CHAPTER 18
Forest Recreation Management
# CHAPTER 18
## FOREST RECREATION MANAGEMENT

Integrated Resource Management Considerations ................................................................. 18-2

### PLANNING AND DESIGN ................................................................. 18-4

### OPERATIONAL CONSIDERATIONS .............................................. 18-7

- **Construction** .................................................................................. 18-7
- **BMP: Invasive Species** .................................................................... 18-7
- **Operations** ..................................................................................... 18-8

### RESOURCES FOR ADDITIONAL INFORMATION .......................... 18-9
Forest recreation management involves the selection, development, operation, and maintenance of recreation areas to provide quality outdoor experiences for the recreation user.

Forest-based recreation is frequently a primary objective of private forestland ownership. University of Wisconsin-Extension research indicates that the most popular recreational pursuits of private forest woodland owners include hunting, camping, snowmobiling, hiking, fishing, ATV riding, wildlife watching, off-road bicycling, cross-country skiing, and berry picking. Proper forest recreation management can enhance the recreation experience, while at the same time, complementing a number of other landowner objectives.

**Integrated Resource Management Considerations**

- Forest recreation related development can impact riparian areas and wetlands if not carefully planned and constructed. Improper location, careless construction, and overuse of recreation sites can damage vegetation needed to retain sediments and stabilize banks and shorelines.

- **Soil productivity** can be reduced when soils are compacted, rutted, displaced, or eroded. Some equipment used in developing recreation sites can cause these kinds of soil damage. Soil damage can also be caused by recreational vehicles (e.g., ATVs, pickups, dirt bikes, snowmobiles when there is not enough snow, mountain bikes), horses, or by the trampling of too many hiking boots.

- Poorly designed and/or overused recreational developments adjacent to waterbodies have the potential to impact water quality. Wisconsin’s Forestry Best Management Practices (BMPs) for Water Quality and local zoning regulations are important considerations. Information on Wisconsin’s Forestry BMPs can be found at: [dnr.wi.gov](http://dnr.wi.gov) – keywords “water quality forestry BMPs.”

- Recreational activities can introduce and/or spread a variety of **invasive species**. Planning for recreational development should include plans for monitoring and controlling invasives. A complete list of recreational user BMPs for invasive species can be found at: [www.wisconsinforestry.org initiatives/other/invasive-species-bmps recreation-bmps](http://www.wisconsinforestry.org initiatives/other/invasive-species-bmps recreation-bmps).

Here are a few examples of BMPs for limiting the spread and introduction of invasive species for recreational users:
- Plan activities to limit the potential for the introduction and spread of invasive species.
- Avoid traveling through or working in small, isolated populations of invasive plants.
- Clean equipment, shoes and clothing upon leaving infested areas.
- Minimize soil disturbance.
- Do not plant known invasive plants.
- Inform and educate users of an area about common invasive species.
- Provide invasive species training opportunities for staff, contractors and volunteers.

![Figure 18-1: A simple boot cleaning once you leave an area with invasive plants can help minimize the introduction and spread of invasive plants to other areas.](image-url)
Figure 18-2: Multiple-use trail systems are common in many public and industrial forestlands. These areas often receive a lot of traffic, and may need special protective measures to guard against soil erosion and other site damage.

- Trails, campsites and other recreational developments can increase wildlife viewing opportunities, but careful planning is needed to avoid degradation of unique habitats, and adversely impacting rare or sensitive species through increased human use.

- **Visual quality** is normally a primary consideration in the development of recreational areas. Care must be taken to ensure that construction methods and standards, maintenance activities, levels of use, and potential user conflicts are also considered in order to prevent visual degradation of both the developed area and the adjacent surroundings.

- Carefully designed timber harvests can present opportunities for later use of haul roads and landings for recreational purposes.

