

**WOOD COUNTY, WI  
FOREST COMPREHENSIVE LAND USE PLAN  
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CHAPTER 300  
DESCRIPTION OF FOREST & MANAGEMENT PLANNING**

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### 300.1 County Forest Ownership

The County Forest is composed of 79 management compartments ranging in size from 120 acres to nearly 1352 acres. Within the county forest boundaries, approximately 96 percent of the land is county owned with most of the remaining 4 percent in small private holdings. A map of these compartments can be found in the Appendix.

### 300.2 Natural Features

#### 300.2.1 Topography

The Wood County Forest, located in the central part of the state, lies primarily within the Central Sand Plains physiographic region of Wisconsin. Wood County contains Precambrian igneous and metamorphic rock, Cambrian sandstone, and a variety of Pleistocene material. The southern part of the county is the flat plain of Glacial Lake Wisconsin. The remainder of the county has undulating topography. The northwest part of the county is underlain by thick glacial sediment deposited before the Wisconsin Glaciation. Much of the rest of the county is underlain by Cambrian sand and sandstone, but outcrops of Precambrian rock are abundant. The present landforms are the direct result of the Wisconsin Glacial Ice Sheet. This last stage of glaciation ended some fifteen to twenty thousand years ago. Most of the county forest lies in the southern portion of the county in the flat plain of Glacial Lake Wisconsin.

#### 300.2.2 Geography

Wood County is the 32nd largest county in Wisconsin with a land area of approximately 507,428 acres, plus another 9,116 acres of water including: nine named lakes, 70 unnamed lakes or flowages and 82 streams, totaling approximately 390 miles in length. Approximately 206,500 acres (40%) are classified as forestland. The County Forest, which contains approximately 37,826 acres, is the 19th largest County Forest in the state.

Appendix 1000 contains maps showing the location of the County Forest.

#### 300.2.3 Geology and Soils

Wood County consists of three geologically different areas. As mentioned previously, the southern third of the county is the flat plain of Glacial Lake Wisconsin. Most of the plain is underlain by offshore sand, which is thickest in the east. In many places, one or more beds of offshore silt and clay occur in the sand at a depth of several meters or tens of meters. The water table is near the surface in the western half of the lake plain, and peat overlies the sand in many places. The water table is well below the surface in most of the eastern half of the lake plain, which is bisected by the trench of the Wisconsin River. The middle third and northeastern part of the county have undulating topography underlain in many areas by thin Cambrian sand and sandstone; other areas are underlain by Precambrian metamorphic and igneous rock. Although this area has been glaciated, Pleistocene material generally consists of surface layer hill slope deposits containing only scattered fragments of glacially transported material. The northwestern part of the county has undulating topography underlain by thick glacial sediment deposited before the Wisconsin Glaciation.

Soil types on the Wood County Forest are generally sandy and are in the following associations: Elm Lake-Merrilan, Plainfield-Friendship, and Newson-Meehan. Organic soils present on the Wood County Forest are primarily from the Dawson-Greenwood and Markey-Rifle associations. A generalized soil map can be found in the Appendix. Detailed soils information is available from the USDA Web Soil Survey ([websoilsurvey.nrcs.usda.gov](http://websoilsurvey.nrcs.usda.gov)).

### **300.2.4 Ecological Landscapes**

Ecological Landscapes are regions in Wisconsin containing similar ecology and management opportunities. Each landscape can present unique management opportunities and challenges. These landscapes are essentially based on the National Hierarchical Framework of Ecological Units (NHFEU) (Cleland et al. 1997). More information on the 16 Ecological Landscapes defined within Wisconsin is available at <https://dnr.wi.gov/topic/landscapes/index.asp?mode=Choose>  
The Wood County Forest lies within the Central Sand Plains Ecological Landscape.

