

## Proposed Decision Memo

### Prescribed Burning of Cave Hill, Dennison Hollow, and Stoneface Research Natural Areas and Simpson Township Barrens Ecological Area and Adjacent Forest Communities

USDA Forest Service  
Hidden Springs Ranger District, Shawnee National Forest  
Saline County, Illinois  
T9S, R7E, Sec 34 and 35  
T10S, R7E, Sec 2, 3, 9, 10, 15, 16, 21, and 22  
and  
Johnson County, Illinois  
T12S, R4E, Sec 10, 11, 14, and 15

### Proposed Action

The proposed action is to prescribe burn approximately 3602 acres. The burn is divided into two areas; one burn is about 3108 acres, located in the Cave Hill, Stoneface, and Dennison Hollow Research Natural Area's vicinity and the other is about 494 acres, located in the Simpson Township Barrens Ecological Area vicinity (see attached maps for project locations). The proposed action also includes the cutting of trees and shrubs to release any new discoveries of Meads Milkweed plants where they occur. This project is designed to complement the previously approved Prescribed Burning of Mead's Milkweed (*Asclepias meadii*) Habitat Decision (Project Record) by expanding the vicinity into a landscape-scale burn. The proposed action will include associated fire lines as needed to contain the prescribed burn. Fire line construction will avoid all known heritage resource sites. Roads, trails, creeks, and other existing barriers will be utilized as firebreaks when possible.

The purpose of the proposed action is to increase sunlight to the barren and glade plant communities, potentially undiscovered populations or individual plants of the shade-intolerant Mead's Milkweed, a federally listed plant species, and reduce the understory component of shade-tolerant tree species (maples, elms and others). The project will also provide for plant and animal community diversity by encouraging the regeneration of oak-hickory forest communities and associated herbaceous and shrub species adjacent to the barren communities. Oaks do not regenerate well without adequate sunlight and will decline without the proper growing conditions. Without active management, native plant species of the barrens and woodland communities at these sites will be suppressed and become out-competed by more aggressive shade-tolerant species.<sup>1</sup>

The four burn units from the Prescribed Burning of Mead's Milkweed (*Asclepias meadii*) Habitat Decision are not part of this decision, although cumulative effects have been considered in determining the significance of the proposed project's effects.

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<sup>1</sup> For more information on the use of prescribed burn for listed species, glade restoration, timber stand (oak-hickory) improvement, see Forest Plan Record of Decision, pp 7, 11-13, 16, 17, 18, 28-29, 32, 33-34 (March 2006).

The prescribed burn will also include all pine stands within the burn-unit boundary. Prescribed burning will help reduce fuels in the area of the burns. All significant heritage resources will be protected. No burning will be conducted between May 1 and September 1 and no mechanical felling of standing dead trees will be done from April 1 to November 15 on the burn units in order to mitigate any potential adverse effects on the Indiana Bat. Areas containing known Meads Milkweed will not be burned between April 1 and October 30. Mitigation of potential effects on wildlife, plants, and water and air quality has been incorporated into this proposal.

## **Decision**

It is my decision to implement this action as proposed.

## **Public Involvement**

Public participation was a key part of the development of this prescribed burning project. Scoping is required for proposed actions including categorical exclusions, FSH 1909.15, 30.3(3). This proposal was listed in *The Shawnee Quarterly* (July 2007 and October 2007). A legal notice was published in *The Southern Illinoisan* on November 11, 2007 and the Proposed Decision Memo was sent for a 30-day comment period to individuals expressing interest. The scoping letter and proposed decision memo were also available on the Forest website (<http://www.fs.fed.us/r9/forests/shawnee/>). The comments received were considered in the decision-making process.

## **Monitoring**

The effects of this project on forest resources will be closely monitored (*See also* Forest Plan, Record of Decision, p 18). Monitoring is part of the burning plan for this project.

## **Mitigation**

The environmental effects of this project have been considered and documented in the project record. The results and effects of past similar prescribed burns have been taken into account. Based on field work and the best available science, mitigation has been developed to reduce and avoid the already minimal environmental effects. Mitigation is part of the burning plan for this project.

## **Other Findings:**

### National Forest Management Act

The proposed action is consistent with Standards and Guidelines of the 2006 Shawnee National Forest Land and Resource Management Plan. The proposed action is consistent the U.S. Fish and Wildlife Service's Meads Milkweed (*Asclepias meadii*) Recovery Plan, which states, "Perform prescribed burns on a regular basis in Mead's milkweed habitat" and the establishment records for each of the research natural areas, which state "Prescribed burning and hand removal of trees and shrubs are permitted..."

The Forest Plan allows for the use of prescribed fire for oak regeneration, wildlife habitat management, and maintenance of fire-dependent plant communities. In reaching my decision, I have carefully considered the programmatic environmental analysis set forth in the Final Environmental Impact Statement (FEIS) for the Forest Plan, as well as the programmatic Plan goals and objectives and discussion in the Record of Decision of prescribed burning for

maintaining and restoring oak-hickory forests and other natural communities (see footnote 1 above). This decision is intended to facilitate progress towards the desired future condition described in the Plan.

