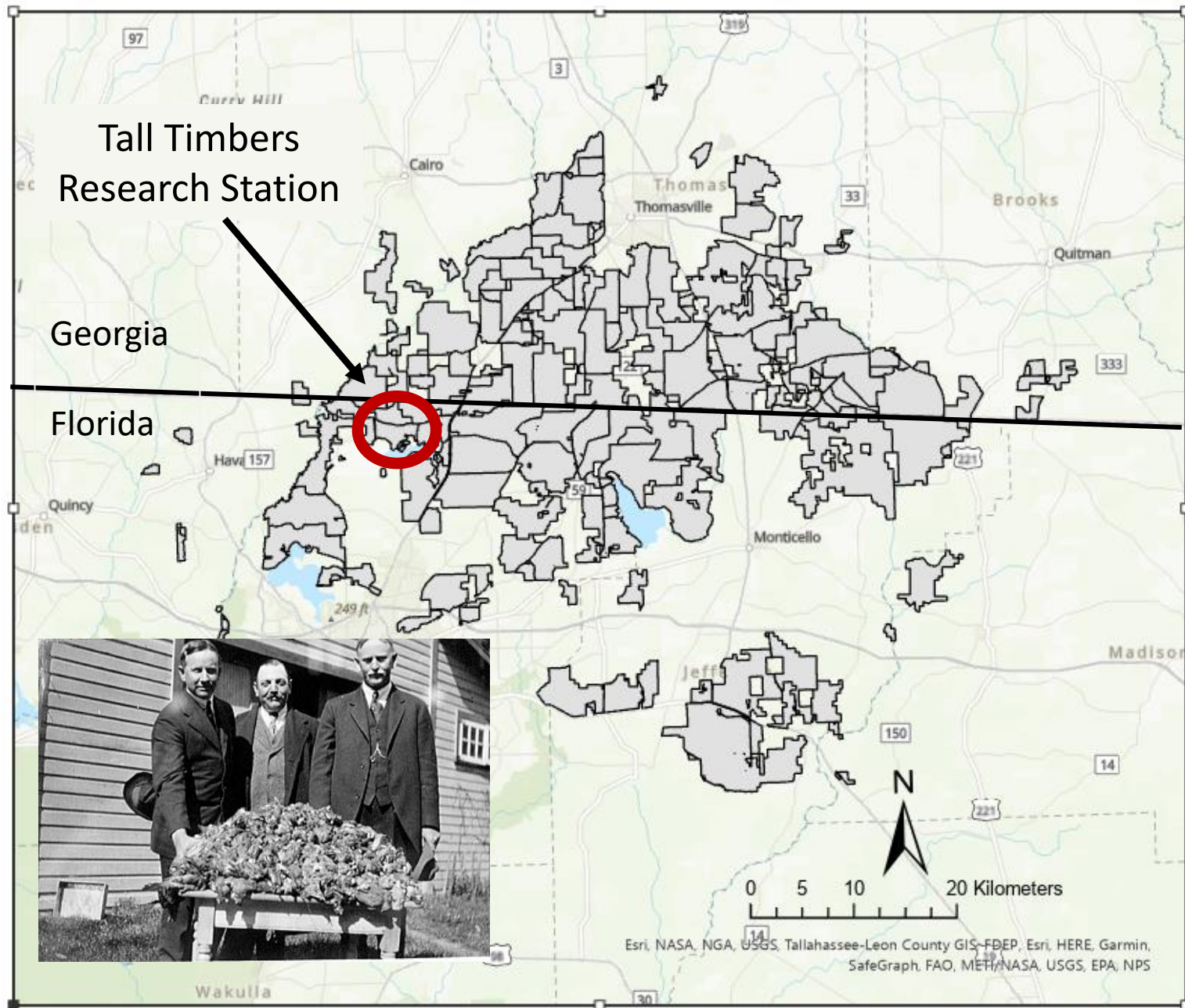
1. The DEPARTMENT hereby agrees to engage the COOPERATOR and the COOPERATOR hereby agrees to provide the services hereafter set forth in connection with the DEPARTMENT's Red-cockaded Woodpecker Safe Harbor- Landowner Incentive Program.
2. The COOPERATOR shall perform in a satisfactory and timely manner, as determined by the DEPARTMENT, the scope of services identified in Appendices A and B, which appendices