#### **300.2.4.1 Land Type Associations and Biological Communities**

Wisconsin's County Forests are part of a larger landscape and are managed not as sole entities but part of a larger ecoregion. The National Hierarchical Framework of Ecological Units (NHFEU) categorizes Wisconsin into two provinces, the Laurentian Mixed Forest (212) forming the northern half of the State and the Eastern Broadleaf Forest (222). Within each province are sections, subsections and land type associations that further group land into areas with similar geology, soil types, surface water features, wetlands and historic and potential plant communities. The Wood County Forest is encompassed within the Eastern Broadleaf Forest (222) province, and is entirely encompassed by the "Central Sand Plain" Subsection. Land type Associations (LTA's) within this subsection include: 222Ra04 Northwest Outlet Cranberry Bogs, 222Ra07 Wisconsin River Outwash Terraces, 222Ra11 Yellow River Floodplain and Terraces, 222Ra14 Glacial Lake Wisconsin Siliceous Sand Plain, 222Ra16 Jackson-Juneau Sandstone Knolls and Terraces, 222Rb02 Spaulding Uplands, 222Rb03 Pittsville Uplands. LTA is, having common ecological characteristics, allow land managers to better plan for future vegetative communities, wildlife species to feature, and compatible recreation uses.

A biological community is an assemblage of different plant and animal species, living together in a particular area, at a particular time in specific habitats. Communities are named for their dominant plant species. Wood County lies within the "Curtis Tension Zone", which is a vegetative transition band that runs through central Wisconsin, separating northern forest communities from southern forest communities. As a result, there are species found on the Wood County Forest that are either on the northern or southern limit of their natural ranges. The following biological communities are found on the Wood County Forest:

Northern Forest: contains mixed deciduous and coniferous forests found in a distinct climatic zone that occurs north of the tension zone. Commonly found in the 222Rb03 LTA in the northern portion(s) of the County Forest. An example is the mixed white pine, aspen, birch, oak, and maple stands found on County lands in Hiles and Seneca Townships.

Southern Forest: contain a predominance of oaks and a general absence of conifers and lie south of the tension zone. Commonly found in the 222Ra11, 222Ra14, 222Ra16 LTA's in the Southern portion(s) of the County Forest. The stands of black and pin oak common in Port Edwards and Remington Townships are examples of this community.

Oak Savannas: characterized by open grassland areas interspersed with trees, especially oaks. They are defined as having less than fifty percent of the ground covered with trees. There are no known areas of good savannah being managed on the County Forest. However, there may be opportunities, particularly in the southern portions of the County Forest, to manage or restore this community.

Oak and Pine Barrens: typically occur on sandy soils and are dominated by grasses, low shrubs, small trees, and scattered large trees. Most commonly, these are Pine Barrens in

northern and southern Wisconsin and oak barrens in the southern and west central parts of the state. There are no known barrens communities on the County Forest.

Grassland: characterized by the absence of trees and large shrubs and the dominance of grass and forb species.

Wetlands: characterized by soils or substrate that is periodically saturated or covered by water. This community is common across all LTA(s) throughout the forest.

Aquatic Communities: including springs, ponds, lakes, streams and rivers. Common to most LTA's within the County Forest. The Yellow River, Lake Dexter, Hemlock Creek, East Fork Black River, and their tributaries are the major stream complexes on the County Forest. Land type associations are units of the National Hierarchical Framework of Ecological Units (NHFEU) classification system. They are much smaller than Ecological Landscapes and are generally based on glacial features. They can be useful for planning at finer scales within a landscape. More information is available at <https://dnr.wi.gov/topic/landscapes/index.asp?mode=detail&Landscape=11>

(Or links specific to other landscapes)

### 300.2.5 Vegetative Cover Types

Approximately 76 percent of the Wood County Forest land base is forested, and approximately 24 percent of the Wood County Forest is non-forested. Forested uplands are comprised of primarily aspen, oak, and pine while aspen, red maple, white pine, and bottomland hardwoods occupy the forested lowlands. Non-forested includes types such as upland and lowland grasses, lowland brush, grass openings, shrubs, and bogs, open water, and rights-of-way.



