



Interim Forest Management Plan

Property Identifiers

Property Name: Van Loon Wildlife

Property Designation or Type: Wildlife Area

DNR Property Code: 8780

Forestry Property Code: 3229

Property Location - Counties: La Crosse and Trempealeau

Property Acreage: 3918

Master Plan Date: 1981

Property Manager: Ron Lichtie Wildlife Biologist

Property Assessment

Ecological Landscape Description:

The Van Loon Wildlife Area is within the Western Coulee and Ridges Ecological Landscape which is a mosaic of forest, cropland and grassland with wetlands mostly in the river valleys. Primary forest cover is oak and hickory. Maple and basswood forests, dominated by sugar maple, basswood and red maple, are common in areas that were not burned frequently. Bottomland hardwoods dominated by silver maple, swamp white oak, river birch, ashes, elms and cottonwood are common within the floodplains of the larger rivers. Relict "northern" mesic conifer forests composed of hemlock, white pine and associated hardwoods such as yellow birch are rare but do occur in areas with cool, moist microclimates. Dry rocky bluffs may support xeric stands of native white pine, sometimes mixed with red or even jack pine. Prairies are now restricted to steep south or west facing bluffs, unplowed outwash terraces along the large rivers, and a few other sites. They occupy far less than 1% of the current landscape. Mesic tallgrass prairies are now virtually nonexistent except as very small remnants along rights-of-way or in cemeteries.

General property description

Van Loon Wildlife Area is a 3,918 acre property located in La Crosse County. It is located in the northwest corner of La Crosse County around 3 and 1/2 miles northwest of



Interim Forest Management Plan

the Village of Holmen. The property extends 5 miles south of the Black River from Hwy 53/93 "Hunter's Bridge" to the community of New Amsterdam on County Trunk XX.

The wildlife area originated as a lease project in 1948 (known as McGilvary Bottoms). Fee acquisition began in 1957 with the purchase of 758 acres from the William Van Loon estate. The property contains six historic McGilvray arch truss bridges [exit DNR] over the Black River built circa 1892.

Habitat on the property consists primarily of flood plain forest, sand prairies, and oak savanna. Situated on sand and gravel deposits of the Black River, it features groves of scattered oak forest with green ash. The sparse canopy of the savanna has permitted the development of prairie grasses and forbs and the exceptionally rich groundlayer has over 100 species documented. The mature floodplain forest situated between channels of the Black River contains canopy dominants of large silver maple, swamp white oak, and green ash. Associated species include river birch, cottonwood, yellowbud hickory, American elm, basswood, and black ash. Swamp white oak is reproducing well and there is good distribution of both size and age classes for most tree species, although very large individuals are relatively infrequent. The site is dissected by several flood channels and topography is nearly level. The shrub layer is moderately dense composed of prickly ash, elderberry, buttonbush, common winterberry, and nannyberry.

Van Loon is also featured in the Mississippi - Chippewa River Region of the Great Wisconsin Birding and Nature Trail [exit DNR].

Management-

The wildlife area is managed to provide opportunities for public hunting, fishing, trapping, and other outdoor recreation while protecting the qualities of the unique native communities and associated species found on the property. The state natural areas are primarily managed passively, with some thinning of the canopy, understory manipulation and shrub control via harvest, brushing or fire to mimic natural disturbance patterns in the savanna. Populations of invasive species are controlled or eliminated by cutting, pulling, burning, herbicide treatment and/or bio-control.

Topography/Soils

The property is relatively flat and contains alluvial sands and gravel with some loam especially toward the downstream stretches of the property.

Property Context/Landscape

The property is situated in an area that is lightly to moderately fragmented with open areas including agricultural fields and residential developments as well as open wetlands. Because of this, opportunities exist for both large block old forest development and young forest, shrub, and grassland development.



Interim Forest Management Plan

Current forest types, size classes and successional stages-

- Bottomland Hardwoods is the most prevalent timber type on the property (83% of the forested acreage, 2,624 acres). The date of origin for this type ranges from 1900 to 1970, but the majority of the stands originated in 1930 or earlier. Large sawtimber silver maple is the dominant species and size class. Other species present include swamp white oak, cottonwood, river birch and green ash.
- Black oak is the second most common timber type (15% of the forested acreage, 476 acres). The date of origin for this type ranges from 1960 to 1905, The wide range of ages is somewhat misleading however, because most of the stand ages are clustered around the origin dates of 1960, 1945, 1920, and 1905. Other associated species are swamp white oak, ash, hickory, basswood and silver maple.
- The remaining 2% of the acreage consists of small stands of central hardwoods, northern hardwoods, aspen and red pine.

NHI: Endangered, Threatened, Special Concern species

There are 6 state endangered, 15 state threatened, and 19 state special concern species known from the general vicinity of the property.

