MINNESOTA DEPARTMENT OF NATURAL RESOURCES DIVISION OF PARKS AND RECREATION

Subject:	State Park Forest Management
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Purpose

The purpose of these guidelines is to provide background and policy with respect to State Park forest management. It outlines a process to follow for developing forest management prescriptions; identifies potential management activities; and provides a historical, legislative, and policy context for forest management decisions. As resource managers in the 1990s, it is important that we be able to both make good management decisions and to effectively explain them to other resource professionals and the public in general. Forest management in Minnesota will continue to be scrutinized by both the public and the legislature.

Historical Background

Historically, natural areas in State Parks have been managed toward the presettlement goal, since the best historical information that we have about the natural vegetation of Minnesota prior to Euro-American settlement is often from the original land survey in the middle 1800s. It is now recognized that, within this context, the goals for each community may change as more information about that community and its restoration potential becomes available. For example, areas that have been significantly altered (old fields) may be very difficult to restore to the native prairie or savanna that they once were. In addition, current research may show that disturbed systems now provide important habitat to rare species (e.g., the Henslow sparrow which nests in old fields). *Currently the park unit planning process identifies the management goals for each state park unit based on input from resource professionals as well as the public.*

Ecosystem-Based Management and Sustainability

Natural resource management is becoming more challenging, as natural areas are increasingly becoming islands surrounded by agriculture, residential development, and other highly manipulated environments. The long-term survival of the resources that State Parks hold is dependent on the long-term survival of the surrounding natural landscapes. Successful management of State Park forests will require managers of all disciplines to work beyond their individual boundaries to identify the best management strategies for those resources.

Management Guidelines

A. Site-Specific Management Goals: Site-specific management goals will be determined based on the site's previous history, current use, and relative ecological importance. In general, State Parks will strive to restore and maintain the native biodiversity (local flora and fauna) of the natural communities that they hold, both in form and function.

B. Ecosystem-Based Management: The management goals and opportunities of whole ecosystems, as defined by adjacent land owners, resource managers, and the public will be taken into consideration before the division makes resource management decisions.

C. Natural Ecosystem Functions: Prescriptions will mimic natural processes as much as possible.

D. Genetic Integrity: Local genetic integrity will be maintained whenever possible.

E. Effects on Other Resources: Adverse effects on other resources and the recreational public will be minimized (e.g., cultural resources such as historic buildings).

F. Visitor Education: Visitors will be made aware (through interpretation or other means of communication) of the unit's management goals and prescriptions.

G. Spatial Scale: The spatial scale of biodiversity will be considered when determining management actions and goals. For example, a park consisting of primarily old-growth forest may offer less biodiversity locally, but contribute to greater biodiversity on the regional landscape.

H. Research: Research and monitoring will accompany management actions. Well prescribed management is based on good research. Better management is based on good monitoring as well.

I. Possible Management Activities: Managing natural communities* requires a range of activities from monitoring present conditions to active intervention. Resource management techniques in forests may include:

- 1. **Prescribed burning** to regenerate forest communities, reduce fuel loads, or prepare sites for planting;
- 2. **Prescribed cutting or girdling** (with or without harvest) to replicate windstorms and wildfires, to reduce fuel loads to open the canopy for planting when burning is not feasible, or to thin plantations as needed;
- 3. Seed harvesting to collect local genotypes for future plantings;
- 4. **Seeding and planting** of native species to accelerate natural regeneration. *Ground scarification is to be used only where critically needed and after archaeological examination since ground and soil ecosystem components can be altered with this type of treatment.*
- 5. Problem species control to reduce the numbers of exotic or native problem species;
- 6. Reintroduction of native species to a community that has lost them;
- 7. **Removal of downed wood** to reduce the potential of insect and disease outbreaks. *Decisions on whether or not to salvage will consider the positive ecological values of downed wood to the ecosystem as well as the potential insect and disease threat to the surrounding landscape.*

*Picnic areas and campgrounds in parks may have different management goals due to visitor considerations and aesthetics, and may be managed differently than natural communities. For example, hazard trees may be removed for visitor safety and downed trees may be removed for aesthetics or visitor convenience.

AUTHORITIES

Existing legislation and policy that provide a framework for State Park forest management includes:

- The **Outdoor Recreation Act** (M.S. 86A.05, Subd. 2), which states that "State Parks shall be administered by the Commissioner of Natural Resources in a manner which is consistent with the purposes of this subdivision to preserve, perpetuate and interpret natural features that existed in the area of the park prior to settlement, and other significant natural, scenic, scientific, or historic features that are present. Management shall seek to maintain a balance among the plant and animal life of the park and to reestablish desirable plants and animals that were formerly indigenous to the park area but are now missing."
- The **Minnesota DNR Natural State Park Policy** (3/11/81), which directs State Park resource management programs with respect to forest management toward:
 - **Establishing and maintaining species or communities** that were present during presettlement times or successional stages of the biotic communities thereof;
 - **Employing resource management techniques** that will enhance a park's natural systems;
 - Utilizing natural methods in the maintenance and establishment of vegetative communities; and
 - Striving to replicate natural appearance and community structure.

This policy also indicates that:

- Prescribed burns may be used as a vegetative management tool;
- **Harvesting** of timber will be allowed only for achieving the vegetation management objectives of the park, resource protection, or when necessary for the health and safety of park visitors;
- **Cooperative vegetative management agreements** shall be developed between divisions for implementing each approved park management plan. Commercial methods will be used for vegetation management when natural methods are not ecologically or economically practical; and
- **Chemical pesticides** shall not be used within natural state parks, except under established state statutes, department policy, and when approved.

For other relevant department directives see the following:

- Operational Order No. 59 (Pest Control, Pesticide Use & Pesticide Management)
- Operational Order No. 47 (Prescribed Burning Guidelines)
- Operational Order No. 97 (Detection and Correction of Hazard Trees on Recreation and Administrative Sites)
- Project Proposal and Resource Assessment process, Division of Parks and Recreation
- Guidelines on Pesticide Use, Division of Parks and Recreation
- 1995-2005 Strategic Plan, Division of Parks and Recreation
- Resource Management Guide, Division of Parks and Recreation (in progress)
- Individual Park Unit Plans, Division of Parks and Recreation
- Fuelwood Guidelines, Division of Parks and Recreation

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