State of Florida
Agreement
25 pages

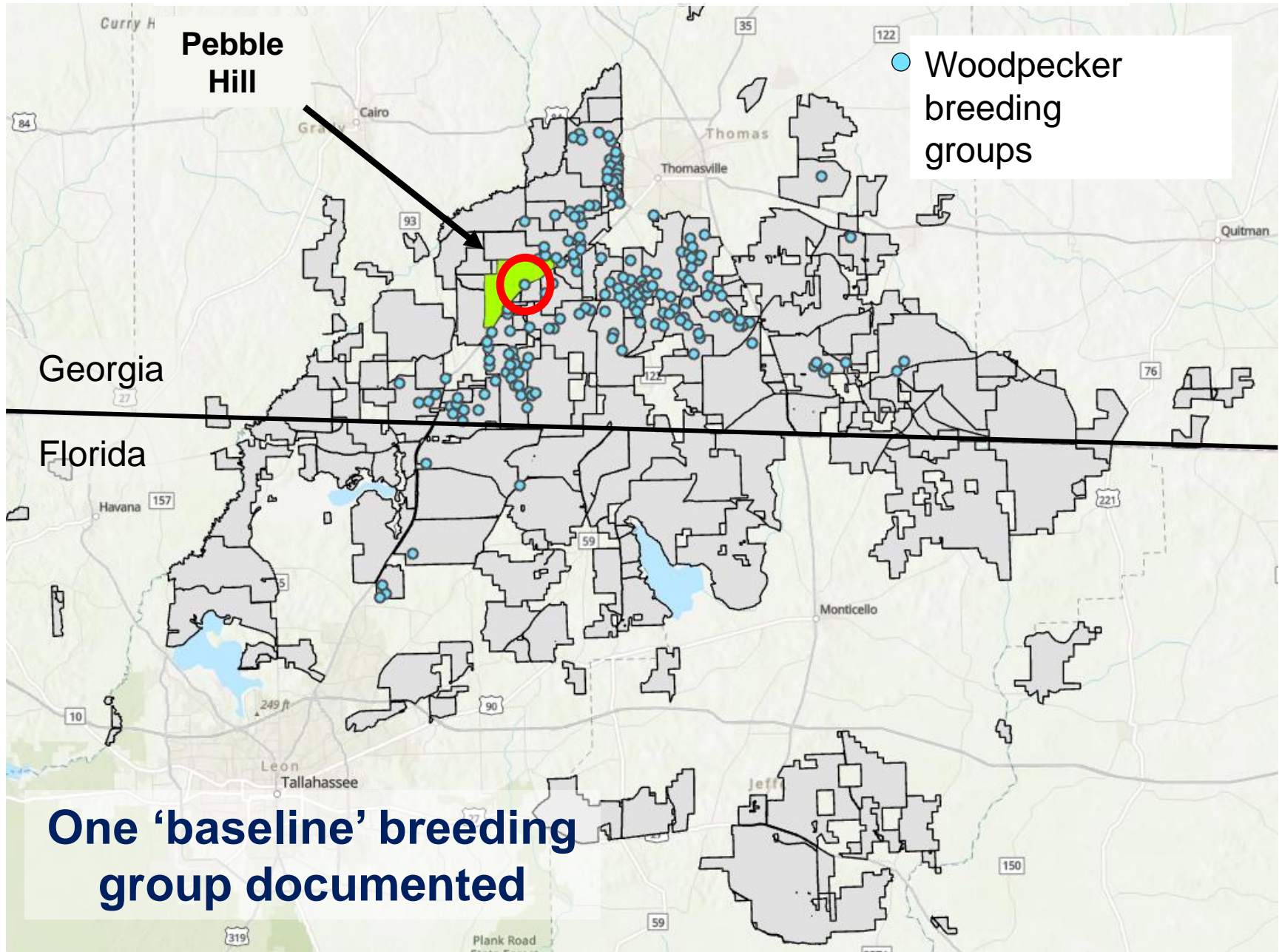
State of Georgia
Agreement
10 pages



Private Properties in Red Hills Region



