Property Identifiers

Property Name and Designation:  Town Corner Wildlife Area and Town Corner Cedars State Natural Area (No. 550)

County:  Marinette

Property Acreage:  893 acres (approximately 306 acres of State Natural Area)

Forestry Property Code(s):  3888

Master Plan Date:  Town Corner Wildlife Area Management Plan Concept Element, 1985

Part 1: Property Assessment (1-2 pages maximum)

The following items should be considered during the property assessment. Not all sections may be relevant for all properties.

General Property Description

- Landscape and regional context

The Town Corner Wildlife Area (WA) with imbedded Town Corner Cedars State Natural Area (SNA) is located in the northern third of Marinette County in T35N-R19E, Sections 1, 2, and 11. The property is 2.5 miles northwest of Amberg, WI and is situated just southwest of Town Corner Lake. It lies between the North and South Branch of the Pike Wild River. The entire property is within the Northeast Sands Ecological Landscape (NSEL) which occupies a narrow, diagonal area of northeast Wisconsin. This ecological landscape formed in glacial outwash sand plains (some of them pitted), and has steep outcropping Precambrian bedrock knolls of basalt, rhyolite, or granite. Sandy ground moraines and end moraines are also interspersed in the ecological landscape.

Historically, extensive oak/jack pine-barrens and jack pine forests were found in the outwash sand portions of this ecological landscape. Moraines supported forests of hardwoods, red pine, and white pine. Outwash plains often contained pitted depressions, resulting in numerous wetlands and kettle lakes. Most of this area is still forested; aspen predominates, followed by northern hardwoods. Jack pine remains on the outwash plains along with scrub oak. There are several ecologically significant examples of jack pine/oak barren communities. A small percentage of this ecological landscape contains spruce-fir-cedar forest and lowland hardwood forest.

The NSEL contains several important river systems as well as extensive wetlands. The Menominee is the largest river, located on the Michigan-Wisconsin border. The two original state Wild Rivers that were designated in 1965 under the then-new State Wild Rivers Act are in this ecological landscape; the Pine and Pike rivers. A 24-mile reach of the Menominee County section of the Wolf River, from the Langlade/Menominee County line to Keshena Falls, was designated a National Wild and Scenic River in 1968.
Upper Peshtigo River runs through the ecological landscape's center and includes the Caldron Falls Flowage and the High Falls Reservoir. Water quality in free-flowing rivers and streams is generally good across this ecological landscape, due to a combination of generous forest cover and a lack of significant industrial and other development. This is underscored by the fact that 221 individual rivers and streams, and one impoundment, are designated as either Outstanding Resource Waters (ORW) or Exceptional Resource Waters (ERW). Pertaining to wetlands, Town Corner WA and SNA alone, has 312 acres of white cedar, 17 acres of black spruce, and 37 acres of emergent vegetation and lowland brush.

- History of land use and past management

The property was acquired by the state beginning in 1947 and completed in 1951 to be managed, in a traditional sense, as a winter deer yard; an additional 120 acres were donated to the state in 1987. Despite management efforts, deer did not utilize the property as a yarding area. By the late 1950s management shifted to providing hunting opportunities and forest game habitat. The area currently provides excellent deer habitat including critical winter thermal cover in the extensive conifer dominated portion.

The northern wet-mesic forest dominated by white cedar, associated ground layer flora, and the bog seepage lake are biologically unique and contain rare species. This area was designated the Town Corner Cedars SNA in 2007. The SNA runs through the center of the property.

Timber harvest history and other history

According to the 1985 master plan, a portion of the western half of the property was planted to red and jack pine around 1950. Timber has been harvested from the property over the past 20-40 years according to accepted silvicultural practices primarily in the oak, maple, and aspen types to benefit wildlife species.

Site Specifics

- Current forest types, size classes and successional stages

About 91% (820 acres) of the property is forested. About 60% (491 acres) of the forested area is scheduled for timber management over the course of the next 50 years. The remaining 40% is not scheduled for one of the following reasons: it is unsuitable for harvest due to low productivity; it is inaccessible; silviculture guidelines need to be developed; it is being passively managed; or it is a natural community type where timber harvest is not a management approach.

Cedar is the most abundant timber type covering about 38% (312 acres) of the forested acreage and occurs in a single stand. The cedar is about 95 years old. Much of the cedar lies within the Town Corner Cedars SNA. Timber management in the SNA is passive and the objective is an ecological reference area.

