Agenda
Bankhead Liaison Panel
Hardwood Restoration Workshop and Field Tour
September 24, 2011

8:45 AM Sign-in, pick up materials

9:00 AM Introductory remarks, Bankhead District Ranger Elrand Denson

9:05 AM Welcome, orientation and panelist introductions by our moderator, John Green

9:15 AM Panelist presentations (15 minutes each)

- Ben Prater
  - ecological restoration, reference communities, monitoring, ecological services, implications of adopting ecological restoration as a management goal
- Luben Dimov
  - silviculture and silvicultural tools, desired future conditions, purpose of first thinning in restoration, role of fire as a disturbance
- Ed Loewenstein
  - basal area targets, thinning in mixed stands versus pine stands, why cut hardwoods, long-term silvicultural strategies
- Callie Schweitzer
  - overview of Bankhead research and the results so far, hardwood regeneration strategies, vegetative responses to disturbance , both desirable and undesirable species

10:15 AM Depart for field tour

10:30 AM Compartment 38, stand 7, DFC Hardwood Woodland, pre-treatment
- Age = 32 years (clearcut and planted); size = 38 acres; forest type = Loblolly pine, 89 sq.ft. BA
- Thinning target basal area = 55-70 sq.ft.
- No record of regular prescribed burning, located in Hall burn unit

11:15 AM Compartment 43, stand 6, A&M research stand, DFC Hardwood Woodland and Hardwood Forest, thinned 12/05, burned 1/31/06, burned 2/20/09
- Age = 36 years; size = 63 acres; forest type = Loblolly pine
- Different levels of thinning

12:00 PM Compartment 38, stand 3, DFC Hardwood Forest, pre-treatment
- Age = 33years (clearcut and planted); size = 17 acres; forest type = Loblolly pine/hardwood, 96 sq.ft. BA; thinning target basal area = 55-70 sq.ft.
- No record of burning, not located in a burn unit

12:45 PM Lunch at Brushy Lake

1:30 PM Compartment 33, stand 13, Walston Ridge, DFC Oak/Pine Woodland, thinned 6/07, burned 2001, 2004, 3/20/2008, 3/10/09
- Age = 1907; size = 39 acres; no record of timber harvest since late 1960's; forest type before 2007 treatment = Loblolly pine, 120 sq.ft. BA; thinning target basal area = 50-60 sq.ft.

2:15 PM Compartment 52, stand 16, research stand, DFC Hardwood Forest, thinned 12/05
- Age = 39 years (clearcut, possible herbicide site prep, planted); size = 91 acres; forest type pre-treatment = Loblolly pine, 103 sq.ft. BA; different thinning target basal areas; no record of regular prescribed burning, not in a burn unit

3:00 PM Black Warrior Work Center, Q. & A. and discussion

5:00 PM Closeout

Bankead Liaison Panel
September 24, 2011 Hardwood Restoration Workshop/Field Tour
Panel of Experts

Benjamin Prater, Associate Executive Director, Wild South

- Conservation Director, Wild South, August, 2007 to May, 2009
- Conservation Director, Southern Appalachian Biodiversity Project, May, 2006 to May, 2007 (Graduated from League of Conservation Voters Environmental Leadership Institute 2006)
- Ecologist, Southern Appalachian Biodiversity Project, May 2004 to May 2006
- Bachelor of Science in Environmental Science, Catawba College, Salisbury, NC August 1998 to May 2002 (Received Senior Environmental Science Award for academic excellence, 2002)
- Master of Environmental Management in Resource Ecology and Conservation Biology, Duke University Nicholas School of the Environment, August 2002 to May 2004 (Received Certificate in Geospatial Analysis, 2004 and Recognized as 2nd –Year Student of the Year 2004)
- Author of Wild South's Restoration Principles and has participated in numerous panels and meetings on ecological restoration, forest management, and collaborative processes throughout the region.