## Property Cover Type Acreage

Print Date: 11/24/2021  
Report 101

### 7200 - WOOD COUNTY FOREST

#### Acreage

Recon Acres	37,656	
Forested Acres	28,798	Forested acres include acreage from stands that have a true forest type for their Primary Type.
Scheduled for Management	27,985	
Not Scheduled for Management	813	Acreage not scheduled for management includes acreage from stands with a prefix of: R - Designated Wild River Zone Y - Designated Wilderness Area Z - Other Stand Omitted from Management
Non-Forested Acres	8,841	



## Property Cover Type Acreage

Print Date: 11/24/2021  
Report 101

### 7200 - WOOD COUNTY FOREST

Forest Type Acreage					
Type	Type Description	Stands	Acres	Percent of Forested Acres	Percent of Recon Acres
A	ASPEN	342	12,402	43 %	33 %
BH	BOTTOMLAND HARDWOODS	31	1,242	4 %	3 %
BW	WHITE BIRCH	1	5	0 %	0 %
CH	CENTRAL HARDWOODS	11	303	1 %	1 %
MR	RED MAPLE	102	3,078	11 %	8 %
O	OAK	224	6,211	22 %	16 %
OX	SCRUB OAK	24	516	2 %	1 %
PJ	JACK PINE	12	126	0 %	0 %
PR	RED PINE	113	1,893	7 %	5 %
PW	WHITE PINE	118	2,742	10 %	7 %
SH	SWAMP HARDWOODS	2	13	0 %	0 %
SW	WHITE SPRUCE	5	38	0 %	0 %
T	TAMARACK	5	229	1 %	1 %
<b>Total:</b>		<b>990</b>	<b>28,798</b>	<b>101 %</b>	<b>75 %</b>



## Property Cover Type Acreage

Print Date: 11/24/2021  
Report 101

### 7200 - WOOD COUNTY FOREST

Non-Forest Type Acreage					
Type	Type Description	Stands	Acres	Percent of Non-Forested Acres	Percent of Recon Acres
G	UPLAND GRASS - *OLD CODE, RECODE	4	45	1 %	0 %
GG	TRUE GRASSES - *OLD CODE, RECODE	18	112	1 %	0 %
GH	HERBACEOUS VEGETATION - *OLD CODE, RECODE	3	18	0 %	0 %
IA	PARKING AREA	2	12	0 %	0 %
ICG	CAMPGROUND	1	52	1 %	0 %
IP	PICNIC AREA	1	27	0 %	0 %
ITM	MOTORIZED VEHICLE TRAIL	1	12	0 %	0 %
KB	MUSKEG - BOG	2	10	0 %	0 %
KEV	EMERGENT VEGETATION - *OLD CODE, RECODE	2	57	1 %	0 %
KG	LOWLAND GRASS - *OLD CODE, RECODE	58	4,893	55 %	13 %
L	WATER	1	263	3 %	1 %
LB	LOWLAND BRUSH - *OLD CODE, RECODE	2	100	1 %	0 %
LBA	LOWLAND BRUSH - ALDER - *OLD CODE, RECODE	27	908	10 %	2 %
LBD	LOWLAND BRUSH - RED DOGWOOD - *OLD CODE, RECODE	1	109	1 %	0 %
LBW	LOWLAND BRUSH -WILLOW - *OLD CODE, RECODE	31	1,770	20 %	5 %
LM	MINOR LAKE	7	49	1 %	0 %
LMS	MINOR STREAM	28	262	3 %	1 %
ROW	RIGHT OF WAY	11	117	1 %	0 %
UB	UPLAND BRUSH - *OLD CODE, RECODE	4	18	0 %	0 %

