



# WILD SOUTH

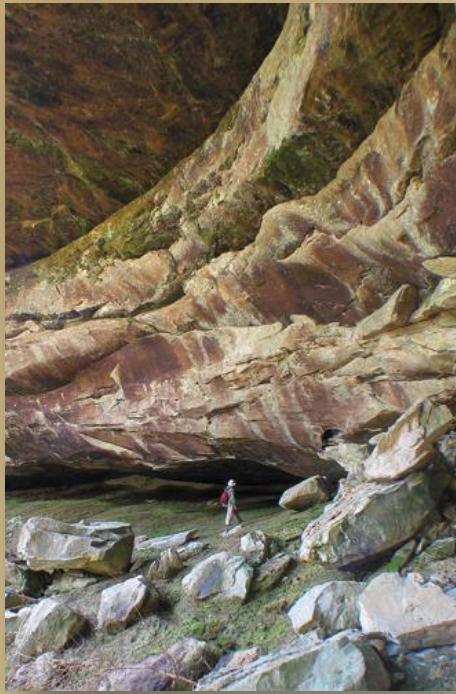
## Ecosystem Restoration on the Bankhead National Forest of Alabama

Ben Prater

November 17<sup>th</sup>, 2010

# Presentation Outline

- National Forests of Alabama
- Past Management
- Current Conditions
- A New Direction
- Forest Operations
- Research and Monitoring
- “The Once and Future Forest”



# Bankhead National Forest Restoration



## Alabama's Four National Forests Featured communities:

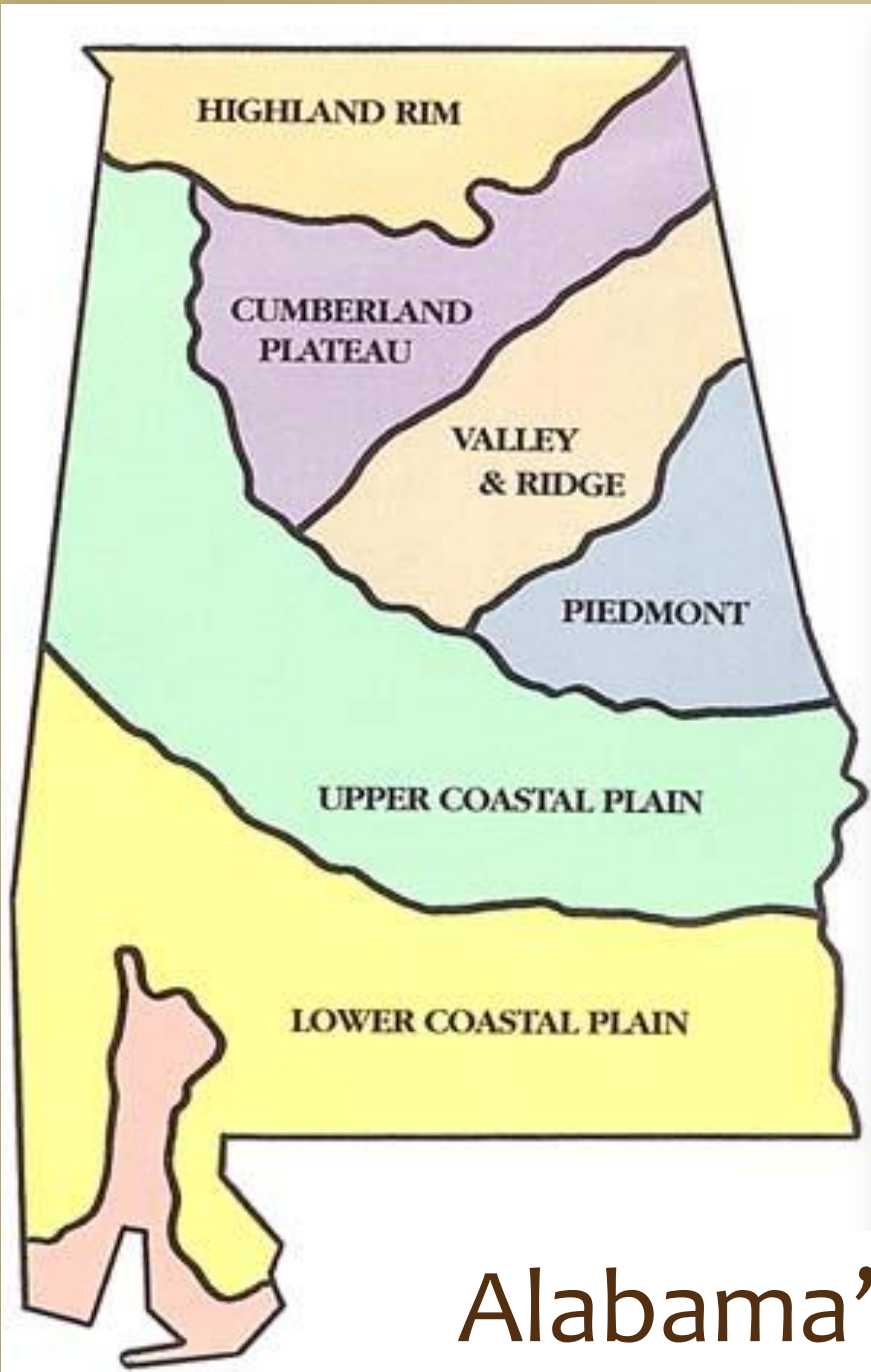
Conecuh – Coastal Longleaf

Tuskegee – Coastal Longleaf

Talladega – Oakmulgee Division:

Talladega – Shoal Creek  
Rare Mountain longleaf

Bankhead – Oak Forest, Upland  
Longleaf, Oak-Pine Forest,  
Upland Shortleaf



# Alabama's Geography



The Bankhead includes of over 400 miles of canyons contain a disjunct population of threatened eastern hemlocks.



The native forest was chestnut, oak and hickory with a minor component of pine.

