
Agricultural, Natural & Cultural Resources

Introduction

This element provides a baseline assessment of the Town of Hunter’s agricultural, natural, & cultural resources and covers all of the information required under Wisconsin Statute 66.1001. Information includes: productive agricultural areas, a natural resource inventory, and a cultural resource inventory. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development and maintenance of agricultural, natural, & cultural resources in the Town of Hunter.

The Town of Hunter, like other communities in Sawyer County, has an abundance of high quality natural resources worth protecting for the economic, recreational, and ecological needs of current and future residents. Throughout the planning process, specific resources within the Town of Hunter will be better understood and goals will be updated to support their protection and maintenance over time.

Agricultural Resource Inventory

The following section details some of the important agricultural resources in Sawyer County as most farming and agricultural data is not collected at the town level. However, assumptions can be made based on data collected at the County level. The information comes from a variety of resources including the U.S. Census of Agriculture. Several other relevant plans exist (i.e. – Sawyer County Farmland Preservation Plan, 1982) and should be consulted for additional information.

Agriculture in Sawyer County

In the mid to late 1880s, with the major forest cut-over nearly complete, prospective development of farming the now cleared land was marketed not only locally, but nationally. Small ready to go farms (a home, pigs, chickens, etc) were available for persons to purchase and instantly start a farm. In 1920 there were 823 farms & farm operations throughout Sawyer County, covering 86,914 acres. By 1940 the number of farms countywide peaked at 1,300 and farm acreage reached a high of 142,584 acres in 1950.

Based on 2008 Town of Hunter assessment data, only four parcels were assessed as agricultural, totaling 103 acres. By comparison, the Existing Land Use Map has a total of 161.5 acres represented on the map.

Table 5.1 provides information on the number and size of farms in Sawyer County for the years 1997, 2002 and 2007. The total number of farms in Sawyer County increased by 46 farms between 1997 and 2002, but added only one farm from 2003 to 2007. Both the market value of land and buildings increased between 1997 and 2007 in Sawyer County.

Table 5.1: Sawyer County Farms and Lands in Farms 1997-2007

Farms and Land in Farms	1997	2002	2007	Percent Change 1997-2007
Number of Farms	184	230	231	25.5%
Land in Farms (acres)	48,463	54,056	47,093	-2.8%
Average Size of Farms (acres)	263	235	204	-22.4%
Market Value of Land & Buildings				
Average per Farm	\$207,326	\$460,891	\$606,685	192.6%
Average per Acre	\$769	\$1,986	\$2,976	287.1%

Source: U.S. Census of Agriculture, 1997-2007

Productive Agricultural Areas

Productive or prime agricultural lands is defined by the Natural Resources Conservation Service (NRCS) as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. The land must also be available for these uses (cropland, pastureland, forestland, or other land but not water or urban built-up land).”

Prime farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. The Town of Hunter is generally not an agriculturally productive area. However, based on soil types and other conditions, some areas of the Town may have the ability to sustain crop development. **Map 5.1** represents prime farmlands. Most of the land area identified on **Map 5.1** would not be considered developable for agricultural purposes due to ownership under tribal or federal status. According to the NRCS, prime farmland generally:

- has an adequate and dependable water supply from precipitation or irrigation,
- has a favorable temperature and growing season,
- has acceptable acidity or alkalinity,
- has few or no rocks,
- is permeable to air and water,
- is not excessively erodible,
- is not saturated with water for long periods of time, and
- does not flood frequently or is protected from flooding.

Natural Resource Inventory

The following section details some of the important natural resources in the Town of Hunter and Sawyer County. This information also comes from a variety of resources including the Wisconsin Department of Natural Resources and the Sawyer County Land and Water Conservation Department.

Soils

The general landscape can be described as an undulating plain. This means that it is flat (the elevation in the whole of Sawyer County varies only 652 feet) with light, mild rolling hills in the earth’s surface. The soils underneath the mostly forested landscape are acidic in comparison to the soils of southern Wisconsin’s agricultural zone. Bedrock varies in depth below the land

surface, with most areas of the Town having bedrock greater than 100 feet from the land surface (**Map 5.2**).

The underlying ability of soils to drain precipitation is an indicator of areas having greater potential for development or agricultural activities. **Map 5.3** represents the soil's ability to drain water. Much of the eastern half of the Town has somewhat poorly, poorly, or very poorly drained soils, with most of this area also contained in the Chequamegon-Nicollet National Forest.

Land Cover

The National Oceanic and Atmospheric Administration, through the Coastal Change Analysis Program, maintains a land cover data set for coastal regions of the U.S. This data is developed using remotely sensed imagery, and is useful for showing general trends of land cover within the coastal regions of the state. **Table 5.2** represents data for the Town of Hunter from the National Oceanic and Atmospheric Administration data set.

The land cover of the town is primarily made up of broad-leaved deciduous forest. This category accounts for 38.5 percent of the entire town. The town is also largely made up of open water, with nearly 16,000 acres present. **Map 5.4** shows the land cover in the Town of Hunter.

