

### **Critical Habitat Area Wissota 3 – Mermaid Island Bay**

This Critical Habitat Area is the 29-acre bay on the north-central shore of Little Lake Wissota known as Mermaid Island Bay (Figure 18). The shoreline at this Critical Habitat Area is composed of home development with abundant lawn (Figure 21). 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.

This site was selected for its fishery value.

#### **The Plant Community:**

The plant community at this site includes 6 species of aquatic plants.

The submergent plant community provides many fish and wildlife benefits (Table 9). Slender naiad, elodea, coontail, water stargrass 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.



Figure 21. Wissota Lake Critical Habitat Area 3; Mermaid Island Bay

Table 9. Wildlife and Fish Uses of Aquatic Plants in Critical Habitat Area 3

Aquatic Plants	Fish	Water Fowl	Song and Shore Birds	Upland Game Birds	Muskrat	Beaver	Deer
<b>Submergent Plants</b>							
<i>Ceratophyllum demersum</i>	F, I*, C, S	F(Seeds*), I, C			F		
<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>Vallisneria americana</i>	F*, C, I, S	F*, I	F		F		
<i>Zosterella dubia</i>	F, C, S	F(Seeds)					

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

\*=Valuable Resource in this category

### Wildlife Habitat

This site provides:

- 1) feeding areas for geese and ducks.

### Fish Habitat

The rubble and gravel lake bed, large woody cover and submerged vegetation at this site provide critical fish habitat. This site provides:

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

### Water Quality

The aquatic plant community at this site provides a biological buffer, reducing the possibility of invasions by exotic species

### **Recommendations for Area 3**

#### Recommendations for the terrestrial shoreline buffer:

- 1) Use no lawn care products or fertilizers on the back yards of the homes
- 2) Shoreline and bank vegetation needs to be restored through revegetation of the native vegetation
- 3) No permits issued for retaining walls and rip-rap, use native vegetation as protection
- 4) No bank grading
- 5) Boat houses on the shore may be zoning compliance issues

#### Recommendations for the aquatic habitat below the Ordinary High Water Mark

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