Luben Dimov, Ph.D., Alabama A&M University

- Assistant Professor of Silviculture and Forest Management, Alabama A&M University, 2005 to present
- Bachelor of Science and Master of Science in Forestry, University of Forestry, Bulgaria, 1992-1998, research focused on mixed species uneven-aged upland forests (Bulgaria), oak tissue cultures (University of Zagreb, Croatia), and plant propagation and nursery production (Darby Nursery Stock Ltd., England)
- Ph.D. in Forest Ecology and Silviculture from Louisiana State University in 2004, bottomland hardwoods
- Post-doctoral research in ecology and silviculture of coastal wetland forest, Louisiana, 2005
- Research interests: *Ecology, silviculture, management, and restoration of hardwood forests, restoration of American chestnut, control of invasive plant species, and effect of silvicultural treatments on the ground layer vegetation*

Edward F. Loewenstein, Ph.D., Auburn University

- Associate Professor of Silviculture, Auburn University
- Research Forester with the USDA Forest Service in the North Central Research Station, Columbia, Missouri, 1996-2002
- Bachelor of Science, Forest Resource Managemet, Southern Illinois University, 1985
- Master of Science, Forest Biology, Auburn University, 1992
- Ph.D., Silviculture, University of Missouri, 1996
- Research interests: *Uneven-aged silvicultural systems, Hardwood silviculture, Canopy dynamics, Temporal effects of thinning on light in the understory, Stand stocking and growing space allocation*
- His research is focused on what has been described in the popular press as "New Forestry", "Continuous Cover Forestry", or sometimes as "Partial Cutting Systems" or "Alternative Silvicultural Systems". In traditional terminology, all of this falls under the broad heading of uneven-aged or two-aged silviculture. He is specifically looking at the response of the forest canopy and understory to disturbance and addressing issues including: 1) wildlife habitat development and damage control; 2) aesthetic preferences of landowners and operational feasibility of small acreage management at the urban/rural interface; 3) regeneration dynamics and prediction under partial canopy closure; and 4) development of biologically and economically optimal thinning regimes.

Callie Jo Scweitzer, Ph.D., USDA Forest Service Southern Research Station

- Research Forester, Upland Hardwood Ecology and Management Unit, Southern Research Station, Bent Creek Experimental Forest, working out of Huntsville, AL
- Bachelor of Science, Biology, Indiana University of Pennsylvania
- Master of Science, Forest Ecology, Pennsylvania State University
- Ph.D., Forest Resources, Pennsylvania State University
- Current research: *Covers over 10 million acres of hardwood forests in the Cumberland Plateau and associated highlands, focusing on the ecological role of disturbance in these hardwood forest ecosystems. Her primary research focus is on silviculture, or the management of forested stands. To date, her research has contributed to an understanding of stand composition and both flora and fauna dynamics under different management regimes.*
- Callie and her tennis-teaching professional husband Ken have been trying to hike and camp in all the National Parks, with as many state and local parks thrown in as possible. Callie has always had a love for the outdoors much to the bane of her relatives, who had to suffer through endless collections of sticks, stones and slimy creatures.

John Green, our Moderator

- John Green graduated from the University of Alabama law school in 1974. He practiced law, representing individuals from various backgrounds with regard to personal and business-related legal issues until his retirement in 2010. During this time John also worked as a Hearing Officer for the Alabama State Department of Education, hearing and deciding disputes between parents and local school systems concerning issues in special education law. John has been visiting, hiking, hunting, and camping in the Bankhead National Forest for almost forty years.

Stand History – 9/24/2011 Bankhead Liaison Panel Hardwood Workshop/Field Tour

Compt. 33 Stand 13 Walston Ridge Demo

Age Year 1907

Forest Type (CISC) Before Treatment = Loblolly Pine with 120 ft^2 BA

Demonstration Area:

Treatment Area Size - 39 acres

No record of any timber harvest from the late 1960's through time of treatment in 2007.

Regular Dormant Season Burning – 1984, 1988, 1992, 1997, 2001, 2004, 3/20/2008 and 3/10/2009

Thinned July 2007 – DFC Oak/Pine Woodland Demonstration Area

Thinning - Target BA 50 – 60 ft^2

Thinning - species prioritized for retention – Black walnut, shortleaf pine, white oaks, red oaks, hickories, loblolly pine, black cherry, persimmon, and yellow poplar

Demonstration Area – Pine Oak Woodland ***Goal*** *– Establishment of oak/pine woodland; promote migratory songbird habitat; and provide for establishment of oak/hickory advanced regeneration*

Compt. 52 Stand 16 and 17 McDougal Camp/Research Stand

Note: SRS/AAMU Research Block 1 Treatments 4 and 5

Stand 16 = Treatment 4

Age Year 1972

Forest Type (CISC) Before Treatment = Loblolly Pine with 103 ft^2 BA

Treatment Area Size – 91 acres

Record indicates clearcut in 1971 with possible herbicide site preparation

No record of regular prescribed burning. Not within an Rx Burn Unit.