Table 5.2 – Land Cover Types

TYPE	ACRES	PERCENT OF TOWN
Bare Land	0	0%
Cultivated Crops	19.84	0.04%
Deciduous Forest	18,712.09	38.49%
Developed, High Intensity	0.66	0.001%
Developed, Low Intensity	66.80	0.14%
Developed, Medium Intensity	5.95	0.01%
Developed, Open Space	31.31	0.06%
Estuarine Emergent Wetland	0	0%
Estuarine Forested Wetland	0	0%
Estuarine Scrub/Shrub Wetland	0	0%
Evergreen Forest	2,725.92	5.61%
Grassland/Herbaceous	22.93	0.05%
Mixed Forest	5,402.44	11.11%
Open Water	15,802.30	32.50%
Palustrine Emergent Wetland	154.55	0.32%
Palustrine Forested Wetland	3,098.28	6.37%
Palustrine Scrub/Shrub Wetland	2,210.45	4.55%
Pasture/Hay	248.69	0.51%
Scrub/Shrub	116.85	0.24%
Unclassified	0	0%
Unconsolidated Shore	0	0%
TOTAL	48,619.06	100.00%

Source: NOAA Coastal Change Analysis Program

Topography & Slope

The Town of Hunter is located within the Northern Highland geographic province of Wisconsin; an expansive region characterized by an upland area that stretches north into Canada and is a driftless area not at all modified by glacial erosion and deposition, but shaped entirely by weathering and stream erosion. Surface elevations in Hunter range from a maximum of 1,528 feet west of Helsing Road to a minimum of 1,275 feet near East Fork Road.

Steeply sloping lands can present challenges or pose barriers to development. Steepness of topography is commonly expressed as percent slope. As a general rule, slopes in excess of 20 percent are of greatest concern for any land disturbing activity. Steep slopes do not necessarily preclude all forms of development, although costly engineering and site preparation/mitigation measures are required in order to minimize potential adverse impacts. Steep slopes (>20%) in Hunter are shown on **Map 5.5**.

Watersheds

The Town of Hunter is located just south of the continental divide separating the Mississippi River drainage basin and the St. Lawrence River drainage basin. The area covered by these two drainage basins covers much of central North America. A watershed, as defined by the University of Wisconsin-Extension, is “the entire physical area or basin drained by a distinct stream or riverine system, physically separated from other watersheds by ridge top boundaries”. Parts of five watersheds are located in the Town of Hunter. Most of the town is covered by the Lake Chippewa watershed. Other watersheds include Couderay, East Fork Chippewa River, Weirgor Creek and Brunet River and West Fork Chippewa River watersheds. See **Map 5.6** for watershed boundaries.

Groundwater

Groundwater is the only source of drinking water in the Town of Hunter. It is a critical resource, not only because it is used by residents as their source of water, but also because rivers, streams, and other surface water depends on it for recharge. According to a DNR database, there are 29 active high capacity wells in Sawyer County. A high capacity well is one that has a capacity of 70 gallons per minute or more. Only one active high capacity well is located in the Town of Hunter, for purposes identified as “other than municipal”.

Groundwater contamination is most likely to occur where fractured bedrock is near the ground surface, or where only a thin layer of soil separates the ground surface from the water table. Groundwater can be contaminated through both point and nonpoint source pollution (NPS). The Environmental Protection Agency defines NPS as: “Pollution which occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.” And point source pollution as: “Sources of pollution that can be traced back to a single point, such as a municipal or industrial wastewater treatment plant discharge pipe.”

Groundwater contamination susceptibility is defined for the GCSM as the ease with which water (and any contaminant carried in the water) travels from the land surface to the top of the groundwater layer. **Map 5.7** illustrates groundwater contamination susceptibility for the Town of Hunter. Five physical resource characteristics were identified as important in determining

groundwater contamination susceptibility. Resource characteristic maps used in the GCSM were compiled and automated from generalized maps at a scale of 1:250,000 or 1:500,000. These data layers and their corresponding coverage names in the DNR GIS Database Library are:

- Bedrock Depth or Depth-to-Bedrock ("brdpw92d")
- Bedrock Type ("brtpw95c")
- Soil Characteristics* ("schpw92d")
- Surficial Deposits ("sdppw95c")
- Water Table Depth or Depth-to-Water Table

Wetlands

The Town of Hunter has numerous wetland areas. Approximately 10 percent of the land cover consists of wetlands greater than five acres. The occurrence of wetlands in the area is due to the relatively recent glacial movement in the state (the ice age ended about 12,000 years ago), ample precipitation, and the humid climate.

Glaciers formed lake basins by gouging holes in loose soil or soft bedrock, depositing material across stream beds or leaving buried chunks of ice that later melted to leave lake basins. When these natural depressions or impoundments filled with water, they became lakes (Water on the Web - <http://wow.nrri.umn.edu/wow/index.html>).

Like other natural features such as trees or waterways, there are different wetland categories, each with unique characteristics that support their own ecosystems. There are certain traits, however, that all wetlands share. First, they have hydric conditions, meaning they have either standing water of variable depth or have saturated soils. Second, wetlands act as a holding area for overflow water. Without this storage capability of wetlands, shoreland areas floodplains throughout the watershed would be at a higher risk of disastrous flooding. Third, wetlands help keep surrounding water bodies healthy by catching and storing extra particles, both pollutant and nutrient, and acting as groundwater recharge areas.

Because wetlands are home to such a thickness and diversity of plant and animal life, they are able to absorb and use excess particles such as nitrogen and phosphorous that would otherwise end up as pollution in lakes.

Scientists have recently recognized wetlands as important regulators of global climate, especially bogs. The carbon required creating greenhouse gasses such as carbon dioxide and methane is stored in wetlands, thus becoming unavailable for the production of the threatening gasses. Photosynthesis, the process by which plants make energy for themselves, converts carbon dioxide into plant matter. Dead plant matter, on the other hand, releases carbon gasses into the atmosphere during decomposition.

