

COUNTY FOREST COMPREHENSIVE LAND USE PLAN
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1 **600 PROTECTION**

2 600.1 OBJECTIVE

3 To protect and manage the resources of the forest from preventable losses resulting from fire, insects,
4 diseases, and other destructive elements including those caused by people. Protective methods shall
5 include proper silvicultural methods.
6

7 **605 FIRE CONTROL**

8 Damage to the forest caused by uncontrolled fire can create an important challenge in the
9 management of the forest. Loss of resource values caused by fire will be minimized through
10 organized prevention, detection, and suppression methods. Maintaining a healthy forest is key to fire
11 management. The DNR is responsible for all matters relating to the prevention, detection, and
12 suppression of forest fires outside the limits of incorporated villages and cities (s. 26.11(1),
13 Wis.Stats). The DNR works cooperatively with local fire departments in all fire control efforts.
14 Chippewa County Forest is part of the *extensive* Forest Fire protection area. The Fire Prevention
15 Handbook No. 4310.5, Fire Presuppression Handbook No. 4320.5, the Fire Management Handbook
16 No. 4325.1, and the Area Fire Plan shall serve as the guidelines for fire control activities.
17

18 605.1 COOPERATION WITH THE DEPARTMENT OF NATURAL RESOURCES

19 Pursuant to s. 26.11(4) and s. 28.11(4)(f), Wis. Stats. and of the Chippewa County Forest
20 Ordinance, the County is authorized to cooperate with the DNR in the interest of fire
21 prevention, detection and suppression on the County Forest. This is accomplished through
22 agreements authorizing the DNR to use County Forest land or to utilize County personnel and
23 equipment for fire protection activities.
24

25 605.1.1 Personnel

26
27 County Forest personnel, upon request from the DNR, shall be made available for forest fire
28 control efforts within the county in accordance with an established memorandum of
29 understanding (MOU). The DNR is responsible for training and directing the activities of
30 county personnel in accordance with the rules identified in the Area Fire Action Plan.
31

32 605.1.2 Equipment

33
34 County Forest equipment, upon request and as identified in the MOU, shall be available for
35 forest fire control suppression. During periods of high fire hazard, all County Forest vehicles
36 and/or crews should be equipped with one or more back pack cans, axes or shovels,
37 appropriate personal protective equipment, mobile communication and any other equipment
38 deemed essential by the MOU. All hand tools shall be maintained and provided by the DNR.
39

40 605.1.3 Fire Detection

41 Fire detection is the responsibility of the DNR. County Forest and Parks personnel shall assist
42 and report any wild fires to the DNR, or 911 Dispatch.
43

44 There are no fire towers on County Forest lands. The Flambeau and Ruby fire towers are
45 located on private land with 99-year leases.
46

47 605.1.4 Forest Fire Prevention

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

53 605.2 SLASH DISPOSAL
54 Timber sale contracts will be designed to meet or exceed the requirements of the Slash
55 Disposal Law, s. 26.12, Wis. Stats. Additional requirements may be imposed as necessary.
56

57 605.3 DEBRIS BURNING
58 Unauthorized burning of debris will not be permitted on County Forest Lands pursuant to s.
59 26.12(5), Wis. Stats. Deposit of yard waste or any other matter is not allowed on County
60 Forest land. The local municipalities coordinate yard waste disposal facilities for County
61 residents.
62

63 605.4 CAMPFIRES
64 Adequate fire rings are present at all campsites at Morris-Erickson, Pine Point and Otter Lake
65 County Parks. During periods of high fire danger, use of campfires may be restricted. While
66 campfires are allowed on the County Forest, it is unlawful to leave any fires unattended. On a
67 DNR designated red flag day, it is unlawful to start or use any fires.
68

69 605.5 PRESCRIBED BURNING
70 All prescribed burning on County Forest land will follow the DNR recommendations. See
71 Prescribed Burn Handbook No. 4360.5 for details. Prescribed fire may be an effective
72 management tool on the County Forest. Prescribed burning may be done for wildlife habitat,
73 site preparation for tree planting and seeding, fire hazard reduction, barrens and prairie
74 management, insect and disease control, etc.
75

76 605.6 COUNTY FOREST FIRE HAZARD AREAS
77 Primary emphasis will be placed on fire control efforts in pine areas. Maps of these areas are
78 on file at the local DNR fire station in Cornell. (Fire Management Handbook #4325.1) The
79 County will cooperate with DNR Fire Control in providing for firebreaks or access-ways
80 Firebreaks or access ways will be established in new plantations in accordance with Manual
81 Code 2421. Existing access roads, firebreaks, and water access points will be maintained as
82 deemed necessary. Secondary emphasis will be placed on hardwood areas and aspen areas
83 with no firebreaks developed or maintained. However, access roads will be maintained as
84 defined in Chapter 700 of this plan.
85

