



United States  
Department of  
Agriculture

Forest Service



Mark Twain  
National Forest,  
Region 9



April 2004

# DECISION MEMO

## Jim and Guthrie Bald Prescribed Fire

Project Number: 10408  
Ava/Cassville/Willow Springs Ranger District  
Mark Twain National Forest  
Ozark and Taney County, Missouri



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## **I. DECISION**

### **A. Description of Decision**

As the deciding official on the Ava/Cassville/Willow Springs Ranger District, it is my decision to implement the Jim Bald (75 acres) and Guthrie Bald (260 acres) Prescribed Fire projects totaling 335 acres every 3 to 5 years. The project area is located in T. 24 N., R. 17 W., Sections 16, 17 and 22, Taney County, Missouri (refer to attached map). In addition to the prescribed fire activities, other connected actions will include; 1) fire line construction and maintenance; 2) pre-burning to protect cultural resource sites and enhance fire-fighter safety. Mitigation measures and monitoring procedures described in Appendix B will be completed prior, during and after the implementation of this project.

### **B. Purpose of the Decision**

The 2001 National Fire Plan laid the foundation for a long-term program to reduce fire risk and restore healthy, fire-adapted ecosystems on the nation's forests and grasslands. One of the guiding principals of the National Fire Plan is to "restore healthy, diverse and resilient ecological systems to minimize uncharacteristically severe fires on a priority watershed basis through long-term restoration." This principal is also emphasized in the Presidents 2002 "Healthy Forest Initiative."

The Mark Twain National Forest has been actively implementing principals of restoring fire adaptive ecosystems for the past twenty-years. The Ava/Cassville/Willow Springs Ranger District has previously prescribed burned Jim Bald in 1987 and 1992 and Guthrie Bald in 1985 and 1993. In addition, encroaching eastern red cedar was previously mechanically removed from the project area. The objectives to the prescribed fires and cedar removal were to restore and maintain specialized glade and savanna habitats. These habitats evolved and developed with fire as a natural or man-caused disturbance. Before 1870, fire frequency in the Hercules glade complex of the Ava unit was approximately one fire every 3.2 years, but fire frequency after 1870 decreased to one fire every 22 years (Guyette and McGinnes 1982). This change in fire frequency is believed to be a result of shifts in cultural land-use practices. As a result, these habitats become denser due to an increase in woody plant species, in particular, eastern red cedar. Research estimates that openness in glade habitats decreased by 34% between 1938 and 1975 (Kimmel and Probasco 1980, Amelon 1991). The effects of reduced fire frequencies, the resulting encroachment of woody species decreases the quality, and quantity of native grasses, forbs and sedges, change the species composition and decrease the diversity of the native plant communities. The Mark Twain Land and Resource Management Plan (Forest Plan) outlines the management direction for specialized habitats such as glades (Forest Plan, page IV-56). The purpose and objective of this project is to continue to maintain open glades and the diversity of these native plant communities while enhancing wildlife habitats and reducing hazardous fuels.

When these open glades become dominated by eastern red cedar, often referred to as "cedar glades", the chances of catastrophic wildfire increase dramatically. The fire regime condition class (FRCC) is currently in condition class 2. FRCC is a classification of the amount of departure from the natural regime. FRCC 2 is defined as areas where the fire regimes have been moderately altered from their natural range. Risk of losing key ecosystem components is moderate. Fire frequencies have departed from natural frequencies by one or more return intervals. This result in moderate changes to one or more of the following: fire size, intensity and severity, and landscape patterns. Vegetation and fuel attributes have been moderately altered from their natural range. If fire is not used as a management tool to maintain FRCC 1 or 2 these glade/savanna habitats would eventually move into FRCC 3. This would result in the eventual loss of key ecosystem components such as decline in species richness, composition, and increases in non-native invasive species.

## II. REASONS FOR CATEGORICALLY EXCLUDING THE DECISION

I have concluded that this decision may be categorically excluded from documentation in an environmental impact statement or environmental assessment as it is within one of the categories identified by the U. S. Department of Agriculture in 7 CFR part 1b, and that the degree of the potential effects of proposed actions on resources conditions listed Section II, Items 1 through 7 does not constitute extraordinary circumstances. This decision will not result in a significant environmental effect.

### A. Category of Exclusion

The project is within FSH 1909.15, Category 31.2 (6)(d), “Wildlife habitat improvement activities which do not include the use of herbicide or do not require more than one mile of low standard road...Prescribe burning to reduce natural fuel build-up and improve plant vigor.”