Wildlife Action Plan Conservation Opportunity Areas (COA) and Species of Greatest Conservation Need (SCGN)

The Black River (including Van Loon WA) is identified as a Conservation Opportunity Area for Large River Corridors of Continental Significance within the Western Coulee and Ridges Ecological Landscape within Wisconsin's Wildlife Action Plan.

Aquatic and terrestrial species of greatest conservation need associated with the river, riparian forest and savanna, remnant prairie, and shrub communities of the property include:

Black Buffalo, Blue Sucker, Bluntnose Darter, Crystal Darter, Gilt Darter, Goldeye, Greater Redhorse, Lake Chubsucker, Lake Sturgeon, Paddlefish, Pallid Shiner, Pugnose Shiner, River Redhorse, Shoal Chub, Starhead Topminnow, Western Sand Darter, Blanding's Turtle, Bullsnake, Eastern Massasauga, Four-toed Salamander, Midland Smooth Softshell Turtle, Pickerel Frog, Prairie Racerunner, Wood Turtle, Acadian Flycatcher, American Golden Plover, American Woodcock, Bald Eagle, Bell's Vireo, Black-billed Cuckoo, Black Tern, Blue-winged Teal, Blue-winged Warbler, Brown Thrasher, Canvasback, Cerulean Warbler, Eastern Meadowlark, Field Sparrow, Grasshopper Sparrow, Great Egret, Henslow's Sparrow, Kentucky Warbler, King Rail, Lark Sparrow, Least Flycatcher, Lesser Scaup, Louisiana Waterthrush, Northern Bobwhite, Northern Harrier, Osprey, Prothonotary Warbler, Red-headed Woodpecker, Red-shouldered Hawk, Rusty Blackbird, Short-billed Dowitcher, Veery, Vesper Sparrow, Whip-poor-will, Willow Flycatcher, Wood Thrush, Yellow-billed Cuckoo, Yellow-crowned Night-Heron, Elktoe, Rock Pocket Book, Spectacle Case, Purple Wartyback, Butterfly, Elephant Ear, Snuffbox, Ebony Shell, Higgin's Eye, Washboard, Bullhead, Mapleleaf, Winged Mapleleaf, Flat floater, Round Pigtoe, Monkeyface, Salamander Mussel, Yellow



Interim Forest Management Plan

Sandshell, Wartyback, Buckhorn, Fawnsfoot, Pink Papershell, Yellow Sandshell, Slough Sandshell, Pecatonica River Mayfly, Armored Mayfly, Flat-headed Mayflies, Cleft-footed Minnow Mayfly, Sand Snaketail, Brush-legged Mayflies, Fragile Forktail, Eastern Red Damsel, Royal River Cruiser, Small Square-gilled Mayfly, Dubirahia Riffle Beetle, Swamp Darner, Lancet Clubtail, Predaceous diving Beetles, Common Netspinner Caddisfly, Pygmy Snaketail, Small Minnow Mayflies, Common Burrower Mayfly, Knobel's Riffle Beetle, Speckled Rangeland Grasshopper, Green-streaked Grasshopper, Mermiria Grasshopper, Sand Locust, Seaside Grasshopper, Obscure Grasshopper, Spot-winged Grasshopper, Dawson's spur-throated Grasshopper, Blue-legged Grasshopper, Spur-throat Grasshopper, Gladston's Spur-throat Grasshopper, Northern Marbled Grasshopper, Virginia Big-headed Tiger Beetle, Red-tailed Leafhopper.

Significant cultural or archeological features

Both archeological and historical features are present on the Van Loon Wildlife Area. Management practices scheduled for the property will be planned and conducted in consultation with the state archeologist.

Invasive species

Reed Canary Grass, Purple Loose strife, Common Buckthorn, Garlic Mustard are the known vegetative invasive species. Populations of invasive species are controlled or eliminated by cutting, pulling, burning, herbicide treatment and/or bio-control.

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

Two areas within the property have been designated as State Natural Areas (SNA): the Van Loon Floodplain Forest SNA, which is 317 acres, located on two separate parcels approximately ¼ mile to the north and south of STH 35; and the Van Loon Savanna SNA, which is 1574 acres and includes most of the property located north of Seven Bridges Road.