Private Properties in Red Hills Region

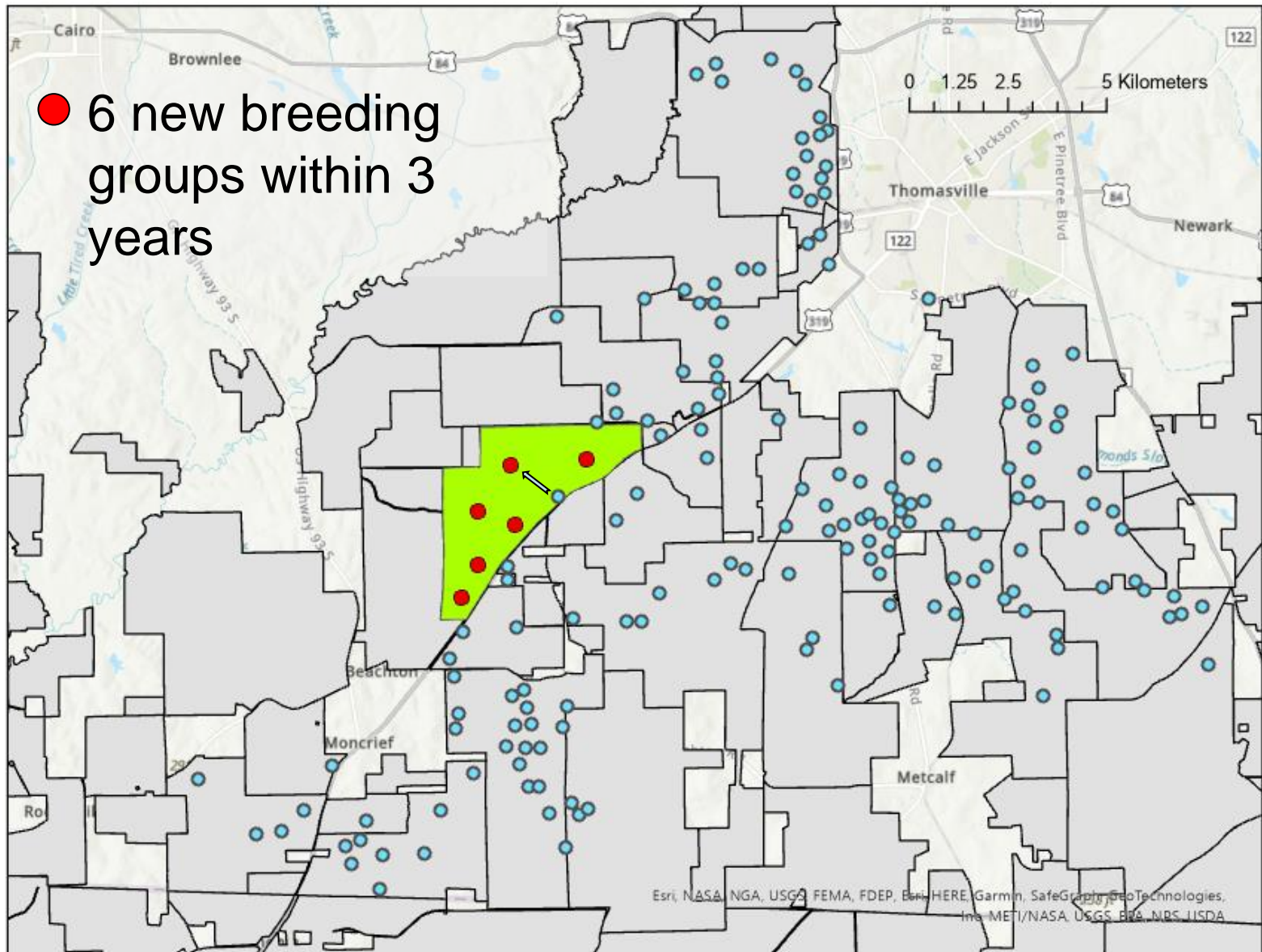


New cavity
resources
created at 6
new locations

4 artificial
cavities in