### B. Relationship to Extraordinary Circumstances

#### 1. Threatened and Endangered Species or Their Critical Habitat

The Endangered Species Act requires that federal activities do not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species’ designated critical habitat. As required by this Act, potential effects of this decision on listed species have been analyzed and documented in the *Biological Evaluation for the Jim Bald, Guthrie Bald and McClurg Glade Prescribe Burn Project* (Project File, Document D1). The activities proposed will comply with reasonable and prudent measures (RPM’s) and terms and conditions (TC’s) of the June 23, 1999, Biological Opinion by the U.S. Fish and Wildlife Service (FWS). The proposed action will have no additional effects outside those evaluated in the programmatic Biological Assessment and Biological Opinion for Indiana bat, gray bat, bald eagle, or Mead’s milkweed. A determination of “May affect – Not likely to adversely affect” was made for Bald eagle, Indiana bat and Graybat. Formal consultation with the U.S. Fish and Wildlife Service was conducted for this project which concurred with the effects determination of the site-specific Biological Evaluation (Project File, Document D5)

#### 2. Floodplains, Wetlands, or Municipal Watersheds

Floodplains: Executive Order 11988 requires avoiding adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as, “. . . the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any one year.” Floodplains, consisting of those valley bottom areas, which are typically inundated by storm floodwaters, are located along the low gradient stream reaches. This decision will not result in significant negative impacts to floodplains as disclosed in the project file (Project File, Document D1).

Wetlands: Executive Order 11990 directs us to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, “. . . areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or will support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. No significant changes in soil erosion, stream flow regimes or ground-water tables will occur (Project File, Document D1).

Municipal Watersheds: Municipal watersheds are designated by Congress, and managed under multiple use prescriptions in forest plans. There is no congressionally designated municipal watershed on the Forest. This decision will not affect municipal watersheds.

### 3. Congressionally Designated Areas

Wilderness: This decision will not affect the Hercules, Piney Creek or Devils Backbone Wildernesses.

Wilderness Study Areas: There are no Wilderness Study Areas on the Forest (Forest Plan FEIS, p. III-23). This decision will not affect Wilderness Study Areas.

National Recreation Areas: There are no National Recreation Areas on the Forest. This decision will not affect National Recreation Areas.

### 4. Inventoried Roadless Areas

This decision will not affect inventoried roadless areas on the Mark Twain National Forest (MTNF).

### 5. Research Natural Areas

There are no Research Natural Areas on the Forest, (Forest Plan FEIS, pp. III-25, 26.) This decision will not affect Research Natural Areas.

### 6. Native American Religious or Cultural Sites, Archaeological Sites, or Historic Properties or Areas

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register. Section 106 of the National Historic Preservation Act also requires federal agencies to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered in federal lands. It affords lawful protection of archaeological resources and sites that are on public and Indian lands. The Native American Graves Protection and Repatriation Act covers the discovery and protection of Native American human remains and objects that are excavated or discovered in federal lands. It encourages avoidance of archaeological sites that contain burials or portions of sites that contain graves through "in situ" preservation, but may encompass other actions to preserve these remains and items. This decision complies with the cited Acts. A cultural resource survey has been completed for this project (Project File, Document D3), and was determined that there will be no affect on historical properties. The State Historical Preservation Office (SHPO) concurred with this finding.

## III. **PUBLIC INVOLVEMENT**

The public involvement phase of this project was completed in accordance with FSH 1909.15 and 40 CFR 1501.7. A scoping letter was sent to 214 interested parties and agencies on the Ava/Cassville/Willow Springs Ranger District Mailing list January 20, 2003. The District received 3 responses. No significant issues or extraordinary circumstances were identified as a result of public involvement.

## IV. **FINDINGS RELATED TO OTHER LAWS AND REGULATIONS**

This decision will comply with all applicable laws and regulations. I have summarized some below:

Forest Plan Consistency (National Forest Management Act) - This Act requires the development of long-range land and resource management plans. The Mark Twain Forest Plan was approved on June 23, 1986, as required by this Act. The plan provides for guidance for all natural resource management activities on the Forest. The Act requires that all projects and activities be consistent with the Forest Plan. The Forest Plan has been reviewed in consideration of this project. This decision is responsive to guiding direction contained in the Plan, as summarized in Section I of this document. The Forest Plan identifies a number of multiple-use

and resource management goals that are achieved by implementing the plan. The Forest Plan Fire Management Goals include:

- Identify a cost-efficient response to fire prevention and suppression based on objectives for the management area and the values that are at risk.
- Implement prescribed fire as a tool to meet resource management objectives.