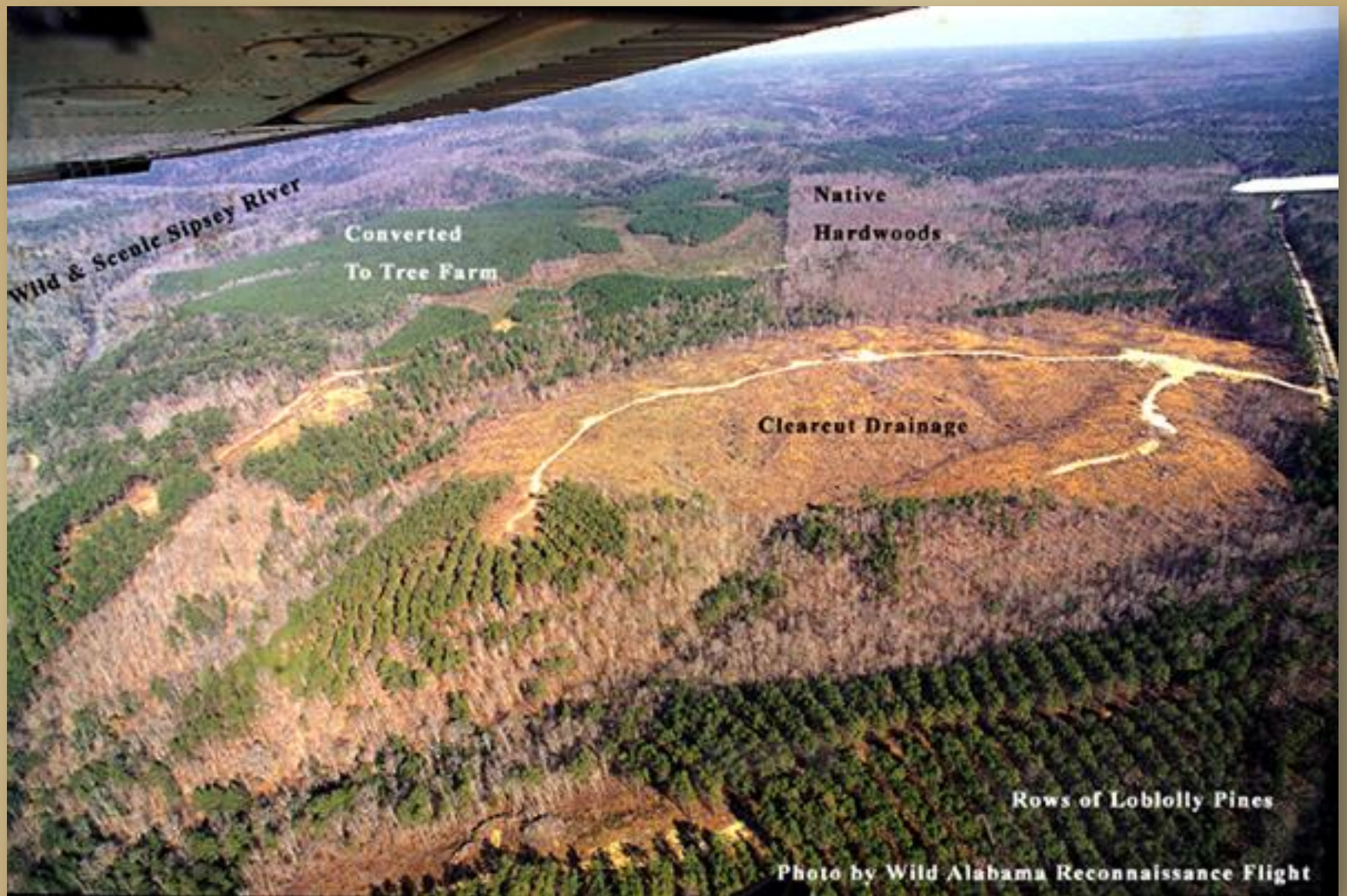


Photo by Wild Alabama Reconnaissance Flight

Today's forests are fragmented and re-planted into pine monocultures.





An Alabama industrial tree farm.



Forest Conversion Along Ridgetops



The Xeric Ridgetops of the Sipsy  
Wilderness in 1995.

# Past Management Practices

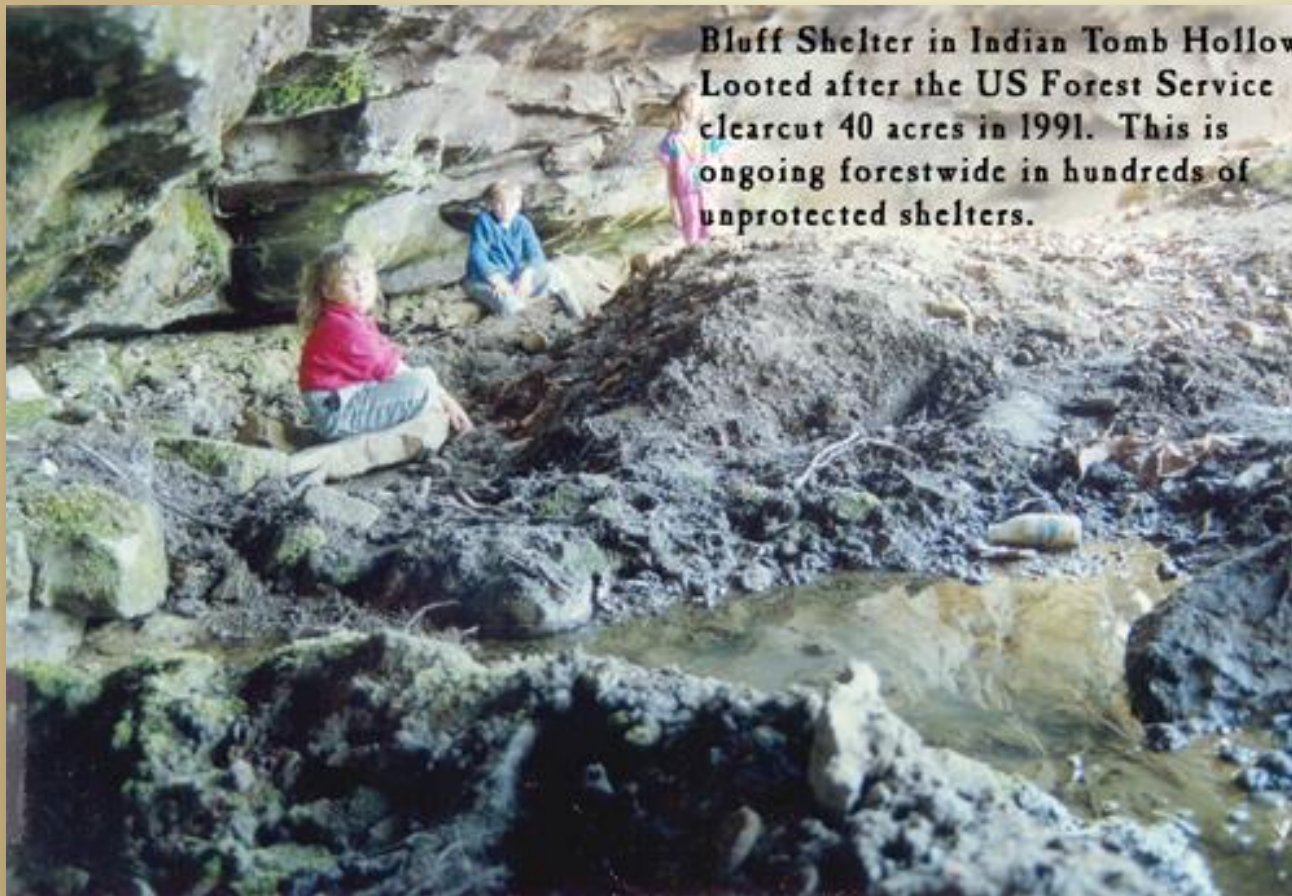
The Forest Plan of 1985 was unpopular with the public at large because of scenic quality. The real tragedy was the impact to biodiversity, soils, and aquatic systems.



Unsustainable timber quotas for timber production included large clearcuts, herbicides, site prep burning and the conversion of hardwood communities to loblolly pine plantations.