- **Cultural areas** can provide excellent recreational/educational opportunities, but protection from possible overuse, vandalism, theft, and other potential problems associated with increased human use must be carefully considered.
Well thought out recreation areas are easy to use, inviting and make sense. You may consider hiring a landscape architect to assist with planning for more extensive developments. As you plan your own recreation development, think back to sites you have used that worked well. Recall what their orientation was. For example, beaches generally should face south or west, but the snow on ski trails last longer facing north or east. Sketch out your plan on topographic maps and air photos to consider the relationships between different recreation uses, forest cover, slope, orientation, and other factors. Discuss plans with others that have already done similar work, and re-examine your initial thoughts before committing to a set plan. Up-front planning can save you time and money.

**Recreation management begins with an assessment of an owner’s values and goals for the forestland.**

Some things to think about include:
- What are the desired activities?
- Is enough space available for the desired activities?
- Can uses be separated by season or distance?
  For example, can hunting trails be used for cross-country skiing trails in the winter? Is your desired hunting experience compatible with ATV trails?
- What activities are occurring on adjoining land?
- Who may be using the forestlands? Are they private or public lands?
- How long will the land be held? Can significant development be justified?
- Will the activity increase the spread of nonnative invasive plants or invasive insects and diseases?
- Can hazards such as defective or dead trees be mitigated to minimize the risk of injury from tree failure? Consider creating a hazard tree management plan if you are inviting people to camp, congregate or remain stationary in a location where tree failures could injure visitors.

*Figure 18-3: A snowshoer wanders the woodlands of northern Wisconsin.*

**Consider other resource activities that may be compatible** with recreational development, and integrate planning whenever possible. Forest management activities, for example, can be part of an effort to develop recreational opportunities. Consider laying out harvest roads to accommodate trail development, and include site remediation as part of the timber sale contract. Revenues generated can be used to fund efforts to enhance the habitat value of landings and create wildlife viewing areas.

**Environmental considerations** should be part of the planning process. Recreational development should be environmentally responsible. Consider soil types, topography and water resources. Resources are available from a number of sources to assist in providing information and technical advice (see the resources at the end of the chapter for more information). Efforts should also be made to identify any threatened and endangered species or rare habitats that may occur on sites to be developed (see Chapter 3: Wildlife Habitat and Biodiversity).
• **An assessment of the “carrying capacity” of the land** is a key element of recreation management planning. Different activities have specific spatial needs, and similarly, the land’s ability to sustain a particular level of use varies by activity. Responsible planning is required to care for the site and meet the expectations of the user. Consider limiting the quantity of activities in order to provide a higher quality experience. Seek advice from landscape architects or other qualified planners for large-scale or intensive development. These professionals can save a great deal of money and frustration.

• **Consider how to address conflicts between users and groups of users.** You may have to separate uses by space or scheduling to avoid conflicts. Depending on ownership, you may need to consider providing law enforcement, trail patrols, and emergency medical treatment.

• **Maintenance** of a recreation area is seen as part of the recreation experience by some. Others want to minimize this task and maximize their recreation time. Maintenance needs, such as the mitigation of trees that could be hazardous, should be considered as plans are developed. Generally, well-planned and constructed facilities are easier and less costly to maintain. Check with other operators of recreation areas for advice on surface finishes, trail construction, mowing equipment, etc.

• **Cultural resources** like Native American burial sites or work sites, logging camps, or homestead sites can be very interesting and also provide historical insights. Planning for recreational development should address cultural resource issues in terms of both protection and interpretation. Existing cultural resource inventories should be reviewed early in the planning process. If no information is available, field inspections should be conducted before development plans are finalized to determine presence or absence of cultural resources. If cultural resources are present in the development area, it may be possible to modify construction plans to reduce or eliminate damage to the resources. Cultural resource professionals can help determine the best approaches to the mitigation of potential damage (see the Resource Directory for sources of cultural resource assistance).
• **Check with local authorities to ensure any planned developments meet code and zoning requirements.** Working with local zoning and code enforcement personnel before planning gets too far along can help you avoid costly re-work later. They are also familiar with local recreation sites, and can be a valuable source of information.

• **Handicapped access needs** should be evaluated and made part of the planning process – particularly if public use is anticipated.