The Forest has successfully conducted similar burns with favorable results. I have taken into consideration recent past prescribed burns, as well as the scientific information and public views (both supporting and opposing) presented at the Forest's prescribed burning workshop in January, 2007. I have given careful attention in the development of this project to the protection of soils, water and wildlife. Forest personnel conducted field work to support the analysis of effects. I also consulted with resource experts and considered the voluminous scientific studies in the record concerning both the effects of burning and its efficacy in restoring and maintaining native plant communities and regenerating oak-hickory forest. I have carefully weighed the scientific evidence available, including opposing viewpoints regarding oak-hickory silviculture submitted during the comment period. A substantial body of published, peer-reviewed, scientific evidence supports the use of fire in natural community restoration and maintenance. The scientific evidence concerning oak-hickory silviculture was reviewed in the development of this project. Thus, this decision is based upon the best available scientific information.

#### National Environmental Policy Act

The Council on Environmental Quality NEPA regulations at 40 CFR 1507.3 provide that agencies may, after notice and comment, adopt categories of actions that typically do not have a significant effect on the human environment and therefore do not require preparation of an environmental assessment or an environmental impact statement. 40 CFR 1500.4(p), 1501.4(a)(2), 1508.4. A categorical exclusion is not an exemption from NEPA, but rather a method of complying with NEPA. Categorical exclusions are an administrative tool to promote efficiency in the NEPA review process by reducing excessive paperwork for those categories of actions that, based upon extensive practice and experience, have been determined not to have (individually or cumulatively) significant environmental effects. Forest Service categorical exclusions are set forth in Forest Service Handbook 1909.15, Chapter 30.

This action is categorically excluded from documentation in an environmental impact statement or an environmental assessment. Forest Service Handbook (FSH) 1909.15, WO Amendment 1909.15-2004-3, effective 7/6/2004, provides direction on compliance with the National Environmental Policy Act. Section 31.2 of this amendment identifies categories of routine proposed actions for which documentation in an environmental impact statement or environmental assessment may be excluded, but a project or case file is required and the decision to proceed must be documented in a Decision Memo. Section 31.2, category 6 involves timber stand and wildlife habitat improvement activities.<sup>2</sup>

For many years the Department of the Interior and the USDA Forest Service have conducted fuels treatments (prescribed burning) for the purpose of timber stand improvement and forest health. The environmental effects of prescribed burning projects have been examined and found to be non-significant either individually or cumulatively. Over 2,500 projects with burning, somewhat similar to that proposed here were reviewed by the agencies. In addition, over 150 peer-reviewed scientific publications concerning prescribed burns were analyzed. Based on the

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<sup>2</sup> 6. Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicides or do not require more than one mile of low standard road construction (Service level D, FSH 7709.56). Examples include, but are not limited to: \* \* \* d. Prescribed burning to reduce natural fuel build-up and improve plant vigor. FSH 1909.15, 31.2, #6

review of past projects and scientific literature, the agencies concluded that prescribed burning maintains forest health without significant adverse environmental effects. The silvicultural benefits of prescribed burning are well-documented in scientific literature and confirmed by years of professional experience. The synthesis of the literature concerning prescribed burning found that when conducted with proper safeguards, prescribed burning has a net beneficial effect on the environment by protecting and sustaining a desirable vegetation structure, function and composition improving wildlife habitat. The Forest Service has successfully developed and implemented a number of categorical exclusions involving the use of prescribed burning. The environmental effects of prescribed burning like that involved in this project are well known and have been found to be non-significant.

I have examined the effects of this project and the previously approved Prescribed Burning of Mead's Milkweed Habitat Decision and determined that it will not (individually or cumulatively) have significant environmental effects.

This prescribe burn project will improve growing conditions for native plant communities. Monitoring and past project implementation on the Forest indicates that this treatment will successfully accomplish the native plant community restoration and maintenance purpose of the project. Section 31.2, category 6 does not contain any acreage limitations. The Forest has designed the scope and size of this project based upon past projects on the Forest to ensure that the action will be effective in accomplishing the purpose of the project and to limit potential environmental effects. I was informed by and took into account in reaching this decision the acreage limits found in other categorical exclusions, *e.g.* 4500 acre limit in FSH 1909.15, Section 31.2(10), and the determination of non-significance associated with those categories.

Wildlife habitat improvement is another aspect of Section 31.2, category 6. The prescribe burn project will improve wildlife habitat by facilitating regeneration of oak-hickory forest. The benefits of oak-hickory forest concerning wildlife habitat, hard mast, and wildlife community diversity are well-documented in published scientific literature in the record. The oak-hickory forest normally produces an annual crop of acorns and other nuts that are a primary fall and winter food for species like the blue jay, red-headed woodpecker, wood duck, raccoon, turkey, and other species. Moreover, oak-hickory forest has an important role with regard to providing plant and animal community diversity in a multiple use context. In reaching this decision, I considered the Forest-wide species viability evaluation and wildlife effects analysis in the FEIS developed for the Plan. This project decision is based upon the best available scientific information concerning plant communities, wildlife populations and habitat. This project will improve wildlife habitat and animal community diversity by regenerating oak-hickory forest.

