

**Decision Notice and Finding of No Significant Impact for Amendment #25 to the
Nantahala and Pisgah National Forests
Land and Resource Management Plan
Direction and Standards for Protection of the Indiana Bat**

November 2010

**Responsible Official
Marisue Hilliard
Forest Supervisor**

**For More Information:
Sheryl Bryan
Forest Fisheries & Wildlife Biologist
828-257-4271**

1.0 INTRODUCTION

This **Decision Notice** and **Finding of No Significant Impact** documents my decision to modify the management direction and standards established in Amendment 10 of the Land and Resource Management Plan for the Nantahala and Pisgah National Forests (NP LRMP) for protection of the Endangered Indiana bat.

2.0 PURPOSE AND NEED FOR THE DECISION

In July, 1999 Indiana bats were first identified on Nantahala National Forest in Graham County, North Carolina. On April 7, 2000 the USDI Fish and Wildlife Service (FWS) issued a biological opinion (BO) regarding the NP LRMP's effect on Indiana bat. The FWS rendered a non-jeopardy opinion and an incidental take statement. The opinion listed several reasonable and prudent measures required to minimize incidental take. The recommended measures were formulated into Amendment 10 of the NP LRMP as management direction and standards that went into effect in August, 2000.

The BO from 2000 was amended in April 2005 to extend it for an additional five years, and again in February of 2009 after bats were identified in Cherokee County, North Carolina. The BO was set to expire in April, 2010. I took this opportunity to take a hard look at the direction and standards in Amendment 10 to see if there was updated science to be incorporated, and to evaluate the efficiency and effectiveness of how the terms and conditions of the BO were being implemented through Amendment 10. Several statements in Amendment 10 were identified as needing to be updated, changed, or eliminated. Some additional language was also needed.

Working together with the Asheville Field Office of the FWS, we developed modifications to some of the language in Amendment 10 to bring it up to date. The FWS has evaluated this language as being at least as protective of Indiana bats as the language in Amendment 10 (FWS letter April 1, 2010).

3.0 DECISION

The Environmental Analysis (EA) titled *Updating Management Direction and Standards for Protection of the Indiana Bat* (November 2010) documents the alternatives considered and the associated environmental effects of the alternatives considered in detail. This 2010 EA, along with the *Environmental Assessment For Amendment 10 Nantahala & Pisgah National Forests Land and Resource Management Plan* (August 2000 - available on the National Forests in North Carolina's website), informed my decision. Based upon the analysis which incorporates the best available science, I have decided to select Alternative B as described in Chapters 1 & 2 and Appendix B of the 2010 EA. The specific changes that will be amended into the Nantahala and Pisgah National Forests Land and Resource Management Plan are documented in Appendix A of this Decision Notice.

Alternative B will:

- Remove reference to a "Priority Leave Tree" list: Indiana bats are now thought to be more opportunistic in their selection of roost trees and maternity trees than previously thought. Shellbark and shagbark hickories are still recognized as highly valuable components of Indiana bat habitat.

- Clarify that the most desirable snags (dead standing or leaning trees) for Indiana bats are those in the early stages of decay, and those clumped with other similar snags. Also, it will clarify that snags without bark, crevices, or cavities are not desirable.
- Expand the range of pine snags to be retained, and specifying the width of live-tree buffers for selected snags.
- Modify the language pertaining to intermittent stream buffers to maintain canopy contiguity rather than a standard width.
- Allow prescribed burning during the late summer/early fall, after young bats are mobile, while retaining the limits on the number of acres burned in suitable habitat. This would permit some growing season burning that is desirable as a tool for ecosystem restoration.
- Change the monitoring direction to more accurately document compliance with standards for maintaining Indiana bat habitat.
- Add direction to inspect buildings for bats prior to reconstruction, removal, or demolition.
- Allow for updates to the Habitat Suitability Index model to reflect new remote sensing technology or other improvements as they occur.

4.0 RATIONALE FOR THE DECISION

I have selected Alternative B because best meets the purpose and need to incorporate updated information, remove out-of-date direction in Amendment 10, and better clarify certain elements of bat habitat.

