

COUNTY FOREST COMPREHENSIVE LAND USE PLAN

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CHAPTER 600

PROTECTION

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600 PROTECTION

OBJECTIVE

To protect and manage the resources of the forest from preventable losses resulting from uncontrolled wildfire, insects, diseases and other destructive elements including those caused by people, recognizing that controlled burning is often beneficial to certain wildlife species. Protective methods shall include proper silvicultural methods.

605 FIRE CONTROL

Damage to the forest caused by uncontrolled fire can create an important challenge in the management of the forest. Loss of resource values caused by fire will be minimized through organized prevention, detection and suppression methods. Maintaining a healthy forest is an important key to fire management. The DNR is responsible for all matters relating to the prevention, detection and suppression of forest fires outside the limits of incorporated villages and cities. (Wisconsin Statutes s.26.11(1)). The DNR works cooperatively with local fire departments in all fire control efforts. Jackson County Forest is part of the Black River Falls Intensive Forest Fire protection area. The Fire Management Handbook No. 4325.1 and the Area Fire Action Plan shall serve as the guidelines for fire control activities.

605.1 COOPERATION WITH THE DEPARTMENT OF NATURAL RESOURCES

Pursuant to s. 26.11(4) and s. 28.11(4)(f), Wis. Stats., and the Jackson County Forest Ordinance, the county will cooperate with the DNR in the interest of fire prevention, detection and suppression on the County Forest. This is accomplished through a Fire Management Memorandum of Understanding (MOU) authorizing the DNR to use County Forest land or to utilize county personnel and equipment for fire protection activities. The MOU will include an Addendum which defines and quantifies the provisions of the MOU. Prior to Spring fire season each year, the Addendum will be reviewed and revised as necessary by DNR Area Fire Control personnel and the County Forest Administrator. See Chapter 900 for copy of MOU.

605.1.1 Personnel

County Forest personnel, upon request from the DNR, shall be made available for forest fire control efforts within the county in accordance with the MOU. The DNR is responsible for

training and directing the activities of county personnel in accordance with the rules identified in the Area Fire Action Plan.

605.1.2 Equipment

County Forest equipment, upon request and as identified in the MOU, shall be available for forest fire control suppression. During periods of high fire hazard, all County Forest vehicles and/or crews as identified in the MOU, should be equipped with one or more back pack cans, axes or shovels, appropriate personal protective equipment, mobile communication and any other equipment deemed essential by the MOU. All hand tools shall be maintained and provided by the DNR.

605.1.3 Fire Detection

Fire detection is the responsibility of the DNR. County Forestry personnel shall assist and report any wild fires to 911 Dispatch, the DNR and local fire departments. DNR fire detection towers located on County Forest land include the Saddle Mound tower in the Town of City Point, the Oak Ridge Tower in the Town of Manchester, and the Knapp Tower in the Town of Knapp.

605.1.4 Forest Fire Prevention

DNR fire control personnel are authorized by the county to place fire prevention signs at recreational areas and other strategic locations within the forest. The County conducts and controls all operations (including harvesting) on the forest in a manner designed to prevent forest fires. The use of the County Forest during high fire danger periods may be restricted. These restrictions will include, but not be limited to, recreation and logging.

605.2 SLASH DISPOSAL

Timber sale contracts will be designed to meet or exceed the requirements of the Slash Disposal Law, s. 26.12, Wis. Stats. Additional requirements may be imposed as necessary.

605.3 DEBRIS BURNING

Unauthorized burning of debris will not be permitted on County Forest Lands pursuant to s.

26.12(5), Wis. Stats.

605.4 CAMP FIRES

Adequate fireplaces will be provided at designated recreation sites. During periods of high fire danger, use of camp fires may be restricted.

605.5 PRESCRIBED BURNING

All prescribed burning on County Forest lands will follow the DNR recommendations. See Prescribed Burn Handbook No. 4360.5 for details. Prescribed fire may be an effective management tool on the County Forest.

605.6 COUNTY FOREST FIRE HAZARD AREAS

Primary emphasis will be placed on fire control efforts in pine areas. Maps of these areas are available at the local DNR field office (Fire Management Handbook #4325.1, Section 3030). The County will cooperate with DNR Fire Control in providing for firebreaks or access ways. Existing access roads, firebreaks and water access points will be maintained as deemed necessary. Secondary emphasis will be placed on hardwood areas with no firebreaks developed or maintained. However, access roads will be maintained as defined in Chapter 700 of this plan.