Van Loon Floodplain Forest State Natural Area (No. 568)

<http://dnr.wi.gov/topic/Lands/naturalareas/index.asp?SNA=568>

features 317 acres of **mature floodplain forest** situated between channels of the Black River. Canopy dominants are large silver maple, swamp white oak, and green ash. Associated species include river birch, cottonwood, yellowbud hickory, American elm, basswood, and black ash. Swamp white oak is reproducing well and there is good distribution of both size and age classes for most tree species, although very large individuals are relatively infrequent. The site is dissected by several flood channels and topography is nearly level. The shrub layer is moderately dense composed of prickly ash, elderberry, buttonbush, common winterberry, and nannyberry. Characteristic groundlayer species include cut-leaved coneflower, Virginia wild rye, Virginia waterleaf, wild ginger, wood nettle, sensitive fern, meadow rue, and calico aster. Throughout the floodplain are pockets of sloughs, ponds, wet meadow, and shrub swamp. Avifauna includes uncommon species such as red-shouldered hawk, cerulean warbler, and prothonotary warbler. Other birds are pileated woodpecker, wood duck, green heron, red-headed woodpecker, eastern wood-pewee, yellow-throated vireo, blue gray



Interim Forest Management Plan

gnatcatcher, ovenbird, American redstart, and indigo bunting. Van Loon Floodplain Forest is owned by the DNR and was designated a State Natural Area in 2008.

Van Loon Floodplain Savanna State Natural Area (No. 569)

<http://dnr.wi.gov/topic/Lands/naturalareas/index.asp?SNA=569>

features groves of scattered oak forest with green ash. The sparse canopy of the savanna has permitted the development of **prairie grasses and forbs** and the exceptionally rich groundlayer has over 100 species documented. Plants include white wild indigo, creamy indigo, rough blazing-star, tall green milkweed, lupine, culver's root, and field milkwort. Rare and uncommon species present in the site include snowy campion, pirate perch, weed shiner, pugnose minnow, and Pecatonica mayfly. Birds include wood duck, yellow-billed cuckoo, pileated woodpecker, great-crested flycatcher, tufted titmouse, blue-gray gnatcatcher, yellow warbler, American redstart, ovenbird, rose-breasted grosbeak, and northern oriole. Van Loon Floodplain Savanna is owned by the DNR and was designated a State Natural Area in 2008.

Van Loon is a WBCI Important Bird Area [exit DNR] noted for Yellow-crowned night-herons, Acadian flycatchers, cerulean warblers, and prothonotary warblers that breed there. The site also supports red-headed woodpeckers, blue-winged warblers, and field sparrows. Waterbirds congregate in late summer and thousands of landbirds migrate through, particularly in the spring.

Primary public uses (recreation)

Fishing, hunting, and trapping are the primary recreational uses of the property. Access is provided by public road crossings and three parking areas.

McGilvray Road is located in Northwest La Crosse County, Wisconsin, in the Van Loon Wildlife Area. Located on a former vehicular road is a unique combination of five rare bowstring arch truss bridges and one low truss bridge. They represent two styles of bridge construction popular in the nineteenth and early twentieth centuries which are quickly being replaced due to deterioration or inability to meet today's greater traffic requirements. Currently the McGilvray Road and its bridges are open only to pedestrian traffic and are available for viewing and historic interpretation.

Other recreational uses:

- Hiking
- Cross Country Skiing
- Wildlife Viewing
- Bird Watching
- Berry Picking
- Canoeing

Biotic Inventory Status

NR 44 compliant Rapid Ecological Assessment was completed in 2016:

http://intranet.dnr.state.wi.us/int/land/er/nhi/reports/LBTRPG_REA_final_Internal.pdf



Interim Forest Management Plan

Deferral/consultation area designations

<http://intranet.dnr.state.wi.us/int/land/div/InterimPlanning/resources.asp>

The exceptional diversity of the property and the Rapid Ecological Assessment lead to the designation of one "Consultation" site, and one "Deferral" site:

Deferral: Van Loon Bottoms (1493 acres):

http://intranet.dnr.state.wi.us/int/land/div/InterimPlanning/maps/Draft_DC_Site_LBTRPG07.pdf

Consultation: Van Loon Floodplain Savanna (2999 acres):

http://intranet.dnr.state.wi.us/int/land/div/InterimPlanning/maps/Draft_DC_Site_LBTRPG06.pdf

It will be important to update prefixes in WisFIRS as soon as possible for the stands that comprise these sites. Consultation sites will get a prefix of "G" in the recon. Deferral areas will get a "GZ" prefix. Following final approval of the master plan by the Natural Resources Board, the prefixes will need to be changed to reflect their new classification from the plan.



Interim Forest Management Plan

IFMP components

Management Objectives: (Outline primary forest management objectives):

Forest management objectives include maintaining existing forest types, conversion of some forest types and developing a diversity of age classes including both young and old forest areas for both game and non-game species. This will largely be accomplished through sustainable silvicultural systems that will increase the diversity and structural complexity of the wildlife habitat while at the same time minimize disturbance to riparian areas along the river corridor and associated wetlands. Many of the wetter areas will be passively managed due to the sensitive nature of these areas as well as the lack of operability.

