Blue Lake Curly Leaf Pondweed (CLPW) Survey 2018

Completed 6/7 - 6/8 2018

By: Isanti SWCD

Plant Density
Low = 1 to 5 plants
Medium = 6 to 10 plants
High = 11 or more plants

Upper Blue Lake

Findings:

2018 showed the lowest CLPW density since 2015. Only four areas on the lake were identified to have high density CLPW where the plant was matting at the waters surface. The minimal/stunted growth of CLWP can be linked to the late ice out and significant snow cover late into the spring. The majority of the CLPW was identified in areas along the shore in 7 to 8 feet of water. Coontail was the second most abundant aquatic plant identified.

Most of the CLPW was identified on the west side of the lake along much of the shore. However, the densities found on the west side of the lake, for the most part, were low and were seen growing 12" to 18" below the water's surface.

Identification of CLPW on the east side of the lake was very minimal, especially in comparison to the previous three years. For much of the shore (0 to 8ft of water), only low-density areas of the CLWP were identified. Areas of high and medium density CLPW were identified in both the north and south end of lake (north was more severe). These areas have large clusters of CLWP matting at the surface of the water.

Suggestions:

It can be assumed that without late ice out and significant snow cover late into the spring, the lake CLPW density will increase. Using historic data combined with the 2018 treatment option we can assume the CLPW density in 2019 to be similar to 2016-2017 (pending ice and snow conditions). When determining treatment zones, consider; historical chemical treatment applications (treat areas three consecutive years in a row), areas of high boat traffic (areas where probability is high for plant severing, distribution and reestablishing), areas of high density residential, and areas with high density creating a problem. In terms of treatment options, control should be the goal.

Lower Blue Lake:

Findings:

2018 showed lowest CLPW density since 2015. Several areas on the lake were identified to have high density CLPW where the plant was matting at the water's surface but that is significantly lower than past surveys. The minimal/stunted growth of CLWP can be linked to the late ice out and significant snow cover late into the spring. The majority of the CLPW was identified in areas along the shoreline in 7 to 9 feet of water.

The highest density of CLPW on the east side of the lake was identified near the north and south ends of the lake. In both cases, the CLPW was identified in large dense clusters, matting at the water's surface. Only three areas the north and south ends along the shore were identified to have large density areas. For the majority of the east shore, CLPW density was low and was seen growing 12" to 18" below the water's surface.

The highest density of CLPW on the west side of the lake was identified in the northern portion of the lake (from the boat access going south to the point.). This area was identified to have the highest density of the entire lake. The majority of the CLPW was seen growing at the water's surface and in most cases beginning to form large matts. Some areas of high density were identified along the shore in the south end of the lake, with areas of medium and low density CLPW mixed in.

Suggestions:

It can be assumed that without late ice out and significant snow cover late into the spring, the lake will increase in CLPW density. Using historic data, we can assume the CLPW density in 2019 to be similar to 2016-2017 for most of lake (pending ice and snow conditions). We can assume gradual decrease density in areas chemically treated if chemical treatment is consistently used each year. When determining treatment zones, consider; historical chemical treatment applications (treat areas three consecutive years in a row), areas of high boat traffic (areas where probability is high for plant severing, distribution and reestablishing), areas of high density residential, and areas with high density creating a problem. In terms of treatment options, control should be the goal.