



Interim Forest Management Plan

Property Identifiers

Property Name: **Love Creek Fishery Area**

Property Designation or Type: **Fishery Area**

DNR Property Code(s) (DNR Prop Code Number): **2508**

Forestry Property Code(s): **2508**

Property Location - County: **Iowa**

Property Acreage: **593 acres**

Master Plan Date: None

Property Manager: **Justin Haglund – WDNR Fisheries Biologist (Dodgeville)**

Property Assessment

A. Ecological Landscape description and property context

Love Creek Fishery area is a 593 acre property in east-central Iowa County, Ridgeway Township. Love Creek lies within the Western Coulee and Ridges Ecological Landscape.

The Western Coulee and Ridges Ecological Landscape is the largest of the 16 Ecological Landscapes. It is located in southwestern and west central Wisconsin within the Driftless Area, a region that escaped glaciation during the last glacial period. The Driftless Area is noted for its steeply dissected terrain, extensive network of streams, and lack of glacial deposits (although glacial outwash materials do occur in river valleys). Several large rivers including the Wisconsin, Mississippi, Chippewa, Kickapoo and Black flow through or border this Ecological Landscape. Historical vegetation consisted of southern hardwood forest, oak savanna, and prairie, along with wetlands (forested and open) along rivers and streams. With Euro-American settlement, most of the level land on ridgetops and in valley bottoms was cleared for agriculture. The untillable steep slopes between valley bottom and ridgetop either remained in forest or grew up into oak-dominated forests when early wildfire-suppression policies were instituted. The early vegetation of Wisconsin was mapped by Robert Finley and published in 1976, and was based on notes and maps for the original public land surveys. Finley's map indicates that Love Creek Fishery Area was dominated by oak opening, surveyors described the terrain as uneven, rolling, and even "exceedingly hilly, "and described the vegetation as thinly timbered". All of this information points towards prairie, oak savanna and oak woodland as the dominant cover types. Current vegetation of the Western Coulee and Ridges Ecological Landscape is a mix of forest (40% of total cover), agriculture, and grassland, with wetlands mostly restricted to the river valleys. The primary forest cover is oak-hickory, while maple-basswood forests are common in cooler, moister areas. Bottomland hardwoods occur in the valley bottoms of major rivers. Relict conifer stands are rare, and are associated with steep-faced outcrops with cool microclimates. This Ecological Landscape



Interim Forest Management Plan

has few natural lakes, though oxbows and ponds may be found with large river floodplains. Impoundments have been installed on a number of rivers to create man-made lakes.

B. General property description – management, adjacent land uses, topography, soils, etc.

Love Creek Fishery Area is a 593 acre area managed primarily for fishing and hunting opportunities. Love and Strutt Creeks are both located on the property and are classified as class 1 trout stream codified as exceptional resource waters. Hunting opportunities on the property include; deer, wild turkey, and small game. The topography varies from gently rolling to extremely steep. Wooded uplands comprise 76% of the area, while grassy/herbaceous uplands comprise 17% and lowland/wetlands comprises 7%. Several small springs and seeps feed into Love and Strutt Creeks across the landscape. Much of the upland habitat is managed for woodland or savanna species, however the planted prairies/grasslands and remnant prairies are managed to maintain that habitat type. Prescribed fire is a major land management tool for prairie restoration and maintenance, as well as herbicide use and mowing.

Most soils in the study area are deep, well-drained silt loams. Limestone and sometimes sandstone bedrock lie close to the surface in scattered locations throughout both sites, however, resulting in shallow soils and exposed bedrock (sometimes in the form of cliffs or outcrops). Alluvial deposits occur along stream and river bottoms, yielding poorly-drained soils.

C. Current forest types, size classes and successional stages

The majority of the forest cover types on Love Creek Fishery Area are upland associated species and comprise about 76% of the land area. The non-forested areas consist mostly of upland grass, brush and some lowland brush/wetlands.

Forested Cover types total 454 acres or 76% of the recon acres.

Oak: 300 acres (66% of the forested acres). 20% of the oak resource is younger than 65 years, 30% in the 66-90 year class, and 50% older than 90 years.

Central Hardwoods: 103 acres (23% of the forested acres). Only 4% of the central hardwood resource is younger than 50 years old, 42% is found within the 50-80 year old class and the remaining 54% is older than 80 years.

Bottomland Hardwoods: 37 acres is classified as bottomland hardwoods (8% of the forested acres).

Other tree species: There are 5 acres of miscellaneous minor forest cover types

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

The Natural Heritage Inventory (NHI) reports 24 elements that occur on or near Love Creek Fishery Area. This list includes 1 State Endangered species, 5 State Threatened species, and 2 Special Concern species. There are also 2 communities listed as special concern elements.