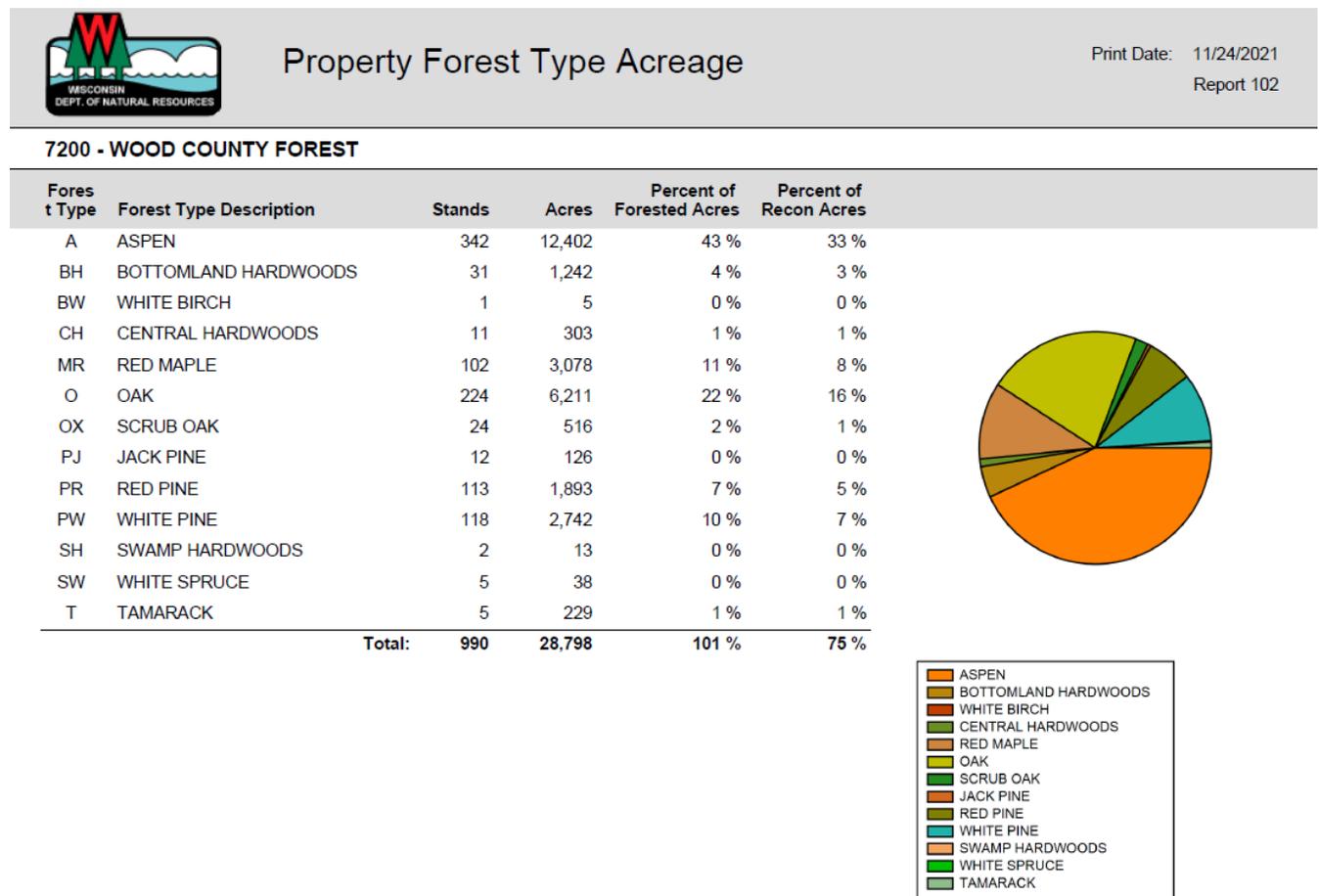
Non-Forest Type Acreage					
Type	Type Description	Stands	Acres	Percent of Non-Forested Acres	Percent of Recon Acres
Z	ROCK OUTCROPS	1	7	0 %	0 %
<b>Total:</b>		<b>205</b>	<b>8,841</b>	<b>99 %</b>	<b>22 %</b>

\*Percentages may not sum to 100% due to rounding

## FORESTED COMMUNITIES

The forested cover types are made up of a variety of size classes (*regeneration, sapling-pole, and saw timber*) and structure (*canopy, layers, ground vegetation, dead and downed material and inclusions*).

Forest cover types and acreages associated with the Wood County Forest are provided on following page:



## NON-FORESTED COMMUNITIES

Non-forested habitats are important components of management within the County Forest. Upland and wetland non-forest types provide important habitat for distinct groups of species.

### Upland Non-Forest

Upland non-forest areas of the County Forest include:

Grass openings- consist of upland grasses such as brome, quack, bluegrass, timothy, big and little bluestem, and Indian grass.

Herbaceous vegetation- ground cover predominated by herbaceous species with bracken fern, sweet clover, giant ragweed, sting nettle, upland aster, goldenrod, and prairie dock being common.