FHRP EIS Thinned 2005 – DFC Hardwood Forest

Thinning Target Basal Area

Research Treatment 4 = 25 acres Thin to 50 ft^2 BA DFC Hardwood Forest

Remainder of stand = Thin to 55 – 70 ft^2 BA DFC Hardwood Forest

Thinning - species prioritized for retention (Leave tree preference from dominant and codomcrown class based on diameter and species) – oak sps, hickory sps, yellow poplar, longleaf, shortleaf, loblolly, and Virginia pine

Stand 17 = Treatment 5

Age Year 1976

Forest Type (CISC) Before Treatment = Loblolly Pine with 103 ft^2 BA

Treatment Area Size – 35 acres

Record indicates clearcut in 1971

No record of regular prescribed burning. Not within an Rx Burn Unit.

FHRP EIS Thinned 2005 – DFC Hardwood Forest

Thinning Target Basal Area

Research Treatment 4 = 25 acres Thin to 75 ft^2 BA DFC Hardwood Forest

Remainder of stand = Thin to 55 – 70 ft^2 BA DFC Hardwood Forest

Thinning - species prioritized for retention (Leave tree preference from dominant and codomcrown class based on diameter and species) – oak sps, hickory sps, yellow poplar, longleaf, shortleaf, loblolly, and Virginia pine

Compt. 38 Stand 3 Brushy Creek Road (Upper Brushy Stewardship)

Age Year 1978
Forest Type (CISC) Before Treatment = 13 - Loblolly Pine/Hardwood with 96 ft^2 BA
Stand Acres – 17 acres
Record indicates clearcut and planting
No record of regular prescribed burning. Not within an Rx Burn Unit.
FHRP EIS Planned for Thinning 2011 – 2012 – DFC Hardwood Forest
Thinning Target Basal Area Thin to 55 – 70 ft^2 BA DFC Hardwood Forest
Thinning - species prioritized for retention (Leave tree preference from dominant and codom. crown class based on diameter and species) – oak sps, hickory sps, yellow poplar, longleaf, shortleaf, loblolly, and Virginia pine

Compt. 38 Stand 7 Pine Torch Road (Upper Brushy Stewardship)

Age Year 1978 – 1980
Forest Type (CISC) Before Treatment = Loblolly Pine with 89 ft^2 BA
Stand Acres – 38 acres
Record indicates clearcut and planting
No record of regular prescribed burning. Within the Hall Rx Burn Unit.
FHRP EIS Planned for Thinning 2011 – 2012 – DFC Hardwood Woodland
Thinning Target Basal Area Thin to 55 – 70 ft^2 BA DFC Hardwood Woodland
Thinning - species prioritized for retention (Leave tree preference from dominant and codom. crown class based on diameter and species) – oak sps, hickory sps, yellow poplar, longleaf, shortleaf, loblolly, and Virginia pine

Compt. 43 Stand 6 Telephone Road/Research Stand
Note: SRS/AAMU Research Block 1 Treatments 6 and 7

Age Year 1975
Forest Type (CISC) Before Treatment = Loblolly Pine
Stand Acres – 63 acres
Prescribed burning records include 1992, 2006, and 2009 . Within the Telephone Rx Burn Unit.
FHRP EIS Thinned 2005 – DFC Hardwood Woodland
Thinning Target Basal Area
Research Treatment 6 (east ridge)= Thin to 50 ft^2 BA DFC Hardwood Woodland
Research Treatment 7 (south/west part of stand) = Thin to 75 ft^2 BA DFC Hardwood Woodland
Remainder of stand = Thin to 55 – 70 ft^2 BA DFC Hardwood Forest
Thinning - species prioritized for retention (Leave tree preference from dominant and codom. crown class based on diameter and species) – oak sps, hickory sps, yellow poplar, longleaf, shortleaf, loblolly, and Virginia pine