- Clarifying that clumps of snags in the early stages of decay are preferred for bat habitat to just random snags. Actually including this in the NP LRMP ensures this distinction will not be overlooked and not passed on to implementers on the ground.
- Expanding the range of pine snags to be buffered recognizes that locally Indiana bats regularly use pine types for roosting and for maternity colonies.
- Clarifying the desired condition for intermittent streams allow greater management flexibility while protecting the important structural feature of the habitat.
- Allowing late summer burning increases our flexibility to restore ecosystem structure more efficiently than strictly relying on dormant season burning.
- Permitting implementation monitoring of bat standards concurrently with our standard inspection processes also increases efficiency.
- Directing building inspections for bats prior to disturbance closes a gap in protection.
- Allowing updates to the Habitat Suitability Index model recognizes the rapid state at which remote sensing technology is advancing.

5.0 OTHER ALTERNATIVE CONSIDERED

The other alternative considered is described below along with the rationale for its non-selection.

Alternative A: This alternative is the no-action alternative and, therefore, maintains current management direction and standards (EA Appendix A). I did not select this alternative because it does not incorporate the latest science and the management efficiencies of Alternative B that were endorsed by the FWS as being equally protective of Indiana bats.

6.0 PUBLIC INVOLVEMENT

On April 22, 2010 a scoping letter was sent to the forest-wide scoping list and posted on the Forest website. A legal notice was published in the Asheville Citizen-Times on April 28, 2010 requested comments on the proposed amendment. No comments were received. No issues were identified by the public, partners, or Forest Service personnel concerning possible significant effects or unresolved conflicts over use of limited resources for this plan amendment.

7.0 FINDING OF NO SIGNIFICANT IMPACT

After considering the environmental effects described in the environmental assessment (EA) *Updating Management Direction and Standards for Protection of the Indiana bat*, I have determined that implementation of this decision is not a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not needed.

1. Both beneficial and adverse effects have been considered. (EA pages 7-27)
2. The action will not significantly affect public health or safety. (EA page 27)
3. The action will not significantly affect any unique characteristics of the geographical area, including historic or cultural resources, wetlands, floodplains, wilderness areas or outstandingly remarkable wild and scenic river values. (EA page 27)
4. The effects of this action on the human environment are not likely to be highly controversial. (EA pages 7-27)
5. The action does not involve highly uncertain, unique or unknown environmental risks. (EA pages 7-27)
6. This action does not establish a precedent for future actions with significant effects. (EA pages 7-27)
7. This action has been considered cumulatively relative to other actions. (EA pages 7-27, various sections)
8. No sites listed in or eligible for the National Register of Historic Places will be affected by the action. (EA page 27)
9. The proposed action will not adversely affect endangered or threatened species or critical wildlife habitat. (EA, Biological Section 3.1 pages 7-25; Biological Assessment and Biological Evaluation, EA Appendices C and D).
10. This action does not violate any federal, state, or local environmental laws.

8.0 FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

The Forest Service is currently operating under the November 9, 2000 planning rule (see *Federal Register*, December 18, 2009). According to 36 CFR 219.35 and Appendix B to 219.35, the responsible official may elect to conduct the plan amendment process under the “1982 planning regulations” (those regulations in effect before November 9, 2000). I have elected to conduct this plan amendment process following the 1982 planning regulations.

After reviewing the Environmental Assessment that includes Amendment # 25 to the Nantahala and Pisgah National Forests Land and Resource Management Plan I have determined that the decision to implement this amendment will not result in a significant change to the NPLRMP. This determination was made after consulting 16 U.S.C. 1604(f)(4), 36 CFR 219.10(f) (1982 regulations), Forest Service Manual 1926.51 – *Changes to the Land Management Plan that are Not Significant* and FSM 1926.52 – *Changes to the Land Management Plan that are Significant*. Based on these planning requirements, I have determined that:

- This amendment will not significantly alter the levels of goods and services projected by the forest plan; nor will it prevent the opportunity to achieve those outputs in later years.
- This amendment will only affect a small part of the land management plan, and changes to land management will be very minor.