The unique traits of a healthy, rich wetland as it relates to the production of greenhouse gasses are beneficial because it consumes large quantities of carbon dioxide (because of the massive amount of plant matter present), and it does not facilitate fast decomposition. The net carbon sequestering resulting from these two processes is complex and unpredictable at small levels, but research shows that if a large amount of the land cover in an area that are wetlands, it acts

as a carbon sink, meaning that it traps more carbon than it releases to the atmosphere in the form of greenhouse gasses.

Wetlands are categorized by attributes such as vegetation, soil type, the degree of water saturation or water depth, and how the wetland is fed. The Wisconsin Department of Natural Resources defines wetlands in the Town of Hunter as either Aquatic Bed, Emergent/wet meadow, Forested or Scrub/Shrub.



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



Emergent or "Wet" Meadows - These wetlands may have saturated soils, rather than standing water, more often than not. Sedges, grasses and reeds are dominant, but look also for 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 which 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.

In addition to the benefits of wetlands described above, wetlands are also home to a sundry of unique plant and animal species. Here is a brief list of some popular species whose populations would significantly decrease or disappear without the habitat provided by wetlands (WDNR Wetlands website):

<u>Plants</u>	<u>Birds</u>	<u>Mammals</u>	<u>Reptiles</u>	<u>Insects</u>
Cattail	Wren	Mink	Frogs	Beetles
Arrowhead	Crane	Beaver	Snakes	Butterflies
Water Lily	Woodpecker	Mole	Turtles	Dragonfly
Cranberry	Kingfisher	Hare	Salamander	Damselfly
Pitcher Plant	Duck	Otter	Snail	
Mosses	Owl	Bobcat		
Labrador Tea	Hawk	Shrew		
	Oriole			
	Warbler			

Sawyer County has recognized the vast environmental and economical benefits of wetlands and has established ordinances restricting construction on and around wetlands. Section 4.29 from the Sawyer County Zoning Ordinances says that all buildings and structures on lots that abut wetlands must be set back a minimum of 40 feet from the boundary of a non-navigable wetland, and must be set back at least 75 feet from a navigable wetland. The zoning administrator usually determines the navigability of a wetland, although the DNR has final authority.

Section 17.9 W-1 of the ordinances is the Wetland/Shoreland One District. This applies to wetlands greater than or equal to five acres. It speaks primarily to issues regarding when and under what circumstances a permit is necessary for activities such as silviculture, pasturing of livestock, and maintenance of roads, construction of duck blinds, and construction of preservation institutions such as fish hatcheries.

The Town has a total of 4,956 acres of wetlands according to the Wisconsin Department of Natural Resources inventory (**Table 5.3**). This total is 10 percent of the Town, and 3.1 percent of the county. The majority of these wetlands are under federal, state, or tribal ownership. **Map 5.8** shows the wetland types in the Town of Hunter.

Table 5.3: Wetland Types

Type	Acres
Aquatic Bed	201.6
Emergent/wet meadow	633.4
Forested	1,955.2
Scrub/shrub	2,165.9
Total	4,956.1

Floodplains

Floodplains are important and valuable natural resources. They provide wildlife habitat, storm water retention, and serve as groundwater recharge areas. Development in these areas may lead to high constructive costs, storm damage repairs, and environmental degradation. Additional costs and maintenance can include, flood proofing; increased flood insurance premiums; and water related repairs to roads, water mains, and sewers.

Due to these limitations, the state requires that cities, villages, and towns develop a floodplain/shoreland zoning ordinance to address the issues above. Development in these areas is usually allowed, but certain design standards and increased setbacks may be required. The floodplain is normally defined as those areas that are subject to inundation by the 100-year recurrence interval flood event. This means that in any year there is a 1 percent chance that the area will flood. High-density development in floodplain areas should be discouraged and park and open space encouraged.

Floodplain areas generally overlap wetland areas and are located along the various water features. Digital floodplain maps are currently not available. An effort is underway to develop digital floodplain maps, but is not scheduled for completion until late 2010 or 2011. The Sawyer County Zoning Department also uses regional flood elevation data to determine whether a building foot print would be near or in a suspected floodplain area. For more information regarding floodplains and where they are located, please refer to the county zoning administrator or the FEMA's official floodplain maps.

Surface Water Resources

Surface waters are important in maintaining ecological integrity and diversity. The Town of Hunter has an abundance of surface waters in lakes, ponds, rivers, and streams, which covers approximately 32 percent of the landscape. In all, the town has approximately 253 miles of shoreline, covering approximately 16,000 acres. The large amount of shoreline can be attributed directly to the Chippewa Flowage. This water body has a very irregular shoreline with many islands, inlets and bays. There are 18 named lakes and flowages and numerous unnamed ponds as well as six named rivers and numerous creeks and streams. **Table 5.4** shows lake characteristics for the Town of Hunter.