605.7 UNCONTROLLED FIRE

Any uncontrolled or non-prescribed fires on the County Forest will be suppressed as soon as possible.

605.8 CONTROLLED FIRES

There are instances where unplanned fires can benefit timber and wildlife resources. Fires, once a prevalent component of the landscape, rejuvenated native grasses, promoted natural regeneration of timber, and maintained open landscapes which benefited a variety of wildlife and plant species. Barrens and other openings are a dwindling environmental component, preservation of these habitat types, will enhance and maintain protected animal and plant species populations. Often times prescribed burns, large timber cuts, or mowing is impractical due to environmental, social and budgetary restrictions. Wildfires enhance these

limited landscape components. Although human health and safety are priorities, unplanned fires may be allowed to expand beyond a minimized area before being extinguished. These plans should be in place and determined by DNR FC, Wildlife and Jackson County.

610 CONTROL OF FOREST PEST & PATHOGEN

610.1 DETECTION

Damage to the forest caused by insects, other pests and diseases can adversely affect management of the forest resources. Losses to resource values impacted by forest pests will be minimized through integrated pest management methods, with emphasis on silvicultural prescriptions (timber sales). The detection and control of pest problems will be accomplished by county and DNR personnel in cooperation with other agencies.

610.2 PEST SURVEYS

Pest surveys are conducted under the direction of the DNR regional entomologist. The DNR works in cooperation with the Wisconsin Department of Agriculture Trade and Consumer Protection (DATCP) in monitoring the spread of gypsy moths. The County may cooperate by providing personnel and equipment to assist in these operations.

610.3 INTEGRATED PEST MANAGEMENT

Integrated pest management for the purpose of this Plan, is defined as follows:

“The maintenance of destructive agents, including insects, at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.”

The integrated pest management control and methodology shall be determined jointly by the county forest administrator, and DNR liaison forester in consultation with the DNR regional entomologist and regional forester. Suppression of forest pests may include the following:

- 1) Silvicultural prescriptions, including timber sales.
- 2) Biological control.
- 3) Chemical control.

610.3.1 Specific Pests and Pathogens

610.3.1.1 Gypsy Moth Strategy

This introduced pest has progressed westward from the northeastern United States since the early 1900's. It reached eastern Wisconsin and has been widespread in some counties since 1988. Despite efforts to slow-the-spread and suppress outbreaks, it is progressing westerly through Wisconsin. The Jackson County Forest's strategy to combat this defoliating insect will focus on using silvicultural techniques to maintain and improve forest vigor, so as to decrease the likelihood and severity of defoliation. In addition, suppression spraying with approved insecticides may be considered in high use recreation areas and stands containing a high percentage of susceptible, high valued timber. Biological controls may also be available for introduction to help reduce outbreak frequency. These areas are identified in Chapter 900.8.

The presence or discovery of threatened or endangered species in these areas may impact both the type of treatment and the decision to apply suppression tactics. Current insecticides for gypsy moth control include a bacterial insecticide (Btk) and a commercial formulation of a naturally-occurring virus (Gypchek). The Gypchek virus, specific to gypsy moth larvae, is only available through the federal suppression program administered by the DNR. The intent in combating this insect is not to eradicate, but rather to reduce populations so that tree mortality is maintained at tolerable levels. The DNR's local gypsy moth coordinator and entomologist will be available for consultation on control tactics and possible quarantine procedures. DATCP is the agency responsible for quarantine procedures for wood products from infested counties.

Jackson County Forest's threshold levels for suppression will be as follows:

- 20 acres in size and of a compact and regular shape (minimum eligible size for aerial spraying through the state suppression program) OR high use, developed recreation areas
- 500 egg masses per acre based on 1/40th acre (18.6 ft. radius) plots
- Located in one of the susceptible areas identified on the Jackson County gypsy moth suppression map found in Chapter 900.8.

610.3.1.2 Jack Pine Budworm

Jack pine budworm, *Choristoneura pinus pinus* Freeman, is a native needle-feeding caterpillar that is generally considered the most significant pest of jack pine. Vigorous young jack pine stands are rarely damaged during outbreaks. The most vigorous stands are well stocked, evenly spaced, fairly uniform in height, and less than 45 years old. Stands older than 45 years that are growing on very sandy sites and suffering from drought or other stresses are very vulnerable to damage. Tree mortality and top-kill are more likely to occur in these stands. This mortality and top-kill create fuel for intense wildfires. It will be Jackson County's strategy to harvest at the appropriate rotation age, maintain high stand densities (without overcrowding), and use good site selection for jack pine. This will be an effort to help avoid budworm-caused tree mortality and reduce the threat of damaging wildfires while still providing suitable conditions for jack pine regeneration. Prompt salvage following an outbreak will also help reduce the possibility of wildfire. Use of insecticides is not warranted in combating this forest pest on the County Forest.