E. Wildlife Action Plan [Conservation Opportunity Areas (COA)]

According to the Wisconsin Wildlife Action Plan (WAP) (WDNR 2006a), Love Creek Fishery Area lies within the larger “Dodgeville and Wyoming Oak Woodland/Savanna” COA, an opportunity identified as having continental significance.



Interim Forest Management Plan

The WAP identifies 37 natural communities for which there are “Major” or “Important” opportunities for protection, restoration, or management in the Western Coulees & Ridges Ecological Landscapes. Thirteen of these natural communities are present on Blackhawk Lake managed lands and include Southern Dry Forest, Southern Dry-Mesic Forest, Pine relict, Oak Barrens, Shrub Carr, Dry Prairie, Sand Prairie, Surrogate Grasslands, Emergent Marsh, Dry Cliff, Coldwater Stream, Coolwater Stream, and Southern Sedge Meadow.

The WAP also describes Priority Conservation Actions that make effective use of limited resources and address multiple species with each action. Implementing these actions and avoiding activities that may preclude successful implementation of these actions in the future would greatly benefit the SGCN at Love Creek Fishery Area. Priority Conservation Actions identified in the Wisconsin Wildlife Action Plan (WDNR 2006b) for the Western Coulees & Ridges Ecological Landscapes that apply to Love Creek Fishery Area include:

- Oak barrens restoration and maintenance.
- Restoration and protection of spring-fed cold water streams.
- Preservation of cliff communities, along with cave and bat hibernacula.
- Restoration of oak savanna communities.
- Rare species restoration and management.
- Protection of pine relicts.

F. Significant cultural or archeological features

Located within the Love Creek Fishery are two areas documented to have significant archeological concern/archeological sites. The locations of these areas are described below.

All management activities within these specific parcels must be discussed with the State Archeologist and approved prior to initiation.

T07N R04E Section 34 NwNe

T06N R04E Section 3 SwNe

G. Invasive species

There are many nonnative invasive species present at Love Creek Fishery Area. Garlic mustard, wild parsnip, Eurasian bush honeysuckle, autumn olive, multiflora rose, common buckthorn, barberry, and reed canary grass are the most abundant. Efforts have been made to control many of these species with herbicide and cutting. Ongoing efforts continue throughout the property during all management activities.

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

Ridgeway Pine Relict SNA is nearby Love Creek Fishery Area. There are no SNAs designated within the Fishery Area.

Exceptional Characteristics and Opportunities



Interim Forest Management Plan

Rare Animals and Plants. Love Creek Fishery Area supports numerous rare species (see section D above). Twenty-four rare species have been documented, including 1 State Endangered species, 5 State Threatened species, and 2 Special Concern species.

Oak Savanna Restoration. Oak savannas were historically common in Wisconsin but are now rare throughout the state, thus their restoration is critical to the survival of many rare plants and animals that depend on them. Opportunities exist at Love Creek Fishery Area to restore Oak Opening, Oak Woodland, and Oak Barrens within a matrix of other habitats.

Older Forest Conservation. Older forests (greater than 100-120 years old) in Wisconsin are rare and declining, largely due to timber harvesting and conversion to other land uses.

Herptile Conservation. The variety of aquatic, wetland, and upland habitats of Love Creek Fishery Area are well-suited to a number of herptile species. The pickerel frog has been documented in association with springs and spring-fed creeks.

I. Primary public uses (recreation)

Hunting and fishing are the primary recreational uses of the property. Hunting for deer, turkey and small game throughout the uplands and lowlands is most popular. Fishing is also an important use of the streams present on the property. Trout fishing is popular along Love and Strutt creeks and their tributaries flowing throughout the ownership. Other activities practiced on the Love Creek Fishery area include trapping, bird watching and hiking, berry and mushroom picking, snowshoeing, and cross-country skiing.

J. Biotic Inventory Status

A "Rapid Ecological Assessment" of the property was completed in June 2012. This document is available on the Department's website <http://dnr.wi.gov/topic/nhi/nhireports.asp> under DNR Publication PUB-ER-834-2012: https://dnr.wi.gov/files/PDF/pubs/er/ER0836_ext.pdf

Love Creek Fishery Area was surveyed for Natural Communities, Breeding Birds, Herptiles, Small Mammals, Terrestrial Snails, and Terrestrial Insects as part of this assessment in 2010-2011.

K. Deferral/consultation area designations

No deferral/consultation areas were documented within the Love Creek FA.

IFMP components

Management Objectives: (Outline primary forest management objectives):

1. Manage and maintain oak cover types wherever feasible. The oak cover type will slowly and naturally convert to shade tolerant central and northern hardwood species without active management. The creation of younger forest ages classes via timber sales supported with natural and artificial regeneration will attempt to maintain a significant oak component on the landscape. There are significant younger oak plantings that can be maintained for future oak stands.
2. Central Hardwood type will be managed using even age management techniques with a focus on oak and black walnut whenever possible. The promotion of younger age class oak within the central hardwood type will be a priority when feasible. Black walnut regeneration will be a focus when dominant.



