

Critical Habitat Area Wisconsin 1 – Pine Harbor Bay

This Critical Habitat Area encompasses the 67-acre bay on the east shore of the lake known as Pine Harbor (Figure 11). It includes deep marsh habitat and supports important near-shore terrestrial habitat, shoreline habitat and shallow water habitat (Figure 25-27). The shoreline at this Critical Habitat Area is composed of native herbaceous growth and some shrub layer and home and lawn development with abundant wooded cover. Large woody cover from fallen trees is common in the shallow water. This woody cover provides important habitat for fish cover and wildlife resting areas.

This site was selected for its habitat value for fish and wildlife and its aquatic vegetation. The site provides an audible buffer from road and boat noise.

The Plant Community:

The plant community at this site includes 7 species of aquatic plants.

Emergent vegetation: cattails protect the shoreline and provide important food sources, cover and fish spawning habitat.

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

The submergent plant community provides many fish and wildlife benefits (Table 13). Slender naiad, elodea and wild celery occur at this site. The pondweed family is an important food source for fish and waterfowl and is represented at this site by clasping-leaf pondweed and spiral-fruited pondweed.



Figure 25. Lake Wissota Critical Habitat Area 1: south shore.



Figure 26. Wissota Critical Habitat Area 1: west shore and island shore.



Figure 27. Close-up of Large Woody Cover and Great Blue Heron on Island shore; CHA #1.

Table 13. Wildlife and Fish Uses of Aquatic Plants in Critical Habitat Area 1

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>Najas flexilis</i>	F, C	F*(Seeds, Foliage)	F(Seeds)				
<i>Potamogeton richardsonii</i>	F, I, S*,C	F*(All)			F*	F	F
<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
<u>Emergent Plants</u>							
<i>Typha latifolia</i>	I, C, S	F(Entire), C	F(Seeds), C, Nest	Nest	F* (Entire), C*, Lodge	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

The east side of the island has good waterfowl and shorebird habitat. Emergent vegetation, shoreline shrubs and brush, snag and perch trees and fallen logs provide this critical habitat. This site provides:

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

Fish Habitat

The 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, northern pike, musky and smallmouth bass
- 2) spring spawning, year-round nursery areas, feeding areas and protective cover for largemouth bass, bluegill and crappie

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) stabilizes the sediments, holding the sediments to reduce the resuspension by waves and other disturbance
- 4) provides a physical buffer that protects the shoreline against erosion

Recommendations for Area 1

Recommendations for the terrestrial shoreline buffer:

- 1) Maintain wildlife habitat at this site
- 2) Maintain and increase naturally vegetated wildlife corridor on shore
- 3) Any shoreline and bank vegetation protection projects permitted by revegetation of the native vegetation. No permits issued for rip-rap or retaining walls
- 4) No bank grading

Recommendations for the aquatic habitat below the Ordinary High Water Mark

- 5) Maintain current protection of area for fish habitat
- 6) Do not remove fallen trees along the shoreline
- 7) Do not alter the littoral zone except for improvement of spawning habitat
- 8) 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. Limit removal to navigation channels. Permits required for any vegetation removal.
- 9) Protect emergent vegetation.
- 10) Recommend slow-no-wake in the bay
- 11) No permit approval for pea gravel beds or sand blankets, except for DNR fishery or wildlife approved projects.
- 12) No dredging or lake bed removal or modifications.
- 13) Pier placement by permit only to minimize number of piers and their size and disturbance; require light-penetrating pier material such as metal grating.
- 14) No boat ramp placement.
- 15) Recreational floating devices sited by permit only.