

ESTUARIES & COASTAL WETLANDS OF LAKE SUPERIOR

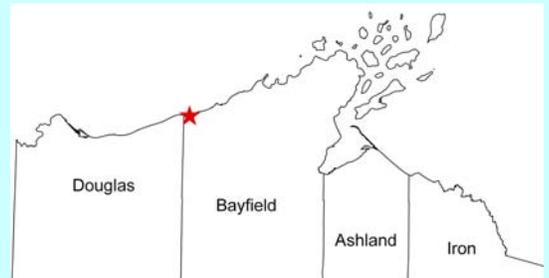
Fish Creek (Oulo Creek) Mouth

Approximate Size: 20 acres*

Ownership: Private

Year Last Surveyed by WDNR/NHI: 2012

GLCWC Classification: Barred Drowned River Mouth



Photos by Amy Staffen

Site Description

Fish Creek lies in Orienta Township in northwestern Bayfield County approximately 7 miles west of Port Wing. A sand barrier impounds the drowned river mouth, channeling the stream west about one-tenth mile before meeting the lake. A small, shallow lagoon lacking vegetation lies behind the sandbar. Southwest of the lagoon, a tall sand terrace grades into a four-acre Emergent/Submergent Marsh Complex. Submergent aquatic plants are also found in calmer areas of the stream, especially north of Highway 13. Northern Sedge Meadow occurs upstream from the lagoon along the creek's banks as well as on a small mid-channel island, and grades into Alder Thicket. Fish Creek and adjoining lands are privately owned, with low-density residential sites, young mixed forest, and state and local roads.

The small beach community near the creek's mouth is dominated by dune grass (*Ammophila breviligulata*), with lesser amounts of beach pea (*Lathyrus japonicus*), Canada wild rye (*Elymus canadensis*), and the non-native invasive crown vetch (*Coronilla varia*). The wetland southwest of the lagoon manifests two distinct vegetative zones in response to varying water depths: A central deep-water zone (1.5-3 feet) is dominated by stiff arrowhead (*Sagittaria rigida*) and common arrowhead (*S. latifolia*), while a shallow-water zone (<1.5 feet) surrounds it and is dominated by common bur-reed (*Sparganium eurycarpum*), soft-stem bulrush (*Schoenoplectus tabernaemontani*), common yellow lake sedge (*Carex utriculata*), and tussock sedge (*C. stricta*). Abundant swamp milkweed (*Asclepias incarnata*) attracts numerous butterflies. Submergent and emergent plants here are moderately diverse, and include spiral-fruited pondweed (*Potamogeton spirillus*), slender naiad (*Najas flexilis*), and coon's-tail (*Ceratophyllum demersum*). The sedge meadow is sparsely vegetated with a few common species such as tussock sedge, common yellow lake sedge, and American manna grass (*Glyceria grandis*); the adjoining Alder Thickets have similar composition. The adjacent upland slopes harbor open-canopied low-quality Boreal Forest with pole- to sawtimber sized balsam fir (*Abies balsamea*), paper birch (*Betula papyrifera*) and white spruce (*Picea glauca*). Above the slopes, the forest grades quickly into managed stands of young balsam fir.

*Area includes bay, first 0.4 mile of creek, associated wetlands, and immediately adjacent uplands.

Threats

The non-native invasive plants crown vetch (*Coronilla varia*), queen-of-the-meadow (*Filipendula ulmaria*), Canada thistle (*Cirsium arvense*), and reed canary grass (*Phalaris arundinacea*) are located at the edges of the Emergent Marsh. Invasive plants can out-compete native plants by monopolizing light, water, and nutrients, and can have negative impacts on soils, nutrient cycling, etc. 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

The Lake Superior Binational Program identified this stream as important to the integrity of the Lake Superior ecosystem for coastal wetlands.

Abbreviations and Helpful References

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

Lake Superior Binational Program - <http://www.epa.gov/glnpo/lakesuperior/>

WDNR Coastal Wetlands webpages - <http://dnr.wi.gov>, Keyword: "coastal wetlands"

WDNR/NHI - Wisconsin Department of Natural Resources, Natural Heritage Inventory Program.

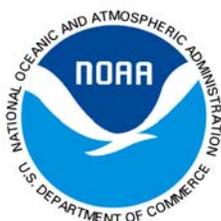


Photos by Amy Staffen

Southwest of the lagoon, a tall brushy sand terrace grades into a four-acre Emergent/Submergent Marsh complex (left). Submergent aquatic plants provide cover for large schools of young catfish (arrow, at right).

Suggested Citation

A. Staffen, K. Doyle, and R. O'Connor. 2012. Site Description for Fish Creek (aka Oulo Creek). Wisconsin Dept. of Natural Resources. Madison, WI. <http://dnr.wi.gov>, Keyword: "coastal wetland fish creek west"



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