- 1) Manage and maintain oak cover types where feasible
 - a) Diversify age classes and successional stages
 - b) Promote larger diameter trees.
 - c) Increase snags coarse woody debris except where noted otherwise
 - d) Promote oak in young stands or where overgrown by other species.
- 2) Manage to emphasize importance of forest interior songbirds and other old forest wildlife species especially in the southern portion of the property.
 - a) Limit forest habitat fragmentation.
 - b) Natural conversion to other hardwoods may be appropriate for interior forest blocks, whereas in other areas oak and silver maple regeneration may be favored.
- 3) Manage for early successional forest types especially on the northern portion of the property for young forest wildlife species.
 - a) Promote oak and silver maple regeneration where appropriate, looking at the context of each stand. Natural conversion to other hardwoods may be appropriate for interior forest blocks, whereas in other areas oak and silver maple regeneration may be favored.
 - b) Promote feathered edge along forested - open area transition.
- 4) Manage and maintain bottomland hardwood forest stands and associated wetland and riparian habitats.
 - a) Maintain and develop structural and functional attributes of old forests including biologically mature trees, large diameter trees, large snags and coarse woody debris.
- 5) Promote oak savanna structure and function especially on the northern portion of the property. Avoid coarse woody debris where it may conflict with prescribed burn management of savanna.



Interim Forest Management Plan

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):

OAK - Maintain and promote oak through planting, timber stand improvement methods, prescribed fire, thinning, seed tree, shelterwood, group selection, coppice, and other techniques described in the DNR Silviculture and Forest Aesthetics Handbook. Promote the growth and retention of large oak through techniques such as thinning, extended rotation, and managed old forest/old growth. Release swamp white oak (and other oaks) where overgrown with bottomland hardwoods

Prioritize regeneration harvests where remnant prairie vegetation does NOT exist in the understory. Promote oak savanna by thinning trees where prairie understory exists and promote savanna structure adjacent to existing prairie/savanna by thinning trees (retain approximately 40-60 sq ft of basal area per acre of oak).

For interior forest blocks, concentrate on conversion to uneven-aged management/thinning to develop large diameter trees under an extended rotation.

BOTTOMLAND HARDWOODS – This is the most abundant forest type on the Van Loon Wildlife Area, and provides valuable habitat for a multitude of bird species. Focus on maintaining large blocks of this type to meet wildlife habitat needs and to retain the special overall significance of this type on the property. Where appropriate and feasible, use forestry practices to regenerate floodplain forest tree species. Thinning as well as single tree and group selection (small patch harvesting) are common tools used in these forest types to maintain health and vigor. Based on site conditions and the presence of invasive species (especially reed canary grass), these cutting practices may be used individually or in combination to achieve the management objectives. Primarily utilize uneven-aged harvest methods to develop large diameter trees and maintain forest canopy. The use of small patch harvesting in an uneven-aged management system to regenerate the type while mimicking natural disturbance has been successful in other areas. Uneven-aged management through patch clearcuts will retain the habitat benefits of large canopy trees, while allowing sunlight to the forest floor to grow new seedlings and provide multiple vegetation layers. Consider extended rotations, managed old forest/old growth, and allowing old forest to develop through natural processes via passive management.

Utilize even aged methods along the forest-open land (not wetland due to reed canary grass concerns) transition retaining some mast trees (especially oak) as groups or individuals to meet legacy tree and green tree requirements and to develop large snag/cavity trees. This will also promote quality feathered edge habitat.

Promote oak savanna structure by thinning non-oak adjacent to savanna. In this case, a shelterwood harvest may be appropriate if reed canary grass is not in the understory.

WHITE PINE –Passively manage natural white pine stands for their historic significance, as well as wildlife and aesthetic value. Promote regeneration of natural white pine by releasing understory trees via commercial/non-commercial tree cutting.



Interim Forest Management Plan

RED PINE – Thin or clearcut to allow conversion to other forest types or remnant prairie if the understory contains native tree species and/or prairie species. Retain a few trees adjacent to other forest types (to reduce windthrow) for wildlife and aesthetics.

ALL STANDS:

- Follow proper BMP's to protect streams on the property.

- Identify invasive species and use proper BMP practices and treatment options to eradicate or minimize impact.

- Identify and protect rare and endangered species and provide habitat for these species.

- Use thoughtful planning with forest management practices to enhance recreation opportunities on the properties.

- Retain reserve/legacy/green tree retention trees as groups or individuals throughout the property within harvested stands

Summary of Public Involvement and Comments Received

Maps (Optional)

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



Interim Forest Management Plan

PREPARED BY:

Property Manager

Date

APPROVED:

Area Program Supervisor

Date

REVIEWED BY:

Forester

Date

District Ecologist

Date