*FHRP EIS **Purpose and Need** (for all stands above except Walston Ridge Demo)*

1) To improve and maintain overall forest health (address immediate forest health risks in 15 – 45 year old loblolly pine forest and long-term forest health).
2) To restore native upland hardwood forests and pine-oak woodlands
3) To provide forest communities and plant and animal habitats that are uncommon on other lands in the Southern Cumberland Plateau (establishes a desired condition that sustains healthy forest communities and wildlife habitats long-term)

FACT SHEET
BANKHEAD FOREST HEALTH AND RESTORATION INITIATIVE

The drought of the late 1990s killed thousands of acres of loblolly pines throughout Alabama. Facing this threat, the Bankhead Community Liaison Panel focused on improving the health of the Bankhead National Forest. Working with the United States Forest Service (USFS), a plan was generated that would not only improve the forest health, but would restore the 79,000 acres of monoculture pine plantation to native forest communities. The one-species forests had proven to be an easy target for hungry pine beetles. Mixed forest communities have much more resistance to insects and disease.

With extensive input from the Liaison Panel, the USFS determined the desired future condition of the Bankhead Forest 50 to 100 years into the future. The largest change is the conversion of about 59,000 acres of pine plantations to oak/hickory/pine forests. This will almost double the oak/hickory/pine forest which currently covers 36% of the Bankhead Forest today. Also planned is the development of 4,910 acres of longleaf pine woodland, 13,467 acres of shortleaf pine woodland, and 12,042 acres of oak woodlands. To reach the desired future condition, there will be many small projects. The first stage of the restoration initiative, the Bankhead Forest Health and Restoration Project (BFHRP), is mostly complete. This project was oriented toward thinning overstocked fifteen- to forty-five-year-old pine plantations and preparing and planting the seriously damaged southern pine beetle (SPB) damaged areas. The desired future conditions will leave the Bankhead Forest with native forest communities that are no longer commonly found on private lands.

The restoration work will have no impact on canyons, existing recreation facilities, cultural and heritage sites, or sensitive plant communities. The plan offers benefits to many different interests. The biggest benefit to all is that the Bankhead will dramatically increase its native forest communities, creating improved wildlife habitat and recreation opportunities. More areas will be available to outdoor enthusiasts. While timber is considered a by-product of the silvicultural treatments used to accomplish the ecological restoration, the local timber industry will have job opportunities into the foreseeable future. Environmental protection groups will see added biological diversity in the forest. The project is turning out to a win-win situation for all involved.

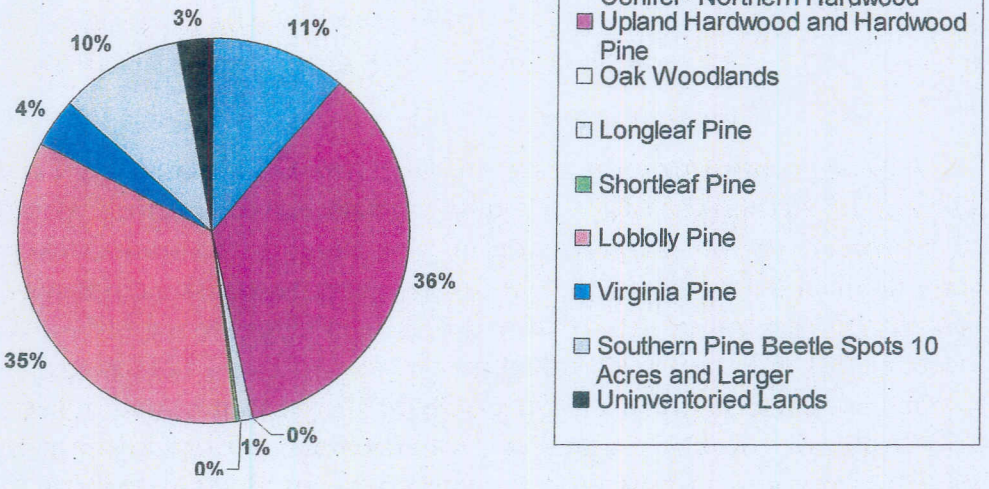
Loblolly pine stands continue to be thinned and guided to their desired future condition. The severely SPB damaged sites have been reforested. All project work is performed under the direction of the USFS. Joint monitoring field trips by the USFS and the Bankhead Liaison Panel assure that all work is performed according to Best Management Practices, that negative impacts to ecological resources are minimized, and that the forest is moving toward the desired future condition.