610.3.1.3 Oak Wilt

Oak wilt, *Ceratocystis fagacearum* (Bretz) Hunt, is a destructive disease of oak trees. It is responsible for the death of thousands of oak trees in forests, woodlots, and home landscapes each year. Oak wilt is caused by a fungus that invades and impairs the tree's water conducting system, resulting in branch wilting and tree death. Trees in both the red oak group and white oak group are affected. There is no known cure once a tree has oak wilt. Prevention of new oak wilt infection centers is the best management option and involves avoiding injury to healthy trees and removing dead or diseased trees. Healthy trees should not be pruned during the growing season as this attracts beetles that may carry the oak wilt fungus. If pruning is necessary or damage is incurred during the growing season, e.g. through construction activities or storms, the wounds should be painted immediately with a wound paint. It will be Jackson County's policy to remove infected trees and debark or chip them when located in a high intensive use area. If the infected wood is used for firewood once it is split and stacked, the materials shall be covered with plastic for a period of six months to kill the fungus and any insects in the

material. Where practicable and cost efficient, pockets of oak wilt will be contained by treating adjacent oaks forming a barrier to prevent the fungus from spreading through the roots. Timber harvest of red oak may be restricted between April 15 and July 1.
pest.

610.3.1.4 Two-lined Chestnut Borer

The two-lined chestnut borer, *Agrilus bilineatus* (Weber), is a common secondary pest in trees which have been severely defoliated several years in a row. Oaks that have been defoliated by insects such as gypsy moth (*Lymantria dispar*), fall cankerworm (*Alsophila pometaria*), and forest tent caterpillar (*Malacosoma disstria*) can be attacked and killed by the two-lined chestnut borer. Prevention of two-lined chestnut borer is the best management option. Jackson County will strive to maintain healthy trees through sound silvicultural practices to discourage infestation. Infestations will be salvaged promptly.

610.3.1.5 Forest Tent Caterpillar

Forest tent caterpillar, *Malacosoma disstria* Hubner, can be found throughout the United States and Canada wherever hardwoods grow. The favored hosts in Wisconsin are aspen and oak. This native insect causes region-wide outbreaks at intervals from 10 to 15 years; outbreaks usually last 2 – 5 years in the Lake States. Severe and repeated defoliation can lead to dieback and/or reduced growth of affected trees, which in some instances may be significant. Populations are often controlled by natural enemies, helping the population crash. Aerial spraying of insecticides can be an option for control as well. It is Jackson County's strategy to employ sound silvicultural practices to combat this cyclic pest.

610.3.1.6 Emerald Ash Borer

The emerald ash borer, *Agrilus planipennis*, was introduced from Asia and has taken hold in lower Michigan. In Michigan it has resulted in widespread mortality specific to ash including green, white, black and several horticultural varieties. Although not currently

present in Wisconsin, it is a severe threat to ash in the State. Ash comprises a significant component in the northern hardwood timber type and can be found in nearly pure stands in some lowland areas. Adult beetles feed on foliage however, it is the larvae that cause mortality by feeding on the phloem and outer sapwood of the ash trees. Jackson County will cooperate with ongoing trapping and survey efforts. Sound silvicultural practices will continue to be used to maintain forest health. Should an infestation occur Jackson County will work with DNR Forest Health staff in applying measures to minimize spread, including aggressive salvage trees.

610.3.2 Funding

Pest control activities on the County Forest will be funded through the county forestry budget if other sources of funding are not available. In the event costs require additional funding, special appropriations from the County Board Contingency Fund will be sought. In addition, state legislation may provide monetary assistance in direct crisis situations where major control operations are undertaken. In case of gypsy moth outbreaks, the county may seek funding from the State of Wisconsin Gypsy Moth Suppression Program.

610.3.3 Legal Obligations

All control operations will comply with regulations as set forth in existing state and federal legislation. Refer to Wisconsin Administrative Code NR80, AG.29, and the Environmental Pesticide Control Act.

610.3.4 Special Projects

The County may cooperate with other agencies in forest pest research. See Chapter 200.

615 TIMBER THEFT

All cases of alleged timber theft on the county forest shall be investigated and resolved promptly. An allegation of theft by cutting and /or removing timber from the county forest does not alleviate the county from payment under s. 28.11 (9) Wis.Stats. The county will collect damages pursuant to s. 26.05 Wis. Stats. and may pursue criminal charges under s.

