



Interim Forest Management Plan

Property Identifiers

Property Name: **Dewey Marsh Wildlife Area**

County(ies): **Portage**

Property Acreage: **6,078 acres**

Forestry Property Code: **5078**

Property manager: **Lesa Kardash**

Master Plan Date:

Part 1: Property Assessment

General Property Description

Dewey Marsh Wildlife Area is a 6,078 acre property located 6 miles north of Stevens Point. Access to the property can be found off of Co. Hwy X. Hay Meadow Road passes through the center of the property. The east edge is flanked by Torun Road and the north comes into contact with Oakwood Drive.

Dewey Marsh contains a large expanse of relatively undisturbed northern sedge meadow including smaller islands of tamarack and black spruce swamp, paper birch and white pine woods, and ericaceous bog. The marsh is dominated by blue-joint grass, steeple bush and wire-leaved sedges, with cat-tails and bur-reed. It forms the headwaters of Hay Meadow Creek. Scattered throughout the area are islands of aspen, birch, and white pine. Tamarack and black spruce swamps are also present. The Dewey Marsh State Natural Area is located within the wildlife area. Hay Meadow Creek passes through the property in the east and south. The lay of the land is generally flat and forested areas are dominated by aspen. The most common soil type is muck. The upland areas are underlain by sandy loam soils. Small areas of bedrock are exposed in portions of the uplands.

The state began purchasing property in the area in 1973. The large marsh made the area generally unsuitable for agriculture. Large wildfires occurred on the property in 1974 and 1976.

- **Landscape and Regional Context:**

The Dewey Marsh Wildlife Area is located in the Central Sand Plains and Forest Transition Ecological Landscapes. Within these landscapes, the property lies within several Land Type Associations, primarily Glacial Lake Wisconsin Bogs (212Ra05), Peplin Uplands (212Qd07) and Plover-Hancock Outwash Plain (222Ra08). The Dewey Marsh Wildlife Area and the Dewey Marsh State Natural Area is considered a Conservation Opportunity Area, as well as a *Small Legacy Place*. The site was given a



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three-star rating for conservation significance in the Land Legacy Report in 2006. Dewey Marsh is recognized as a Wisconsin Wetlands Association "Wetland Gem" (2009).

- **History of Land Use:**

Large areas of the uplands were cleared of forests for farming in the late 19th and early 20th century. Most of this farming failed and went tax delinquent causing the lands to revert back to public ownership. Further purchases and donations over the years have enlarged the Dewey Marsh Wildlife Area to its current size. Private inholdings of primarily agricultural and residential properties are scattered throughout the property. Drainage of the lowland areas for agriculture likely did not occur on this property.

Active forest management has taken place on the property since state ownership including tree planting and timber cutting. Two, major forest fires occurred on the property in 1976. Both fires were human caused with one fire starting in early September and the second in mid-October of 1976. Both fires were managed collectively as the *Dewey Marsh Fire* and became the longest-burning "peat fire" in Wisconsin history. The Dewey Marsh Fire was declared "out" in late March of 1977. Around the time of the Dewey Marsh Fire, numerous "potholes" and wildlife ponds were either burned into or excavated in the wetland areas to improve habitat for waterfowl.

Site Specifics

- **Current Forest Types:**

Approximately 2,084 acres of Dewey Marsh Wildlife Area is forested cover. The forest cover types include:

Aspen – 39%

1. 15 to 25 Years – 27%
2. 26 to 40 Years – 36% (Dewey Marsh Fire: 1976)
3. 56 to 70 Years – 31%
4. 71 to 89 Years – 6%

Tamarack – 17%

1. 36 years old – 57% (Dewey Marsh Fire: 1976)
2. 58 years old – 43%

Black Spruce – 15%

1. 74 to 79 Years – 100%

Oak (includes scrub oak) – 15%

1. 36 to 40 Years – 6% (Scrub oak)
2. 56 to 70 Years – 19%
3. 71 to 100+ Years - 75%

Pine (Jack, red & white combined) – 9%

1. 45 to 60 Years – 45%
2. 61 to 80 Years – 29%
3. 91+ - 26% (All White Pine)

Northern Hardwoods – 4%

1. 16 to 20 Years – 100%

- **NHI: Endangered, Threatened, Special Concern species, Species of Greatest Conservation Need (SGCN)**

One state threatened, 1 state endangered, and 7 special concern species are known from the general vicinity of the property. Species of Greatest Conservation Need identified within the Wildlife Action Plan as being associated with large wetland complexes and adjacent uplands include: Blanding's Turtle, Four-toed Salamander, Pickerel Frog, Wood Turtle, American Bittern, American Woodcock, Bald Eagle, Black