Attendance at panel meetings and on monitoring field trips is open to the public.

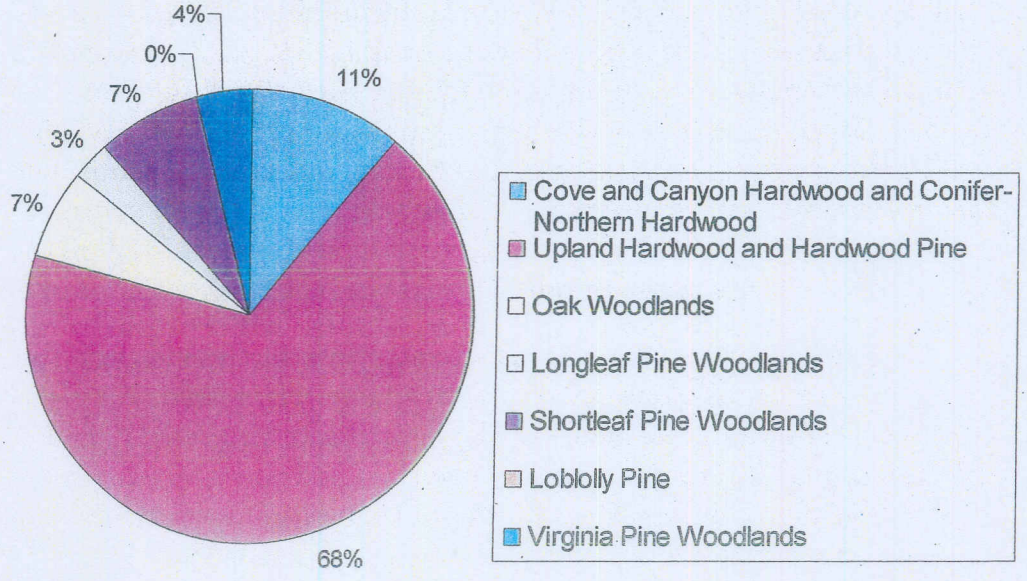
BANKHEAD HEALTH AND RESTORATION PROJECT

CONDITIONS TODAY
PERCENT OF FOREST

Follow down list clockwise from 12:00



DESIRED FUTURE CONDITION
PERCENT OF THE FOREST



Bankhead National Forest
April 30, 2011
Hardwood Restoration Workshop and Field Tour

