

Water Lilies and Duckweed were abundant in Sutton Lake, September 2022

Aquatic Plant Survey for Sutton Lake, Scott County, Minnesota, 2022

Visual Aquatic Plant Survey: September 1, 2022

Prepared for: Prior Lake-Spring Lake Watershed District



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March 9, 2023

Aquatic Plant Survey for Sutton Lake, Scott County, Minnesota in 2022

Summary

On September 1, 2022, a summer point intercept survey was attempted on Sutton Lake, Scott County. Water levels in Lake Sutton were low enough to restrict navigation on a majority of the lake. Approximately 80% of the lake was unreachable and impassable due to low water conditions and a quantitative point intercept survey was not conducted. Observed water depths on Sutton Lake ranged from 1 inch to 6 inches. Duckweed coverage was approximately 80% of the lake surface, and in some cases duckweed was growing directly on the shallow flocculent silty sediments. Coontail, flatstem pondweed, and star-duckweed were observed growing in some areas. White lilies were common throughout the basin. The aquatic plant community in 2022 had 3 species of submerged plants, 2 floatingleaf species, and several emergent species.

Wild rice and bulrush were present scattered in patches throughout much of the lake. It appeared bulrush and wild rice were expanding and colonizing new areas due to the low water levels. Bur marigold and arrowhead were also present in Sutton Lake.

Aquatic plant growth was observed in 100% of the wetted area in Sutton Lake.



Figure 1. View of Sutton Lake.

Aquatic Plant Conditions for Sutton Lake - September 1, 2022



Figure 2. Emergent plants were common in Sutton Lake in 2022. Wild rice and bullrush were found in several locations on September 1, 2022. White water lilies were common while no spatterdock was observed. Coontail was present where water depth 3 inches or greater. Duckweed was growing throughout the basin.

Aquatic Plant Survey for Sutton Lake, Scott County, Minnesota, 2022

Lake ID: 70-009400 Size: 64 acres (GIS derived) Littoral area: 64 acres Maximum depth: 3 ft (0.5 ft maximum observed)

Introduction

Sutton Lake is located within in Scott County. An aquatic plant point intercept survey was attempted on the 64-acre lake on September 1, 2022. A sampling grid is shown in Figure 3.

However, drought conditions resulted in lake water depths of one to six inches. Soft sediments were up to two feet thick. Navigation by boat or by walking was not feasible. Therefore qualitative estimates were made along with visual observations.



Figure 3. Sample locations for the point intercept aquatic plant survey.

Aquatic Plant Survey Results - September 1, 2022

Aquatic plants were observed growing throughout Sutton Lake for the September 2022 aquatic plant survey. Coontail was the dominant submerged plant in Sutton Lake. White lilies and duckweed were common floating-leaf species. A total of 3 submerged aquatic plants, 2 floatingleaf plants, well as several emergent plants were identified (Table 1 and Figure 4).

Table 1. Sutton Lake aquatic observed
plants for the September 1, 2022 survey
based on field observations.

Species Observed on Sept. 1, 2022
Emergents
Wild rice
(Zizania aquatica)
Bulrush
(Scirpus spp.)
Arrowhead
(Sagittaria latifolia)
Bur-marigold
(Bidens cernua)
Floatingleafs
Duckweed
(Lemna sp)
White water lilies
(Nymphaea odorata)
Submergents
Coontail
(Ceratophyllum demersum)
Star duckweed
(Lemna trisulca)
Flatstem pondweed
(Potamogeton zosteriformis)

Sutton Lake Aquatic Plant Coverage September 1, 2022

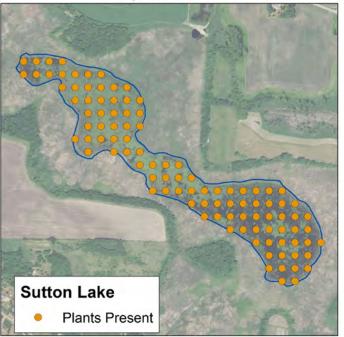


Figure 4. Estimated aquatic plant coverage was 100%.

Representative Aquatic Plants in Sutton Lake





Water lilies and Duckweed





Bulrush

Coontail

Wild rice