Shrub opening- primarily upland site less than 10% stocked with tree species but having 50% or more of the area stocked with taller growing, persistent shrubs. This includes hazel, dogwood, Juneberry, sumac, alder, willow, and prickly ash.

Rock outcrops- include rocky talus and bedrock.

### Wetlands

Wisconsin State Statutes define a wetland as “an area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation, and which has soil indicative of wet conditions.” Wetland communities are recognized to be a complex association of plants and animals, soils and water levels having special natural values. They provide many functional values including shoreline and flood protection, water quality protection, groundwater recharge, and animal and plant habitat. Therefore, it is the policy of Wood County to preserve, protect, and manage wetlands under its jurisdiction in a manner that recognizes the natural values of wetland and their importance on the environment. Scientists distinguish dozens of wetland types, characterized by vegetation, soil type and degree of saturation or water cover. Some of the more prominent types found on the County Forest include:

Aquatic beds- plants growing entirely on or in a water body no deeper than 6 feet. Plants may include pondweed, duckweed, lotus and water lilies.

Marshes- characterized by standing water and dominated by cattails, bulrushes, pickerelweed, lake sedges and/or giant bur-reed.

Sedge or “wet” meadows- these wetlands more often than not have saturated soils rather than standing water. Sedges, grasses and reeds dominant, but may also have blue flag iris, marsh milkweed, sneezeweed, mint and several species of goldenrod and aster.

Scrub/shrub- these areas, which include bogs and alder thickets, are characterized by woody shrubs and small trees such as tag alder, bog birch, willow and dogwood.

Forested- these areas, include bogs and forested floodplain complexes, are characterized by trees 20 feet or more in height such as tamarack, white cedar, black spruce, elm, black ash, green ash and silver maple.

Forest management is conducted on many of the forested wetlands with activities occurring primarily during frozen conditions. See Chapter 830 for detailed discussion on Biological Community Types.

### **300.2.6 Fish and Wildlife**

Wisconsin supports over 650 different types of mammals, birds, reptiles, amphibians and fish as well as millions of invertebrates. Management of county forestlands and the biotic communities they support provide a mix of habitat types and ages for a wide range of wildlife species. County forestlands provide a full range of habitats from open grasslands/barrens to mature forests, from bogs to forested wetlands, from spring ponds to lake shorelines. County forest staffs work closely with WDNR fish and wildlife managers and conservation organizations to identify and manage critical habitat for breeding, migrating and wintering fish and wildlife.

The Wood County Forest is habitat for wildlife common to Wisconsin. Numerous species of songbirds, waterfowl, raptors, shorebirds, reptiles, amphibians, fish and mammals frequent the forest. Each species, or interacting group of species, do best under different conditions, ranging from recently disturbed ground to old growth. A diversity of plant communities is key to providing a niche for a variety of wildlife species. For example, two very popular wildlife species in the county are the white-tailed deer, and ruffed grouse. The aspen forest type is recognized as key habitat for these and many other species and is important in maintaining biological diversity across North America. A number of endangered, threatened, or rare wildlife species make their home in or near the Wood County Forest.

The bald eagle, osprey, red-shouldered hawk, Karner blue butterfly, timber wolf, and massasauga rattlesnake are examples. Longer rotation forest communities, such as bottomland hardwoods, white pine, or northern hardwoods, similarly provide important habitat for other, less well-known species, such as pileated woodpeckers or northern goshawk.

### **300.2.7 Rare and Endangered Resources**

A review of the Natural Heritage Inventory (NHI) indicates the presence of a number of rare species, natural communities and unique natural features on the Wood County Forest. All land disturbing projects will include an evaluation phase, to determine whether an NHI screening is required.

The Natural Heritage Inventory Database is the most comprehensive source of rare species data for Wisconsin. These data are used for a variety of purposes including research, land management, state land master planning, community planning, conservation planning and review of public and private activities across the state, The NHI Portal is currently available to DNR staff and County Forest staff who hold a data sharing license.

The Wisconsin Historical Preservation Database is the most comprehensive source of cultural resources for Wisconsin. These data are used for a variety of purposes including research, land management, state land master planning, community planning, conservation planning and review of public and private activities across the state, The Wisconsin Historical Preservation Database is currently available to DNR staff and County Forest staff.