Aspen is the second most abundant forest cover type on the property making up about 32% (263 acres) of the wooded acreage. About 20% of the aspen is less than 10 years old, 73% is about 34 years old, and the remaining is over 50 years old. All of the aspen is scheduled for timber management in the next 3 to 32 years. An aspen stand of 193 acres is scheduled for harvest in 3 years; however, it will be broken into approximately three different blocks to create age class diversity over the next 0-20+ years.
The third largest forest cover type is scrub oak at 8% of the forested area. The majority, approximately 46%, is less than 10 years old, about 12% is between 10 and 20 years old, and the rest is over 80 years old.

The remaining forest cover types represent much smaller components as follows: oak 7%, jack pine 5%, red pine 5%, red maple 3%, black spruce 2% and white pine 1%.

- **Natural Area designations**

  Town Corner Cedars SNA was designated in 2007. The SNA supports a good quality northern wet-mesic forest dominated by white cedar with tamarack, black spruce, balsam fir, and scattered white pine. The shrub cover is very sparse to moderate. A carpet of mostly sphagnum with other mosses blankets the forest floor and supports a ground flora that includes three-leaved goldthread, naked miterwort, marsh fern, yellow bluebead lily, creeping snowberry, blunt-leaved orchid, American starflower, bunchberry, twin-flower, one-flowered wintergreen, liver-leaf wintergreen, and Canada mayflower. A wide variety of lichens can be found growing within the forest enhancing the site's diversity. A small undeveloped seepage bay lake is situated in the center of the cedar swamp with good cedar reproduction occurring on the lake's north shore. Surrounding the small lake is a firm to floating poor fen that supports numerous notable species including grass-pink, pitcher plant, round-leaved sundew, common bog-arrow grass, and dragon's-mouth orchid. Birds include common raven, Nashville warbler, song sparrow, swamp sparrow, and indigo bunting.

- **High Value Conservation Forests (HCVF) or other resources/natural community types limited in the landscape**

  Several of the community types identified on the Town Corner WA and SNA are identified as types of HCVF. The SNA supports a northern wet-mesic forest natural community with tamarack (poor) swamp which is considered rare or uncommon in the northern Wisconsin. The SNA also contains a firm to floating poor fen community surrounding a small shallow seepage lake community. Also noted is the spring lake community type along the SW shoreline of Town Corner Lake. Additionally, all of the cedar stands within the WA are considered HCVF.

- **Rare species**

  Wisconsin Department of Natural Resources Natural Heritage Inventory (NHI) system documents endangered/threatened/special concern terrestrial invertebrates and natural communities present on the property. Five community types have been identified as well as one turtle. Publicly available version for those reports can be viewed on-line from the Wisconsin Department of Natural Resources website. In general these species occur outside of the areas proposed for timber management in this document. Additionally, these species are accounted for in management planning by internal established processes to avoid conflict and protect and preserve the resource.

- **Invasive species**

  Non-native invasive plants are present at Town Corner WA area and surrounding landscape. Fortunately, populations of these species are small. Invasive species tend to be associated with recreational and anthropogenic disturbance. Invasive species pose the greatest immediate threat to native species diversity, rare species habitats, or high-quality natural communities.
Spotted knapweed and European marsh thistle have been noted on the property. The European marsh thistle has had control measures and is being monitored. Spotted knapweed is prevalent across the landscape and could be treated here if determined to be a priority and resources are available. Native phragmites has been identified and has exhibited invasive tendencies. If the vigorous spread of phragmites continues, the floating bog could convert to a monotype stand of vegetation resulting in the loss of a unique plant community and numerous protected plants. This area is currently being monitored.

Forestry best management practices guidance for invasive species are followed along with additional precautionary measures to limit the occurrence and spreading of any invasive species on the property.

- **Soils**

The associated ecological landscape is broken down into Landtype Associations (LTAs). The LTAs of Town Corner WA and SNA are Aurora Moraines on the west side of the SNA and Athelstane Moraines making up both the SNA and east side of the property. Aurora Moraines soil association is Podus-Michigamme-Keweenaw-Seelyeville and Athelstane Moraines soil association is Menahga-Ishpeming-Keweenaw-Seelyeville. Both LTAs have similar landform descriptions. The characteristic landform pattern is rolling collapsed moraines and outwash plains with bedrock knolls and ridges. The Seelyeville muck, which makes up all of the SNA, are deep, nearly level, very poorly drained soils, in depressions and drainageways on outwash plains, on moraines, on stream terraces, or in glacial lake basins. They are subject to ponding. Other soils are predominantly well-drained to excessively-drained, fine, sandy loam to sand, over outwash, acid loamy sand till, or igneous/metamorphic bedrock.