Table 5.4: Town of Hunter Lake Characteristics

Lake Name	Location Sec. T-N-R	Surface Acres	Miles of Shoreline	Miles of Public Shoreline	Percent of Private Shoreline	Lake Type & Classification
Blueberry	4 39 7	280.0	4.20	0.15	96%	SE – Class 2
Bunker	25 40 7	21.2	0.70	0.70	0%	SE – Class 4
Carpenter	35 40 7	12.0	0.63	0.50	21%	SE – Class 4
Chippewa Flowage	40 7 / 40 6	15,300.0	232.93	181	22%	I – Class 1
Fawn	11 40 6	3.0	0.30	0.30	0%	SE – Class 4
Glover	10 40 7	26.0	0.95	0	100%	SE – Class 4
Goose	16 40 6	40.0	1.22	0.03	98%	SE – Class 4
James	20 40 6	13.6	0.58	0	100%	SE – Class 4
Little Cranberry	23 40 6	8.4	0.45	0.45	0%	SE – Class 4
Lost	17 40 7	48.0	1.38	1.38	0%	SE – Class 4
Osprey	6 40 7	221	9.13	0.18	96%	SE – Class 3
Pine Island	9 40 7	46.5	1.20	0	100%	SE – Class 4
Reed	4 40 7	69.2	2.14	0	100%	SE – Class 4
Sunfish	19 40 7	7.7	0.42	0.42	0%	SE – Class 4
Two Axe	26 40 6	56.9	3.46	3.46	0%	SE – Class 4
Two Boys	35 40 7	102.3	2.84	0	100%	SE – Class 4
Venison	14 40 6	4.0	0.34	0.34	0%	SE – Class 4
Venison Spring	12 40 6	1	0.29	0.29	0%	SP – Class 4

Source: Sawyer County Lakes Classification Data, NWRPC

Lake Type: SP=Spring; SE=Seepage; D=Drainage; I=Impoundment. Classification 1-4 relates to lake zoning requirements.

Lake Types

Lakes generally fall into four types, based on their water source and type of outflow.

Seepage Lakes (SE) are a natural lake fed by precipitation, limited runoff, and groundwater. These lakes do not have a stream outlet. These lakes are generally acidic, low in nutrients, and susceptible to acid rain.

Groundwater Drainage Lakes (spring lakes-SP) are natural lakes fed by groundwater, precipitation, and limited runoff. These lakes have a stream outlet. These lakes are usually well buffered against acid rain and contain low to moderate amounts of nutrients.

Drainage Lakes (D) are lakes fed by streams, precipitation, groundwater, and runoff and is drained by a stream. In these lakes, the nutrient content is usually high, with water exchange happening quite rapidly. Water quality in these lakes is variable, depending on runoff and human activity in the watershed.

Impoundments (I) are manmade lakes created by damming a stream. A stream also drains these lakes. Watershed management is critical in impoundment lakes. The natural movement of the water causes soil and nutrients to collect in the impoundment.

Summary of Sawyer County Lake Classification

In 1996, Sawyer County assumed the responsibility of formulating a classification system for all the water bodies in the county. The county felt this was important because surface waters constitute important environmental and economical (recreational) resources to the area. Lakes are divided up into four categories and rivers and streams are one category based on specific lake criteria such as, surface area, lake depth, lake type, watershed area, shoreline development factor, and amount of existing development.

Based on a lakes/rivers classification, each has specific building and lot standards. Class 1 lakes (minimum protection) have the smallest lot sizes and side yard setbacks, where as Class 4 have the largest setbacks and lot sizes. **Table 5.5** shows the dimensional requirements for each class.

Table 5.5 – Dimensional Requirements for Sawyer County Lakes

Classification	Lot Size (Square Feet)	For each Single Family Dwelling Unit - Lot Width (Feet)	Shoreline Setback (Feet)	Lot Depth (Feet)	Vegetation Removal	Side Yard Setback for all Structures
General Development Class 1	20,000	100 *200	75	200	30' corridor within 35' of the ordinary highwater mark	10' minimum - 40' minimum total
Recreational Development Class 2	30,000	150 *300	75	200	30' corridor within 35' of the ordinary highwater mark	20' minimum - 50' minimum total
Natural Development Class 3	40,000	200 *400	75	200	30' corridor within 35' of the ordinary highwater mark	30' minimum - 60' minimum total
Wilderness Development Class 4	217,800 (5 acres)	300 *600	100	500	30' corridor within 75' of the ordinary highwater mark	60' minimum - 120' minimum total
Rivers and Streams	30,000	150	75	200	30' corridor within 35' of the ordinary highwater mark	20' minimum - 50' minimum total

Source: Sawyer County Zoning Ordinance. *Note: Two family dwelling/duplex.

Outstanding and Exceptional Water Resources

The Department of Natural Resources classifies water bodies as outstanding resource waters (ORW) or exceptional resource waters (ERW) under Chapter NR 102 of the Wisconsin Administrative Code. These waters have outstanding recreational, cultural, aesthetic, or scientific resource value and shall have special protection from degradation. Within the town, four water bodies are classified as ORW (Chippewa Flowage, Chippewa River, West Fork Chippewa River, and East Fork Chippewa River). See **Map 5.8** for details.

In 2006, the Wisconsin Land Legacy Report was released that included an inventory of “Critical Places” to meet Wisconsin’s conservation and outdoor recreation needs over the next 50 years (2005-2055). The report based on public input and established criteria, identified the Chippewa Flowage as a Legacy Place, having substantial protection initiated with limited protection remaining.

Trout Stream Classification

In addition to classifying rivers and streams based on whether they are exceptional or outstanding water resources, the DNR also classifies rivers and streams based on trout

reproduction by classifying them from a Class 1 to Class 3. Venison Creek is the only waterway in the Town classified as a trout stream and has been given a Class 3 trout stream status. The DNR has developed the following classifications for trout streams throughout the State of Wisconsin for trout management purposes.

Class 1 – These are high quality trout waters that have sufficient natural reproduction to sustain populations of wild trout at or near capacity. These streams do not require stocking and usually contain small or slow-growing trout, especially at the headwaters.

Class 2 – These streams may have some natural reproduction but not enough to utilize available food and space; therefore, stocking is required to maintain a sport fishery. These streams have good survival and carryover of adult trout, often producing some fish larger than average size.