# Past Management Practices

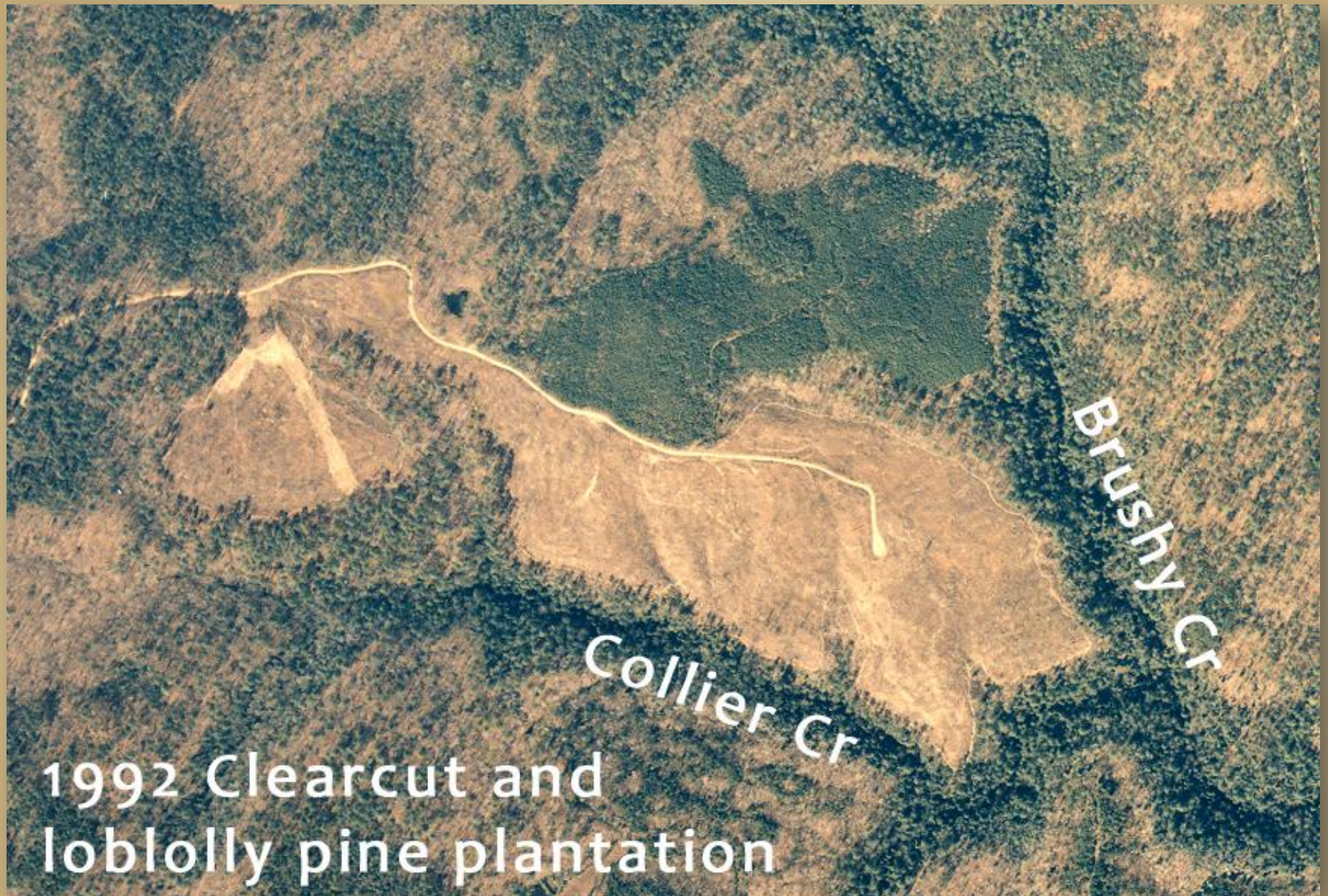
Historical and archaeological sites were illegally destroyed by forest management practices.



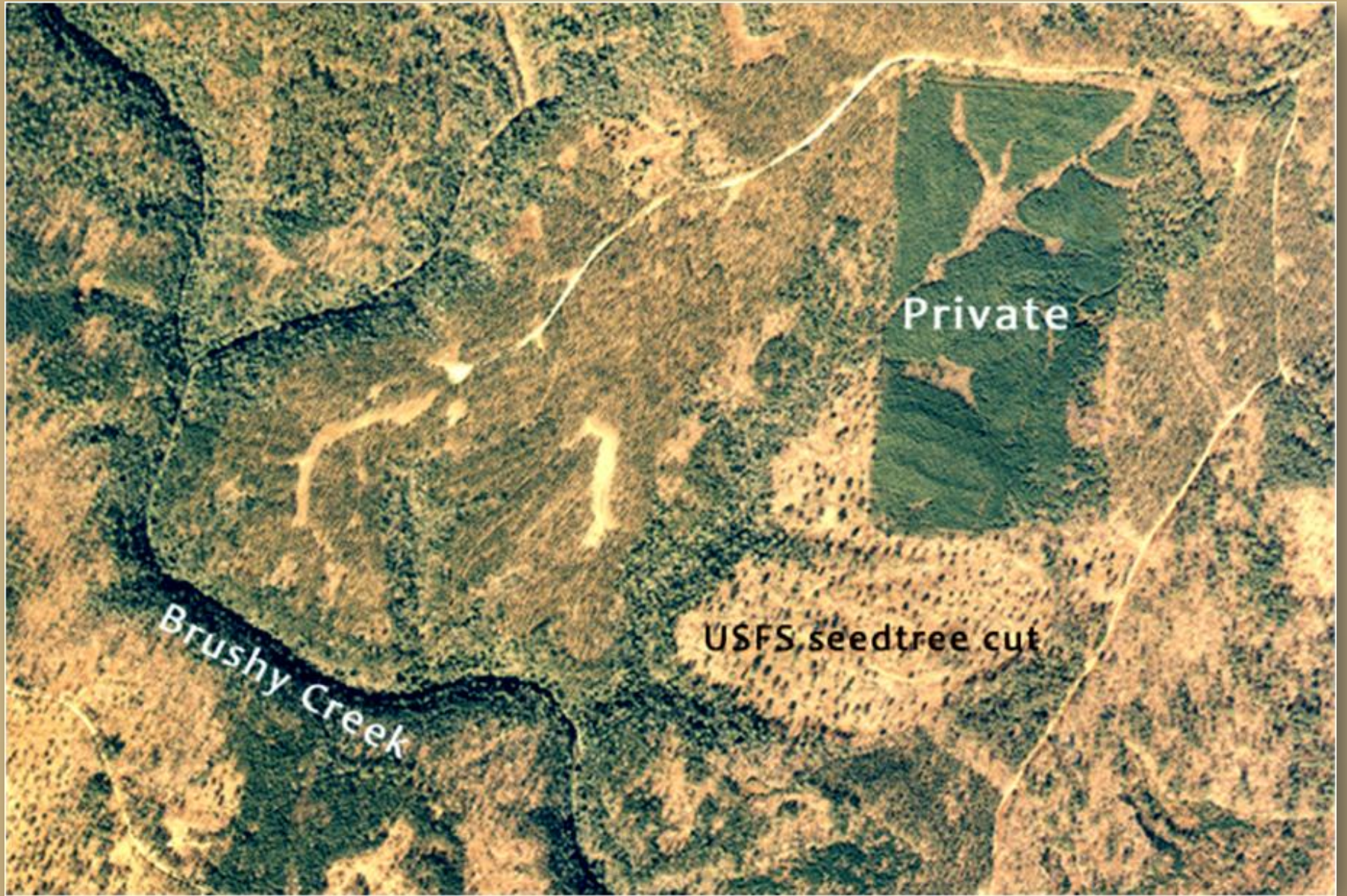
# Past Management Practices



Indian Tomb Hollow



Bankhead National Forest – Forest Plan of 1985







Davis Creek

Loblolly  
plantations

Native  
Hardwoods

Hwy 33

CR 67



US Forest Service Management  
Brushy Lake - Note sedimentation

2-20-92

USDA-F

**Balls Mtn - BNF, 1996**  
**Typical sheet erosion from ridgetop**  
**clearcutting, site prep, conversion**  
**to pine plantation**