**Cultural and Recreational Considerations**

- **Cultural and archaeological sites**

The area of northeastern Wisconsin in which Town Corner WA and SNA is located is almost completely unknown to the cultural historian. Robert J. Salzer in his paper entitled “An Archaeological Survey of the Pine, Pike, and Popple Rivers” (November 1, 1969) reported great difficulty in locating archaeological sites due to the dense forest vegetation, lack of access to the rivers, and the few numbers of active farms adjacent to the rivers.

As a result of Salzer’s survey, he concludes that the Pike River drainage, which Town Corner is associated with, was exploited by aborigines in both recent and prehistoric times. It is a reasonable assumption that then and now, the area was sparsely settled and did not support a large number of people. Since these areas have not been investigated thoroughly, any statement as to the early cultures is conjectural and extrapolated from studies done to the south and east.

All forest management plans review contemporary cultural and archaeological information available in a statewide database. Field personnel, as well, are directed to observe the management area for possible sites and report to the State archaeologist for additional consultation. Any future discoveries of historical, cultural, or archaeological significance within the project boundary will be protected.
Part 2: IFMP Components (1-2 pages maximum)

Management Objectives (Outline primary forest management objectives):

Town Corner WA and Town Corner Cedars SNA
1. Manage the site as a reserve for northern wet-mesic forest, as an aquatic reserve and wetland protection site, and as an ecological reference area. Natural processes will determine the structure of the forest. Harvesting of timber within this SNA can occur if the harvest contributes to the structural and physical attributes desired in the type.

2. Provide opportunities for research and education on the highest quality native northern wet-mesic forests.

All forested stands outside of the state natural area are currently scheduled for management over the course of the next 50 years. The objectives for the major forest cover types are:

Aspen: Management of aspen will provide wildlife habitat, produce forest products, and to maintain the type.

Scrub Oak and Red Oak: Management of scrub and red oak will provide wildlife habitat, produce mast, produce forest products, and to maintain the type.

Jack Pine: Management of jack pine will provide wildlife habitat, produce forest products, and to maintain the type.

Red Pine: Management of red pine will begin to resemble naturally occurring pine stands.

Other timber types representing small proportions of the overall property will generally be managed to maintain the type following the guidelines set forth in the WDNR Silviculture Handbook.

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives):

Town Corner WA and Town Corner Cedars SNA
1. Forested stands within the state natural area are managed passively, which allows nature to determine the ecological characteristics of the site. Exceptions include control of invasive plants and animals, maintenance of existing facilities, and access to suppress fires. Salvage of trees after a major wind event is not considered compatible with management objectives.

2. Regeneration of timber stands will be accomplished through natural seeding or sprouting wherever possible. Where natural regeneration is unlikely or is absent after the lapse of normal regeneration period, direct seeding or planting of two or more native species may be used. Hand planting will minimize the appearance of rows.

Aspen will be managed even-aged with coppice regeneration harvests conducted at rotation age, and will be consistent with the guidance of the silviculture handbook. Green
tree retention guidelines will be followed. Diversification of age classes and early successional types can be maintained through this method. Rotation ages may be modified to increase age diversity as desired. Generally snag, den, and mast trees will be retained during harvests.

Scrub oak and red oak will be managed even-aged with shelterwood, coppice, or overstory removal methods depending on stand level characteristics and be consistent with the guidance of the silviculture handbook. Extended rotations to may be desirable where the oak remains healthy. Maintenance of the type through harvesting will be needed in declining stands. Snag, den, and mast/seed trees will be maintained during final harvests. Green tree retention guidelines will also be followed. To maintain the type long term, regeneration harvests and post-harvest treatments will likely be required.

Jack Pine will be harvested consistent with the guidance of the silviculture handbook. To maintain the type long term, regeneration harvests and post-harvest treatments will likely be required.

Red Pine will be thinned consistent with the guidance of the silviculture handbook to approximate the structure and size class of naturally occurring pine stands and to encourage recruitment of other tree species. The stand will start to lose its plantation row appearance and understory shrubs and plants will develop in the stand as well.

The other timber types cumulatively represent 6% of the forested types and will be managed in accordance with the WDNR Silviculture Handbook and/or in consideration of adjacent stands, a landscape level approach, or as management approaches evolve.
Interim Forest Management Plan

Approvals:

Joe Henry ___________________________________ 5/29/14
Regional Ecologist Date

Bruce Djupstrom 5/15/14
Forester Date

Janet Brehm 5/14/14
Property Manager Date

John Huff 5/14/14
Area/Team Supervisor Date