Interim Forest Management Plan

3. Northern Hardwood type will be managed using both even age and uneven age management techniques when applicable. Even age management will be utilized when it may be possible to establish a component of young oak within the northern hardwood type.
4. There is not a significant acreage of aspen, but there are many stands with aspen as a component with smaller clones. Maintain aspen stands and clones within larger cover types through coppice regeneration where appropriate, considering habitat context and adjacent stand management.

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).

1. Oak: Aggressively attempt to manage the oak resource that is present on the property when possible and where feasible. Work towards establishing more young oak stands. Utilize even age oak management techniques as patch clearcutting, the shelterwood method, clearcutting and overstory removal to regenerate older oak stands. The establishment of patch clearcuts, shelterwoods, clearcuts and overstory removals ranging in size from at least one acre to much larger will be necessary to achieve oak regeneration success. Utilize all potential tools in the effort to regenerate older oak stands, including mechanical/chemical site prep, prescribed fire, tree planting and timber stand improvement practices.
2. Central Hardwoods: Some central hardwood stands have minimal oak presence and/or would be very difficult to regenerate into oak stands. Maintain the large oak in these central hardwood stands as long as possible. Maintain a component of scattered oak overstory within these harvest areas for wildlife. Utilize silvicultural techniques that emphasize establishing patch clear-cuts from 1 acre to 5 acres in size when feasible to encourage as much of an oak component as possible. Augment central hardwood natural regeneration with oak planting (400-800 seedlings per acre) to establish an oak component within these areas going forward.
3. Northern Hardwoods: Utilize group selection and patch selection harvesting techniques when completing management activities in these areas. Group and patch size can vary in these areas from 0.25 acres to 5 acres. Augment northern hardwood regeneration with oak seedlings where feasible (400-800 seedlings per acre). Maintain a component of scattered oak overstory within these harvest areas for wildlife.
4. Black Walnut: Black walnut is very valuable and a component of central hardwood stands, oak stands and northern hardwood stands across this property. Individual trees within these areas will be included in the standard management prescriptions. In areas dominated by black walnut, trees will be allowed to grow into the larger size classes (24" dbh and larger). When harvesting these larger trees, regeneration must be addressed by requiring patch clear-cuts, overstory removals or seed tree harvests at least 1 acre in size and larger.
6. Red and White Pine: Commercially thin the red and white pine plantations to rotation age and allow conversion to hardwoods. Red pine that has stagnated due to unsuitable soils will be salvaged with natural conversion to hardwoods. Pine relict areas will have no forest management performed.



Interim Forest Management Plan

7. Aspen: The aspen will be managed through coppice regeneration.

8. All Stands: The Wildlife Action Plan describes Priority Conservation Actions that make effective use of limited resources and address multiple species with each action. Implementing these actions and avoiding activities that may preclude successful implementation of these actions in the future would greatly benefit SGCNs at Love Creek Fishery Area. All proposed forestry prescriptions will reference Priority Conservation Actions, Wildlife Action Plan priorities, property objectives and be based on individual stand level needs. Open areas can be managed for grassland nesting birds. Existing cropland will be converted to grassland nesting cover, or could be converted to forested cover types, depending on size and context. Savannas need to be maintained, and where degraded, an effort made to restore them.



Interim Forest Management Plan

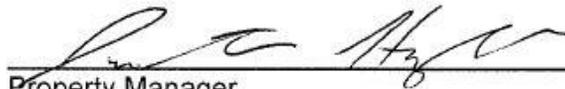
Summary of Public Involvement and Comments Received

No public input was received during the public comment period, which ran from October 14 to 30, 2019.

Maps (Optional)

- a. Forest Primary Type Map
-

PREPARED BY:



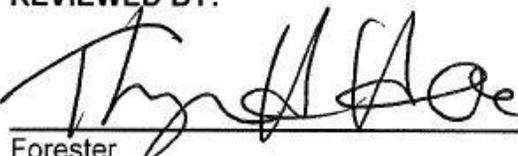
Property Manager 11/14/19
Date

APPROVED:

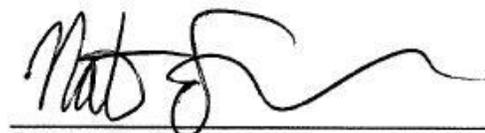


Area Program Supervisor 11/14/19
Date

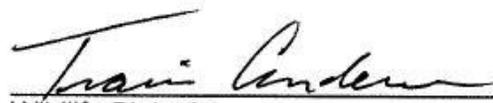
REVIEWED BY:



Forester 11/12/19
Date



District Ecologist 11/4/19
Date



Wildlife Biologist 11/12/19
Date

Love Creek Fishery Area Forest Primary Types