Class 3 – These waters have marginal trout habitat with no natural reproduction occurring. They require annual stocking to maintain a sport fishery, with no carry-over of trout from one year to the next.

Impaired Waterbodies

The Environmental Protection Agency (EPA) requires all states to list water bodies that do not meet specific water quality standards under the Clean Water Act. This list needs to be updated every two years. This 303.d water list represents an inventory of the states impaired waters. Within the town, two water bodies have been placed on this list, Lake Chippewa and Two Axe Lake, both due to contaminated fish tissue.

Forests

Forests are one of the most defining characteristics of northern Wisconsin and play a significant role in the Town of Hunter. This resource represents significant cultural, social, environmental, and economic assets to citizens and communities. Forests provide a range of benefits including wildlife habitat, forest products, recreational opportunities, aesthetics, and other benefits. According to existing land use data, approximately 26,471 acres of land in Hunter are currently in some type of forest (**Table 5.6**).

Table 5.6: Forest Lands

	Acres	Percent
Town Forest	0	0%
County Forest	0	0%
State Forest	6,954.1	26.3%
Federal Forest	12,726.8	48.1%
Private Forest	5,948.2	22.5%
Managed Private Forest	841.8	3.2%
Total Forest	26,470.9	100.0%

The Chequamegon-Nicolet National Forest

One of the most important natural resources in the Town of Hunter is the presence of the Chequamegon-Nicolet National Forest. The Chequamegon-Nicolet National Forest (CNNF), provides many recreational and timber management opportunities for local residents, tourists and businesses and is managed by the U.S. Department of Agriculture Forest Service.

History

The CNNF has approximately 1,519,800 acres of land in eleven northern Wisconsin counties and was initially two separate national forests, the Chequamegon (858,400 acres) and Nicolet (661,400 acres) National Forests. The two National Forests were established in 1933 by a Congressional proclamation and were managed separately until 1993 when management of the two forests was combined. In 1998, Chequamegon and Nicolet National Forests were officially combined and a single entity known as the Chequamegon-Nicolet National Forest emerged.

The creation of the two National Forests was initially driven by activities undertaken during the American Great Depression. With the creation of the Depression Era Civilian Conservation Corps (CCC), the Forest Service undertook a massive effort to reforest what had been timber land that had been over cut and over farmed. Much of the land ended up in the hands of the counties as immigrant farmers were unable to afford the taxes on these lands and abandoned or forfeited these properties to the counties. In turn, the counties often sold these lands to the federal government in order to shed non-producing tax delinquent properties from the tax rolls. The accumulation of these lands by the federal government eventually led to the establishment of the two national forests. The reforestation and planting work done by the CCC was instrumental in the development of new forest growth and is today being managed to increase the diversity of tree species throughout the national forest area. Tree stock in the national forest is relatively the same age as a result of the over cutting that was done during the late 1880s to the mid 1930s.

In spite of the formulation of this single entity national forest in 1998, each original national forest has retained its individual identity. The former Chequamegon National Forest region is primarily managed through the Park Falls headquarters office and the former Nicolet National Forest is managed through the Rhinelander headquarters office. National forests are divided into administrative units called ranger districts. More detailed history of the Chequamegon-Nicolet National Forest can be found in a PDF document entitled “The History of the Chequamegon-Nicolet National Forest”. This PDF file link can be found at the <http://www.fs.fed.us/r9/cnnf/general/history/index.html> webpage.

Timber Resources

The Chequamegon-Nicolet National Forest contains 123,805 acres of land within Sawyer County. Although acreage amounts for specific timber species management are not available, general descriptions of the types of forest are available on the “Selected Alternative Management Areas” map that was included in the Final Environmental Impact Statement report completed by the U.S. Forest Service in November 2008. The following are timber species being managed by the National Forest in Sawyer County municipalities:

- Town of Round Lake
Early successional aspen, uneven – aged northern hardwoods, and old growth forest.
- Town of Spider Lake
Early successional aspen, early successional mixed aspen-conifer, even-aged hardwoods – oak/pine, and conifer – red/white/jack pine.
- Town of Hunter
Uneven – aged northern hardwoods: hardwood-early successional.

- Town of Draper
Early successional aspen-hardwood, areas of no vegetative management, and special management areas.
- Town of Winter
Early successional aspen, Uneven – aged northern hardwoods: hardwood-early successional, old growth forests.

Different areas of the forest are being managed in ways that are intended to create healthier forest ecosystems, so that a variety of wildlife, flora and fauna can flourish within the forest service boundary.

Timber Harvesting

Local forest harvesters and public officials have over the years shown frustration over the limited amount of timber harvesting occurring within the National Forest. While the Ranger Districts are making efforts to produce stumpage contracts, too often these projects are tied up in litigation for years.

Wildlife and Fish Species

An abundance of wildlife can be found in the Chequamegon-Nicolet National Forest. Typical mammals found in relative abundance include whitetail deer, black bear, coyotes, red and gray fox, river otters, beavers, and porcupines. Other species that exist in smaller numbers include the timber wolf, pine martens, fishers, bobcats, elk, and possibly cougars.¹

Many fish species can be found in lakes and streams within the National Forest. Some are naturally reproducing populations and others are stocked to maintain viability. Common species in the region include walleye, northern, musky, brook trout, brown trout, large and smallmouth bass, bluegills, black crappies, yellow perch and suckers.