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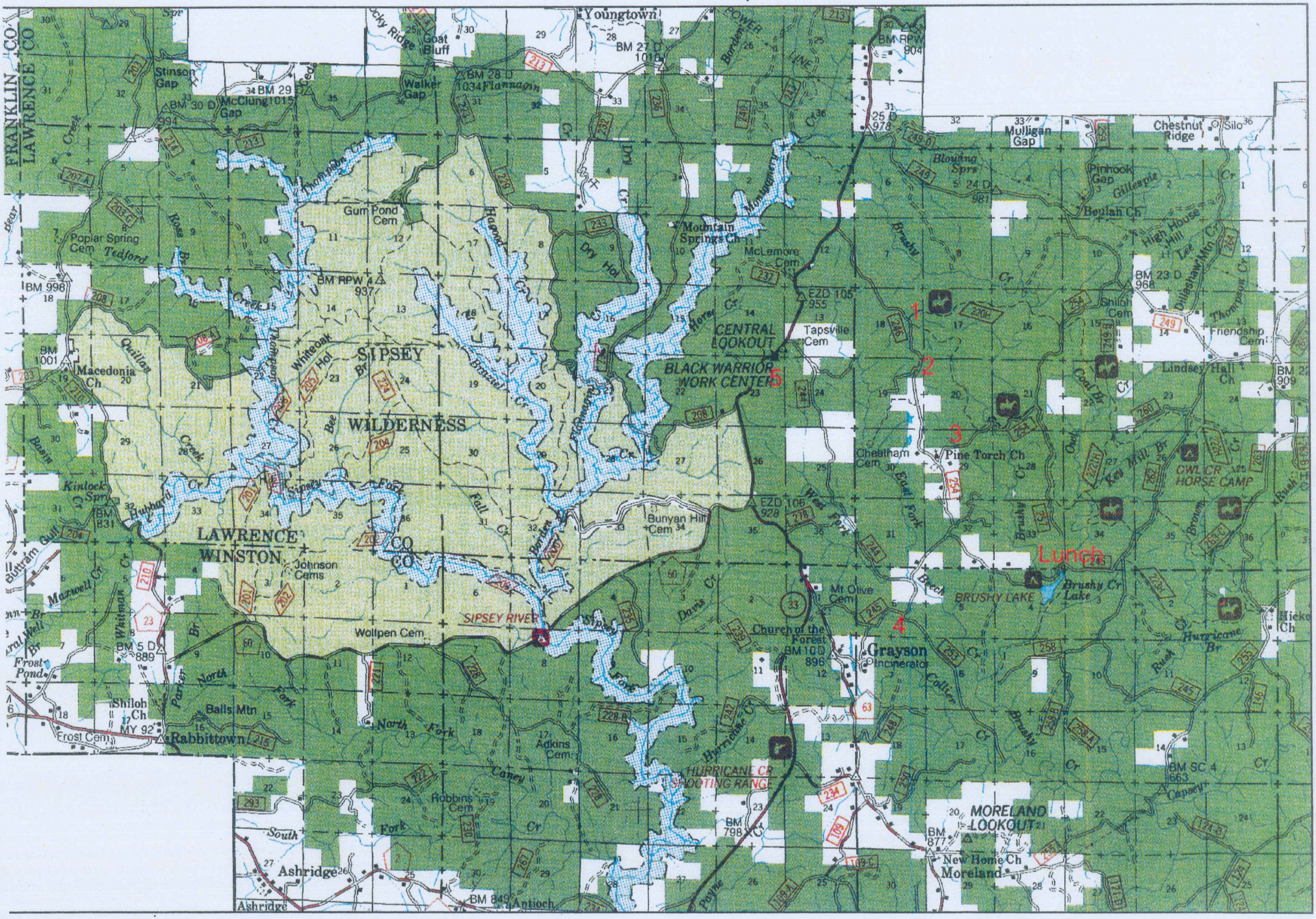


It's Medicine that Keeps a Forest Healthy: THE FACTS ABOUT PRESCRIBED BURNING

What is a prescribed burn? A prescribed burn is a controlled fire ignited by professionally trained and experienced personnel. These burns are carefully planned and executed to reduce forest fuels and improve plant and animal habitats.

What happens during a prescribed burn? After all the control lines that hold the fire in place have been built and everything has been checked to make sure we can contain the fire, we wait until all weather conditions are right. The temperatures have to be right. The wind has to be from the right direction and not too fast. The humidity can't be too high or low. Everything has to be just right or we don't burn. Once we ignite a fire we continue to monitor the fire and weather to ensure that the fire does what we want and stays within the control lines.

How does a prescribed burn produce a healthy forest? Many forest eco-systems in the South depend on fire to maintain a healthy balance of vegetation and wildlife habitat conditions. Low-intensity prescribed burns help maintain an open forest floor by reducing some of the brush and mid-story trees that block sunlight from reaching the ground. By increasing sunlight to the forest floor, often more grass, fruits and seeds become available for the deer, dove, quail and other wildlife species. Also, by modifying stand conditions, prescribed burns can increase vegetation edge effects that many species depend upon when seeking travel routes, feeding spots or finding hiding shelter. This also helps improve access for hunters and hikers. In addition, it reduces the amount of fuel that would be available if a wildland fire should occur. This is very important for the safety of the people who live in and around our forests.

