

**BEFORE THE FOREST SUPERVISOR  
OF THE DANIEL BOONE NATIONAL FOREST  
UNITED STATES FOREST SERVICE**

In Re:

Predecisional Objection of the Environmental Assessment, Draft Decision Notice, and FONSI for the Pine Creek Forest Restoration Project, London Ranger District, Daniel Boone National Forest

**NOTICE OF OBJECTION**

**Pursuant to 36 CFR § 218**, Kentucky Heartwood is seeking predecisional administrative review by Forest Supervisor Dan Olsen of the Environmental Assessment, Draft Decision Notice, and Finding of No Significant Impact for the Pine Creek Forest Restoration Project on the London District of the Daniel Boone National Forest.

**The Objectors are:**

**Kentucky Heartwood, Inc.**, a forest advocacy group founded in 1992 and dedicated to the health and well-being of the public forests in the Commonwealth of Kentucky. Kentucky Heartwood submitted comments during Scoping and on the Draft Environmental Assessment.

**Christopher Morris**, a resident of Independence, Kentucky, and regular user of the Daniel Boone National Forest. Christopher Morris submitted comments on the Draft Environmental Assessment.

**The Kentucky Resources Council**, is a membership-based nonprofit organization founded in 1984 with a mission to protect our built and natural communities from pollution and environmental damage. Kentucky Resources Council submitted joint comments with Kentucky Heartwood on the Draft Environmental Assessment.

Respectfully submitted by:

Kentucky Heartwood (Lead Objector)

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## I. Introduction

The Pine Creek Forest Restoration Project (“Pine Creek project”) proposes a wide range of vegetation management activities across 45,700 acres of the Daniel Boone National Forest in Laurel, Rockcastle, and Pulaski Counties, Kentucky. As noted in comments submitted on the Draft Environmental Assessment (Draft EA), Kentucky Heartwood and Kentucky Resources Council appreciate and support a majority of the management actions that the U.S. Forest Service has proposed. We also appreciate the several modifications that have been made to the project thus far in order to address our concerns. This project represents the first time that Kentucky Heartwood has supported any commercial timber harvest activities on national forest lands in the organization’s 27-year history – specifically supporting commercial woodland treatments in the Pulaski County portion of the project area.

However, despite objectors’ support for many of the proposed actions, and the overall high quality of the NEPA analysis, we have identified a narrow range of issues and deficiencies that we assert must be adequately addressed before the project can be approved. We believe that each of these issues can be dealt with without any major changes to the overall project, while still allowing the Forest Service to meet the project’s stated Purpose and Need.

## II. Trail buffers & scenic integrity

There are substantive flaws in the Environmental Assessment (EA) with regards to scenic management, trail buffers, and the Sheltopee Trace National Recreation Trail (NRT). These flaws can be divided in to two main categories: 1) Conflicting statements in the EA regarding whether and how buffers will be implemented or managed, and 2) An arbitrary and incorrect approach to effects on scenic integrity, user experience, and the balance of forest uses with respect to the Sheltopee Trace NRT. Issues relating to the Sheltopee Trace NRT were raised in Kentucky Heartwood’s scoping comments (page 11), and Kentucky Heartwood and Kentucky Resources Council comments on the Draft EA (page 9).

The Sheltopee Trace was designated as a National Recreation Trail in 1979 pursuant to the National Trails System Act of 1968. The Daniel Boone National Forest website states that “The Sheltopee Trace National Recreation Trail is considered the ‘backbone’ of the forest’s trail system.”<sup>1</sup> Unfortunately, we have been unable to locate enacting language for the trail. According to Steve Barbour, Director of the Sheltopee Trace Association (STA), previous efforts to acquire the enacting language from the Daniel Boone National Forest were unsuccessful.

The EA makes contradictory statements regarding logging buffers around the Sheltopee Trace NRT and other trails. The EA states at several points that buffers will limit impacts to trails, but also explicitly states that buffers along the Sheltopee Trace NRT were “dismissed.” The Sheltopee Trace NRT, and the Poison Honey section in particular, represent the main trail sections potentially impacted by the Pine Creek project.

