

COUNTY FOREST COMPREHENSIVE LAND USE PLAN

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Draft

CHAPTER 300

DESCRIPTION OF FOREST AND MANAGEMENT PLANNING

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300 DESCRIPTION OF FOREST

300.1 COUNTY FOREST OWNERSHIP

The County Forest is composed of 116 management compartments ranging in size from 204 acres to nearly 2,200 acres. Within the county forest boundaries approximately 90 percent of the land is county owned with most of the remaining 10 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 Sawyer County Forest, located in the Northwestern part of the state, lies primarily within the North Central Forest physiographic region(s) of Wisconsin. The topography of the forest and surrounding area has glacial origin. The glaciers eroded hilltops and filled valleys, thus reducing relief. Elevations range from 1750 feet in the northwest Seeley Hills_ part of the county forest to 1240 feet in the southeastern Winter Block. The terrain ranges from flat in the southeastern Winter Block to gently rolling and hilly in the northwest Seely Hills Block and western Sissabagama and Edgewater Blocks of the County Forest.

300.2.2 Geography

Sawyer County has a land area of approximately 804,160 acres, plus another 56,183 acres of water included in lakes and stream, making it the fifth largest county in the state. Approximately 74 percent of the land in the county is classified as forest land. The County Forest, which contains approximately 115,197 acres making it the ninth largest County Forest in the state.

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

300.2.3 Geology and Soils

The soils of Sawyer County have been derived largely from the weathering of the glacial drift deposits and show a great variation within relatively short distances. Since the glacial period, the soils have been modified by water action, wind, and the accumulation and incorporation of organic material. Soil types on the County Forest range from sandy loams in the northern and western portions of the Forest to silt loams in the southern and eastern part of the county. 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).

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 (NHFUE) (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 majority of the Sawyer County Forest lies within the North Central Forest Ecological Landscape, with smaller areas of County Forest also within the Northwest Sands Ecological Landscape and the Forest Transition Landscape.

The North Central Forest Ecological Landscape is found across northern Wisconsin. Soil types are generally sandy loams, sands and silts with forest types dominated by northern mesic forest types such as northern hardwood, aspen-birch, and spruce fir.

The Northwest Sands Ecological Landscape is found in northwest Wisconsin, an area of County Forest in the northwest portion of the county lies within this landscape. Soils are generally well drained sands or loamy sands with forest types dominated by pine, aspen-birch and oak.

The Forest Transition Landscape lies along the northern border of Wisconsin's tension zone through the central and western part of the state. An area of county forest in the southwest corner of the county is found within this landscape. Soil types are primarily well drained sandy loams but there is considerable diversity of soil attributes including

sandy soils, organic soils, and loams and silt loams.

300.2.4.1 Land Type Associations

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. The following Land Type Associations are present within North Central Forest Ecological Landscape on the Sawyer County Forest: Hayward Moraines, Telemark Washed End Moraine, Frog Creek Moraines, Meteor Hills, Birchwood Lakes, Jump River Ground Moraine, Flambeau Silt Capped Drumlins, and the Exeland Plains. Within the Northwest Sands Ecological Landscape, the Hayward Plains Land Type Association occurs, and within the Forest Transition Landscape the Barron-Dobie Plains are found. More information is available at:

<https://dnr.wi.gov/topic/landscapes/index.asp?mode=detail&Landscape=11>

<https://dnr.wi.gov/topic/Landscapes/index.asp?mode=detail&Landscape=13>

<https://dnr.wi.gov/topic/Landscapes/index.asp?mode=detail&Landscape=10>

300.2.5 Vegetative Cover Types

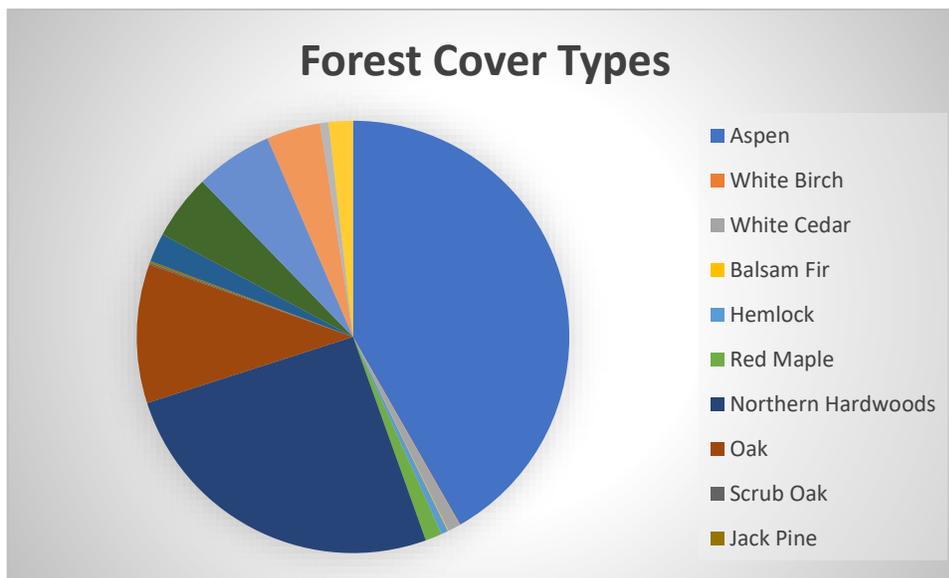
The Sawyer County Forest is Approximately 85 percent of the Sawyer County Forest land base is forested, and approximately 15 percent of the Sawyer County Forest is non-forested. Forested uplands are comprised of primarily aspen, northern hardwoods, and oak while black spruce, swamp hardwoods and tamarack occupy the forested lowlands. Non-forested includes types such as (lowland alder brush, marsh, and muskeg bog).

