

Wisconsin Department of Natural Resources Tier 3 Management Plan

Property Name: Champion Valley Timber Demonstration Forest

Property Designation or Type: Demonstration Forest

DNR Property Code Number: 6930 Forestry Property Code: 6302

Property Location-County: Vernon

Real Estate:

Fee acres owned: 52 Easement acres owned:

NRB approved acreage goal (land records):

Property Manager: Dennis Hutchison

Address 1: DNR Forestry Address 2: 220 Airport Road

City, State, Zip: Viroqua, WI 54665

Office Phone: 608-637-3784



Approved by Natural Resources Board: Date: Oct. 29, 2014

A. Regional and Property Assessment

1. Landscape and Regional Context

Champion Valley Forest is located in the Western Coulees and Ridges Ecological Landscape in southwestern Wisconsin and is characterized by a lack of glacial features. It is part of the region called the "Driftless Area" because it lacks glacial deposits known as "drift" (although glacial outwash materials do occur in river valleys). The topography is unique in the state due to the long periods of erosion that have created dissected ridges, steep-sided valleys, and extensive stream networks with dendritic drainage patterns. The Western Coulees and Ridges Ecological Landscape is more forested than the rest of southern Wisconsin. The Baraboo Range, rugged hills formed primarily of Precambrian Baraboo Quartzite, is located in the eastern part of the ecological landscape. Soils are mostly silt loams (loess) and sandy loams over dolomite and sandstone bedrock. Several large rivers, including the Mississippi, Wisconsin, Chippewa, and Black, flow through or border the ecological landscape. Historical vegetation consisted of southern hardwood forests of several major types, oak savanna, and prairie, with extensive floodplain forests, sedge meadows, and marshes along the major rivers. With Euro-American settlement, most of the more level lands on ridge tops and in valley bottoms were cleared of native vegetation and converted to agricultural uses. The steep slopes between valley bottom and ridge top, unsuitable for raising crops, either remained in forest or grew up into oak or maple-dominated forests after the wildfires common before Euro-American settlement were suppressed. Current vegetation is a mix of forest (the largest landcover component, at over 40%), agriculture, and grassland (mostly nonnative), with wetlands restricted almost entirely to the river valleys. The primary forest cover is oak-hickory (51%) dominated by oak species (Quercus spp.) and shagbark hickory (Carya ovata). Maple-basswood forests (28%), dominated by sugar maple (Acer saccharum), American basswood (Tilia americana), and red maple (Acer rubrum), are common in areas that were not subjected to repeated wildfires prior to Euro-American settlement. Bottomland hardwoods (10%) are common and restricted to the valley bottoms of the larger rivers and are dominated by silver maple (Acer saccharinum), ashes (Fraxinus spp.), elms (Ulmus spp.), and eastern cottonwood (Populus deltoides). Coniferous forests are not extensive and include the so-called "relict" conifer stands of eastern white pine (Pinus strobus), red pine (Pinus resinosa), and (rarely) jack pine (Pinus banksiana) on dry sites.

2. Ownership and Adjacent Land Uses

The surrounding private property is a mixture of natural forest communities and current agriculture fields.

3. General Property Description and Management History and Use

Following extensive logging in the early 1800's, the area was settled primarily by farmers from Bohemia. The subsequent land clearing and sheep culture has a profound impact of the development of today's forest. The generally poor silvical conditions of the area's woods today is largely due to destructive cutting and the adverse effects of livestock grazing on tree quality and regeneration. The area today has a major daily production emphasis.

In 1946 the state of Wisconsin purchased 51.86 acres of woods in the Town of Union upon

which could be demonstrated the best practices for managing farm woodlots of similar conditions. These demonstrations included, but were not limited to:

- 1. Continuous annual or periodic harvest of timber crop
- 2. Compatible recreational uses
- 3. Wildlife management and restoration
- 4. Watershed protection and restoration
- 5. Logging techniques and safety
- 6. Utilization and marketing practices

Soils: The majority of the property is sitting on silt loam type soils.

4. Land Management Cover Types

Northern Hardwoods: A total of 49 acres (94%) of survey data is typed as northern hardwoods. Within this cover type there is 10% large sawlogs, 67% small sawlogs, and 23% seedling/saplings.

Oak: A total of 3 acres (6%) is typed as oak, all in the large sawlog class

<u>5. Endangered, Threatened, Special Concern Species or Habitats, and Wildlife Species of Greatest Conservation Need</u>

At the time of this plan (2014) the Natural Heritage Inventory database identified Southern Mesic Forest, as well as two state threatened and 1 special concern species that are known from the general vicinity of the property. Negative impacts to these and other rare species will be avoided by following DNR's Species Guidance Documents:

http://dnr.wi.gov/topic/EndangeredResources/guidance.asp. In cases where species guidance documents haven't yet been developed, avoidance to rare species will occur via practices such as time of year restrictions, modified harvest boundaries, and/or consultation with rare species experts.