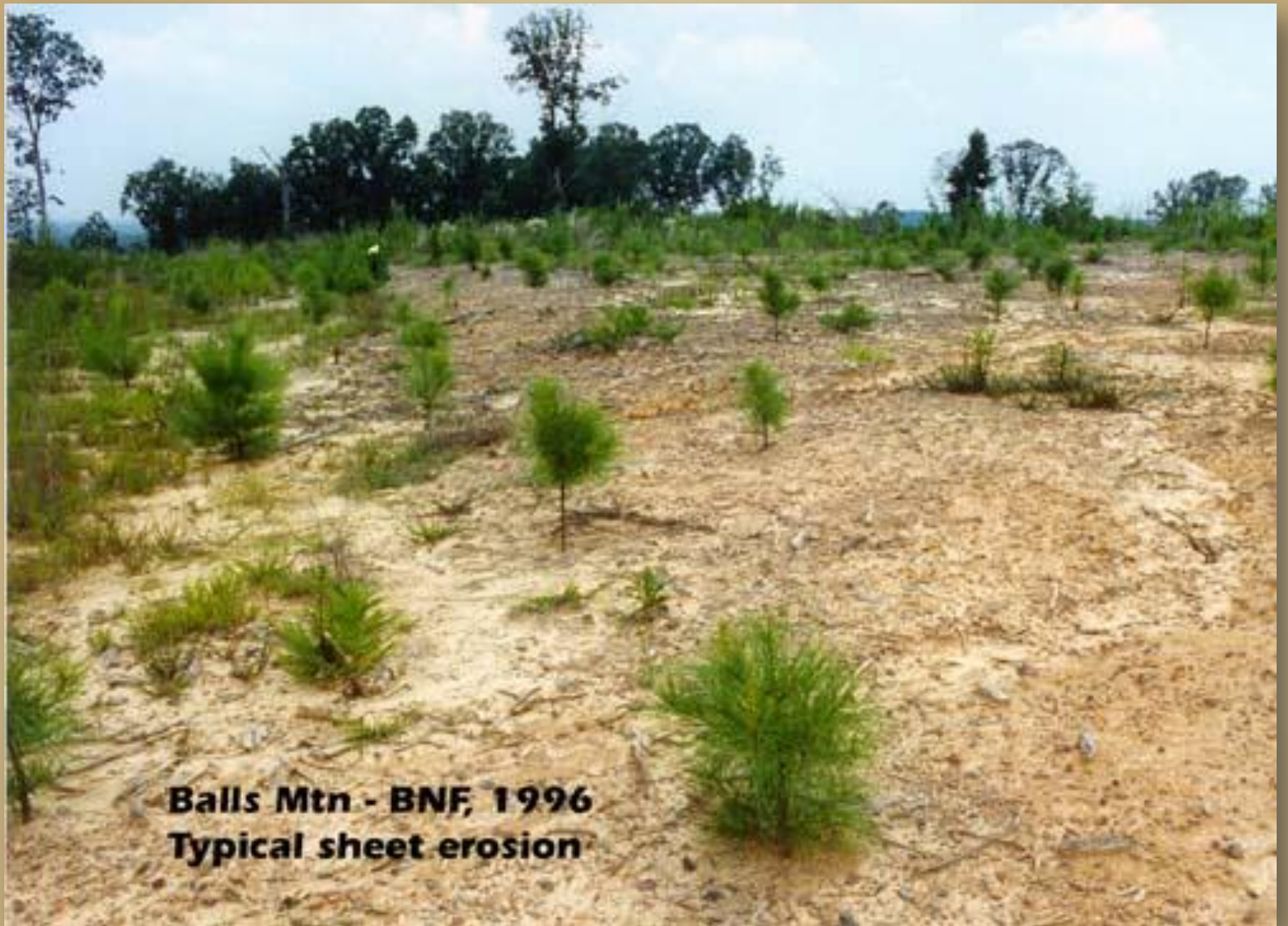




Clearcut and site prep burn for pines



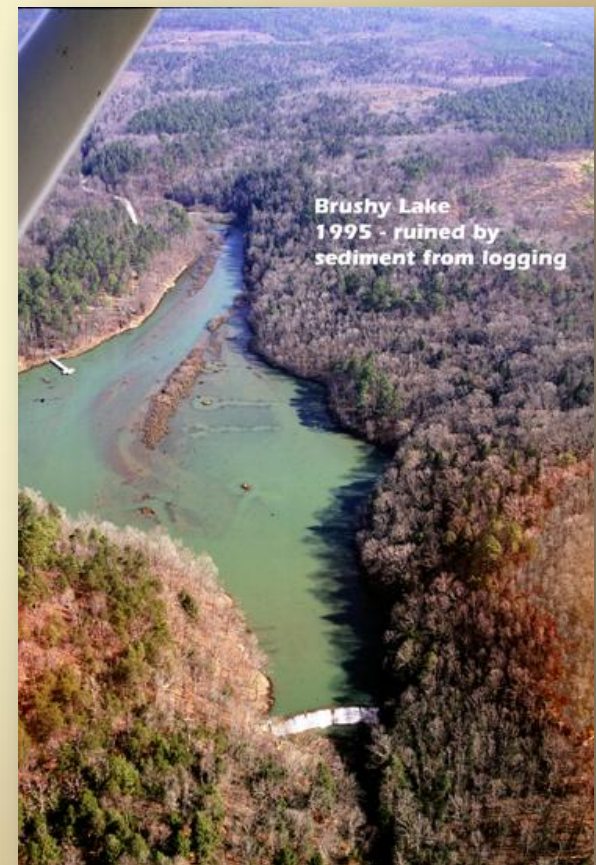
Logging roads affect soils and hydrology.



**Balls Mtn - BNF, 1996**  
**Typical sheet erosion**

# A New Direction

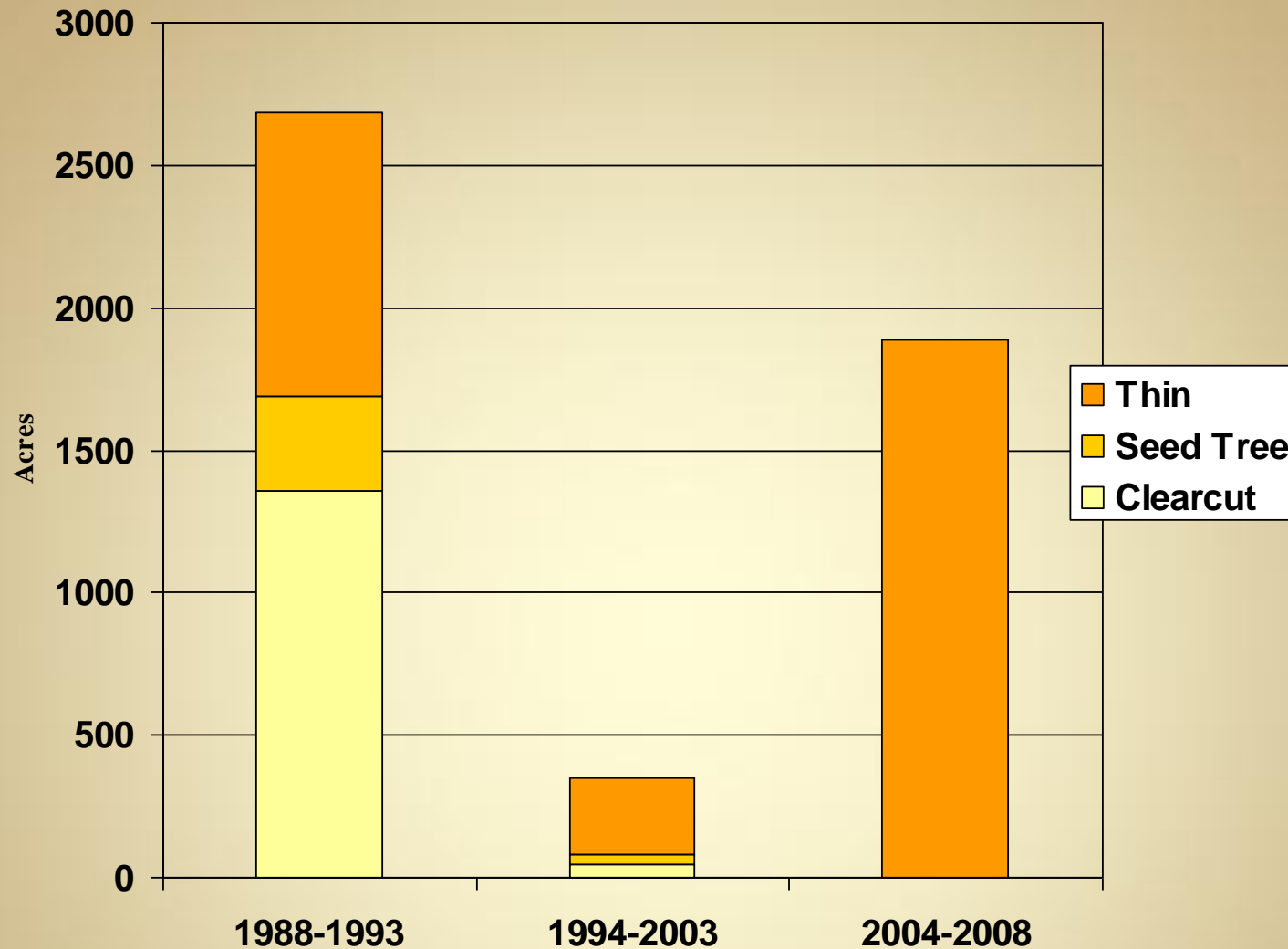
The new Forest Plan has addressed most of the public's concerns and has produced a scientific model of forest management and restoration that will become a model for private lands.