### **300.2.8 Water**

Wood County has 5740.67 acres involving nine named lakes, 70 unnamed lakes/flowages and 389.7 miles of streams. Of this total, 26.4 miles are classified as trout streams.

The fishery resource within the County Forest boundaries is classified as warm water. There are two named lakes, Dexter Lake and Skunk Creek Flowage, having all or portions of their shoreline under county ownership.

Wood County currently has no streams or lakes classified as Outstanding and Exceptional Resource Waters within County Forest boundaries.

## **300.3 Cultural Factors**

### **300.3.1 Economy**

The importance of the County Forests to Wisconsin's economic health continues to rise. County Forests sustain over 60,000 full-time jobs derived from logging, trucking, paper production, manufactured building materials, and lumber. Many other jobs are created in such businesses as the expanding printing industry and are located far from the forested northland. County Forests contribute to the 24 billion dollar forest industry in Wisconsin.

In addition, the lands managed by these 30 counties provide an important recreation resource to complement our state's valuable tourism industry. Tourists spend valuable money at local businesses. By providing 2.4 million acres of public recreation land, we bring tourists to our state. As population increases and public access to privately owned forestland decreases, the need for accessible lands unquestionably will assume an ever more important role. More information on the economic impact of the County Forest program can be found at <https://www.wisconsincountyforests.com/>

Production of forest products and spin-off industries derived from the recreational opportunities on the

Forest and the forest products it produces are vitally important to Wood County's economic well-being. Forest industry is the #2 ranked employer in the County. This information can be found at the following link: <https://dnr.wi.gov/topic/forestbusinesses/factsheets.html>.

## Forest Economy Wood County



### HIGHLIGHTS

*The forest industry is the number two employer in the county*

*Forestry is number one in total output for the county*

*Forestry provides 7.2% of the jobs in the county and 21.0% of the output*

*Every job in forestry supports one additional job in the county*

*Every million dollars of output in forestry creates \$302,000 of output in other sectors*

*Wages in the forest industry are 51% higher than the county average*



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### Direct Economic Effects

	Employment	Output	Value Added
Forestry and Logging	433 jobs	\$21.1 million	\$4.7 million
Pulp and Paper	2,041 jobs	\$1.6 billion	\$362.8 million
Sawmills and Wood Products	1,109 jobs	\$209.7 million	\$60.9 million
<b>Total</b>	<b>3,583 jobs</b>	<b>\$1.8 billion</b>	<b>\$428.3 million</b>

### Employment

Jobs	3,583 jobs
Payroll	\$233.9 million
Total Labor Income	\$240.8 million
Indirect Employment	3,918 jobs

### Output

Total Output	\$1.8 billion
Output per Worker	\$502,000
Indirect Output	\$544.0 million

### Taxes

Direct	\$14.5million
Indirect Taxes	\$42.5 million

### Forest Land

Total Forest Land	228,537 acres
Public Land	62,012 acres
Private Land	166,525 acres
Forest Area	44% forested

2016 data. Output is the total value of the industry in the local economy. Value added is a measure of the industry's contribution to the local community; it includes wages, rents, interest, and profits. Direct impacts are jobs, revenue, and taxes for normal business operations. Indirect includes indirect and induced impacts. It refers to the dollars industry and households spend at other area businesses and the local jobs supported by the forest industry.

### **300.3.2 Education and Research**

Education and research continue to be critical components in making decisions that affect our natural resources. As public needs and demands of our forest and its products increase, we must be prepared to assure that sound decisions result. To this end, Wood County encourages and supports research efforts that relate to the forest, and educational opportunities that will promote a better understanding of forest communities and management.

### **300.4 Other Public Lands Ownership**

Wood County Forest shares common boundaries with the Wood County Wildlife Area, Sandhill Wildlife Area, Jackson County Forest, and Hardwood Bombing Range. These adjacent properties present potential impacts to management decisions and recreational uses on the Wood County Forest. Opportunities to collaborate and cooperate with adjacent public landowners arise from time to time. The Wood County Forest will continue to form and build on these relationships with other adjacent public lands in the best interest of the public.