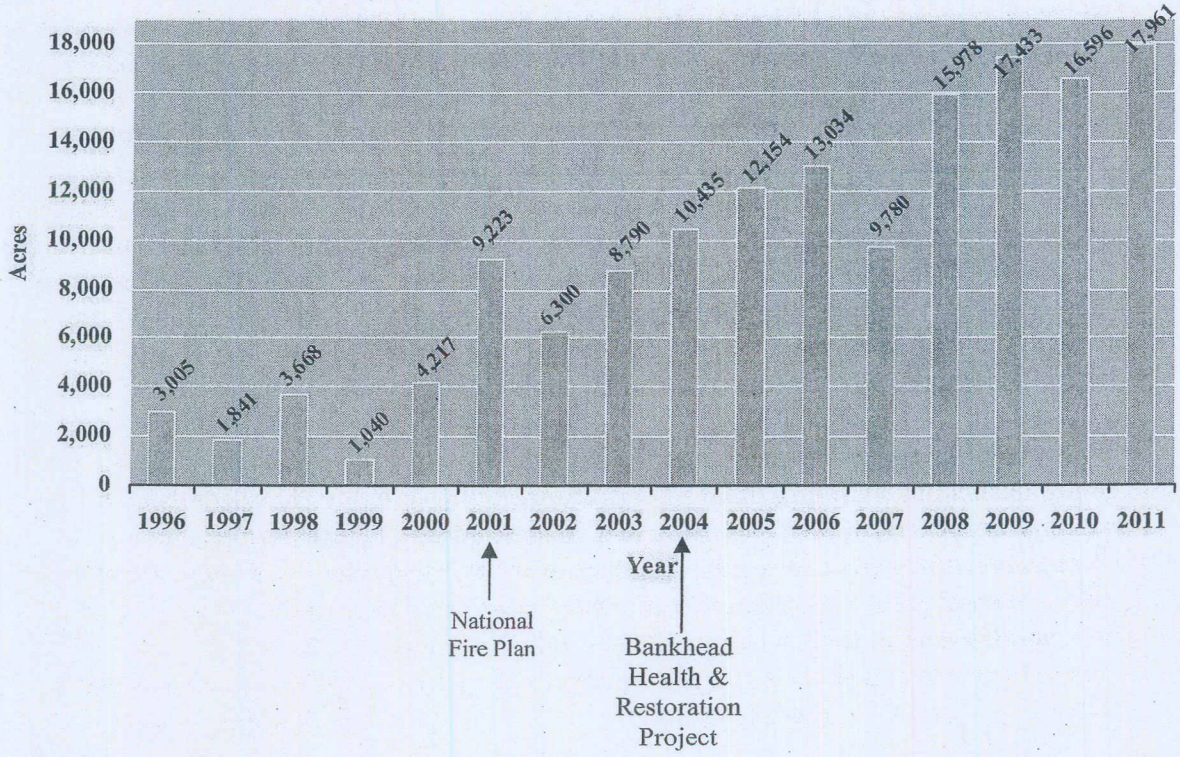
How is smoke managed during a prescribed burn? Any time there is a fire there is going to be smoke. When planning our prescribed burns, we try to select days when the weather conditions will allow the smoke to be carried up and away from sensitive areas such as cities, hospitals, highways, churches or other areas where we know the smoke could cause problems. Despite all planning, sometimes the weather doesn't do what we expect and the smoke goes where we would rather it not go. For this reason we try to do most of our burning early in the day to allow most of the smoke to disappear before nightfall. On the day of the burn we try to let the people that live nearby know that they may be affected by smoke.

If you are in an area of heavy smoke, we suggest you use low-beam headlights when driving or remain indoors if you have respiratory problems.

Prescribed Fire

There are two primary goals of the Bankhead National Forest: reduce hazardous fuel loading in order to better protect national forest and adjacent private lands from wildfires and restore and maintain native forest communities. Native ecosystems targeted for restoration include longleaf, shortleaf, oak woodlands and native bluestems on upper slopes, hardwood forests in drains and canyons, and oak/pine woodlands and native bluestems on mid slopes. By reaching these first two goals will in turn benefit wildlife and their habitat by improving the availability and palatability of forage and browse.

Bankhead NF prescribed burning accomplishments 1996-2011



Acreage/Percentage of the Bankhead National Forest Associated With Prescribed Fire