The EA states on page 10 that “buffering the trail of any tree cutting” along trails will aid the “preservation of scenic integrity.” See EA-10:

**Action 9.D: Modification-Added: Sheltopee Trace National Recreation Trail Re-Route and Maintenance:**

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<sup>1</sup> <https://www.fs.usda.gov/recarea/dbnf/recarea/?recid=70839> (accessed Nov. 12, 2019)

- **Buffer recreational trails and campgrounds:** Design criteria would be added to the implementation plan to avoid direct impacts to the Sheltoewe Trace NRT and developed recreation sites. This would include, but not be limited to, buffering the trail of any tree cutting to retain shade along the trail, preservation of scenic integrity, and reduce woody debris in the trail.

However, on page 20, the EA also states that the idea of trail buffers along the Sheltoewe Trace NRT was dismissed:

“Trail buffers in the Poison Honey and Falls City Road areas were considered but dismissed to support a variety of vegetation communities and treatments along these short lengths of the trail.”

The EA continues on the same page, however, to address concerns over impacts to the trail by stating that buffers “would be designated during the timber marking process.” Again, see EA-20:

“Where feasible, buffers would be designed during the timber marking process to prevent or reduce the number of trees cut along trails and near developed recreation sites, and to minimize ground and vegetation disturbance along trails (**Action 9.D**). These buffers would provide continued tree cover along the popular trail network in the Pine Creek IRMA but would also provide wildlife viewing and hunting opportunities for the public.”

And, again on page 20, the EA states:

“There would be short-term impacts to scenery in specific areas that are treated with certain prescriptions. However, effects would be negligible because:

- 3) Whenever possible, design criteria, especially buffers along the trails and rivers, would be woven into the treatment design to account for scenic values.”

Further, Appendix A, Pine Creek Forest Restoration Project, Design Criteria for Proposed Actions states:

13. Scenic buffers will be incorporated into specific stand prescriptions where feasible, especially along the Sheltoewe Trace National Recreation Trail, the Nathan McClure Trail and near developed recreation sites, to promote scenic diversity and allow for varied visual penetration into the surrounding habitats. Portions of some trails may not be buffered, but trails will be kept clear of logging debris.

The Forest Service cannot dismiss effects to trails, or user experience of those trails, by citing mitigation measures that are simultaneously being rejected.

The second deficiency is that the Forest Service has incorrectly, and we assert arbitrarily, addressed issues with regards to scenic integrity and effects on trail user experiences. As addressed on page 10 of the Kentucky Heartwood/Kentucky Resources Council comments on the Draft EA, the Multiple-Use Sustained Yield Act of 1960 directs the Forest Service to balance the various, and sometimes conflicting, uses of our national forest lands. The MUSY states in Section 3(a) that:

(a) "Multiple use" means: The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; ***that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.*** (Emphasis added)

In other words, not all uses are compatible in a given place and time. And when conflicts arise, the relative value of the resources must be weighed against each other, or otherwise reconciled, when considering a management action. In this case, we believe that the relative value of the scenic integrity of the Sheltoewe Trace NRT outweighs logging where these issues come in to conflict. We don't think that the Forest Service has approached this issue correctly.

The EA on page 20 states that the impacts to scenic integrity from logging prescriptions will have only "short-term impacts to scenery" that will be "negligible" because "Stands that have been cut would resume a natural appearance within 2-5 years of treatment." See EA-20:

"There would be short-term impacts to scenery in specific areas that are treated with certain prescriptions. However, effects would be negligible because:

- 1) Less than 2 percent of the IRMA would be treated in any one year, with the life of the project occurring over about 10 years;
- 2) Stands that have been cut would resume a natural appearance within 2-5 years of treatment;
- 3) Whenever possible, design criteria, especially buffers along the trails and rivers, would be woven into the treatment design to account for scenic values."