Birds of prey can also be found in the Chequamegon-Nicolet Forest area at particular times and including the Peregrine falcon, Snowy owl, American kestrel, Great gray owl, Bald Eagle, Osprey, Great horned owl, and the Red-tailed hawk;² Other bird species that are present that provide ample opportunities for bird watching include Evening grosbeak, Pine grosbeak, Rose-breasted grosbeak, Red-breasted nuthatch, Connecticut warbler, Bohemian waxwing, Red crossbill, American robin, Eastern bluebird, Ruby-throated hummingbird, Common raven, Northern flicker, Black-capped chickadee, Barn swallow, Downy woodpecker, Indigo bunting, Northern cardinal, American redstart, House wren, House finch, Scarlet tanager, Herring gull, Common loon, Wood duck, Mallard, Red-winged blackbird, Belted kingfisher, Great blue heron, Baltimore oriole, American goldfinch, Blue jay, and the Sandhill crane. The various species are not necessarily present throughout the entire range of the National Forest, but are located in those areas providing the best habitat for their particular species.³

¹ Northern Wisconsin All-outdoors Atlas & Field Guide, 2007

² Northern Wisconsin All-outdoors Atlas & Field Guide, 2007

³ Northern Wisconsin All-outdoors Atlas & Field Guide, 2007

Management Indicator Species

Several management indicator species such as timber wolves, martens, bald eagles and elk, among others, have been reintroduced or have been targeted for restoration in the Nation Forest and are now establishing populations. Some interesting examples and updates of these reintroductions are based on the 2007 Chequamegon-Nicolet National Forest Monitoring and Evaluation Report.

Gray wolf

“The gray wolf population throughout northern Wisconsin has been increasing steadily since 1993. A minimum count over the winter of 2006-2007 consisted of 540 to 577 wolves. As a result of this increase in numbers, the U.S. Fish and Wildlife Service removed the gray wolf from the endangered species list on March 12, 2007.”

Bald Eagle

“The bald eagle has recovered in the state of Wisconsin far beyond its recovery goals. In 1978, a goal of 360 nesting pairs was set. This goal was achieved in 1991, and bald eagles continue to increase in numbers. The bald eagle has also been removed from the endangered species list as of July 9, 2007.”

American Marten

This species was reintroduced into the area in the recent past (1980’s-1990) and have dispersed little since that time. The National Forest continues to work on determining what the important habitat features are for maintaining marten viability in the region.

Rocky Mountain Elk

In the winter of 1994-1995, 25 elk were captured from Michigan’s lower peninsula. After an acclimation period and health testing, the elk were brought to Wisconsin in May 1995. The core area of release was in the Chequamegon-Nicolet National Forest near Clam Lake, at the confluence of Ashland, Bayfield, and Sawyer counties. The core area lies entirely within the Great Divide Ranger district of the National Forest. The long term goal is to expand the Clam Lake herd to 1400 elk – about one to two elk per square mile of elk habitat. Much of the present elk habitat lies within Sawyer County and elk sightings are possible particularly in open areas during mating season (fall).

Recreational Areas

Camping

There are presently 18 campsites on islands on the Chippewa Flowage in the Town of Hunter. Eleven of these are owned by the Department of Natural Resources, one is owned by the U.S. Fish and Wildlife Service, and the remaining six are owned by the Lac Courte Oreilles Tribe and managed by the Lac Courte Oreilles Conservation Department. All of these campsites are accessible by water only, and every public site has an identification sign, fire ring, picnic table, and open-air box latrine. LCO sites are available by reservation and fee, while some of the public sites are available on a first-come, first-serve basis. There are also a number of private campgrounds in the Town of Hunter.

Motorized (ATV/Snowmobiling) Trails

Sawyer County has several motorized trails throughout the National Forest area and these are best found utilizing Chequamegon-Nicolet National Forest Travel Management Project maps available from National Forest offices throughout the region.

An important rule regarding motorized trails in the Chequamegon-Nicolet National Forest was handed down on November 9, 2005 with an effective date of December 9, 2005. This rule commonly referred to as the Travel Management Plan revised regulations governing motor vehicle use on all National Forest System lands, including the use of off-highway vehicles. This final rule prohibited the use of motor vehicles off the designated network, as well as the use of motor vehicles on roads, trails, and in areas that are not consistent with the designations. The decision rendered in the Travel Management Plan encompasses the following changes:

- 559 miles of roads will be available for ATVs (roads that are available to ATVs only or available to both highway-legal vehicles (HLVs) and ATVs). 71 miles of these roads are located on the Nicolet side of the forest.
- 52 miles of roads for HLV and ATV use will be controlled seasonally in the fall (open from September 1 to December 31).
- 8 miles of roads for ATV use will be controlled seasonally in the fall (open from September 1 to December 31).
- 25 miles of road for HLV use will be controlled seasonally for sensitive species consideration, including 13 miles of roads for ATV use.
- 334 miles of trails will be designated to be available for public ATV use.

Accessible roads and trails are displayed on the Chequamegon-Nicolet Forest Service Motor Vehicle Use Map available on the National Forest website (<http://www.fs.fed.us/r9/cnnf/rec/tmr/index.html>) and at each local Forest office.

Ski Trails, Hiking, Walking and Biking Trails

No skiing, hiking, walking or biking (mountain) trails are officially designated in the Town of Hunter. However, throughout the public forest lands, all types of non-motorized recreational use are allowed. All areas of the CNNF are open for walking, snowshoeing, and other quiet sport activities. According to CNNF officials, there are no “official” managed hunter walking trails in the Town of Hunter. Official hunter walking trails are mapped out for the public and maintained on a regular basis. CNNF officials note that old logging roads with gates are not official hunter walking trails but open for foot travel, including hunter walking.

