

**BIOLOGICAL EVALUATION OF
FEDERALLY LISTED SPECIES**

Precommercial Thinning of Pine Plantations

Bankhead National Forest
Lawrence and Winston Counties, Alabama

INTRODUCTION: This Biological Evaluation (BE) addresses the effects of the following activity on federally-listed Proposed, Endangered and Threatened species on the Bankhead National Forest. Timber management practices over the past several decades have created numerous early seral conifer plantations that currently contain too many trees per acre and are at a high risk potential for wildfire, insect damage and other forest health concerns. Pre-commercial thinning has opportunity to improve the health and productivity of these plantations and to reduce the moisture/light competition and influence the species composition.

AFFECTED ENVIRONMENT: The treatment area will primarily reduce stocking rates within planted pine stands by using hand held equipment such as chainsaws, brush cutters, machetes, loppers or any similar tools. The stands are too young for a commercial thinning operation. No ground disturbing equipment will be utilized to accomplish this project. Additional work activity such as road construction or use of ground disturbing equipment is not required.

The areas surveyed for this evaluation did not contain glades, rock outcrops, aquatic areas or wetlands, which are habitats where protected, threatened, endangered or sensitive plant species are typically found. Recent surveys of similar habitats have failed to find the presence of species which are federally listed. No riparian areas, wetlands or streambeds will be disturbed.

Bankhead National Forest is located within the northwest corner of Alabama and lies within Lawrence, Winston and Franklin counties. It is comprised of approximately 181,470 acres of forestland. The forest cover varies in both cover type and age class but is mostly a mixture of mature hardwoods and pine. The proposed project is located in four Forest Service management compartments across the forest. They are Compartment 160 – Stand 47 (4 acres); Compartment 166 – Stand 27 (44 acres); Compartment 165- Stand 1 (20 acres); Compartment 30- Stand 16 (36 acres). Maps are available in the project file which is retained by the District Silviculturist.

FEDERALLY LISTED T&E SPECIES EVALUATED

Federally-listed Proposed, Threatened or Endangered (T&E) species that may occur or are known to occur on the Bankhead National Forest (BNF) and must therefore be evaluated for potential effects of management are as follows:

| Scientific Name | Common Name | Status¹ | Taxonomic Group | Bankhead NF Distribution | Species' Habitat Preference |
|-------------------------------|------------------------------|---------------------------|------------------------|---------------------------------|--|
| <i>Myotis grisescens</i> | Gray bat | E | Mammal | F3 | Caves – Winter |
| <i>Myotis sodalis</i> | Indiana bat | E | Mammal | F3 | Caves – Winter Forests - Summer |
| <i>Picoides borealis</i> | Red-cockaded woodpecker | E | Bird | FH | Pine Woodlands |
| <i>Sternotherus depressus</i> | Flattened musk turtle | T | Reptile | F | Pine-Pine/Oak Woodlands & Riparian Wetlands |
| <i>Epioblasma metastrata</i> | Upland combshell | E | Mussel | FH | Perennial Streams |
| <i>Epioblasma turgidula</i> | Turgid blossom pearly mussel | E | Mussel | FH | Perennial Streams |
| <i>Epioblasma brevidens</i> | Cumberlandian combshell | E | Mussel | FH | Perennial Streams Bear Creek |
| <i>Lampsilis altilis</i> | Fine-lined pocketbook | E | Mussel | FH - FP | Perennial Streams U/L Sipsey Fork U/L Brushy |
| <i>Lampsilis orbiculata</i> | Pink mucket (pearly mussel) | E | Mussel | E- FH | Perennial Streams |
| <i>Lampsilis perovalis</i> | Orange-nacre mucket | T | Mussel | F- CH | Perennial Streams U/L Sipsey Fork U/L Brushy |
| <i>Medionidus acutissimus</i> | Alabama moccasinshell | T | Mussel | F - CH | Perennial Streams U/L Sipsey Fork U/L Brushy |
| <i>Medionidus parvulus</i> | Coosa moccasinshell | E | Mussel | FH | Perennial Streams U/ L Sipsey Fork |
| <i>Pleurobema furvum</i> | Dark pigtoe | E | Mussel | F - CH | Perennial Streams U/L Sipsey Fork U/L Brushy |
| <i>Pleurobema perovatum</i> | Ovate clubshell | E | Mussel | FP - CH | Perennial Streams U Sipsey Fork L Brushy |
| <i>Pleurobema plenum</i> | Rough pigtoe | E | Mussel | FH | Perennial Streams |
| <i>Ptychobranchnus greeni</i> | Triangular kidneyshell | E | Mussel | F3 - CH | Perennial Streams U/L Sipsey Fork U/L Brushy |
| <i>Necturus alabamensis</i> | Black Warrior Waterdog | S/C | Amphibian | F3 | Perennial Streams U/L Sipsey Fork U/L Brushy |
| <i>Dalea foliosa</i> | Leafy prairie-clover | E | Plant | FP | Limestone Glades |
| <i>Lesquerella lyrata</i> | Lyrate bladderpod | T | Plant | FP | Limestone Prairies / Glades |

