



Cate's Lake (Google Earth, 2007)

Aquatic Plant Assessment for Cate's Lake (MnDNR ID #70-0018), Scott County, 2007

Prepared for:
Prior Lake/Spring Lake Watershed District

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Lake Statistics

Lake ID #70-0018 (MnDNR)
Lake Area: 27 acres (MPCA)
Maximum Depth :
 13 feet (MPCA)
 8 feet (Blue Water Science)
Total Phosphorus: 24 ppb (range 14 - 57 ppb); n=26 (MPCA)
Chlorophyll a : 5.4 ppb (range 1 - 37 ppb); n=26 (MPCA)
Secchi Disc: 1.8 m (range 1-2m); n=26 (MPCA)

Aquatic Plant Conditions on September 14, 2007

American Lotus	Common along the NW shoreline, growing out to a depth of 6 feet.
White lilies	Growing in the nearshore area around much of the lake out to water depth of about 5 feet (Figure 1).
Smartweed	Rare, found along NW side of the lotus beds.
Coontail	Most common plant in the lake, found growing out to 8-foot water depth. Coontail covers about 80% of the lake bottom.
Elodea	Sparse, found on the NW and west sides of the lake.
Eurasian watermilfoil	Scattered around Cate's Lake, but most common in the southern half of the lake. It was growing to the surface in patches in shallow water, within 30 feet of the shore in only a couple of spots (primarily in the southern half of the lake).



Figure 1. Coontail was the most abundant plant in Cate's Lake and was growing to the surface in shallow water in some areas.

Aquatic Plant Distribution in Cate's Lake



Figure 2. Distribution of water lilies (yellow shading) and lotus beds (orange shading). Coontail was found growing throughout most of the lake (green shading).



**Figure 3. Top pictures: American lotus. Only known occurrence of the American lotus in the Prior Lake/Spring Lake Watershed District is in Cate's Lake.
Middle pictures: Coontail was the most abundant plant in the lake.
Bottom picture left: Coontail dominated the aquatic plants removed by the mechanical harvester.
Bottom picture right: Eurasian watermilfoil was generally scarce in Cate's Lake, although it was dense in several patches in shallow water in nearshore areas.**