The most significant section of trail to be impacted by proposed timber harvest is the Poison Honey section of the Sheltoewe Trace NRT along Forest Road 4355. The current trail route follows FR 4255, and is proposed to be rerouted into the forest after timber harvest operations are completed. The forest stand that the trail passes along (and is proposed to be rerouted through) is currently proposed for a shelterwood harvest<sup>2</sup>. Regardless of arguments over environmental impacts or the relative merits management for early seral habitat, the public generally dislikes the appearance of even-aged timber harvests, like the proposed shelterwood cut along FR 4255. Accepting that

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<sup>2</sup> Shelterwood harvest as defined in the EA would have a target basal area of 10 to 20 ft<sup>2</sup> per acre, or about 7-20 trees per acre. A "typical" forest of the type here has a basal area around 90 to 120 ft<sup>2</sup> per acre.

aesthetics are largely subjective, we do not believe that it is a defensible assertion that “2-5 years” following logging the forest will “resume a natural appearance” that is acceptable to trail users. It’s a near certainty that most forest users will see those conditions as unsightly and undesirable. Even the surrounding forests which were harvested in the 1980s or 1990s are easily discernable by recreational users, and considered less attractive than mature, well-developed forests.

Fortunately, the Forest Service does have a process for evaluating user experiences and perspectives with regard to aesthetics for the purposes of decision making. Information is provided in FSM 2300 - RECREATION, WILDERNESS, AND RELATED RESOURCE MANAGEMENT CHAPTER 2380 - LANDSCAPE MANAGEMENT. These directives state:

#### **2382.4 - Applications to Project Management**

Refer to the Agriculture Handbook series on Landscape Management (FSM 2380.61) as guidance in project-level work to:

1. Plan, design, and construct utilities to reduce negative impacts to scenery associated with the utilities.
2. Analyze the impact of range management activities and determine methods to reduce negative impacts to associated scenery.
3. Integrate roads into the landscape with minimum adverse impact to scenery.
4. Determine how various silvicultural and landscape design treatments can be used to meet scenic integrity objectives and landscape character goals.
5. Understand how fire can be a useful tool to achieve desired scenic integrity objectives and landscape character goals.

FSM 2380.61 directs the Forest Service to “Refer to the following publications in the Department of Agriculture’s National Forest Landscape Management Series for technical guidance in managing landscape aesthetics and scenery.” A primary document cited is National Forest Landscape Management: Volume 2, Chapter 1: "Landscape Aesthetics: A Handbook for Scenery Management," Agriculture Handbook 701 (AH 701). This document goes in to extensive detail on how to assess scenic integrity and gather constituent information for informing decisions that may affect user experiences.

AH 701 explicitly acknowledges that timber harvest can “have major scenic effects” (AH 701 at 33) and negatively affect scenic integrity (AH 701 at 32).

8. Scenic integrity is important.

- Scenic integrity is defined as the degree of direct human-caused deviation in the landscape, such as road construction, timber harvesting, or activity debris. Indirect deviations, such as a landscape created by human suppression of the natural role of fire, are not included. (AH 701 at 32)

And:

14. Management activities vary in their intensity.

- Some national forest resource management activities, such as range improvements, at least have potential for adverse effects on scenery. Others, like some timber harvest methods, have major scenic effects. (AH 701 at 33)

AH 701 also provides substantial information regarding the importance of constituent desires and input. See AH 701 page 32:

10. Desires of constituents must be considered.

- Constituents demand protection and management of scenery in national forests. They have expectations, desires, preferences, behaviors, acceptable levels of quality, and values of landscape character and scenic integrity.

Chapter 3 of AH 701 is dedicated to the importance of, and suggested methodologies for, gathering Constituent Information. AH 701 states at 3-3:

“The importance of constituent information as a foundation for understanding and identifying valued landscape attributes, landscape character, and scenic integrity can not be over emphasized especially from a "cultural" landscape perspective. Constituent information is an essential ingredient in all phases of the Scenery Management System.”

And at 3-4:

“Content- some of the most useful information for scenery management concerns 1) how constituents use an area and 2) what visitors and other constituents feel, value, desire, prefer, and expect to encounter in terms of landscape character and scenic integrity. These latter concerns extend beyond those who actually visit the Forest to include how it and its scenic and other aesthetic attributes are interpreted by life in the area. Also, how are the aesthetic experiences interpreted by people living far away from the area who may be more concerned with the provision of scenery and other amenities as part of the mission of the National Forest System.”