As part of the direction for fire management, the Forest Plan states, "... fuels management will be planned based on an analysis of probable fire location, expected fire intensities, potential net resource value change, and risk to health and safety, and will be addressed in the development of management area action plans." This project is tiered to the Forest Plan and will contribute to accomplishment of the Desired Future Conditions found on pages IV-115 and IV-125 to provide for a natural appearing mosaic of stands, emphasizing; 1) wildlife habitat diversity, and 2) provide for production of other resources. This project will also protect heritage resource sites as found on page IV-30 and ensure continued viable habitat for sensitive species as found on page IV-50.

This project is responsive to the Forest Plan Goal (page IV-2) to "Provide for wildlife species requiring specialized habitat including those recognized by both Federal and State authorities as being threatened, endangered, rare, or sensitive."

Vegetation Manipulation (National Forest Management Act) – Proposed actions often carry out management prescriptions selected and scheduled during land and resource management plan development. This decision is consistent with the requirements for management prescriptions. The regulations found at 36 CFR 219.27 require that "Management prescriptions that involve vegetative manipulation of tree cover for any purpose shall" comply with the following requirements:

*Be best suited to the goals in the Forest Plan.* The applicable goals are stated in Section I of this document. This decision is responsive to those goals and is best suited to meet those goals.

*Be selected to provide the desired effects on water quality and quantity, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation users, aesthetic values, and other resource yields.* The decision, including adherence to applicable Plan Standards and Guidelines, is designed to provide the desired effects of management practices on the resource values. This decision is consistent with the Plan and provides the desired effect on the above resources (Project File, Document B1).

Endangered Species Act – See Section II, Item B1 of this document (Project File, Document D1).

Sensitive Species (Forest Service Manual 2670) - This Manual direction requires analysis of potential impacts to sensitive species, those species for which population viability is a concern. On February 29, 2000, the Regional Forester approved the sensitive species list. This decision will have "no impact" on sensitive species (Project File, Document B1).

Clean Water Act - This Act is intended to restore and maintain the integrity of waters. The Forest Service complies with this Act with Best Management Practices. This decision incorporates Best Management Practices to ensure protection of soil and water resources, in compliance with this Act (Project File, Document B1).

Wetlands (Executive Order 11990) – See Section II, Item B2 of this document.

Floodplains (Executive Order 11988) – See Section II, Item B2 of this document.

Clean Air Act – Under this Act, areas of the country were designated as Class I, II, or III airsheds for Prevention of Significant Deterioration purposes. Class I areas generally include national parks and

wilderness areas. Class I provides the most protection to pristine lands by severely limiting the amount of additional human-caused air pollution that can be added to these areas. Hercules Glade Wilderness, 11 miles southeast of one project, is the only Class I airshed on the Forest. The remainder of the Forest is classified as a Class II airshed. No areas on the Forest have been designated as Class III. This project will not affect air quality.

Federal Cave Resources Protection Act –The intent of this Act is to secure, protect, preserve, and maintain significant caves, to the extent practical. No known cave resources will be affected by this decision.

National Historic Preservation Act - See Section II, Item B6 of this document.

Archaeological Resources Protection Act - See Section II, Item B6 of this document.

Native American Graves Protection and Repatriation Act - See Section II, Item B6 of this document.

American Indian Religious Freedom Act – This Act protects American Indians’ inherent right of the freedom to believe, express, and exercise their traditional religions. The federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes reserved rights are protected. No tribal concerns were identified for this project.

Environmental Justice (Executive Order 12898) - This Order requires consideration of whether projects would disproportionately impact minority or low-income populations. This decision complies with this Act. Public involvement occurred for this project, the results of which I have considered in this decision-making. Public involvement did not identify any adversely impacted local minority or low-income populations. This decision is not expected to adversely impact minority or low-income populations.

National Environmental Policy Act - This Act requires public involvement and consideration of potential environmental effects. The entirety of documentation for this decision supports compliance with this Act.

**V. ADMINISTRATIVE REVIEW OR APPEAL**

This decision is not subject to appeal pursuant to 36 CFR 215.12(f).

**VI. IMPLEMENTATION DATE**

This project can begin after this Decision Memo has been signed.

**VII. CONTACT PERSON**

Further information about this decision can be obtained from Brian Davidson, NEPA Coordinator or Jenny Farenbaugh, District Ranger at the Ava/Cassville/Willow Springs, Ranger District: P.O. Box 188, Ava, Missouri 65608; (417) 683-4428; fax (417) 683-5722.