FORESTED COMMUNITIES

The forested cover types are made up or 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 associated with the County Forest are:

Forest Type	Forest Type Description	Stands	Acres	Percent of Forested Acres	Percent of Recon Acres
A	Aspen	882	40,022	42%	35%
BW	White Birch	7	45	< 1%	< 1%
C	White Cedar	13	887	1%	1%
FB	Balsam Fir	5	59	< 1%	< 1%
H	Hemlock	13	487	1%	< 1%
MR	Red Maple	35	1,195	1%	1%
NH	Northern Hardwoods	481	24,454	26%	21%
O	Oak	246	9,967	10%	9%
OX	Scrub Oak	1	117	< 1%	< 1%
PJ	Jack Pine	6	136	< 1%	< 1%
PR	Red Pine	99	2,065	2%	2%
PW	White Pine	141	4,684	5%	4%
SB	Black Spruce	65	5,550	6%	5%
SH	Swamp Hardwoods	115	3,853	4%	3%
SW	White Spruce	37	611	1%	1%
T	Tamarack	85	1,734	2%	2%



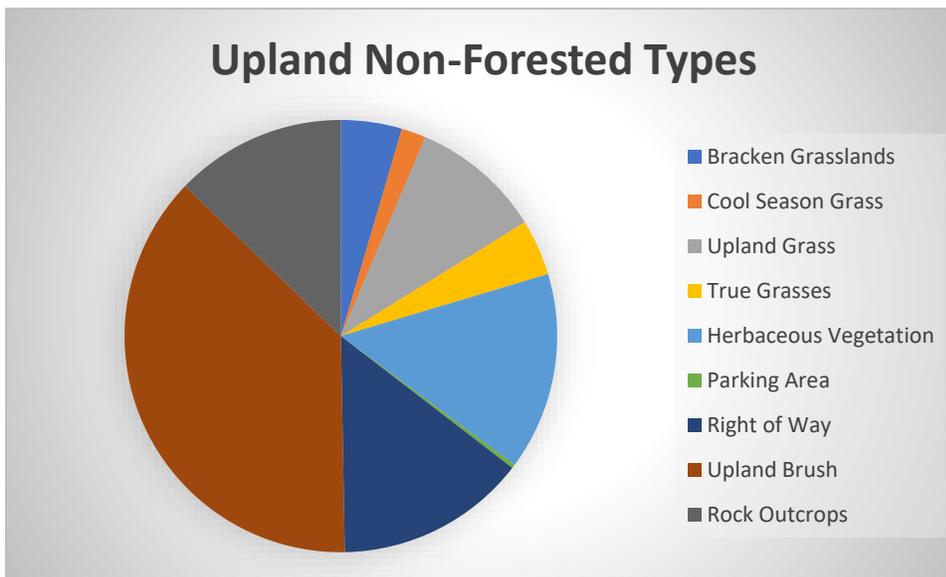
NON-FORESTED COMMUNITIES

Non-forested habitats are important components of management within the County Forest. Up-land 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:

Forest Type	Forest Type Description	Stands	Acres	Percent of Non-Forested Acres	Percent of Recon Acres
BK	Bracken Grasslands	2	62	< 1%	< 1%
CSG	Cool Season Grass	2	25	< 1%	< 1%
G	Upland Grass	17	133	1%	< 1%
GG	True Grasses	9	57	< 1%	< 1%
GH	Herbaceous Vegetation	9	201	1%	<1%
IA	Parking Area	2	4	<1%	<1%
ROW	Right of Way	23	194	1%	<1%
UB	Upland Brush	22	510	3%	<1%
Z	Rock Outcrops	4	174	1%	<1%



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.