And at 3-7:

***“Combining a constituent assessment for scenery management with other resource inventories should be done when ever possible.*** At a minimum, constituent assessments for scenery management and recreation management should be combined. This chapter on constituent information is written with a joint assessment for scenery and recreation management in mind.” (Emphasis added)

A reasonably detailed assessment of impacts to scenic integrity need not apply to all aspects of the Pine Creek project. Fortunately, AH 701 also provides guidance on this issue.

“Existing travelways and use areas are identified and classified in order to determine which existing observer positions to use in the landscape visibility analysis.” (AH 701 4-6)

Under the criteria in AH 701, the Sheltopee Trace NRT would properly be considered a “Primary Travelway and Use Area,” (See AH 701 at 4-8) and therefore a detailed assessment of impacts to scenic integrity is necessary. Similarly, the Ned Branch trail ought to be considered a Primary Travelway and Use Area with respect to shelterwood harvest proposed within 100 ft. trail. Other stands in the project area may warrant more detailed consideration for effects on scenic integrity

due to their relationship to well-used sites (e.g., the proposed shelterwood harvest on FR 119B/Lick Creek Road on the south approach to Pine Island Double Falls).

While AH 701 makes recommendations for how to gather Constituent Information, no specific methodology is prescribed. The Forest Service did, however, gather public input on the Pine Creek project overall. And of the 122 comments received by the Forest Service in response to the Draft EA for the project, our review found only one comment letter generally supportive of logging. The vast majority of public comments expressed disapproval of logging and associated environmental and visual impacts. These responses are consistent with statements about the impacts of logging on scenic integrity made in AH 701. Therefore, assertions made in the Pine Creek EA that impacts to scenic integrity from shelterwood harvesting along the Sheltoewe Trace NRT are “negligible” are not backed up by the record, and as such are arbitrary.

A relatively straightforward way to resolve the deficiencies in the analysis and the inherent conflicts of use in this aspect of the proposal would be to drop the proposed shelterwood logging along the Poison Honey section of the Sheltoewe Trace NRT. A reasonable secondary approach would be to convert the shelterwood prescription in this location to a Commercial woodland prescription with a relatively high basal area retention (close to 50 ft<sup>2</sup> per acre basal area).<sup>3</sup> The Forest Service already changed the prescription for the proposed harvest units west on the same ridge from a shelterwood to a Woodland and wooded grassland between scoping and publication of the Draft EA. A similar change for the proposed shelterwood harvest along the Ned Branch trail would present a viable solution in that location. The retention of more trees in the canopy, along with the proposed prescribed fire activities, could provide for a reasonable combination of active management with timber harvest and the retention (possibly even enhancement) of scenic integrity the Poison Honey section of the Sheltoewe Trace NRT, the Ned Branch trail, and other locations.

We strongly suggest that the Forest Service, if there is to be timber harvest in the Poison Honey section, work directly with the Sheltoewe Trace Association and Kentucky Heartwood in trail and harvest layout to limit negative impacts to scenic integrity.

### **III. Rare and sensitive species/Inadequacy of survey data**

We appreciate the detailed information provided in the Specialist’s Report for Rare or Uncommon Botanical Resources and NNIS. We also appreciate that the Forest Service has modified the Specialist’s Report to include species location data that we provided in our comments on the EA. While we were able to provide data for several sites, particularly for *Stewartia ovata*, we did not survey every site for every (or most) species of concern addressed in the Specialist’s Report.

Limiting potential negative impacts (while maximizing positive effects) to rare and sensitive species resulting from logging or other management (e.g., prescribed fire) is predicated on having design criteria that are based on site-specific information (i.e., surveys) about these species. The EA and Draft Decision Notice and Finding of No Significant Impact (Draft DN and FONSI) presuppose limited negative impacts to rare or sensitive species “Because design criteria will be written in to each stand prescription” (EA-23) and “Design criteria would be applied during implementation to protect sensitive plants and rare communities from treatment activities” (EA-27).