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Tern, Black-billed Cuckoo, Blue-winged Teal, Blue-winged Warbler, Bobolink, Canada Warbler, Connecticut Warbler, Golden-winged Warbler, Henslow's Sparrow, LeConte's Sparrow, Lesser Scaup, Northern Goshawk, Northern Harrier, Osprey, Rusty Blackbird, Sharp-tailed Grouse, Short-eared Owl, Solitary Sandpiper, Trumpeter Swan, Veery, Whooping Crane, Willow Flycatcher, Wilson's Phalarope, Yellow-billed Cuckoo, Yellow Rail, Eastern Red Bat, Gray Wolf, Hoary Bat, Northern Long-eared Bat, Silver-haired Bat, Water Shrew, Spatterdock Darner, Warpaint Emerald, Clamp-tipped Emerald, Ringed Boghaunter, and Jutta Arctic.

- Wildlife Action Plan Conservation Opportunity Areas (COA).

Dewey Marsh is specifically listed in the Wisconsin Wildlife Action Plan as a Conservation Opportunity Area for "large Sedge Meadows, Fens and Prairies with Upper Mid-West/Regional Significance".

- Existing State Natural Areas (SNA) designations/natural community types limited in the landscape

Because the property supports one of the largest and highest quality peatland complexes in this region of the state much of the site qualifies for an ecological reference area and High Conservation Value Forest spanning nearly the full spectrum of northern peatlands in a near pristine condition. The following designations exemplify the quality of the site: Dewey Marsh State Natural Area (#182) – 926 acres, <http://dnr.wi.gov/topic/Lands/naturalareas/index.asp?SNA=182> , a *Small Legacy Place* <http://dnr.wi.gov/topic/lands/landlegacy> given a three-star rating for conservation significance in the Land Legacy Report in 2006, and Dewey Marsh is also recognized as a Wisconsin Wetlands Association "Wetland Gem" (2009).

- Biotic Inventory Status

Completed 2011 titled "Rapid Ecological Assessment for Central Wisconsin Wildlife Areas Property Group".

- Deferral/consultation area designations

3824 acres designated as "Deferral" in 2013

- Invasive species

The presence of glossy buckthorn was noted in the "Rapid Ecological Assessment for Central Wisconsin Wildlife Areas Property Group". Other invasive species whose presence has been documented include spotted knapweed, crown vetch, leafy spurge, black locust, scotch pine, and sweet clover.

Cultural and Recreational Considerations

The Dewey Marsh Wildlife Area sees moderate recreational use. The property offers opportunities for hunting upland birds, deer, bear, wolves and small game as well as trapping and bird watching. The Dewey Marsh Wildlife Area is also crossed by a snowmobile trail. Although no designated hiking or biking trails exist, lightly-traveled, dead-end roads offer local residents excellent walking and dog-walking/training opportunities.



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Historical, cultural and archaeological sites are rare, but do exist across the property. Old homesteads and evidence of past farming activities are scattered about the property.

Part 2: IFMP Components

Forest Management Objectives:

The primary forest management objective is to provide younger forest for both game species and early successional Species of Greatest Conservation Need. A second objective is to provide small blocks of old forest and scattered old trees for mast production, cavity trees and snag trees for wildlife benefits. This will largely be accomplished through sustainable silvicultural systems that will increase the diversity and structural complexity of wildlife habitat.

- 1) Aspen & Early Successional Types
 - a. Promote aspen where it exists and/or appropriate.
 - b. Maintain age-class diversity within the compartment and across the property.
 - c. Improve diversity within the stand by developing an oak component within aspen areas where possible.
- 2) Tamarack
 - a. Promote older age classes as access is limited by important bog habitats surrounding these timber types.
 - b. Monitor tamarack health across the property.
- 3) Black Spruce Bogs
 - a. Promote older age classes as access is limited by important bog habitats surrounding these timber stands.
 - b. Monitor black spruce health across the property.
- 4) Oak Types
 - a. Promote oak regeneration through shelterwood & seed tree harvest systems and scarification & seeding operations.
 - b. Promote the establishment of oak within larger blocks of aspen where appropriate.
 - c. Thin to promote larger diameter classes and protect legacy trees.
 - d. Investigate extended rotation opportunities, especially in oak areas on the high ground in the NW $\frac{1}{4}$ of section 14 on the east side of the *Dewey Marsh State Natural Area* where opportunity still exists...
- 5) Pine
 - a. Natural conversion of red pine plantations to a more natural cover type appropriate to site.
 - b. Thin to improve spacing, large diameter trees, and encourage natural regeneration.
 - c. Harvest mature Jack pine and allow sites to naturally convert to white pine.
- 6) Northern Hardwood Types
 - a. Promote the establishment of small parcels of sugar maple, basswood, and ash where opportunities exist.
 - b. Thin to promote larger diameter classes and establish age class diversity.