• **How will you pay for your development?** Funding through the Wisconsin Forest Landowner Grant Program (WFLGP) or federal cost-sharing assistance programs may be available for forestry projects that enhance recreational, historic or aesthetic features on private property. Activities eligible for financial assistance must be included in a Wisconsin DNR-approved Forest Stewardship Plan for the land. Contact your local Wisconsin DNR forester or Wisconsin DNR Service Center for additional information and application materials. Grants may also be available from state and federal agencies to assist with the development of recreation sites on publicly-owned land. For more information go to: [dnr.wi.gov – keyword “WFLGP.”](http://dnr.wi.gov).

Figure 18-5: An urban park provides the opportunity for some city dwellers to experience a local forest.

Figure 18-6: A turkey hunter in southern Wisconsin.
Chapter 18 – Forest Recreation Management

OPERATIONAL CONSIDERATIONS

LIABILITY – CAN I BE SUED?
Landowners, including governmental bodies and non-profit organizations that own, lease or occupy land, or have a recreational agreement with another owner, have certain protections against liability under Wisconsin’s Recreation Use Statute, 895.52. This important law says that landowners do not have a duty to inspect the property, keep it safe, or give warning of an unsafe condition. Only when a landowner acts maliciously or fails to disclose a known hazard, may he/she be liable. The law covers nearly every outdoor recreation activity, except organized team sports. Discuss this statute with your insurance provider as you consider risk management for your property. For more information, visit: learningstore.uwex.edu/assets/pdfs/G3326.PDF.

Construction

- Install and maintain appropriate erosion control structures to protect water quality and soil productivity (see Chapter 12: Forest Road Construction and Maintenance).

- Use “fill-only” construction techniques in the area of the cultural resource.

- Do not allow surfaces in archaeologically sensitive areas to erode, slump or wash out. Implement temporary stabilization methods to preserve the shape, slope, elevation, and contours of archaeological sites and historic features. Stabilization should not alter the historic character of the cultural resource.

- If practical and feasible, avoid cultural resource areas when constructing recreational facilities. If it is not possible to completely avoid a cultural resource, minimize or eliminate soil disturbance and erosion in the vicinity of the resource.

- The Wisconsin DNR Trails Handbook can be of assistance when planning trails. It includes guidance on marking and signing, trail width, surfacing material, grades, and on-going maintenance. It also provides detailed diagrams as well as signage suggestions. The Wisconsin DNR Department Design Standards Handbook can be used as a guide to the development of general recreational facilities. It has chapters that include picnic areas, swimming beaches, trails, camp areas, parking lots, and fishing facilities, and provides guidance on developing facilities that are accessible.

For more information or to obtain copies of these handbooks, contact the Bureau of Parks and Recreation by visiting: dnr.wi.gov – keyword “parks.”

- When landscaping sites, make sure to choose plants that are appropriate to your area and are quality stock. Plant according to specifications, and provide adequate follow-up care. Do not use nonnative invasive plant species.

BMP: Invasive Species

6.4 Select plant materials that are site appropriate to favor establishment and vigor.

Figure 18-7: Trail construction should consider invasive plants. The honeysuckle shrub adjacent to this trail and other invasive plants may spread or invade new areas due to the disturbance.
Operations

- When operating within a riparian management zone, confine recreational off-highway vehicle use and other nonfoot traffic to trails that are designed, constructed and maintained using guidelines for skid trails and forest roads. Refer also to appropriate guidelines in Chapter 13: Timber Harvesting and Chapter 12: Forest Road Construction and Maintenance.

- All sites need to be inspected periodically. Look at your recreation site from a critical perspective. It is easy to overlook conditions that you see every day, so ask an associate or even a customer for critical feedback on your maintenance program. This work will pay off in reduced risk and improved understanding of the way others see your facility. At minimum, you need to inspect for diseased and defective trees from the standpoint of creating a hazardous situation, surface irregularities, signage, and other safety related conditions in your recreation area. In areas that will receive a lot of traffic (pedestrian or vehicular), periodically inspect the facility to determine whether a cultural resource is being damaged by public use of the area. If so, special protective measures may be desirable.

- Monitor recreation areas for the introduction of nonnative invasive species, and take action to control them as necessary.

- Consider developing a firewood management policy to minimize the risk of introducing invasive insects and diseases.