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<sup>3</sup> **Action 2: Woodland and wooded grassland shrubland communities** prescribes a basal area of 10-29 ft<sup>2</sup> for wooded grassland/shrubland communities (about 5-30 trees per acre) and 30-50 ft<sup>2</sup> for woodland (about 15-40 trees per acre).



However, it appears that qualified, site-specific surveys have still not been carried out by the Forest Service in each of the proposed timber harvest units. Without these surveys, there is no reasonable assurance that site-specific design criteria can be adequately incorporated in to each of proposed timber harvests. Absent other assurances, we maintain a well-reasoned skepticism that qualified surveys will occur prior to logging operations to help avoid unnecessary negative impacts. These issues were raised in the Kentucky Heartwood/Kentucky Resources Council comments on the Draft EA on page 7.

Illustrating our concern, we do not understand how large populations of *Stewartia ovata* were overlooked in several stands proposed for timber harvest. Presumably, these stands were assessed by Forest Service staff prior to, and during, the assessment phase of the Pine Creek proposal to determine adequacy of the proposed timber harvest treatments. Despite any assessments, Forest Service staff missed some fairly obvious and large populations of *Stewartia ovata*. This is understandable if the Forest Botanist, or other qualified botanists, were not tasked with surveying the sites.

The EA and Draft DN and FONSI also rely on the design criteria listed in Appendix A for addressing concerns over impacts to rare and sensitive species:

“Design criteria would be applied during implementation to protect sensitive plants and rare communities from treatment activities (see Appendix A).” (EA-27)

However, other than criteria to avoid impacts wetlands and glades, the design criteria in Appendix A rely on the availability of site-specific field identification of rare and sensitive plants to mitigate impacts. Absent such qualified field identification, the design criteria cannot adequately provide for the protective measures assumed in the EA and Draft DN and FONSI.

The Draft DN and FONIS states:

I am fully confident the selected measures will minimize adverse effects for the following reasons: a) these measures are practices we have used successfully in the past; b) Kentucky State Best Management Practices for commercial logging are extremely rigorous; c) the interdisciplinary team of resource specialists on the Daniel Boone National Forest have taken a very hard look at potential impacts and developed design criteria specifically to avoid adverse site-specific impacts, and d) my staff is highly trained and have the flexibility to mark and avoid any sensitive resources found in the field from impacts of the treatment planned for that area.

We agree that Daniel Boone National Forest staff are highly trained in their fields. But training in one field (e.g., silviculture, hydrology, etc.) does not confer expertise in another. Without a qualified botanist on-site to survey each harvest unit there is little assurance that rare and sensitive species will be appropriately incorporated into site-specific implementation plans.

Resolving the above deficiencies in the analysis is fairly straightforward. We recommend that the Forest Service incorporate into the design criteria an affirmative statement that each proposed harvest site will be assessed in the field by the Forest Botanist or other qualified botanist prior to, or as part of, the site-specific design and layout of any timber harvest activities. Such a measure would assure mitigation of negative impacts, as well as the maximizing beneficial effects, from any timber

harvest activities on rare and sensitive species, and meet the assumptions in the EA and Draft DN and FONSI.

#### **IV. Indiana and northern long-eared bat maternity colonies**

The 2004 Daniel Boone Forest Plan incorporates specific Objectives and Standards with regards to Indiana bat maternity colonies. Objective 1.1.A. states:

**Objective 1.1.A.** During project analysis and implementation, protect, maintain, or enhance habitat for bat species. Management activities should:

- a) Protect or enhance habitat for PETS and Conservation bat species, including significant hibernation and maternity caves/rockshelters.
- b) Maintain and protect roost trees used by PETS bat species as well as foraging/swarming habitat around significant hibernation, staging, and maternity sites.
- c) Protect, maintain, and enhance Indiana bat roosting, foraging, and maternity habitat.

The Forest Plan further incorporates a binding Standard, DB-WLF-8, which states:

**DB-WLF-8.** Tree cutting may not be conducted within 2.5 miles of any Indiana bat maternity colony from May 1 through August 15.

Forest Plan Standard DB-VEG-14 states:

**DB-VEG-14.** Do not apply triclopyr within 60 feet of known occupied gray, Virginia big-eared, or Indiana bat hibernacula or known maternity tree.