The Revised Forest Plan for Alabama will manage for the many unique attributes that are found on Alabama's National Forests. The focus of the new plan is the restoration of native forest communities, habitat improvement for wild critters, and to provide recreational opportunities for the public.

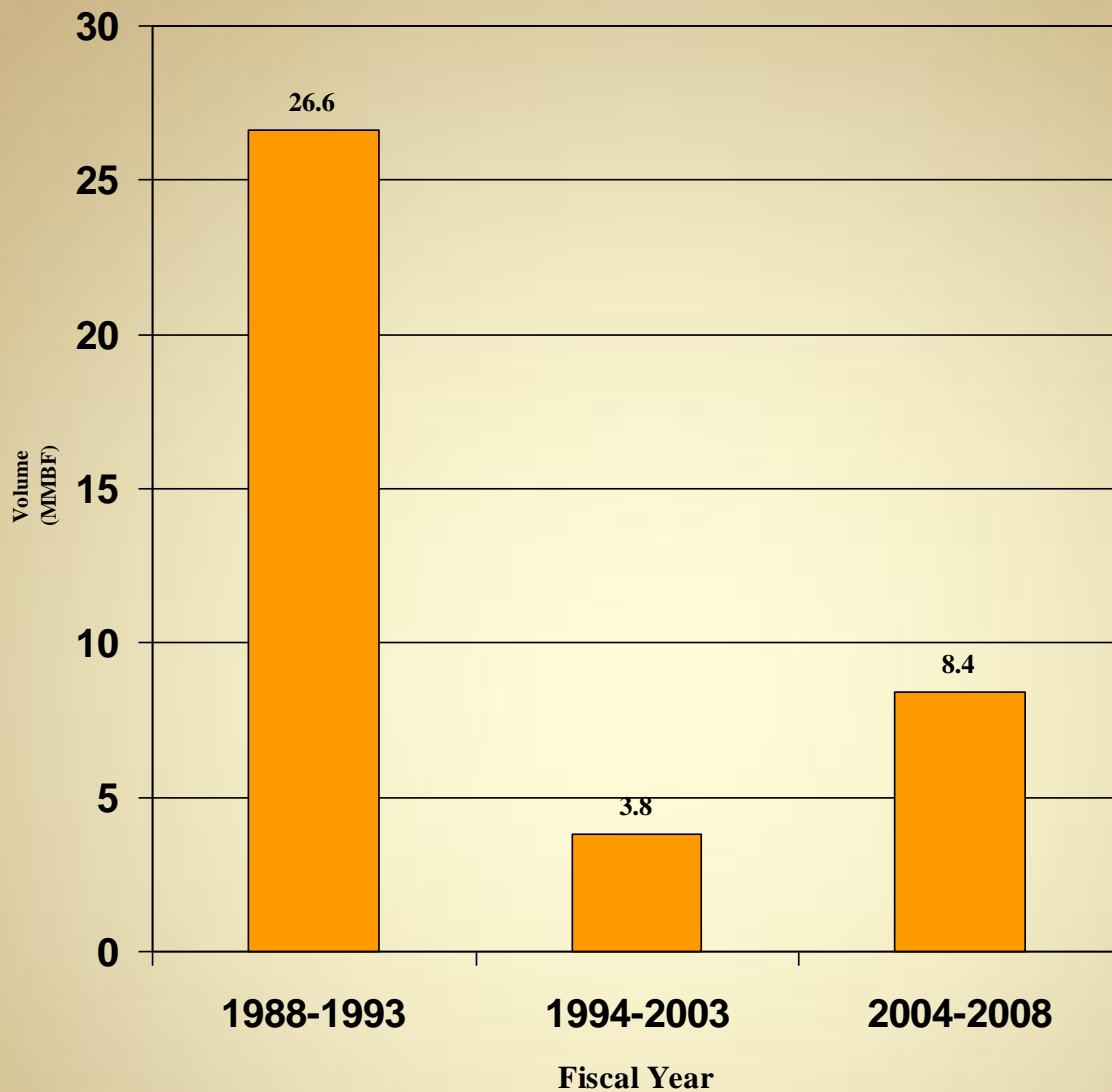






# Bankhead National Forest

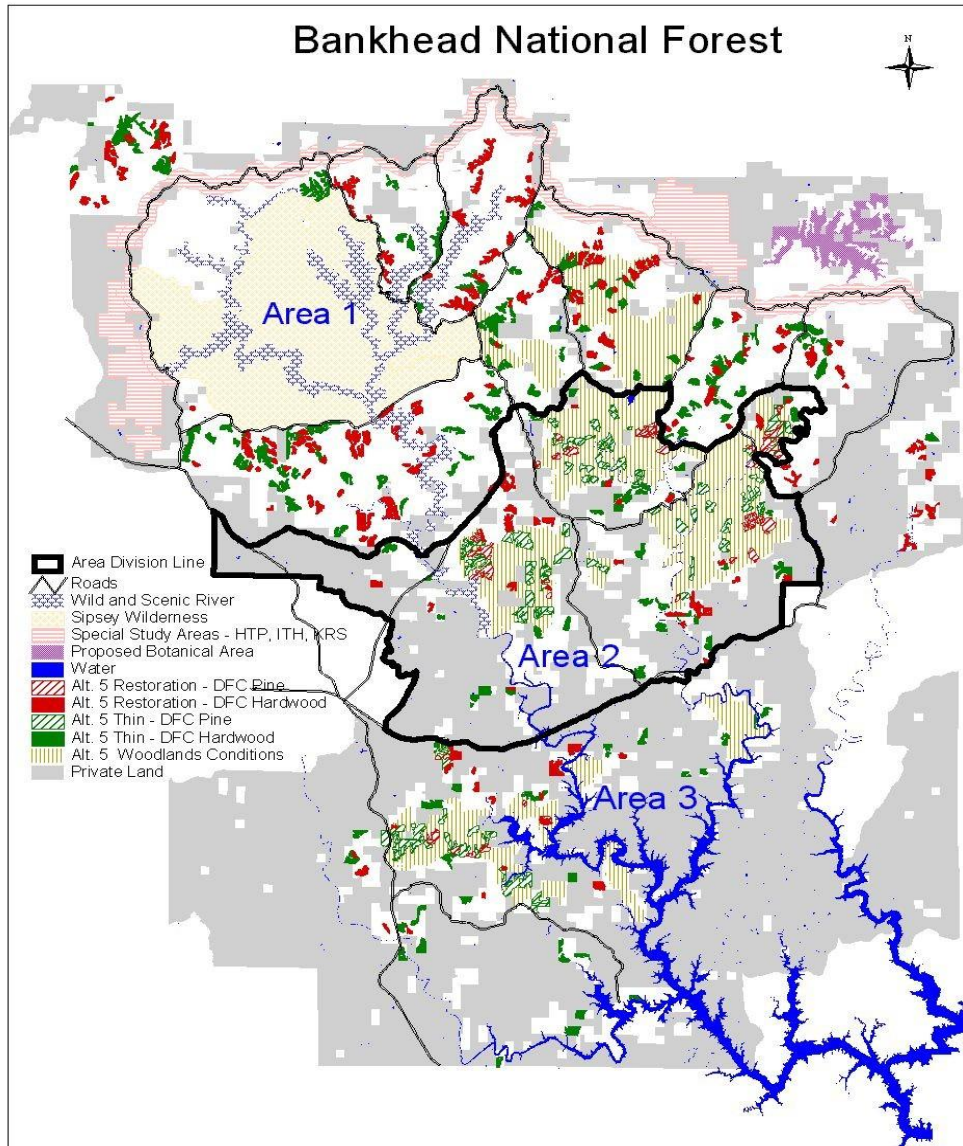
Annual Acres Treated by Timber Harvest  
20 Year Trends and Projections



