



Pattison State Park Interim Forest Management Plan

Property Identifiers

Property Name: Pattison State Park (PSP), North Country Trail (NCT)

Property Designation or Type: State Park

DNR Property Code(s): 9410

Forestry Property Code(s): 1644 (PSP), 1641 (NCT)

Property Location: Douglas County

Property Acreage: 1527 (PSP), 40 (NCT)

Master Plan Date: June 25, 1984

Property Manager: Kevin Feind

Part 1: Property Assessment

A. ECOLOGICAL LANDSCAPE AND PROPERTY CONTEXT

Primary ecological landscape is Superior Coastal Plain with the very southern portion of Pattison State Park located in the Northwest Lowlands. The Superior Coastal Plain is Wisconsin's northernmost Ecological Landscape, bordered on the north by southwestern Lake Superior and strongly influencing the local climate, resulting in cooler summers, warmer winters, and greater precipitation compared to more inland locations. The major landform in this Ecological Landscape is a nearly level plain of lacustrine clays that slopes northward toward Lake Superior.

Historically the Superior Coastal Plain Ecological Landscape was almost entirely forested with a mixture of white pine, white spruce, balsam fir, paper birch, balsam poplar, quaking aspen, and northern white cedar. The present clay plain forest has been fragmented by agricultural use, and today approximately one-third of this landscape is non-forested. Aspen and birch forests occupy about 40% of the total land area, having increased in prominence over the boreal conifers.

The Northwest Lowlands Ecological Landscape was historically almost entirely forested with upland forest vegetation composed mostly of paper birch, balsam fir, sugar maple, aspen, and white spruce. The lowlands supported extensive wet forest of black spruce and tamarack, and some cedar and black ash swamps. The present-day forests remain extensive and relatively unbroken, occupying 76% of the landscape.

B. GENERAL PROPERTY DESCRIPTION

Pattison State Park access is located approximately 10 miles south of Superior, WI on STH 35. The park is split into 4 different sections. CTH B bisects the park running east to west, while STH 35 bisects the park running north and south.



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The landscape surrounding Pattison State Park is a mixture of forests, wetlands, open fields, and low density housing. Open fields are more common to the north on the Superior Coastal Plain. Forest cover is more widespread to the south in the Northwest Lowlands. The extensive wetlands to the south are a mix of forested, shrub-dominated, and open types.

The soils in Pattison are characterized as red clay soils that are made up of reddish-brown, clayey glacial till, and lake-deposited clay and silt. The clay is derived from deep lake-bottom deposits in the Superior Basin, and gets its color from the reddish Precambrian sandstones. It is also slightly calcareous, possibly due to inputs of glacial materials from Minnesota transported via melt water sediments through the St. Louis River valley. These materials are thought to have been derived from limestone and dolomite in Manitoba and transported to Minnesota by the St. Louis Lobe of the glacier. The soils are moderately well drained and clayey, with a clay loam surface, very slow permeability, and very high available water capacity. Soil drainage classes range from well-drained to somewhat poorly drained. Surface textures are generally clay to silt loam; permeability ranges from very slow to moderately slow and available water capacity ranges from moderate to very high.

The fine textures and slow permeability of these soils give them many of the functional characteristics of wetland soils, even when they occur on uplands. Water moves out of them very slowly, and surface ponding from runoff can be common in basins and lower-lying areas. Vegetation communities on these soils typically contain species characteristics of wetlands, including northern white-cedar, black ash and speckled alder.

Pattison is in the Lake Superior Basin and is primarily drained by the Black River with Copper Creek and a few unnamed tributaries also present. Interfalls Lake is located within the park and was formed by a dam on the Black River. This is the only lake located on park property.

The Black River flows through Pattison over a relatively flat plain of lake clays and glacial stream deposits resulting in darkly stained water before flowing over the Superior escarpment. The results of the escarpment are Big Manitou Falls and Little Manitou Falls. The Black River empties into the Nemadji River south of the city of Superior.

Copper Creek is a medium hard water drainage system that flows northward off the Superior escarpment into the Nemadji River. Copper Creek flows over the Superior escarpment through the northernmost part of the park

C. CURRENT FOREST TYPES, SIZE CLASSES, AND SUCCESSIONAL STAGES

Pattison State Park is covered by a mix of upland hardwoods and conifers, lowlands (forested and shrub-dominated), grasslands, streams, and developed areas.

The summary below combines forest information from Pattison State Park (1508 acres) and 41 acres of North Country Trail property that is immediately adjacent to the southeast corner of the park.

- **Aspen:** 497 acres (32% of total acreage). Stands are classified as seedlings and saplings or hardwood poles. Dominant trees are aspen, fir, spruce, and white birch.
- **Northern hardwoods:** 220 acres (14% of total acreage). Stands are classified as hardwood poles to small sawlogs. Dominant trees include sugar maple, white birch, and aspen.