- If your facility is for-profit, you will want to consider marketing. There are a number of local, regional, state, and national associations and agencies eager to assist with the promotion of recreation facilities. The easiest way to get started is to contact your local Chamber of Commerce or Visitor and Convention Bureau.

Figure 18-8: This camper is being inspected for gypsy moth. Inspecting vehicles and other recreational equipment before leaving a site will help slow the spread of invasive species.
RESOURCES FOR ADDITIONAL INFORMATION
These resources are specific to the information in this chapter only. Refer to the Resource Directory for additional resources related to this chapter.

COUNTY FORESTS AND COUNTY PARKS
County Forestry and Parks Departments also operate recreational sites, and are a great source if you need additional advice.

DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION (DATCP)
The Wisconsin DATCP - Division of Food and Recreational Safety is responsible for managing programs that enforce applicable State administrative codes for the inspection and licensure of restaurants, hotels, bed and breakfast establishments, public swimming pools including water park attractions, and campgrounds in Wisconsin. By visiting the Wisconsin DATCP website, you can find more information on definitions and licensing along with links to the Wisconsin State Statutes and Administrative codes pertaining to recreational and educational camps. datcp.wi.gov/Pages/Programs_Services/Recreational_Facilities.aspx

DEPARTMENT OF TOURISM
The Wisconsin Department of Tourism provides guidance and leadership to Wisconsin’s tourism industry, and ensures that tourism is a top contributor to the state’s economy and quality of life. industry.travelwisconsin.com

FEDERAL AGENCIES
The Forest Service and National Park Service provide publications to guide the development and maintenance of recreation sites. www.fhwa.dot.gov/environment/recreational_trails/publications/index.cfm

UNIVERSITY OF WISCONSIN EXTENSION
The “Wisconsin Idea” promotes connections between people and the university. Extension agents and staff are available to assist with business ventures and with planning. www.uwex.edu

WISCONSIN ASSOCIATION OF CAMPGROUND OWNERS (WACO)
WACO, a non-profit association, is a federation of private Wisconsin campgrounds dedicated to the promotion, usage, growth, and improvement of campgrounds in the State of Wisconsin. www.wisconsincampgrounds.com

WISCONSIN COUNCIL ON FORESTRY
The council directed the process to develop Best Management Practices (BMPs) for Invasive Species, including BMPs for Preventing the Spread of Invasive Species by Outdoor Recreation Activities in Wisconsin. Other topics of invasive BMPs include: Forestry, Urban Forestry and Transportation and Utility Corridors. wisconsinforestry.org

WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR)
Wisconsin DNR staff can offer practical advice on many aspects of forest recreation planning.

- ADA considerations
- Drinking water, wastewater, water regulation and zoning
- Recreational facility operations
- Grants and loans

For more information on these topics, to contact the Bureau of Parks and Recreation or to find a park or state forest near you visit: dnr.wi.gov – keyword “parks.”
Pursuant to ch. 227, Wis. Stats., the Wisconsin Department of Natural Resources has finalized and hereby certifies the following guidance document.

<table>
<thead>
<tr>
<th>DOCUMENT ID</th>
<th>FA-20-0005</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCUMENT TITLE</td>
<td>Wisconsin Forest Management Guidelines</td>
</tr>
<tr>
<td>PROGRAM/BUREAU</td>
<td>Forest Economics and Ecology, Applied Forestry Bureau</td>
</tr>
<tr>
<td>STATUTORY AUTHORITY OR LEGAL CITATION</td>
<td>S. 823.075, Wis. Stats. &amp; NR 1.25, Wis. Admin. Code</td>
</tr>
<tr>
<td>DATE SENT TO LEGISLATIVE REFERENCE BUREAU (FOR PUBLIC COMMENTS)</td>
<td>2/10/2020</td>
</tr>
<tr>
<td>DATE FINALIZED</td>
<td>4/6/2020</td>
</tr>
</tbody>
</table>

**DNR CERTIFICATION**

I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections 227.10 and 227.11 of the Wisconsin Statutes. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.

_Carolyn Harden_  
March 27, 2020

Signature Date