# Bankhead National Forest

Annual Timber Volume Sold  
20 Year Trends and Projections

# Preferred Alternative

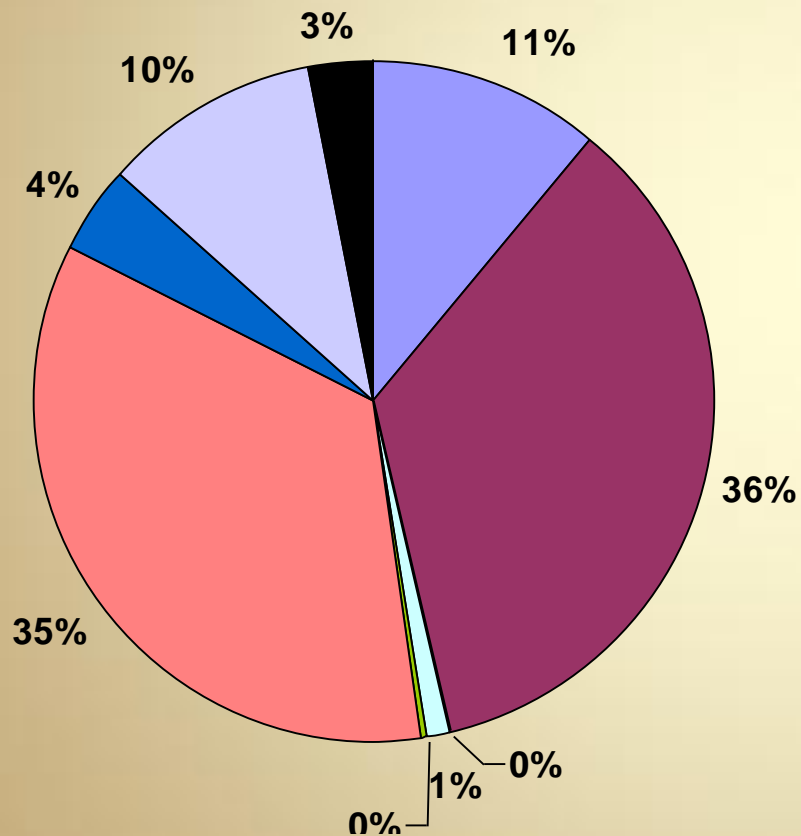


Area 1 – Emphasis on native upland hardwood restoration

Area 2 – Emphasis on native fire-dependent shortleaf pine and oak woodland restoration

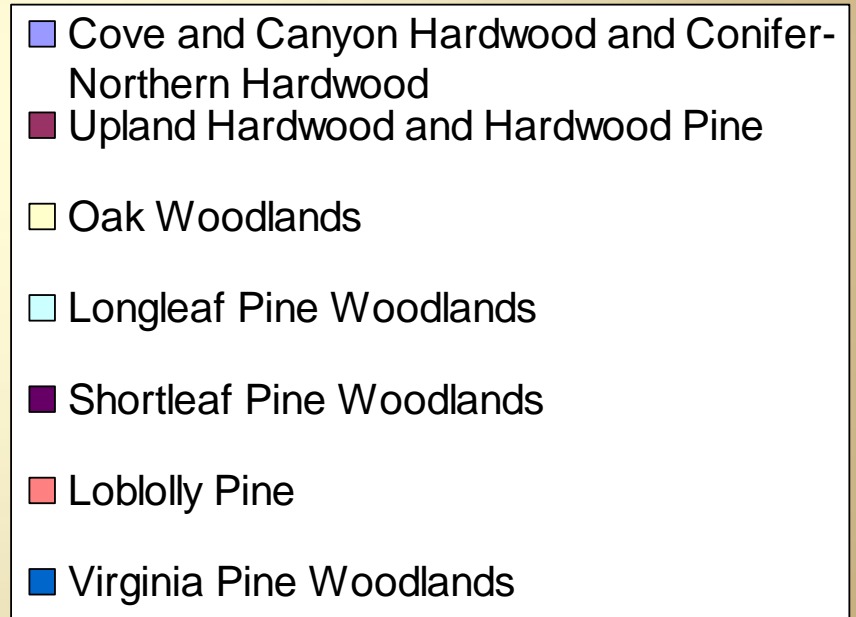
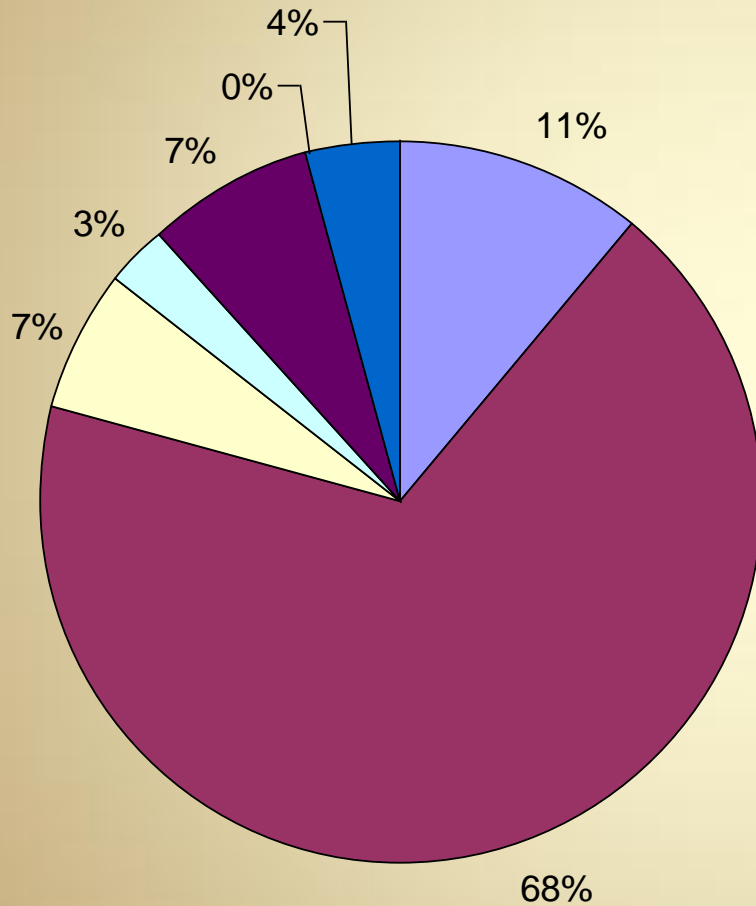
Area 3 – Emphasis on native fire-dependent longleaf pine and oak woodland restoration