**VIII. SIGNATURE AND DATE**

/s/ Jenny Farenbaugh

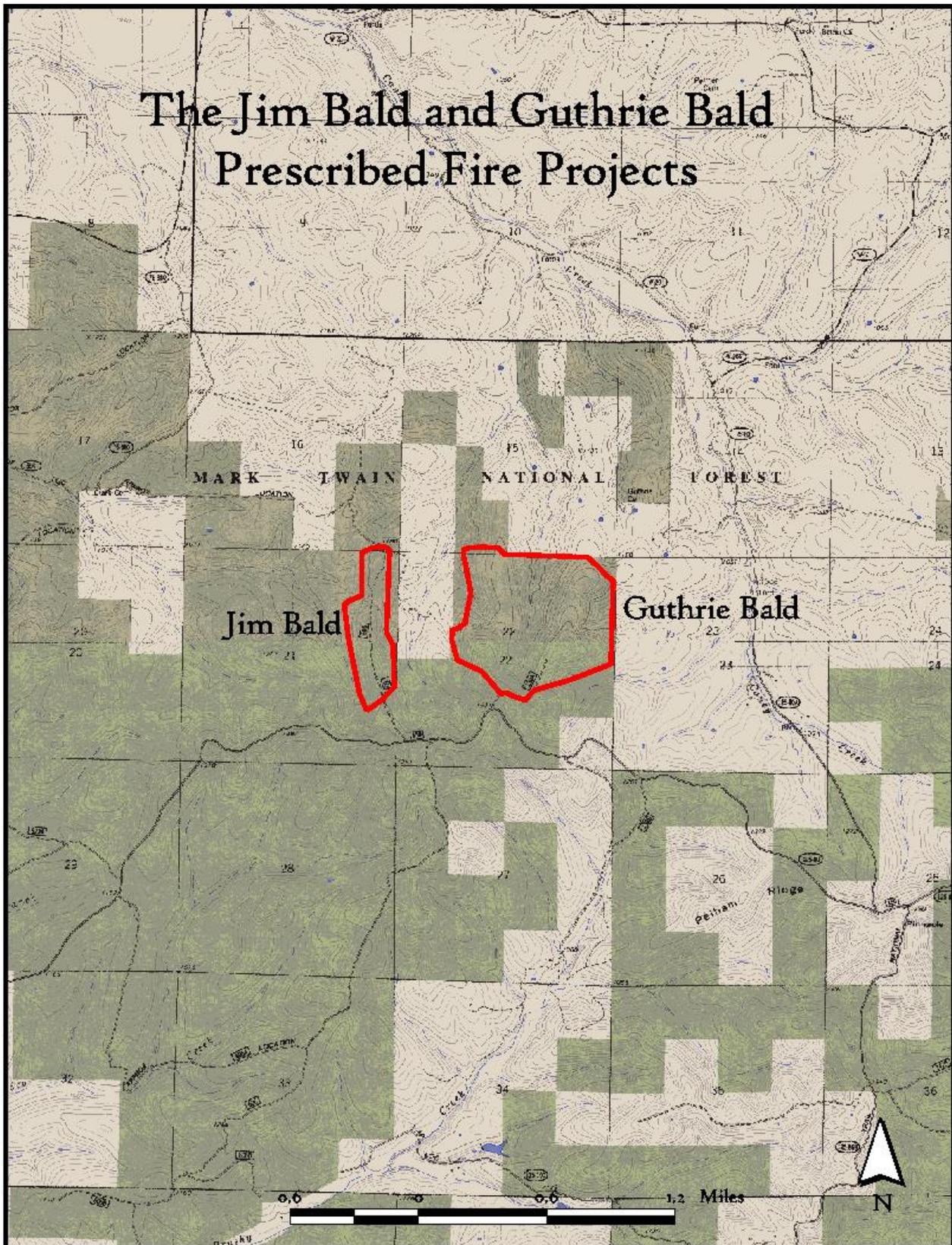
JENNY FARENBAUGH  
District Ranger  
Ava/Cassville/Willow Springs Ranger District

April 19, 2004

Date

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IX. MAP



**X. MITIGATION MEASURES**

Soil and Water

SW – 1. Prescribe burn units will have as little mechanical disturbance to the soil before and just after the burn as possible.

SW – 2. If needed, firelines will be seeded with a native seed sourced suited for the area objectives and will be fertilized if necessary, with standard fertilizer immediately after construction or as soon as possible as to allow the best chance of germination. Water-bars will be constructed if needed in accordance with the Missouri Department of Conservation’s “Missouri Watershed Protection Practice” to minimize water movement along fire lines.

Air Quality and Smoke Management

A – 1. Prescribed burning will be completed during weather conditions that facilitate smoke dispersal. The public would be informed of the planned burning days and Forest Service employees would monitor for public safety hazards, along public travel ways.

A – 2. Post traffic controllers along Forest Road 150 to minimize traffic problems during smoky conditions

A – 3. Avoid burning with a north wind, burn with a south or southwest wind to disperse smoke away from Tumbling Creek cave.