943.20 Wis. Stats. and /or seek civil damages.

615.1 TIMBER THEFT INVESTIGATION

The following procedure will be used in all cases of alleged timber theft:

(a) Gathering facts - The County, through its Sheriff's department and along with assistance of the DNR liaison, rangers and wardens, will ascertain the facts pertinent to the alleged theft, including determination of the damages to the county. Legal counsel representing the county should be involved in all aspects of investigation. Property involved in the alleged theft may be seized pursuant to s. 26.04 Wis. Stats. for use as evidence.

(b) Boundary determination - If property boundaries are involved, the county shall conduct a legal survey of the boundary in question.

(c) Legal counsel – During the investigation, the county legal counsel should be consulted for assistance in resolving the matter. If deemed necessary by the Committee, the district attorney shall be asked to prosecute for violation of s. 26.05, Wis. Stats., (timber theft law), and legal action for damages commenced. Otherwise, with advice of legal counsel, the county may seek to reach a mutually agreed damage payment with the party alleged to have cut or cut and removed the timber without consent of the county.

615.2 TIMBER THEFT – ACTIONS WITH CONTRACTOR INVOLVED

A contractor involved in a timber theft investigation may have one or more timber contracts with the county. The following policy will be implemented in these cases, and will be reflected in timber contract language to facilitate the policy.

(a) Actions During Investigation

Any contractor under investigation for timber theft, or has been issued a citation for timber theft, shall be suspended from operation on the sale area for the contract under investigation, and may, at the discretion of the Committee, be suspended from operating on all timber contracts with Jackson County. The Committee may also suspend the

contractor from bidding on or from purchasing any further timber tracts until the matter of timber theft is resolved.

The Forest Administrator has the authority to impose a suspension of a contract for the above stated reasons until the next meeting of the Committee. The Committee shall then consider the allegations and review the evidence, and shall take action, either to uphold or to reverse the suspension.

(b) Actions Following Resolution of Timber Theft Charges

(1) Charges upheld (Guilty)

In addition to actions allowed in the timber sale contract, any individual convicted of timber theft from County Lands, or pleading to charges of timber theft may, by Committee action, be barred from purchasing timber tracts from Jackson County, or from operating on County Forest lands as a timber contractor, sub-contractor or employee thereof, for a period of time ranging from one to ten years.

(2) Charges dismissed (Not Guilty)

If, after investigation of a timber theft allegation, it is determined that no violation has occurred, or, if the individual accused of timber theft is found not guilty, then all suspensions imposed during the investigation shall be lifted. Also, the contract(s) shall be extended appropriately to compensate for the period of time during which the contractor was not allowed to operate on the sale area(s). The application of stumpage increases shall also take into account the time period of the suspension(s).

620 ENCROACHMENTS

The county will actively investigate all suspected cases of encroachments on the County Forest. To insure the integrity and continuity of the County Forest land, all cases will be dealt with promptly and in a consistent manner. The following procedures will be used in all cases of suspected encroachments:

- (1) The county will establish property boundaries; if necessary, a legal survey will be conducted.
- (2) The county will gather the facts.

- (3) The Committee, in consultation with the forest administrator, county legal counsel, and the DNR, will make a decision as to the disposition of the case.
- (a) All above ground encroachments that are movable will be removed from county property.
 - (b) Permanent type facilities, such as homes, garages, and septic systems shall be addressed individually and may be removed or handled by a land use agreement. Sale or transfer of the encroachment should remain an option depending on the circumstances involved and the viability of an adverse possession claim (s. 893.29 Wis. Stats.).
 - (c) Provisions in the land use agreement, if that option is pursued, may include granting the encroacher permission to encroach on the County Forest lands with the following stipulations: no other encroachments will be allowed; the permit is non-transferable; the county must be notified once encroachment is terminated; county continues full ownership and control of property; permittee agrees to waive any rights to any future declaration of ownership or interest in the encroached county property; county reserves the right to cancel the permit and the permit is to be filed in the office of the Jackson County Forestry Department and all fees related to the land use permit shall be paid by the permittee.
 - (d) A copy of the actual Land Use Agreement can be found in Chapter 900.17.
 - (e) Any disturbance of vegetation and soils as a result of the encroachment must be repaired and restored to original condition and to satisfaction of the County.
 - (f) The cost of all removals, repair and restoration shall be the responsibility of the party which caused the encroachment.