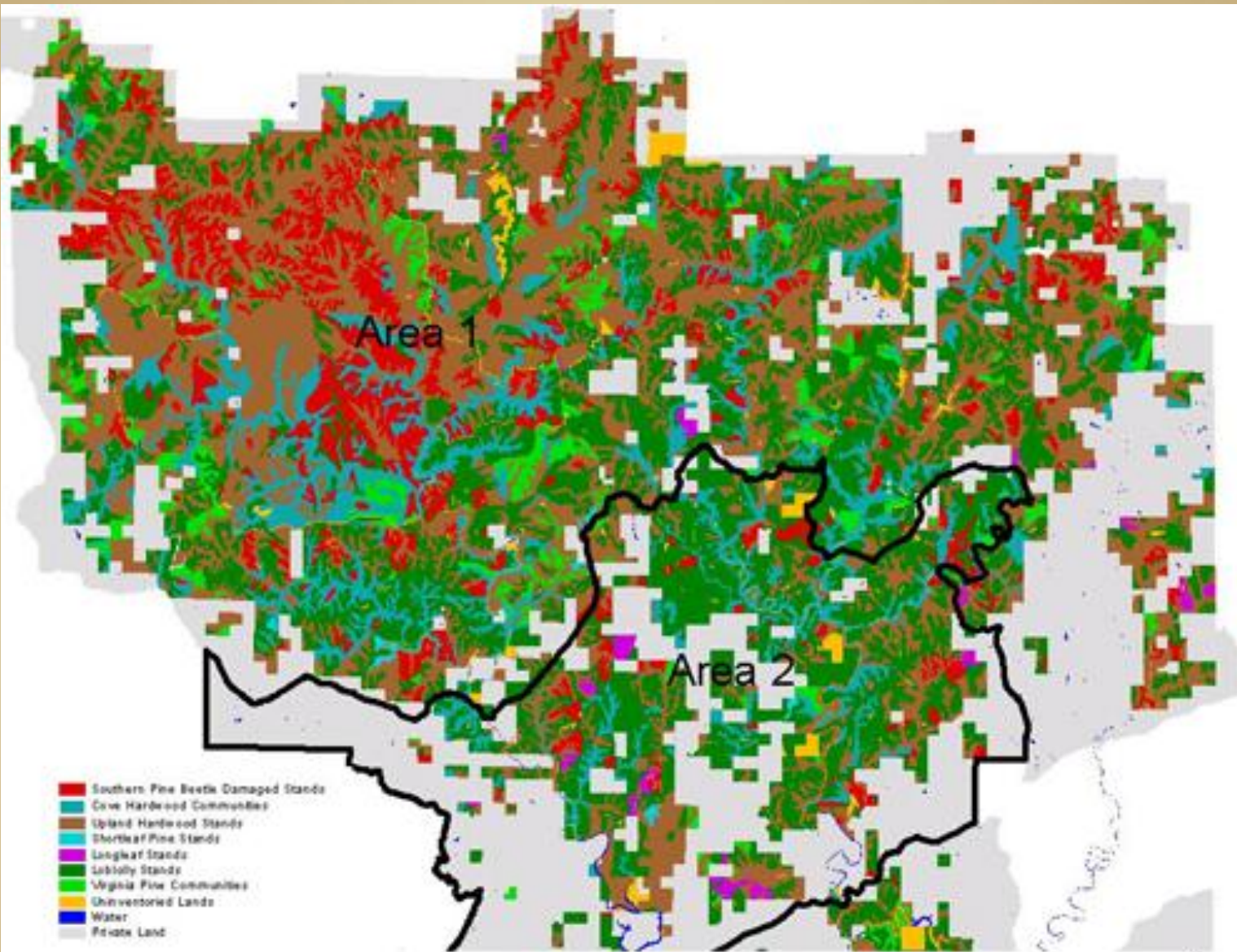
# Forest Conditions Today



- Cove and Canyon Hardwood and Conifer- Northern Hardwood
- Upland Hardwood and Hardwood Pine
- Oak Woodlands
- Longleaf Pine
- Shortleaf Pine
- Loblolly Pine
- Virginia Pine
- Southern Pine Beetle Spots 10 Acres and Larger
- Uninventoried Lands

# Desired Future Conditions

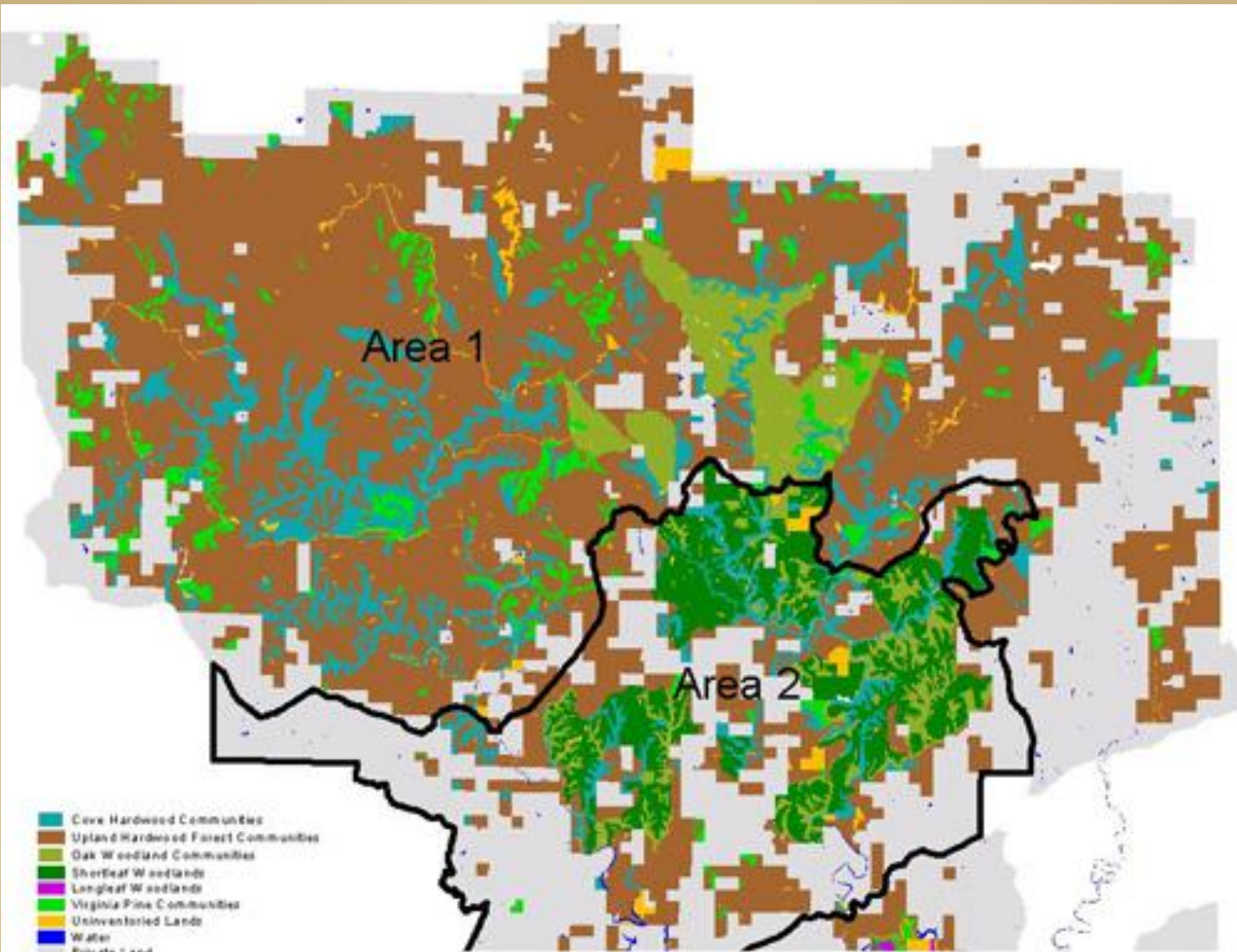




- Southern Pine Beetle Damaged Stands
- Cove Hardwood Communities
- Upland Hardwood Stands
- Shortleaf Pine Stands
- Longleaf Stands
- Loblolly Stands
- Virginia Pine Communities
- Shrivertored Lands
- Water
- Private Land