each location



● 6 new breeding groups within 3 years



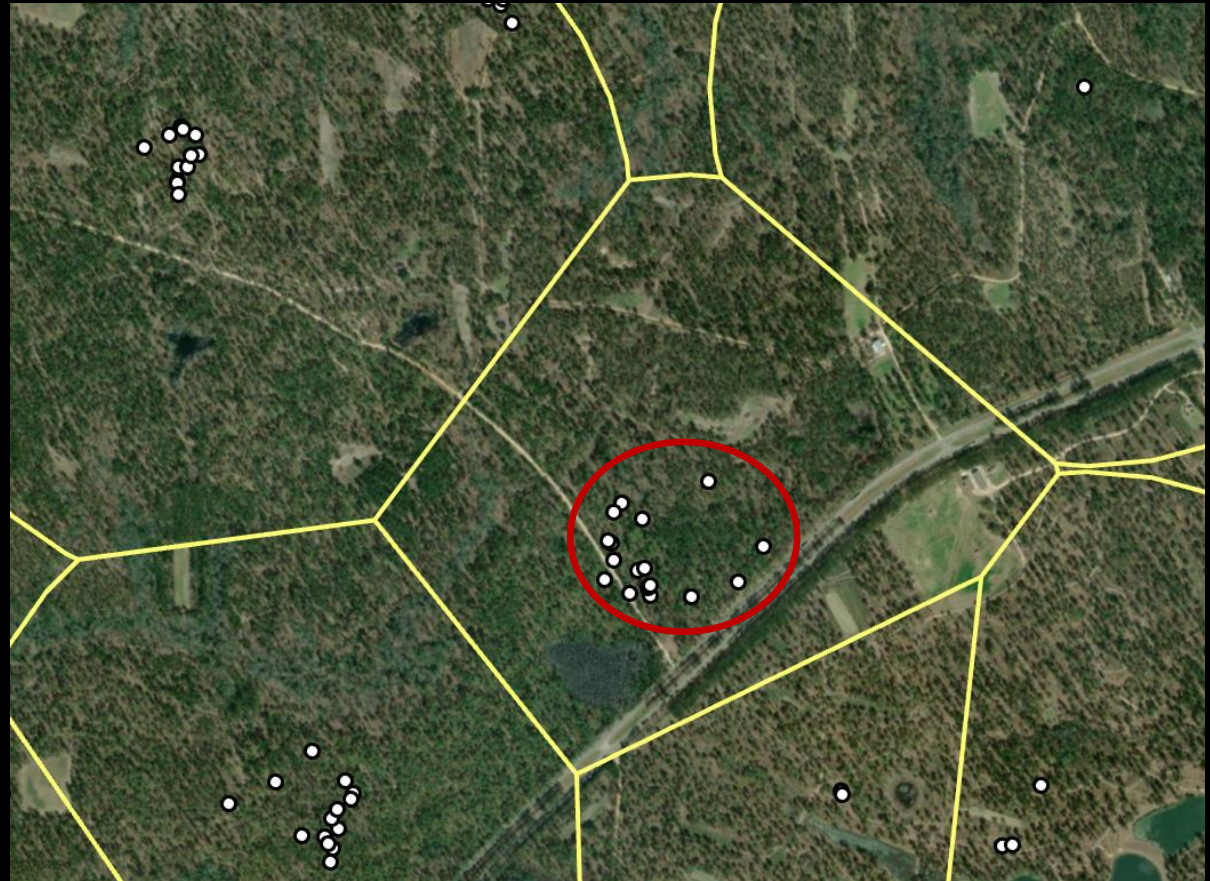
Harvesting Timber Around Pebble Hill Baseline Group