A biological assessment (BA) was completed for the threatened and endangered species. A determination was made that the proposed activities associated with Amendment 25 will have “no effect” on:

Spreading Avens (*Geum radiatum*),
 Mountain Bluet (*Houstonia montana*),
 Mountain Golden-heather (*Hudsonia montana*),
 Heller’s Blazing Star (*Liatris helleri*),
 Spruce-fir Moss Spider (*Microhexura montivaga*),
 Blue-ridge Goldenrod (*Solidago spithamea*)
 Appalachian Elktoe (*Alasmidonta raveneliana*)
 Spotfin Chub (*Cyprinella monacha*)
 Swamp Pink (*Helonias bullata*)
 Littlewing Pearlymussel (*Pegias fabula*)
 Bunched Arrowhead (*Sagittaria fasciculata*)
 Mountain Sweet Pitcher Plant (*Sarracenia jonesii*)
 Green Pitcher Plant (*Sarracenia oreophila*)
 Cumberland bean (*Villosa trabilis*)

In addition, Amendment 25 of the Nantahala-Pisgah Land and Resource Plan is “not likely to adversely affect”:

Virginia big-eared bat (*Corynorhinus townsendii virginianus*)
 Rock Gnome Lichen (*Gymnoderma lineare*),
 Carolina Northern Flying Squirrel (*Glaucomys sabrinus coloratus*)
 Dwarf-flowered Heartleaf (*Hexastylis naniflora*)
 Small Whorled Pogonia (*Isotria medioloides*)
 Noonday Globe (*Mesodon clarki nantahala*)

Indiana Bat (*Myotis sodalis*)
White Irisette (*Sisyrinchium dichotomum*)
Virginia Spiraea (*Spirea virginiana*)

A biological evaluation (BE) was completed for sensitive species that occur on the Nantahala and Pisgah National Forests:

Plants

The implementation of growing season burns with adopting Amendment 25 may negatively impact individuals of *Schlotheimia lancifolia*, *Sticta limbata*, *Cheilolejeunea evansii*, *Rhachithecium perpusillum*, *Buxbaumia minakatae*, and *Drepanolejeunea appalachiana*, but would not affect the viability of the species across the NP. Site specific surveys within suitable habitat for these species prior to a burn will provide occurrence and abundance information to plan these burns to lessen or eliminate any effects to these species.

Growing season burns may beneficially impact the following sensitive plant species: *Cleistes bifaria*, *Berberis canadensis*, *Delphinium exaltatum*, *Desmodium ochroleucum*, *Euphorbia purpurea*, *Fothergilla major*, *Helianthus glaucophyllus*, *Liatris turgida*, *Lilium grayi*, *Lysimachia fraseri*, *Malaxis bayardii*, *Monotropis odorata*, *Prenanthes roanensis*, *Pycnanthemum beadlei*, *Pycnanthemum torrei*, *Rhododendron vaseyi*, *Sabatia capitata*, *Silene ovata*, *Thalictrum macrostylum*, *Thaspium pinnatifidum*, and *Thermopsis fraxinifolia*.

The proposed amendment will not impact any other Sensitive plant species.

Terrestrial Wildlife

The proposed changes may impact individuals of the Tellico salamander, southern Appalachian salamander, Appalachian bewick's wren, frosted elfin, northern bush katydid, Diana fritillary butterfly, tallus coil, glossy supercoil, and bidentate dome, but will not affect the viability of these species across the NP. The project will have no impact on any other sensitive species. No cumulative effects on species viability across the NP will result.

Aquatic Species

There are no Sensitive aquatic species that will be impacted by the implementation of Amendment 25; however, site-specific analysis will continue as individual projects are proposed.

A letter of concurrence was received from the US Fish and Wildlife Service on August 19,2010.

9.0 BEST AVAILABLE SCIENCE

I have considered the best available science in making this decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views if any, and, where appropriate, the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

Chapter 3 of the EA discusses the effects of each of the alternatives with information supplied by a variety of resource specialists including biological scientists, physical scientist, and social scientist. These specialists are knowledgeable on current scientific information and have

considered incomplete or unavailable information when preparing or submitting information on effects.

10.0 IMPLEMENTATION AND APPEAL RIGHTS

For those plan amendments conducted under the “1982 planning regulations”, a responsible official can elect to use either the “Optional Appeal Procedures Available during the Planning Rule Transition Period” (the former 36 CFR 217 appeal procedures that were in effect prior to November 9, 2000) or the Objection procedures of 36 CFR 219.32 from the 2000 planning rule (see Appendix A to 36 CFR 219.35 [*Federal Register*, January 10, 2001]).

For this decision I have decided to use the “Optional Appeal Procedures Available during the Planning Rule Transition Period”. These procedures are available at <http://www.fs.fed.us/emc/applit/includes/PlanAppealProceduresDuringTransition.pdf>.