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- **White birch:** 210 acres (14% of total acreage). Stands are classified as seedlings and saplings and hardwood poles. Dominant trees include white birch, balsam fir, and sugar maple.
- **Oak:** 159 acres (10% of total acreage). Stands are classified as hardwood poles.
- **Swamp hardwoods:** 72 acres (5% of total acreage). Stands are classified as hardwood poles. Dominant trees include black ash and northern white cedar.
- **White pine:** 40 acres (3% of total acreage). Stands are classified as sapling to large sawlogs. Dominant species include white pine, balsam fir, and ash.
- **Swamp conifer:** 39 acres (3% of total acreage). Stand is classified as softwood poles.
- **Fir-spruce:** 23 acres (2% of total acreage). Stand is classified as seedlings and saplings.
- **Bottomland hardwoods:** 22 acres (2% of total acreage). Stand is classified as large sawlogs.
- **Red pine:** 15 acres (1% of total acreage). Stand is classified as small sawlogs.
- **White cedar:** 15 acres (1% of total acreage). Stands are classified as small sawlogs. Dominant trees include northern white cedar and red maple.
- **Red maple:** 14 acres (1% of total acreage). Stand is classified as hardwood poles. Dominant species are red maple and white cedar.
- **White spruce:** 2 acres (<1% of total acreage). Stand is softwood poles. Dominant trees include white spruce, white pine, and balsam fir.

D. NATURAL HERITAGE INVENTORY – ENDANGERED, THREATENED, and SPECIAL CONCERN SPECIES, SPECIES OF GREATEST CONSERVATION NEED

One special concern bird, one threatened and two special concern plants, one special concern snail, one threatened and one special concern herptile, and three good quality natural communities have been documented at Pattison State Park. Two other bird species of greatest conservation need have also been documented at the park.

E. WILDLIFE ACTION PLAN CONSERVATION OPPORTUNITY AREAS (COA)

Pattison State Park is not within any COAs as identified in the [2005 Wisconsin Wildlife Action Plan](#) (WWAP). Several natural communities documented in the park are considered to be high priority or important natural community types for either the Superior Coastal Plain or the Northwest Lowlands ecological landscapes. These include boreal forest, northern mesic forest, and dry cliff.

F. SIGNIFICANT CULTURAL OR ARCHEOLOGICAL FEATURES

According to Wisconsin Historical Society records there are archaeological and historical sites associated with Pattison State Park.

G. INVASIVE SPECIES

The property has non-native invasive species present, including bush honeysuckle (*Lonicera x bella*), garden valerian (*Valeriana officinalis*), reed canary grass (*Phalaris arundinacea*), common buckthorn (*Rhamnus cathartica*), black locust (*Robinia pseudoaccacia*), and Siberian pea shrub (*Caragana arborescens*).

H. EXISTING STATE NATURAL AREAS (SNA) DESIGNATIONS/NATURAL COMMUNITY TYPES LIMITED IN THE LANDSCAPE

There is one State Natural Area: [Big Manitou Falls and Gorge](#).



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I. PRIMARY PUBLIC RECREATION USES

Pattison State Park offers a variety of recreational opportunities including camping, hiking, swimming, cross country skiing, snow shoeing, nature study, hunting, fishing, and trapping. The North Country National Scenic Trail passes through the park.

J. BIOTIC INVENTORY STATUS

[Rapid Ecological Assessment](#) was completed April 2011.

K. DEFERRAL/CONSULTATION AREA DESIGNATIONS

There are 3 deferral sites: Copper Creek Gorge, Pattison Mesic Forest, and Big Manitou Falls and Gorge SNA.

Part 2: Future Management - IFMP components

Primary Forest Management Objectives

Forest management activities involving timber cutting will be undertaken to ensure public safety, salvage dead or dying trees within intensive recreation areas, improve visual aesthetics, modify/maintain wildlife habitat, and to perpetuate desired timber types.

Aesthetic landscape management will be practiced in the south unit of the park and in all stands composed principally of pine and/or white spruce. Old growth management in the southern part of the park will provide plant community types for many animal species that are not abundant on either private or public lands adjacent to the park.

The north unit of the park will be managed in part for aesthetics and to maintain a diversity of wildlife habitat. Maintenance of early successional plant community types in the northern part of the park will provide habitat types required by a number of animal species and help maintain the diverse fauna found in the park.

Though forest production is not considered an objective within the park, vegetative management practices are applicable to the extent they can be used as a means to promote wildlife habitat maintenance/modification, aesthetic management, and forest perpetuation as desired.

Tree planting in intensive and extensive areas will be primarily of species native to the area. Coniferous shelterbelts will be developed as a means of noise abatement along heavy use travel corridors.

Opportunities exist for under planting aspen with native coniferous species. This will allow for the development of a long-lived stand with species capable of achieving larger diameters. It will also increase the coniferous component of the property for greater diversity.

The grasslands and brush areas will be maintained to maximize vegetation diversity within the property.



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Property Prescriptions

All Stands: The Wildlife Action Plan describes Priority Conservation Actions that make effective use of limited resources and address multiple species with each action. All proposed forestry prescriptions should reference Priority Conservation Actions, Wildlife Action Plan priorities, property objectives and be based on individual stand level needs.

Active timber management may be implemented east of STH 35 and north of CTH B. The following prescriptions may be used in that section of the park.

Aspen: to regenerate aspen, clear cut with reserves.

Pine or pine/spruce: selection harvest or shelterwood harvest.

Old field: to maintain periodically mow or prescribe burn.

Summary of Public Involvement and Comments Received

Maps (Optional)

- a. Property Boundary and ownership Maps
- b. Forest Cover Type Maps



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PREPARED BY:

Kevin Feind

03/28/14

Park Supervisor

Date

APPROVED:

Area Program Supervisor

Date

REVIEWED BY:

Forester

Date

District Ecologist

Date



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Boundary Map of Pattison State Park