As addressed on page 5 of the Kentucky Heartwood/Kentucky Resources Council comments on the Draft EA, location and presence data for maternity colonies in the Daniel Boone National Forest is outdated and insufficient.

According to Biological Assessment, the determination that there are no maternity colonies for Indiana or northern long-eared bats in the project area is based on information in the 1994 Cooperative Inventory of Endangered, Threatened, Sensitive and Rare Species for the London Ranger District and The Kentucky State Nature Preserves Commission Heritage Database “as of February 2004” (See BA at 25 and Kentucky Heartwood/Kentucky Resources Council comments on page 5).

The U.S. Fish and Wildlife Service (USFWS) commented on the paucity of maternity colony data in the Daniel Boone National Forest in an April 11, 2019 letter to the Forest Service (commenting on the recent Forest Plan Amendment Draft Environmental Assessment), stating:

Little is known about the summer usage of the DBNF by Indiana bat. ***Limited survey efforts from over a decade ago have provided the location of some maternity colonies and roost trees.*** However, the DBNF has stated that some portion of the large number of bats that spend the winter in the large and medium-sized hibernacula on the DBNF are thought to remain in these areas throughout the summer (USFS 2003). Based on 2018 and preliminary 2019 winter bat count data, approximately 5,600 Indiana bats are estimated to hibernate on the DBNF during the winter (USFWS, internal data). In addition, the DBNF also indicated that Indiana bats from nearby hibernacula on Pine Mountain, Carter Caves, and in Campbell and Fentress Counties in Tennessee are thought to occur on the DBNF (USFS 2003). ***Based on this information, it appears likely that there are other Indiana bat and northern long-eared bat maternity colonies present that have not been documented.*** This habitat and the individual bats occupying these areas could be adversely affected by future forest management actions if there are no protective standards proposed for potential summer habitat for either species. ***Therefore, we recommend developing conservation measures in the BA that would avoid and minimize adverse effects. Several such measures were discussed during the November 2017 science meeting, including identifying and avoiding potential primary roost trees during tree removal activities and limiting the amount of tree removal that can occur during the occupied timeframe, especially during June and July when non-volant pups are present.*** (emphasis added)

Despite requesting in our comments on the Draft EA that surveys for maternity colonies be incorporated into the Pine Creek project design, there is no evidence that such surveys were considered. Appendix A, under Design Criteria for Wildlife, states:

46. Continue to survey for presence of Indiana bat hibernacula at prior to and during implementation.

No provision is made for surveying for Indiana or northern long-eared bat maternity colonies or roost trees in the Design Criteria or elsewhere in the available record. This is especially troubling given the above USFWS recommendations that primary roost trees be identified and avoided “during tree removal activities.”

Potential impacts to Indiana bat maternity colonies is largely ignored in the Biological Assessment (BA) for the Pine Creek project. Instead, the BA states that the implementation of the Pine Creek project follows the Forest Plan, Forest Plan Biological Assessment, and the 2007 Biological Opinion (FWS #07-0580). The determination of “Likely to adversely affect” for Indiana bat in the BA is considered permissible because of USFWS allowances for incidental take that are based on adherence to the Forest Plan. The Pine Creek BA states, regarding timber harvest, that “This green tree harvest follows all applicable forest plan standards.”

However, as stated above, Forest Plan Standard **DB-WLF-8** states that “Tree cutting may not be conducted within 2.5 miles of any Indiana bat maternity colony from May 1 through August 15.” If the Forest Service refuses to look for maternity colonies or other roost trees in proposed harvest areas, and instead relies on objectively incomplete and outdated survey data, then Forest Plan Standard DB-WLF-8 is not being followed.

In order to reconcile this issue, the Forest Service needs to incorporate surveys for Indiana and northern long-eared bat maternity colonies and roost trees into project design and implementation prior to any timber harvest occurring.

Objectors hereby request the opportunity for a meeting per 36 CFR § 218.11(a) to discuss this objection and options for resolution.

The following file is electronically submitted as an attachment:

- ☐ Landscape Aesthetics: A Handbook for Scenery Management (1995), USDA Forest Service, Agriculture Handbook 701