A written appeal must be filed in duplicate, clearly state that it is a Notice of Appeal pursuant to the “Optional Appeal Procedures”, and it must meet the content requirements of Section 9 of the Optional Appeal Procedures. Appeals must be postmarked or received within 45 days after the date the legal notice of this decision is published in the newspaper of record (Asheville Citizen-Times).

Appeals must be filed with the Regional Forester for the Southern Region at:

USDA Forest Service
Attn: Appeal Reviewing Officer
1720 Peachtree Road, NW, Suite 811N
Atlanta, GA 30309-9102

Appeals may also be faxed to (404) 347-5401 or mailed electronically in a common digital format to appeals-southern-regional-office@fs.fed.us. Hand-delivered appeals must be received within normal business hours of 7:30 a.m. to 4:00 p.m., Monday-Friday, closed on federal holidays.

Pursuant to Section 10 of the Optional Appeal Procedures, implementation of this decision will not begin until seven calendar days after the legal notice of this decision is published in the newspaper of record. Should any project or activity under this amendment be implemented before an appeal decision can be issued, the Appeal Reviewing Officer will consider written requests to stay implementation of any of those decisions pending completion of the review. To request a stay of implementation, an appellant must file a written request with the Appeal Reviewing Officer, and the request must meet the requirements found in Section 10 of the Optional Appeal Procedures.

For additional information concerning this decision or the Forest Service appeal process, contact Sheryl Bryan at the National Forests in North Carolina Supervisor's Office either by phone (828) 257-4271 or by mail. Address correspondence to:

USDA Forest Service
National Forests in North Carolina
160A Zillicoa Street
Asheville, NC 28802

11.0 SIGNATURE

Isl Marisue Hilliard

11/9/10

MARISUE HILLIARD

Date

Forest Supervisor

National Forests in North Carolina

**APPENDIX A
N/P Amendment 25**

Modify Amendment 10 as follows - NP LRMP page III-25, add the following:

Activities	General Direction	Standards
Botanical, Wildlife, and Fish Resource Management (continued)	14. For counties listed by the USDI Fish and Wildlife Service (FWS) as having current summer occurrences or likely occupied summer habitat of Indiana Bat, apply the following management direction.	
	14(1). Minimize the risk of incidental take during timber management practices of harvest/regeneration or stand improvement. Conduct surveys in suitable habitat forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable habitat for timber management practices of harvest and regeneration or stand improvements.	<ul style="list-style-type: none"> a. Retain as many standing live trees as practicable where the trunk has more than 25 percent exfoliating (separated from the cambium) bark and are greater than 3 inches dbh. b. Retain as many shellbark and shagbark hickories as practicable, regardless of size or condition. When removal is needed, removal may only occur between August 15 and April 15. c. Retain as many standing snags greater than 3 inches dbh as practicable within regeneration and timber treatment units, regardless of species, unless specifically marked for removal. Snags with no bark, crevices, or cavities need not be retained.

Activities	General Direction	Standards
		<ul style="list-style-type: none"> d. Retain as many hollow, den, or cavity trees greater than 9 inches dbh as practicable. e. To provide partial shade, buffer one-third of all hardwood snags >12 inches dbh or conifer snags >9 inches with exfoliating bark, in the early stages of decay. Where they occur, select snags in clumps for buffering. To buffer means to retain living residual trees where all or part of the tree is within 30 feet of the snag. f. Conduct prescribed burns between August 15 and April 15, but preferably after October 15th, to prevent potential harm to non-volant young. Exceptions must be approved by USFWS. g. Inspect timber sales to ensure these standards are implemented. Report compliance findings annually. h. Design regeneration units with irregularly shaped boundaries where feasible, so that some uncut live trees project into the regeneration unit.
	14(2). Conserve Indiana bat habitat along intermittent and perennial	a. Use Indiana bat summer habitat as a riparian related value for