86 605.7 UNCONTROLLED FIRE
87 Any uncontrolled or non-prescribed fires on the County Forest will be suppressed as soon as
88 possible.
89

90 **610 CONTROL OF FOREST PEST & PATHOGEN**

91 Damage to the forest caused by insects, other pests and diseases can adversely affect management
92 of the forest resources. Losses to resource values impacted by forest pests will be minimized through
93 integrated pest management methods, with emphasis on silvicultural prescriptions (timber sales).

94 610.1 DETECTION

95 The County and DNR personnel, in cooperation with other agencies, will be responsible for
96 detection and control of pest problems.
97

98 610.2 PEST SURVEYS

99 Pest surveys are conducted under the direction of the DNR's regional entomologist. The DNR
100 works in cooperation with the Wisconsin Department of Agriculture Trade and Consumer

101 Protection (DATCP) in monitoring the spread of gypsy moths. The County may cooperate by
102 providing personnel and equipment to assist in these operations.
103

104 610.3 INTEGRATED PEST MANAGEMENT

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

106 *"The maintenance of destructive agents, including insects, at tolerable*
107 *levels, by the planned use of a variety of preventive, suppressive, or*
108 *regulatory tactics and strategies that are ecologically and economically*
109 *efficient and socially acceptable."*
110

111 The integrated pest management control and methodology shall be determined jointly by the
112 County Forest and Parks Administer and DNR liaison forester in consultation with the DNR
113 regional entomologist and regional forester. Suppression of forest pests may include the
114 following:

- 115 1. Silvicultural prescriptions, including timber sales.
- 116 2. Biological control.
- 117 3. Chemical control.
- 118

119 610.3.1 Specific Pests and Pathogens of Interest

120 610.3.1.1 Gypsy Moth Strategy

121
122 This introduced pest has moved westward from the northeastern United States since the
123 early 1900's. It reached eastern Wisconsin and has been widespread in some counties
124 since 1988. Despite efforts to slow-the-spread and suppress outbreaks, it is progressing
125 westerly through Wisconsin. The Chippewa County Forest's strategy to combat this
126 defoliating insect will focus on using silvicultural techniques to maintain and improve
127 forest vigor, so as to decrease the likelihood and severity of defoliation. In addition,
128 suppression spraying with approved insecticides may be considered in high use
129 recreation areas and stands containing a high percentage of susceptible, high valued
130 timber. Biological controls may also be available for introduction to help reduce outbreak
131 frequency.
132

133 The presence or discovery of threatened or endangered species in these areas may
134 impact both the type of treatment and the decision to apply suppression tactics. Current
135 insecticides for gypsy moth control include a bacterial insecticide (Btk) and a commercial
136 formulation of a naturally occurring virus (Gypchek). The Gypchek virus, specific to
137 gypsy moth larvae, is only available through the federal suppression program
138 administered by the DNR. The intent in combating this insect is not to eradicate, but
139 rather to reduce populations so that tree mortality is maintained at tolerable levels. The
140 DNR's local gypsy moth coordinator and entomologist will be available for consultation on
141 control tactics and possible quarantine procedures. DATCP is the agency responsible for
142 quarantine procedures for wood products from infested counties.
143

144 The Chippewa County Forest's threshold levels for suppression will be as follows:

145 Note: The two bullets listed below meet threshold standards for the Gypsy Moth
146 Suppression program administered by the DNR.
147

- 148 • 20 acres in size and of a compact and regular shape (minimum eligible size for
149 aerial spraying through the state suppression program) OR high use, developed
150 recreation areas
- 151 • 500 egg masses per acre based on 1/40th acre (18.6 ft. radius) plots

152

153 610.3.1.2 Emerald Ash Borer

154 The Emerald Ash Borer (EAB) is an exotic beetle that was discovered in lower
155 Michigan in 2002. The adult beetles feed on ash foliage but cause little damage. The

156 larvae (immature stage) feed on the inner bark of ash trees, disrupting the trees ability
157 to transport water and nutrients and killing the tree. Emerald Ash borer probably
158 arrived in the United States on wood packing material via ship or airplanes originating
159 in its native Asia. This insect is currently present in lower in Michigan, Ohio, Illinois,
160 Indiana and Ontario, Canada.