| Scientific Name | Common Name | Status ¹ | Taxonomic Group | Bankhead NF Distribution | Species' Habitat Preference |
|-----------------------------------|-----------------------------|---------------------|-----------------|--------------------------|-----------------------------------|
| <i>Marshallia mohrii</i> | Mohr's Barbara's buttons | T | Plant | FP | Riparian Areas |
| <i>Levenworthia crassa</i> | Fleshy fruit Gladecress | S/C | Plant | F1 | Limestone Glades |
| <i>Sagittaria secundifolia</i> | Kral's water-plantain | T | Plant | F2 | Riparian Areas |
| <i>Platanthera integrilabia</i> | White Fringeless Orchid | S/C | Plant | F1 | Wetlands |
| <i>Thelypteris pilosa</i> var al. | Alabama streak-sorus fern | T | Plant | F3 | Rock Bluffs |
| <i>Xyris tennesseensis</i> | Tennessee yellow-eyed grass | E | Plant | FP | Riparian Areas or Wetlands |
| <i>Apios priceana</i> | Price's Potato Bean | T | Plant | FP | Riparian Areas w/ Limestone Rocks |

Status - T=Threatened; E= Endangered; C=Candidate; S=Sensitive(USFS Southeast Region, 2001 Revision) CH=Critical Habitat designated.
 Distribution- FP=Forest Potential, No Known Occurrences;F1=0-5 known occurrences; F2=6-20 known occurrences; f3=21-100 known occurrences;

This list of species to be evaluated for Bankhead National Forest projects was derived from the BA and BE for implementation of the Forest Plan (2003). The Daphne Ecological Services Office of USFWS's website listing of Endangered Species by county was also consulted for Lawrence county. This listing was also consulted for recent updates/changes that may have occurred since Forest Plan revision.

Species shaded in gray in the above table will not be affected by the proposed project. Habitats of the species within the gray shaded areas are outside of the project area or the project area does not have appropriate habitat for the species. No designated critical habitats will be effected or jeopardized by any aspect of this project. No effects (direct, indirect, or cumulative) are expected to the species, or the known or potential habitats for these species. These determinations are enabled by the knowledge that the species' habitats will not be impacted by the proposed project.

FEDERALLY LISTED T&E SPECIES ANALYZED

FEDERALLY LISTED T&E SPECIES WITH DETERMINATIONS

Federally Listed Species – Determinations:

| Scientific Name | Common Name | Determinations of Effect |
|-------------------------------|------------------------------|---------------------------------|
| <i>Myotis grisescens</i> | Gray bat | No Effect |
| <i>Myotis sodalis</i> | Indiana bat | No Effect |
| <i>Picoides borealis</i> | Red-cockaded woodpecker | No Effect |
| <i>Sternotherus depressus</i> | Flattened musk turtle | No Effect |
| <i>Epioblasma metastrata</i> | Upland combshell | No Effect |
| <i>Epioblasma turgidula</i> | Turgid blossom pearly mussel | No Effect |
| <i>Epioblasma brevidens</i> | Cumberlandian combshell | No Effect |
| <i>Lampsilis altilis</i> | Fine-lined pocketbook | No Effect |
| <i>Lampsilis orbiculata</i> | Pink mucket (pearly mussel) | No Effect |
| <i>Lampsilis perovalis</i> | Orange-nacre mucket | No Effect |
| <i>Medionidus acutissimus</i> | Alabama moccasinshell | No Effect |
| <i>Medionidus parvulus</i> | Coosa moccasinshell | No Effect |
| <i>Pleurobema furvum</i> | Dark pigtoe | No Effect |
| <i>Pleurobema perovatum</i> | Ovate clubshell | No Effect |
| <i>Pleurobema plenum</i> | Rough pigtoe | No Effect |
| <i>Ptychobranthus greeni</i> | Triangular kidneyshell | No Effect |
| <i>Necturus alabamensis</i> | Black Warrior Waterdog | No Effect |

This Biological Evaluation was prepared by:

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_____/ April 24, 2008
Date:

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