Activities	General Direction	Standards
	<p>streams. Conduct surveys in suitable forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable habitat forest types if timber management practices of harvest and regeneration or stand improvements are needed.</p>	<p>delineation of riparian areas (Management Area 18). Within the first 30 feet on each side of perennial streams and other permanent water bodies, no standing trees (green, dead, dying, or leaning) shall be removed or felled. Retain 60 percent canopy cover in the remainder of the riparian area. For crossings, apply the standards for riparian areas (Management Area 18).</p> <p>b. Maintain the existing contiguity of forest canopy along intermittent streams. No harvest within 15 feet of intermittent streams. Leave additional trees outside 15 feet as needed for maintaining canopy contiguity. For crossings, apply management standards for riparian areas (Management Area 18).</p>
	<p>14(3). Minimize the risk of incidental take for all management activities. Conduct surveys in suitable habitat forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable forest types for all</p>	<p>a. Protect all active roost trees.</p> <p>b. Retain suitable standing snags greater than 3” in diameter during personal-use firewood permits, unless marked for removal.</p> <p>c. Removal of standing snags between April 15 and October 15 that are habitat shall be evaluated</p>

Activities	General Direction	Standards
	management activities.	<p>by qualified personnel for Indiana bat occupancy using FWS protocols.</p> <p>d. Consult with FWS about any activities that involve modification of habitat or potential adverse disturbance between April 15 and October 15 within a 1.5 mile radius of known maternity sites.</p> <p>e. Consult with FWS for use of <i>B.t.</i> or other non-selective pesticides to control gypsy moth infestations or other forest pest insects. Reduction in non-target lepidopteran abundance will be considered when determining the size and configuration of spray blocks.</p> <p>f. Notify FWS of any dead, injured, or sick specimens.</p>
	14(4). Conserve Indiana bat habitat for all management activities. Conduct surveys in suitable habitat forest types using FWS protocols for the Indiana bat that show the species is not present, or implement the following standards in suitable habitat forest types.	Analyze the pre- and post-project conditions for activities impacting five or more acres of forest stands (this does not include linear projects), using an HSI approved by the FWS. For the FSW approved HSI, do not let any project or combination of projects decrease the HSI by more than the agreed upon amount.
	14(5). Continue forest plan monitoring efforts to	a. Survey biennially at sites where Indiana bats are

Activities	General Direction	Standards
	<p>determine use by Indiana bats.</p>	<p>present (document occurrences) following FWS protocols.</p> <ul style="list-style-type: none"> b. Consult with FWS if an Indiana bat hibernaculum is found. c. Characterize and quantify habitat at all sites where Indiana bats are documented. d. Report survey results to FWS within 6 months of completion. e. Report the amount of incidental take annually and within 6 months following the end of the previous year's activities.
	<p>14(6).Definitions.</p> <ul style="list-style-type: none"> a. Standing trees are those that are not root sprung. b. Practicable is defined as not intentionally removing. This term does not apply to activities where removal of trees must occur, such as roads, skid trails, cable lanes, landings, rights of way, and other similar activities. Future stand composition is also a consideration when defining what is practicable. c. Early stages of decay means tree still has branches and bark, and most of its full height. d. A snag can be marked for removal if it does not provide or is not expected to provide suitable Indiana bat roosting or 	

Activities	General Direction	Standards
	<p>maternity habitat.</p> <p>e. An intermittent stream has a continuous well defined channel that flows 30 to 90 percent of the time. It may not be flowing during a very dry year. Typically, the stream flows when the water table rises above the channel bottom.</p> <p>f. Exfoliating bark (separated from the cambium) is found on many older trees (such as white oaks and maples) as well as trees that may be in decline.</p>	
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	14(8). Buildings or other manmade structures with enclosed spaces should be inspected for evidence of bat use before reconstruction (i.e. re-roofing), demolition, or removal.	If reconstruction, demolition, or removal must occur while bats are present, adequate surveys (visual, acoustic, or mist-netting) must be conducted by a bat expert to insure that no federally listed species will be impacted.
	15. Continue Forest Plan monitoring efforts to determine use of the national forests by Indiana bats during hibernation, summer roosting/maternity and prehibernation seasons.	
	15(1). Work with FWS, universities, the North Carolina Wildlife Resources Commission, and local experts to locate	

Activities	General Direction	Standards
	and survey caves and mines that may contain Indiana bats.	
	15(2). Collaborate monitoring efforts with research to refine our understanding of the distribution and abundance of the Indiana bat on the national forests. Follow FWS recommendations for monitoring in the Biological Opinion.	
	16. Update the conservation objectives (Forest Plan, p A-3) after developing a conservation strategy for the recovery of Indiana bat. Use information from the Indiana bat recovery plan, the conservation recommendations outlined in the biological opinion, and monitoring information.	