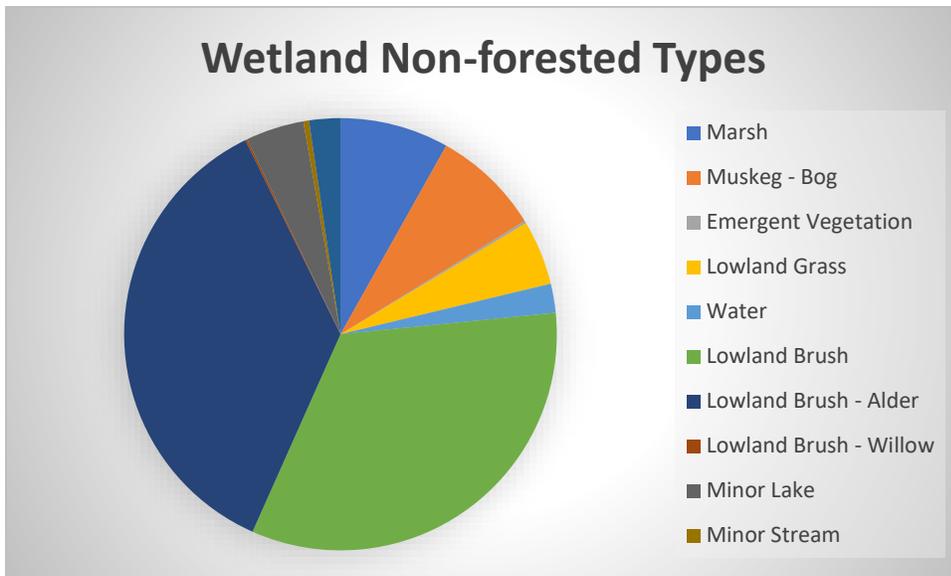
Shrub opening- primarily upland site less than 10% stocked with tree species but having 50% or more of the area stocked with taller growing, persistent shrubs. This includes hazel, dogwood, juneberry, sumac, alder, willow, and prickly ash.

Rock outcrops- include rocky talus and bedrock.

See Chapter 830 for detailed discussion on Biological Community Types.

Wetlands, Non-forested areas of the County Forest include:

Forest Type	Forest Type Description	Stands	Acres	Percent of Non-Forested Acres	Percent of Recon Acres
K	Marsh	35	1,423	8%	1%
KB	Muskeg - Bog	11	1,415	7%	1%
KEV	Emergent Vegetation	3	32	<1%	<1%
KG	Lowland Grass	22	846	4%	1%
L	Water	5	380	2%	<1%
LB	Lowland Brush	54	5,816	31%	5%
LBA	Lowland Brush - Alder	47	6,312	33%	5%
LBW	Lowland Brush - Willow	2	26	<1%	<1%
LM	Minor Lake	19	761	4%	1%
LMS	Minor Stream	2	74	<1%	<1%
WSA	Wetland Shrub - Alder	2	407	2%	<1%



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 Sawyer County to preserve, protect, and manage wetlands under its jurisdiction in manner that recognizes the natural values of wetland and their importance on the environment. Scientist 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 bed- 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 that not have saturated soils rather that standing water. Sedges, grasses and reeds dominant, but may also have blue flag iris, mash

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 forest lands and the biotic communities they support provide a mix of habitat types and ages for a wide range of wildlife species. Each species, or interacting group of species, do best under different conditions. County forest lands 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.

While the Sawyer County Forest provides for a wide range of fish and wildlife species, current management strategies or programs have emphasized the following species and/or communities:

- Elk reintroduction

- Ruffed Grouse management through age class diversity programs within the Aspen cover types throughout the forest.

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 Sawyer 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

Sawyer County has 56,183 acres of lakes and flowages and nearly 690 miles of streams. Of this total, 265 miles are classified as trout streams.

Within the County Forest boundaries there is a variety of fishery resources. Approximately eight named and forty-six unnamed lakes have all or portions of their shoreline under county ownership. In addition, the county owns frontage on six named trout streams totaling over eight miles. A complete inventory of the surface water resources in Sawyer County can be found in [Appendix](#).

The WDNR also maintains a list of Outstanding and Exceptional Water Resources for Sawyer County. This list is periodically revised, with the most current being found on the WDNR website at the following link.

<https://dnr.wisconsin.gov/topic/SurfaceWater/orwerw.html>

Note: An entire listing of the outstanding and exceptional resource waters can be found in Wisconsin Admin. Code NR102.10 and 102.11.

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 29 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 tourist 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 Sawyer County's economic well-being. Forest industry is the #2 ranked employer in the County. Recreation and tourism are ranked # 1. This information can be found at the following link: <https://dnr.wi.gov/topic/forestbusinesses/factsheets.html>.

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, Sawyer 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

Sawyer County Forest shares a common boundary with Bayfield County Forest, Rusk County Forest, Washburn County Forest, Flambeau River State Forest, and Chequamegon Nicolet National Forest. Roads and trails are connected without interruption between the public lands providing for a more enjoyable experience for the user groups. Sawyer County Forest will continue to form and build on these relationships with other adjacent public lands in the best interest of the public.