161
162 Since its discovery EAB has killed an estimated 20 million ash trees and caused
163 regulatory agencies to enforce quarantines and fines to prevent potentially infested
164 ash wood products (especially firewood) from moving out of areas where EAB occurs.
165 ***The probability of this EAB impacting the ash component of the County Forest***
166 ***in the future is high.*** Ash comprises a significant component in the northern
167 hardwood timber type and can be found in nearly pure stands in some lowland areas.

168
169 The adult EAB is metallic green in color, and its body measures about 1/2 inch in
170 length and 1/8 inch wide. The EAB is a good flyer, but tends to fly relatively short
171 distances, about 1/2 mile.

172
173 The larvae (immature stage) are white to cream-colored and are flattened top to
174 bottom. The larvae tunnel under the bark and feed only on true ash trees (*Fraxinus*
175 *spp.*). This feeding activity by the larvae eventually kills the tree within 1 to 4 years
176 after infestation. All the ashes – green, white, and black are at risk, and EAB can just
177 as easily infest healthy trees as well as stressed trees.

178
179 Emerald Ash Borer generally has a one year life cycle, but could require two years to
180 complete a generation in colder climates. Adult emergence begins in May and goes
181 through mid-August. The adult beetle usually lives for about 3 weeks. Females lay
182 eggs in bark crevices on the trunk or branches. After the eggs hatch (about 10 days),
183 the larvae chew through the bark into the tree and begin feeding. Feeding by the
184 larvae is completed in autumn and they overwinter under the bark of the tree. The
185 following spring, adult beetles emerge through "D" shaped exit holes and the cycle
186 begins again.

187
188 Should an infestation occur, Chippewa County will work with DNR Forest Health staff
189 in applying measures to minimize spread, including aggressively salvaging ash trees
190 where feasible.

191
192 610.3.1.3 Oak Wilt

193
194 Oak wilt is a destructive disease of oak trees. It is responsible for the death of thousands
195 of oak trees in forests, woodlots, and home landscapes each year. Oak wilt is caused by
196 a fungus that invades and impairs the tree's water conducting system resulting in branch
197 wilting and tree death. The oak wilt fungus moves from tree to tree in two ways:
198 underground through natural root grafts or overland by insect vectors. The roots of trees
199 in each oak group (especially black oak) commonly graft to roots of other trees forming a
200 continuous underground network. When one tree in a group becomes infected and dies,
201 the fungus spread through the connected root systems, killing more trees.

202
203 The vector for the disease spread is nitidulid beetles also known as sap beetles. Oak wilt
204 spore mats emit a strong fruity odor that attracts the sap beetles. The beetles then carry
205 the fungus to wounds on oak trees that leak sap and the cycle continues.

206
207 Trees in both the red oak group and white oak group are affected. There is no known
208 cure once a tree has oak wilt. Prevention of new oak wilt infection centers is the best
209 management option and involves avoiding injury to healthy trees and removing dead or
210 diseased trees. Healthy trees should not be pruned during the growing season as this
211 attracts beetles that may carry the oak wilt fungus. If pruning is necessary or damage is
212 incurred during the growing season, e.g. through construction activities or storms, the
213 wounds should be painted immediately with wound paint.

214

215 It is Chippewa County's policy to remove infected trees. Once chipped or debarked, the
216 materials shall be covered with plastic for a period of six months to kill the fungus and any
217 insects in the material. A vibratory plow, or similar implement, may be used to sever root
218 grafts on isolated pockets where feasible. Timber harvest of oak will be restricted
219 between April 1 and July 15.
220

221 610.3.1.4 Forest Tent Caterpillar

222
223 Forest tent caterpillar can be found throughout the United States and Canada wherever
224 hardwoods grow. The favored hosts in Wisconsin are aspen and oak. This native insect
225 causes region-wide outbreaks at intervals from 10 to 15 years; outbreaks usually last 2 -
226 5 years in the Lake States. Severe and repeated defoliation can lead to dieback and/or
227 reduced growth of affected trees, which in some instances may be significant. Natural
228 enemies can often reduce and/or control populations. Aerial spraying of insecticides can
229 be an option for control as well. It is Chippewa County's strategy to employ sound
230 silvicultural practices to combat this cyclic pest.
231

232 610.3.1.5 Two-lined Chestnut Borer

233
234 The two-lined chestnut borer is a common secondary pest in trees that have been
235 severely defoliated several years in a row. Oaks that have been defoliated by insects
236 such as gypsy moth, fall cankerworm, and forest tent caterpillar can be attacked and
237 killed by the two-lined chestnut borer. Prevention of two-lined chestnut borer is the best
238 management option. Chippewa County will strive to maintain healthy trees through
239 sound silvicultural practices to discourage infestation. Infestations will be salvaged
240 promptly.
241