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Property Prescriptions:

Aspen – Maintain aspen cover type by regenerating the stand using a simple coppice system. Favor winter harvesting for more abundant regeneration as well as reduced soil impact. Rotation age is generally 50 years. Stands on wet sites may need harvest prior to 50 years, as early as 40 years. Aspen growing on high quality sites may have their rotation age pushed back to 55 to 60 years. Achieve age-class diversity by flexing rotation age within the compartment as well as across the landscape.

Tamarack – This forest type lies within the large bog/marsh landscape which limits access possibilities. A passive management approach similar to black spruce will be followed.

Black Spruce Stands and Black Spruce Bogs – This forest type lies within the large bog/marsh landscape which limits access possibilities. A passive management approach will be followed for black spruce.

Oak – Most of the oak is mature and is growing on poor quality sites consisting of poor soils over shallow bedrock. Regenerate oak using shelterwood and seed tree management techniques. Improve the oak component within Aspen cover types by retaining large diameter oaks for mast production, nesting, and seed production. Conduct non-commercial timber stand improvement practices to encourage future oak development within existing aspen stands. In areas with better soils, thin from below to encourage growth of large-diameter oak, as well as other old forest attributes such as large snags and course woody debris.

Pine – Pine makes up a relatively small component of the property's forest cover. Jack pine is currently over-mature with little to no Jack pine regeneration. When harvesting Jack pine, allow these stands to convert naturally to other species. Red pine exists primarily in plantation with scattered legacy trees in white pine and oak stands. Continue to thin red pine plantations to maintain health and vigor, but allow these sites to convert to other species such as white pine and hardwoods. Scattered stands and individual white pine are scattered across the property. Thin white pine stands from below to encourage older forest attributes such as large diameter trees, standing dead snags, and large course woody debris. Retain scattered trees as reserve/legacy trees. White pine seedling are beginning to establish themselves in oak and pine stands across the property and will likely become the climax species in many areas.

Northern Hardwoods – Just a couple of pole and sawlog size northern hardwood stands consisting of sugar maple, basswood, red oak and ash exist on the fringes of the property. These areas should be thinned to promote all-age northern hardwood stand. Other areas of the property have scattered stands of small, pole-size red maple growing on poor soils. These red maple stands will struggle to achieve merchantable size. Red maple stands such as these should be converted to other species such as aspen or scrub oak to meet wildlife management objectives.

All stands

- Utilize BMP's for Water Quality to protect streams and wetlands when conducting timber sales.
- Identify invasive plant species and implement control practices such as prescribed fire, hand pulling, chemical and mechanical control to eliminate or reduce negative impacts.
- Utilize BMP's for Invasive Species to help limit the introduction and spread of invasive species when conducting timber sales
- Retain reserve/legacy trees and green tree retention as groups or individuals throughout the property within harvested stands

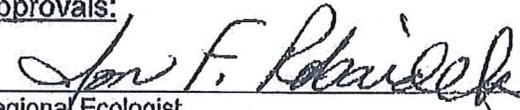
- Avoid negative impacts to rare species by following DNR's Species Guidance Documents: <http://dnr.wi.gov/topic/EndangeredResources/guidance.asp>. In cases where species guidance documents haven't yet been developed, avoidance to rare species will occur via practices such as time of year restrictions, modified harvest boundaries, and/or consultation with rare species experts.

Attachments:

"Rapid Ecological Assessment for Central Wisconsin Wildlife Areas Property Group" - June 2012

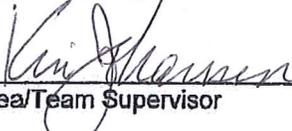
"SNA Guidance to Inventory Personnel Regarding Attributes of Areas That Merit Designation as High Conservation Value Forests on Forest Certified State-owned Lands (HCVF)" - May 2009

Approvals:

 9-29-14
Regional Ecologist Date

 10/3/14
Forester Date

 10/13/14
Property Manager Date

 10/14/14
Area/Team Supervisor Date