

Critical Habitat Area Wisconsin 11 – State Park Cliffs

This Critical Habitat Area includes approximately 1.5 miles of shoreline along the state park on the north shore of the lake, out to the 15-ft depth contour (Figure 6, 10). It supports important near-shore terrestrial habitat, shoreline habitat and shallow water habitat (Figure 9). The shoreline at this Critical Habitat Area is composed mostly of wooded shore with large areas of herbaceous growth and some shrub layer. Large woody cover from fallen trees is present in the shallow water. This woody cover provides important habitat for fish cover and wildlife resting areas.

The site was selected for its fishery value and its aquatic and terrestrial vegetation. The site provides a visual buffer from shoreline structures and roads.

The Plant Community:

The aquatic plant community consists of 7 species at this Critical Habitat Area.

The emergent vegetation at this site protects the shoreline and provides important food sources, cover and fish spawning habitat. The emergent community is composed of bul-rush at this site.

Floating-leaf vegetation, white water lilies and greater duckweed, dampen wave action and provide important fish habitat.

The submergent plant community provides many fish and wildlife benefits. Elodea and wild celery are also present (Table 5). The pondweed family is an important food source for fish and waterfowl and is represented at this site by northern spiral-fruited pondweed.



Figure 9. Lake Wissota Critical Habitat Area #11, State Park Cliffs



Figure 10. Location of Critical Habitat Areas #1, #2 (part) and #11

Table 5. Wildlife and Fish Uses of Aquatic Plants in Critical Habitat Area 11

Aquatic Plants	Fish	Water Fowl	Song and Shore Birds	Upland Game Birds	Muskrat	Beaver	Deer
<u>Submergent Plants</u>							
<i>Elodea canadensis</i>	C, F, I	F(Foliage) I					
<i>Potamogeton spirillus</i>		F(Seeds)	F		F	F	F
<i>Vallisneria americana</i>	F*, C, I, S	F*, I	F		F		
<u>Floating-leaf Plants</u>							
<i>Nymphaea odorata</i>	F, I, S, C	F(Seeds)	F		F	F	F
<i>Spirodela polyrhiza</i>	F	F		F			
<u>Emergent Plants</u>							
<i>Scirpus atrovirens</i>	S, F, C	F	F	F	F		

F=Food, I= Shelters Invertebrates, a valuable food source C=Cover, S=Spawning

***=Valuable Resource in this category**

*Current knowledge as to plant use. Other plants may have uses that have not been determined.

After Fassett, N. C. 1957. A Manual of Aquatic Plants. University of Wisconsin Press. Madison, WI

Nichols, S. A. 1991. Attributes of Wisconsin Lake Plants. Wisconsin Geological and Natural History Survey. Info. Circ. #73

Wildlife Habitat

Emergent vegetation, floating-leaf vegetation, shoreline shrubs and brush, snag and perch trees and fallen logs provide critical habitat at this site. This site provides:

- 1) shelter, cover and feeding areas for ducks and eagles
- 2) shelter, cover, nesting and feeding areas for mink, songbirds, frogs, toads, salamanders, turtles and snakes

Fish Habitat

Rubble and gravel lake bed, large woody cover, submerged vegetation and floating-leaf vegetation at this site provide critical fish habitat. This site provides:

- 1) feeding areas for walleye and smallmouth bass
- 2) feeding areas and protective cover for northern pike and musky
- 3) spring spawning for smallmouth bass and possibly walleye
- 4) year-round nursery areas, feeding areas and protective cover for bluegill and yellow perch

Water Quality

The aquatic plant community at this site:

- 1) provides a nutrient buffer, the plants at the shore and in the water acting as a nutrient sink, absorbing nutrients and reducing algae blooms
- 2) provides a biological buffer, reducing the possibility of invasions by exotic species
- 3) provides a physical buffer that protects the shoreline against erosion

Recommendations for Area 11

Recommendations for the terrestrial shoreline buffer:

- 1) Maintain wildlife habitat at this site
- 2) Maintain snag trees and trees with cavity nesting
- 3) Maintain and increase naturally vegetated wildlife corridor on shore
- 4) Minimize removal of any shoreline. Allow removal of a maximum corridor width of 30 feet.
- 5) Maintain shoreline vegetation to protect water quality by reducing nutrient runoff
- 6) Steep banks on portions of this stretch are eroding and require stabilization. Vegetation restoration is the preferred method of stabilizing these shores.
- 7) No bank grading.

Recommendations for the aquatic habitat below the Ordinary High Water Mark

- 8) Maintain current protection of area for fish habitat
- 9) Do not remove fallen trees along the shoreline
- 10) Do not alter the littoral zone except for improvement of spawning habitat
- 11) Maintain the aquatic vegetation (emergent, floating-leaf and submergent) in an undisturbed condition for wildlife habitat, fish cover and as a buffer for water quality protection. Permits required for any vegetation removal.
- 12) Protect emergent vegetation.
- 13) Do not use lawn chemicals or fertilizers.
- 14) No permit approval for pea gravel beds or sand blankets, except for DNR fishery or wildlife approved projects.
- 15) Restrict dredging and lake bed removal or modifications to protect emergent vegetation.
- 16) Pier placement limited to fishing piers. Minimize the number and size of piers to minimize disturbance; use light-penetrating pier material such as metal grating.
- 17) No recreational floating devices to be permitted.