242 610.3.1.6 Jack Pine Budworm

243
244 Though jack pine is the preferred host, this budworm will also attack red pine stands
245 especially if near infested jack pine stands. Open grown stands with an abundance of
246 male flowers are the most susceptible to infestation. Maintaining the health and vigor
247 of the stands and salvaging infested areas promptly is the goal if this insect appears.
248

249 610.3.2 Funding

250
251 Desired control activities on the County Forest will be funded through the County Forest and
252 Parks budget if other sources of funding are not available. In the event costs require additional
253 funding, special appropriations from the County General Fund, or the County Sales Tax Fund
254 will be sought. In addition, state legislation may provide monetary assistance in direct crisis
255 situations where major control operations are undertaken. In case of gypsy moth outbreaks,
256 the county may seek funding from the State of Wisconsin Gypsy Moth Suppression Program.
257
258

259 610.3.3 Legal Obligations

260
261 All control operations will comply with regulations as set forth in existing state and federal
262 legislation. Refer to Wisconsin Administrative Code NR80, AG.29, and the Environmental
263 Pesticide Control Act.
264

265 610.3.4 Special Projects

266
267 The County and other agencies may cooperate in forest pest research (see Chapter 200).
268

269 **615 TIMBER THEFT**

270 All cases of alleged timber theft on the County Forest shall be investigated and resolved promptly. An

271 allegation of theft by cutting and /or removing timber from the County Forest does not alleviate the
272 County from payment under s. 28.11 (9) Wis.Stats. The County will collect damages pursuant to s.
273 26.05 Wis. Stats., and may also pursue criminal charges under s. 943.20 Wis. Stats., and /or seek
274 civil damages.
275

276 **615.1 TIMBER THEFT INVESTIGATION**

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

278 **Determination of Theft**

- 279 1. Gathering facts - The County, through its Sheriff's department and along with assistance of
280 the DNR liaison, rangers, and wardens, will ascertain the facts pertinent to the alleged theft,
281 including determination of the damages to the County. Legal counsel representing the
282 County (Corporation Counsel's office) should be involved in all aspects of investigation.
283 Property involved in the alleged theft may be seized pursuant to s. 26.04 Wis. Stats. for use
284 as evidence.
- 285 2. Boundary determination - If property boundaries are involved, the County shall conduct a
286 legal survey of the boundaries in question.
- 287 3. During the investigation, the County legal counsel should be consulted for further direction or
288 for assistance in resolving the matter. If deemed necessary by the Committee, the District
289 Attorney shall be requested to prosecute for violation of s. 26.05, Wis. Stats. (timber theft
290 law), and a legal action for damages commenced. Otherwise, with advice of the Corporation
291 Counsel, the County may seek to reach a mutually agreed upon damage payment with the
292 party alleged to have cut and/or removed the timber without consent of the County.
293

294 **620 ENCROACHMENTS (ADVERSE POSSESSION)**

295 The county will actively investigate all suspected cases of encroachments on the County Forest. To
296 insure the integrity and continuity of the County Forest land, all cases will be dealt with promptly and
297 in a consistent manner. The following procedures will be used in all cases of suspected
298 encroachments:
299

300 The county will establish property boundaries; if necessary, a legal survey will be conducted.

301
302 A. The County will gather all facts.

303 B. The Committee, in consultation with the Forest and Parks Administrator, County Administrator
304 Corporation Counsel, and the DNR, will make a decision as to the disposition of the case.

- 305 • All above ground encroachments that are movable will be removed from County property.
- 306 • Permanent type facilities, such as homes, garages, and septic systems shall be addressed
307 individually and may be removed or handled by a land use agreement. Sale or transfer of the
308 encroachment should remain an option depending on the circumstances involved and the
309 viability of an adverse possession claim (s. 893.29 Wis. Stats.).
- 310 • Provisions in the land use agreement, if that option is pursued, may include granting the
311 encroacher permission to encroach on the County Forest lands with the following
312 stipulations: no other encroachments will be allowed; the permit is non-transferable; the
313 County must be notified once encroachment is terminated; County continues full ownership
314 and control of property; permittee agrees to waive any rights to any future declaration of
315 ownership or interest in the encroached County property; County reserves the right to
316 cancel the permit and the permit is to be filed in the office of the Chippewa County Forest
317 and Parks Department and all fees related to the land use permit shall be paid by the
318 permittee.
- 319 • A copy of the actual Access Permit can be found in Chapter 900.