# Bankhead Ranger District Current Conditions

N  
scale = 1:24,000



# Bankhead Ranger District Projected Future Conditions



scale = 1:24,000



Loblolly pine stand marked for thinning





Longleaf thinning & mid-story treatment



Longleaf after growing season burn



Longleaf pines naturally regenerating



Rock outcrops and bluff lines are associated with canyon prescriptions.

This area is adjacent to a thinning site and has been excluded from ground-disturbing activities.



This area will be a natural buffer zone because it is within the protected 100' set-back from a bluff line.



Remnant old-growth Longleaf where fire has been suppressed. The understory will be removed and fire re-introduced to maintain the desired future condition of longleaf woodlands.

# Better Forest Operations

Cut-to-length logging is an alternative to clearcutting which uses log skidders to drag logs. Logs are cut to length by a “processor,” neatly piled where a rubber wheeled “forwarder” loads them and takes them out of the forest.

Great for thinnings, single tree selection and sensitive areas.

The draw-back is there are not many cut-to-length operators available.



Slash evenly spread over site





Cut To Length Thinning



Smaller logging decks



Cut-to-Length Processor showing heads



Note the large tires of the “Forwarder”

# Scientific Research on the Bankhead

Alabama A&M Research teams are surveying, collecting data and monitoring the impacts of restoration practices in the Bankhead National Forest.

Studies will examine impacts of past management and restoration on : Amphibians, Reptiles, Birds, Mammals, Insects, Vegetation, & Soil Bacteria.

Studies will also examine the Social and Economic Impacts and Cut-to-length harvesting vs. Conventional harvesting



What affect did past forestry practices have on native species? Are restoration prescriptions working?

# Collaboration and Monitoring

Wild South, members of the local communities, and other stakeholders form a Liason Panel to advise Restoration and Plan implementation .

Wild South collaborates with the Forest Service to map Canyons, maintain trails, perform stewardship, and inventory invasive plants.

Wild South also engages volunteers in monitoring which is essential for adaptive management.

# The Once and Future Forest

The U.S. Forest Service in collaboration with the public is working to restore six native upland forest community types in the Bankhead.







# Old-growth Communities



Old-growth Shortleaf pine in canopy



Native Upland Hardwood Forests



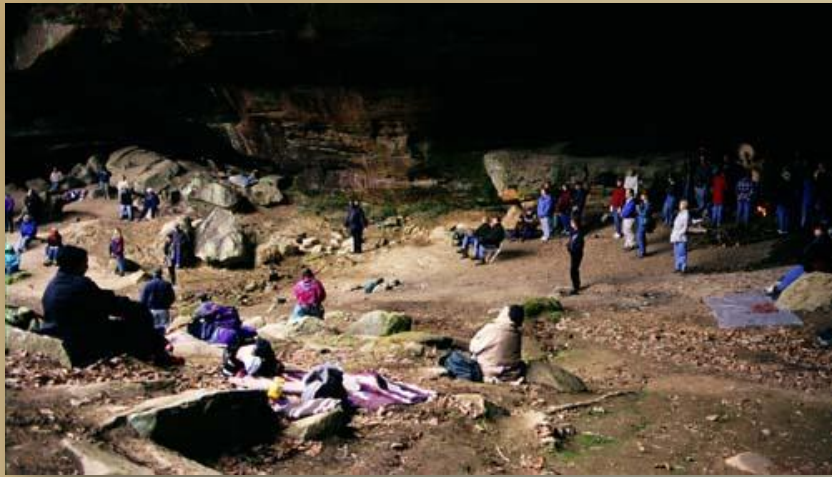
Hardwood Woodland



Longleaf Pine Communities

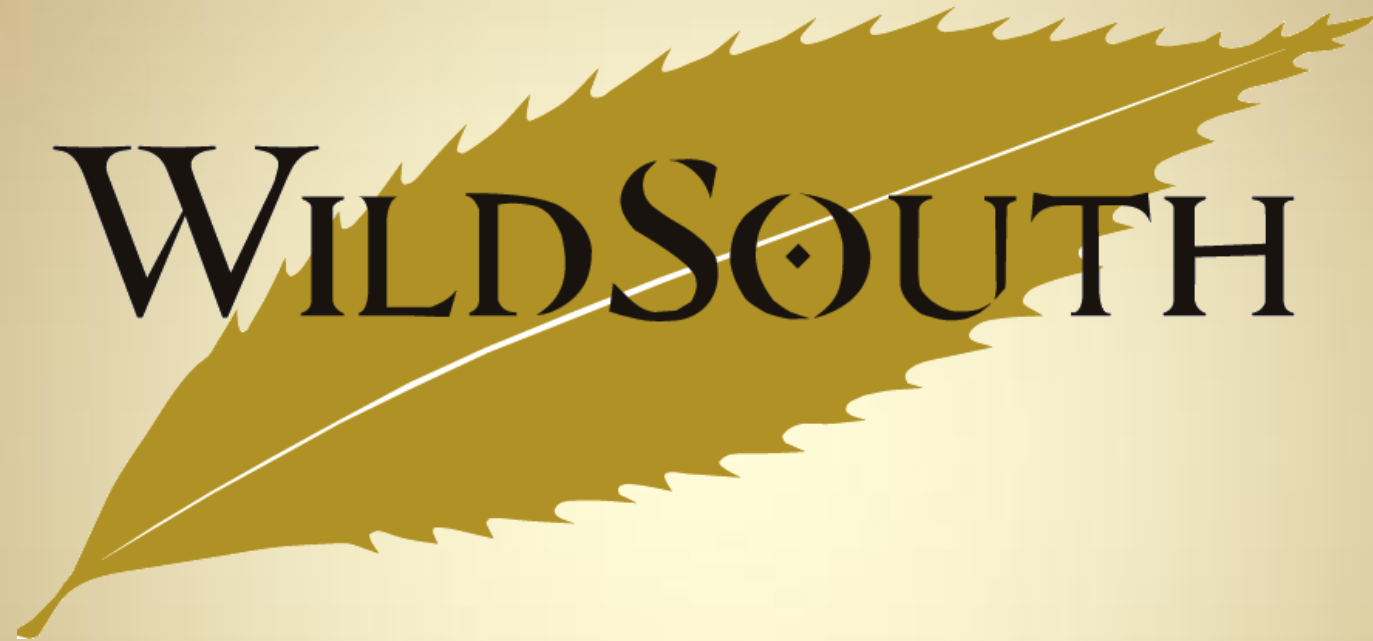


Longleaf Pine Woodlands



Forests provide  
Economic, Social,  
and Cultural Wealth





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[wildsouth.org](http://wildsouth.org)