Additionally, although the property is not specifically listed in the Wildlife Action Plan's Implementation document for the Western Coulee and Ridges Ecological Landscape (WCREL), one priority natural community type is listed in the document that the property contains; Southern Mesic Forest. Species of Greatest Conservation Need associated with southern mesic forest included Acadian Flycatcher, Cerulean Warbler, Hooded Warbler, Kentucky Warbler, Veery, Wood Thrush, Worm-eating Warbler, Yellow-billed Cuckoo, Cherrystone Drop Snail, Northern Long-eared Bat, Eastern Red Bat, Woodland Vole, Hickory Hairstreak, Blue-winged Warbler, and Whip-poor-will. Although the majority of these species will benefit from large block old forest management, a few (primarily the latter species listed) will benefit from the development of quality "feathered" edge habitat along field edges and other open habitats.

6. Invasive Species

A small pocket of Reed Canary grass is located along old logging trail. This area covers approximately one half acre.

Minor amounts of multi-flora rose are scattered across the property.

7. Cultural and Archaeological Features

The Vernon County Archaeological and Historic Sites map (WDNR. 2012) indicates a potential historic site exists. Further review will be needed from the state archaeologist.

8. Public Uses and Infrastructure

This property provides opportunities for multiple forms of public recreation. Hunters use the property during legal hunting seasons, while the general public uses it for bird watching, mushroom hunting, nut gathering, snowshoeing, and hiking.

9. Refuges and other Closed Areas

No portion of this property is designated as a refuge or closed to the public

10. Administrative Facilities

No administrative facilities located on property

Significant Property Management Issues, Trends and Needs:

Property line survey:

Neighboring landowner to the east continually marks the property line with No Trespassing signs. The signs appear to cross back and forth along the property line causing confusion for property users. There are old fence posts that appear to be marking this line, but the accuracy of this line is questionable. Having this line surveyed will delineate the proper boundary location.

Potential non-native earthworm population:

There are spots within the property that appear to have earthworm issues. Bare mineral soil areas that are free of leaf litter and ground layer plant growth indicates a possible non-native earthworm problem.

Old corner posts are hard to find, if they exist at all. The old fence along the east boundary is becoming more difficult to identify as it falls into disrepair.

Potential natural community survey with focus on rare plants, birds, and terrestrial snails: Although the property was examined in the 1970's and early 1980's for natural communities and rare plants, no work has taken place since that time. Of particular importance is rare bird

and snail information which could serve to guide forest management. Additionally, there may be a good opportunity for monitoring bird use, rare plant response, and natural community characteristics under experimental/demonstration oak/northern hardwood management regime.

B. Property Purpose and Goals Management Objectives and Prescriptions

1. Property Purpose and Goals

The main goal for this property is to manage the Northern Hardwood and Oak timber types accordingly to the WI DNR Silviculture Handbook and Generally Accepted Practices.

Based on the properties inventory data the Oak timber type is not regenerating as well as planned. There is the potential to promote oak even if the property is converting to Northern Hardwood species. Conducting non-commercial thinning and releasing any oak that is found will help perpetuate oak on the property.

2. Current and Planned Land Management Objectives and Prescriptions

Cover Types	Total Acres	Management Objectives	Management Practices	Management Issues and Constraints
O/NH	3	Non-commercial Thinning Stand 4 in year 2006	TSI	Need funding
NH/O	4	Non-commercial Thinning Stand 5 in year 2010	TSI	Need funding
NH/NH	33	Un-even aged harvest Stand 1 in year 2021	Single Tree Selection	
NH/NH	5	Un-even aged harvest Stand 3 in year 2021	Single Tree Selection	
NH/NH	7	Un-even aged harvest Stand 2 in year 2036	Single Tree Selection	

Additional Comments:
None
Changes or Additions to Current Management and Development:

SUMMARY OF PUBLIC INVOLVEMENT ACTIVITIES FOR THIS PLAN AND COMMENTS RECEIVED

On May 20, 2014, a 21-day public review period for revision of Stewardship Demonstration Forest property management plans was publicly noted statewide. Publics and partners were informed by way of a statewide press release and an email distribution to subscribers of 'eGov', a statewide government delivery system.

A comprehensive DNR web page was developed for Stewardship Demonstration Forests to describe their history and purpose, and to identify individual properties and locations. Draft management plans were posted on the website for public viewing.

The public was invited to respond by on-line electronic comment form, paper comment forms and email. Consultation occurred for Stewardship Demonstration Forest located within the tribal ceded territory.

No comments were received by the public.

None