Threatened & Endangered Species

While the conservation of plants, animals and their habitat should be considered for all species, this is particularly important for rare or declining species. The presence of one or more rare species and natural communities in an area can be an indication of an area's ecological importance and should prompt attention to conservation and restoration needs. Protection of such species is a valuable and vital component of sustaining biodiversity.

Both the state and federal governments prepare their own separate lists of such plant and animal species but do so working in cooperation with one another. The WDNR's Endangered

Resources Bureau monitors endangered, threatened, and special concern species and maintains the state's Natural Heritage Inventory (NHI) database. The NHI maintains data on the locations and status of rare species in Wisconsin and these data are exempt from the open records law due to their sensitive nature. According to the Wisconsin Endangered Species Law it is illegal to: 1) take, transport, possess, process or sell any wild animal that is included on the Wisconsin Endangered and Threatened Species List; 2) process or sell any wild plant that is a listed species; and 3) cut, root up, sever, injure, destroy, remove, transport or carry away a listed plant on public lands or lands a person does not own, lease, or have the permission of the landowner.

There are exemptions to the plant protection on public lands for forestry, agriculture and utility activities. In some cases, a person can conduct the above activities if permitted under a Department permit (i.e. "Scientific Take" Permit or an "Incidental Take" Permit). **Table 5.7** list those elements contained in the NHI inventory for the Town of Hunter. These elements represent "known" occurrence and additional rare species and their habitat may occur in other locations but are not recorded within the NHI database. For a full list of elements known to occur in Sawyer County & Wisconsin visit the WDNR's Endangered Resources Bureau.

- Endangered Species- one whose continued existence is in jeopardy and may become extinct.
- Threatened Species- one that is likely, within the foreseeable future, to become endangered.
- Special Concern Species- one about which some problem of abundance or distribution is suspected but not proven.

Table 5.7: Natural Heritage Inventory Data, Town of Hunter

Group	Common Name	State Status
Bird	Bald Eagle	SC/P
Community	Black Spruce Swamp	NA
Plant	Sparse-flowered Sedge	SC
Plant	Longstem Water-wort	SC
Community	Muskeg	NA
Community	Poor Fen	NA

Source: WDNR Natural Heritage Inventory, 7/22/2008

SC =Special Concern and SC/P = fully protected

Special Concern species are those species about which some problem of abundance or distribution is suspected but not yet proved. The main purpose of this category is to focus attention on certain species before they become threatened or endangered.

Metallic & Non-Metallic Mineral Resources

Mineral resources are divided into two categories, metallic and non-metallic resources. Metallic resources include lead and zinc. There are no metallic mineral mines in Hunter. Nonmetallic resources include sand, gravel, and limestone. In June of 2001, all Wisconsin counties were obliged to adopt an ordinance for nonmetallic mine reclamation. (Refer to Sawyer County Department of Zoning) The purpose of the ordinance is to achieve acceptable final site reclamation to an approved postmining land use in compliance with uniform reclamation standards. Uniform reclamation standards address environmental protection measures

including topsoil salvage and storage, surface and groundwater protection, and concurrent reclamation to minimize acreage exposed to wind and water erosion. After reclamation many quarries become possible sites for small lakes or landfills. Identification of quarry operations is necessary in order to minimize nuisance complaints by neighboring uses and to identify areas that may have additional transportation needs related to trucking. There are two non-metallic sites within the Town of Hunter.

Cultural Resources

Cultural sites and features are important community resources documenting a community's rich history. Countywide, there are over 100 culturally or historically significant landmarks, buildings or areas. There are countless other cultural and historical resources that remained undocumented by either past fur trader villages or Native American settlements along rivers and lakes.

The Wisconsin Architectural and Heritage Inventory (AHI) includes historical and architectural information on over 120,000 properties throughout Wisconsin. The AHI contains data on buildings, structures and objects that illustrate unique history of Wisconsin and local communities. The AHI is a permanent record maintained by the Wisconsin Historical Society. **Table 5.8** is not a comprehensive list of all old Wisconsin buildings and structures in the Town as the AHI has been assembled over a period of more than 25 years from a wide variety of sources. In many cases, the information is dated, and in some cases, properties may be altered or no longer exist. The majority of property in the inventory is privately owned.

Table 5.8: Hunter Architectural and Heritage Inventory

<u>AHI#</u>	<u>TRS</u>	<u>Type</u>	<u>Date Constr.</u>	<u>Location</u>	<u>Historic Name</u>
18295	4007w-10	House		Paved Rd Off CTH CC	
37781	4006w-08	House	1945		

Source: Wisconsin Historical Society

The archaeological site inventory (ASI) maintained by the Wisconsin Historical Society is the most comprehensive list of archaeological sites, mounds, unmarked cemeteries, marked cemeteries, and cultural sites available. Listed are the archaeological sites, cultural sites, and cemeteries in Sawyer County, Wisconsin. This list does not include sites on Forest Service land and does not include sites located within the exterior boundaries of the Lac Courte Oreilles Reservation. The ASI does not include all of the sites and cemeteries present in the Town of Hunter. It includes only those sites that have been reported to the Wisconsin Historical Society and is a compilation of reports covering a period of 150 years. The information for each entry varies widely and Wisconsin History Society has not been able to verify all of the entries. The ASI is changed and updated on a daily basis and recommendations about site importance may change as new information becomes available.