I have given much deliberation to the size, scope, and location of this action. One of the examples found in Section 31.2, category 6 explicitly includes prescribed burning to reduce fuel and improve plant vigor. The prescribe burn project falls within Category 6, matching closely with an example listed in the Forest Service NEPA procedures. No herbicides or road construction are involved in this project. No logging or commercial harvest of timber is involved. The prescribe burn project involves timber stand and wildlife habitat improvement and fuel reduction that will affect a very small percentage of the total Forest area. The prescribe burn project easily fits into the contours of Category 6.

Environmental analysis of this specific action indicated that there are no extraordinary circumstances related to the proposed action that might warrant further analysis and documentation in an Environmental Assessment or Environmental Impact Statement, *see* Section 30.3. Several points (documented further in the record) support this finding. Site specific analysis supported by field review and monitoring has determined that this project is not likely to affect threatened or endangered species, designated critical habitat, species proposed for Federal listing or proposed critical habitat, Forest Service sensitive species, floodplains, wetlands or municipal watersheds. No congressionally designated areas, such as wilderness, wilderness study areas, national recreation areas, inventoried roadless areas, research natural areas, American Indian and Alaska Native religious or cultural sites, or archaeological sites or historic properties will be adversely affected by this decision. I have taken into account the recent amendment of Forest Service NEPA procedures and the important direction with regard to extraordinary circumstances (71 Fed. Reg. 75481, 75489). The mere presence of one or more of the listed resource conditions (related to extraordinary circumstances) does not preclude the use of a categorical exclusion. I have considered whether a cause and effect relationship exists between the action and effects, and if such a relationship exists, the degree of the potential effect on these resource conditions. *Id.* Based on the thorough analysis documented in the record, I find there are no extraordinary circumstances requiring further analysis.

I have reviewed the site specific analyses for wildlife, plants, soil, water, and air quality in the record and find that while there are potential effects, they can be successfully mitigated and will not be significant effects. The project will have a beneficial effect on timber stand structure and composition, wildlife populations associated with oak-hickory forest, and plant and animal community diversity. I have considered public comment, field data, scientific literature, and the effects from other similar projects. The record supports this finding that the environmental effects from the project will not be significant.

### **Administrative Appeal**

As a result of the court's decision in Earth Island Institute v. Ruthenbeck, 03-6386 (E.D. Cal. July 2, 2005), the decisions for several categorical exclusions, including prescribed burning, are subject to notice, comment and administrative appeal. This decision is therefore subject to 36 CFR 215.

An administrative appeal may be filed by those who have met the requirements for standing to file an appeal. A written notice of appeal must be submitted within 45 calendar days after this notice of decision is published in *The Southern Illinoisan*. However, when the 45-day filing period would end on a Saturday, Sunday, or federal holiday the filing time is extended to the end of the next federal working day (36 CFR 215.15). The date of the publication of this notice is the only means for calculating the date by which appeals must be received. Do not rely upon any other source for this information. The written notice of appeal must be sent to: Attn: Appeals Deciding Officer, Allen Nicholas, C/O USDA Forest Service, Eastern Regional Office, 626 East Wisconsin Avenue, Suite 700, Milwaukee, WI 53202-4616. The notice of appeal may alternatively be faxed to: 414-944-3963, Attn: Appeals Deciding Officer, Allen Nicholas, USDA Forest Service, Eastern Regional Office. Those wishing to submit appeals by e-mail may do so at: [appeals-eastern-shawnee@fs.fed.us](mailto:appeals-eastern-shawnee@fs.fed.us). Appeals must meet the content requirements of 36 CFR 215.14 and will only be accepted from those that have commented or otherwise expressed interest in this project during the 30-day comment period. Hand-delivered appeals

may be submitted to the Eastern Regional Office, 626 East Wisconsin Avenue, Suite 700, Milwaukee, WI, between 7:30 AM and 4:00 PM CT Monday through Friday, except on federal holidays. Acceptable formats for electronic comments are text or html email, Adobe portable document format and formats viewable in Microsoft Office applications.

Additional information regarding this action can be obtained from: Elizabeth Shimp, 602 North 1<sup>st</sup> Street, Vienna, Illinois 62995, phone 618-658-2111, e-mail [eshimp@fs.fed.us](mailto:eshimp@fs.fed.us) or the Shawnee National Forest Website, [www.fs.fed.us/r9/forests/shawnee](http://www.fs.fed.us/r9/forests/shawnee). If no administrative appeal is received, implementation of this decision may not occur for five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 business days following the date of appeal disposition, 36 CFR 215.9.

Records of the project file are available for public review at the Hidden Springs Ranger District.

Date:

JEFF SEEFELDT  
District Ranger  
Hidden Springs Ranger District  
Shawnee National Forest

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