Harvest August 1
through March 1

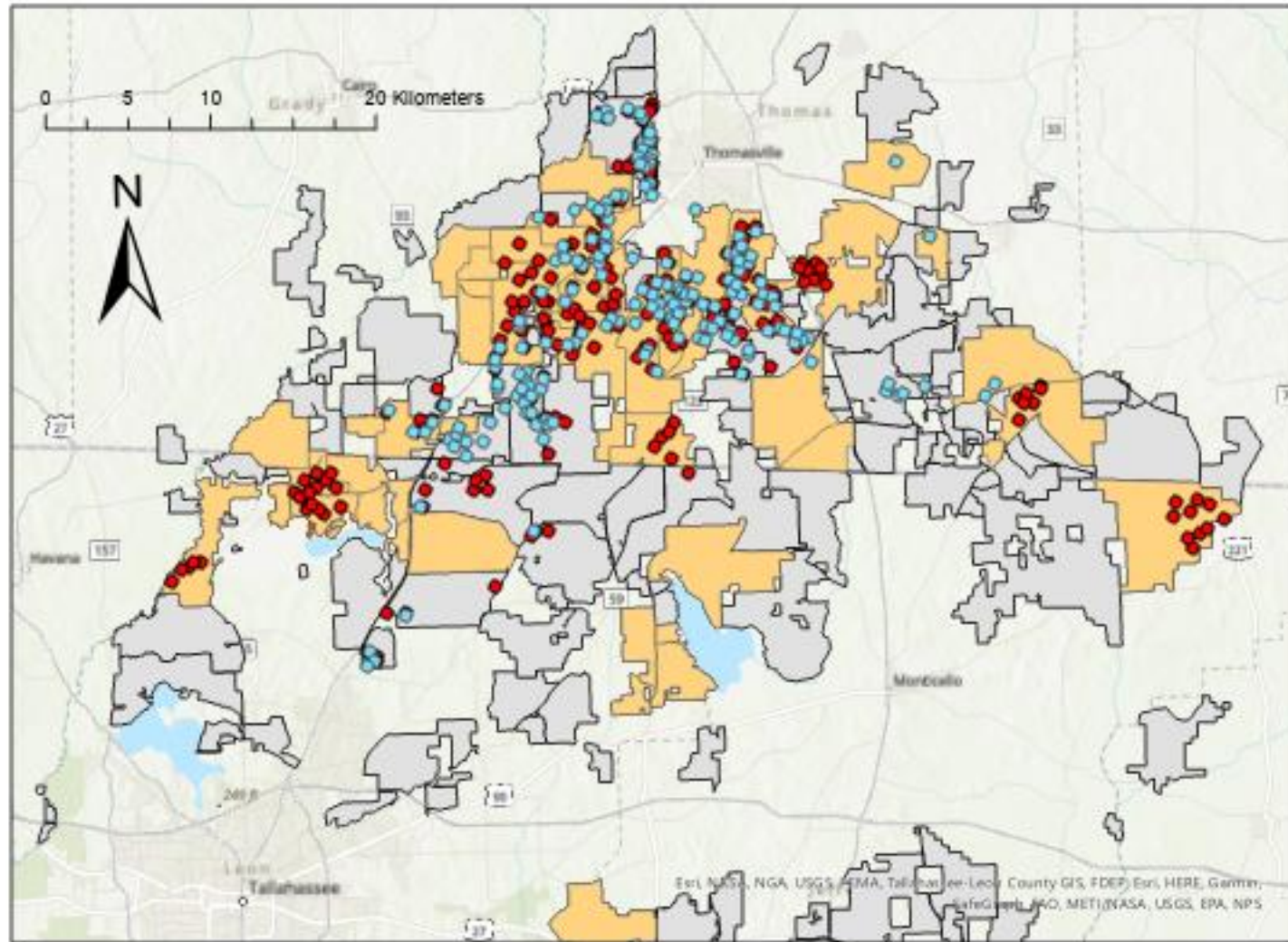
Minimize loss of
large trees within
cavity clusters

Assess foraging
habitat within 0.4 km

Within foraging area,
provide 690 m² pine
basal (pines >25.4
cm) between 9.2-
16.1 m²/ha



200 m



- Safe Harbor Properties
- New breeding groups
- Traditional breeding groups



Property
owner Charlie
Chapin helps
to band an
adult
woodpecker



Major Changes to Prescribed Burning

📅 OCTOBER 1, 2019 /



Big Cypress National Preserve prescribed burn smoke plume

Agriculture Commissioner Nikki Fried announced major changes and enhancements to the state's prescribed burning program, which is authorized by the Florida Department of Agriculture and Consumer Services and the Florida Forest Service. **Prescribed burning in Florida** is a national model for successfully managing statewide forests and

Reasons for Burning

Gamebird management
Forestry management
Fuel reduction

Rare species

Red-cockaded Woodpecker
Gopher tortoise
American Kestrel
Pocket gopher
Pine Snake

In 8 states, more than 400 landowners have signed Safe Harbor agreements that now cover 0.9 million hectares.

These properties have increased the global population of this endangered woodpecker by 25% on private lands.

Michael J. Bean. 2017. Endangered Species Safe Harbor Agreements: An Assessment Working Paper. Sand County Foundation, Madison, WI



Approximately 100 Safe Harbor Agreements have been developed in the past 22 years



Black-footed Ferret

Ranchers in Colorado & Kansas volunteered to have captive-raised black footed ferrets released on their properties to test out reintroduction techniques



Research with rare Chinook Salmon

Private landowners allowed biologists to assess whether juvenile survival is improved by increasing stream flow to breeding ponds on private properties





Thanks to....

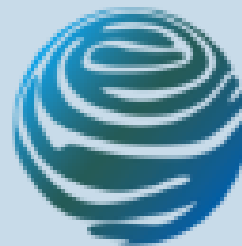
Jaanus Aun

Pille Ligi

Mari Teesalu

&

Private forest owners
in Estonia



Loodushoiu
Fond

