

ESTUARIES & COASTAL WETLANDS OF LAKE SUPERIOR

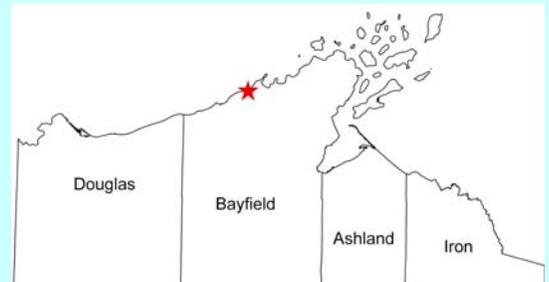
Cranberry River Mouth

Approximate Size: 35 acres*

Ownership: WDOT, WDNR, Private

Year Last Surveyed by WDNR/NHI: 2012

GLCWC Classification: Barred Drowned River Mouth



Site Description

A barred drowned river mouth is formed where the Cranberry River flows into Lake Superior, creating a small lagoon and a complex of approximately 35 acres of wetlands. A narrow sand barrier impounds the river mouth, channeling the stream west about one-quarter mile before actually meeting the lake. This sand formation extends east to the town of Herbster in the form of a wide beach and dune complex. A 10- to 15-foot-high wooded beach ridge separates the lagoon from adjacent wetlands. Alder Thicket and Emergent Marsh are the dominant wetland types here, punctuated by several open-water areas that support submergent aquatic plant species. The town of Herbster lies east of this site, while residences flank the west edge, where thinned second-growth conifer-hardwood forest and large lawns are common. Much of the lower Cranberry River lies within the WDNR South Shore Fish and Wildlife Area.

Alder Thicket lines the stream edges throughout most of this site, with a mix of speckled alder (*Alnus incana*) and willow species (especially bayberry willow [*Salix myricoides*]) creating dense shade over a depauperate ground flora. Emergent Marsh surrounds the open water areas, harboring a diverse flora of 60 native species, and is dominated by broad-leaved cat-tail (*Typha latifolia*), common yellow lake sedge (*Carex utriculata*), lake sedge (*Carex lacustris*), river horsetail (*Equisetum fluviatile*), and common bur-reed (*Sparganium eurycarpum*). Within the marsh matrix, one may also find many sedge meadow and fen species such as marsh bellflower (*Campanula aparinoides*), bog panicked sedge (*Carex diandra*), bottlebrush sedge (*C. hystericina*), tussock sedge (*C. stricta*), and sweet gale (*Myrica gale*). Dominant species of the Submergent Marsh areas include coon's-tail (*Ceratophyllum demersum*), two-leaf water-milfoil (*Myriophyllum heterophyllum*), Fries's pondweed (*Potamogeton freisii*), Richardson's pondweed (*P. richardsonii*), bull-head pond-lily (*Nuphar variegata*), and common arrowhead (*Sagittaria latifolia*). The beach and dune complex west of Herbster is dominated by dune grass (*Ammophila breviligulata*), beach pea (*Lathyrus japonicus*) and sandbar willow (*Salix exigua*), and provides nesting habitat for shorebirds.

*Area includes bay, first 0.5 mile of creek (upstream to Old Hwy. 13), and associated wetlands

Threats

The non-native invasive plants queen-of-the-meadow (*Filipendula ulmaria*), reed canary grass (*Phalaris arundinacea*), narrow-leaved cat-tail (*Typha angustifolia*), bird's foot trefoil (*Lotus corniculatus*) and crown vetch (*Coronilla varia*) are known at this site. Extensive streambank sloughing and silty residue on plants were observed during 2012 surveys. The proximity of this site to Highway 13 may result in degradation of wetland and aquatic resources due to pollution (e.g., runoff laden with sediment, road salt), increased water temperatures and thus lower dissolved oxygen levels (from heated water runoff in summer), and disruption of ecosystem and habitat continuity. Across the Lake Superior clay plain, water quality and wetland function are known to be adversely affected by open lands (e.g., developed land, agriculture, young forest) and positively affected by older forests and conifers. Land use analysis of the watershed and associated water quality monitoring could facilitate better understanding of this site's aquatic and wetland resources.

Additional Comments

Cranberry River is used for spawning by resident brook trout and migratory brown trout, rainbow trout and coho salmon. Warm water fish also use the lagoon and lower river. The Lake Superior Binational Program identified this area as important to the integrity of the Lake Superior ecosystem.

Abbreviations and Helpful References

GLCWC - Great Lakes Coastal Wetland Classification.- glc.org/wetlands/pdf/wetlands-class_rev1.pdf

Lake Superior Binational Program - www.epa.gov/glnpo/lakesuperior/

WDNR Coastal Wetlands webpages - dnr.wi.gov, Keyword: "coastal wetlands"

WDNR/NHI - Wisconsin Dept. of Natural Res./Natural Heritage Inventory. dnr.wi.gov , Keyword: "natural heritage"

South Shore of Lake Superior Fish & Wildlife Area - dnr.wi.gov, Keyword: "south shore"

"Managing Woodlands on Lake Superior's Red Clay Plain" - WDNR publication #PUB-FR-385 2007. dnr.wi.gov, Keyword: "bmp landowner guides"



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River mouth sand bars provide important staging areas for birds such as gulls (left). Bull-head pond-lily (*Nuphar variegata*) is common in Submergent Marsh areas, which transition to Alder Thicket along the stream banks (right).

Suggested Citation

A. Staffen, K. Doyle, and R. O'Connor. 2012. Site Description for Cranberry River Mouth. Wisconsin Department of Natural Resources. Madison, WI. <http://dnr.wi.gov>, Keyword: "coastal wetland cranberry river"



This project was funded by the Wisconsin Coastal Management Program and the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act.