Table 5.9: Hunter Archaeological Sites & Cemeteries on Non-Tribal Land

State Site # /Burial Code #	Site Name	Site Type	Cultural Study Unit	Town Range Section
SY-0021	Winter Dam Sy-2n	1. Campsite/village	1. Unknown Prehistoric	39, 6, W, 2
SY-0066	Herman's Landing	1. Campsite/village	1. Unknown Prehistoric	40, 7, W, 24
BSY-0006	Unnamed Cemetery	1. Cemetery/burial	1. Unknown	39, 7, W, 1
SY-0294	Unnamed Site	1. Transportation	1. Historic Indian	40, 6, W, 34
SY-0340	Forks Cemetery	1. Cemetery/burial	1. Historic Indian	40, 6, W, 20 40, 6, W, 20
SY-0341	1834 Trading Post	1. Trading/fur post	1. Historic Euro- American	40, 6, W, 20
SY-0342	Lake Pokegama Cemetery	1. Cemetery/burial	1. Historic Indian	40, 6, W, 31 40, 6, W, 31
SY-0343	South Post Cemetery	1. Cemetery/burial	1. Historic Indian	40, 6, W, 32
SY-0344	1875 Trading Post	1. Trading/fur post	1. Historic Indian 2. Historic Euro- American	40, 6, W, 32

Source: Wisconsin Historical Society

Throughout Sawyer County are many cultural and festival related activities. Examples of area events include the Musky Festival, a celebration of the Northwoods and the area's great fishing history; Lumberjack World Championships, featuring pole climbers, wood choppers, and log rollers; American Birkebeiner Ski Race, featuring top athletes from around the world; Honor the Earth Homecoming Celebration and Pow Wow; and Chequamegon Fat Tire Festival.

Agricultural, Natural and Cultural Goals, Objectives, Actions

A set of recommended goals, objectives, and actions steps has been developed to assist the Town of Hunter with aspects relating to agricultural, natural and cultural resources.

Agricultural Resources

GOAL: Due to soil types and land use patterns, there are very limited agricultural opportunities in the Town of Hunter.

OBJECTIVES:

1. Ensure any agricultural activities should be done so in an environmentally responsible manner.

Natural Resources

GOAL: Conserve, protect, manage, and enhance the town's natural resources in order to provide the highest quality of life for the Town of Hunter's citizens and visitors.

OBJECTIVES:

1. Protect surface and ground water.

Resource Improvement Action: Coordinate development plans with county zoning officials.

Education Action: Provide information on the disposal of hazardous materials, such as paint, waste oils, computers, insecticides, etc.

Resource Improvement Action: Encourage the county to continue the maintenance program of septic systems and encourage replacement of ineffective systems by property owners.

Education Action: Coordinate with area lakes associations and other agencies on educating property owners on limiting chemical use on lawns.

Education Action: Encourage Best Management Practices (BMP's) on all lands, including farmland areas.

2. Protect area lakes, rivers, wetlands and stream shorelines.

Regulation Action: Support the Sawyer County Shoreland Ordinances.

Education Action: Encourage buffer zones.

Education Action: Develop an informational pamphlet to inform property owners about town resources and services and best use practices for maintaining town character.

Education Action: Supply each new permit applicant with material regarding preservation of natural resources.

Regulation and Resource Improvement Action: Cooperate with other units of government on resources under shared authority.

3. Maintain and/or upgrade public accesses.

Resource Improvement Action: Work with WDNR to maintain and improve boat landings and public accesses.

Resource Improvement Action: Plan and develop recreational trails on public lands.

Regulation Action: Assess the need for a town ordinance of the use of motorized recreational use to reduce conflict with non-motorized recreation and other uses.

Resource Improvement Action: Work with Sawyer County and WDNR to investigate possible county/town park sites and establish a new county park in the township.

4. Protect local forested areas.

Resource Improvement Action: Encourage selective cutting by utilizing the services of a professional forester.

Resource Improvement Action: Work and cooperate with local land trusts and similar organizations on forest protection, management, and preservation.

Education Action: Encourage the use of BMP's in forested areas.

5. Seek solutions to restore areas with land or shoreland deterioration.

Resource Improvement Action: Work with landowners, land and water conservation department, WDNR, Xcel Energy, United State Forest Service, LCO Tribal Government, Chippewa Flowage Area Property Owners Association (CFAPOA), and Lake Chippewa Flowage Resort Association (LCFRA).

Monitoring Action: Identify other vulnerable shoreland areas where shoreland areas may be impaired.

Monitoring Action: Support landowners, land and water conservation department, WDNR, Xcel Energy, United State Forest Service, LCO Tribal Government, Chippewa Flowage Area Property Owners Association (CFAPOA), and Lake Chippewa Flowage Resort Association (LCFRA) seeking any funding sources.

It is also recommended the Town investigate “cluster development” in both shoreland and non-shoreland areas for the preservation of open space. In those situations where the creation of a subdivision may result in an unacceptable loss of natural functions (i.e., forest, vegetation, scenic beauty, aesthetics, etc.) consider “cluster development” as a condition of approval of the subdivision.

Cultural Resources

GOAL: Preserve and enhance cultural heritage resources, including historical places, sites, and landscapes.

OBJECTIVES:

1. Identify the Town’s historic and cultural resources.

Monitoring Action: Work with the State Historical Society, Sawyer County Historical Society, and LCO to identify and preserve our township’s history.

Resource Improvement Action: Evaluate local cultural and historic resources and develop a local landmark program.

2. Preserve scenic and historic views within the Town.

Resource Improvement Action: Develop a list of registered historical places in the Town and identify other potential historical places.

Monitoring Action: Work with private landowners on the preservation of areas of historic significance.