

FIELD NOTES

Lake: Pleasant Lake, Washtenaw County, MI
Observation Dates: 11 September 2017
Activity: LakeScan™ VS 5.0 Aquatic Vegetation Survey and Observations

Key Points

- ~ Pleasant Lake was afflicted with conditions related to the excessive production and collapse of ebrid milfoil biomass in the late winter or early spring of 2017. These conditions precipitated a serious algae bloom (cyanobacteria) and seriously delayed the production of rooted plants into the early summer. The cyanobacteria bloom was of sufficient size and consequence that the lake was temporarily closed. The selective herbicide treatment for ebrid milfoil was also delayed until there was sufficient lake recovery. Water clarity has improved.
- ~ Native Michigan pondweeds dominated plant production in Pleasant Lake in early September. These are usually desirable species and they were observed at generally acceptable levels in many parts of the lake. Active native pondweed growth appeared to have ceased and most of the plants appeared to be in decline.
- ~ Starry stonewort was not detected in the lake.
- ~ Ebrid milfoil has been the dominant nuisance in Pleasant Lake for decades. It was not observed at perceivable nuisance levels in most of the lake in September 2017 as a result of effective treatment in June. It is expected to be present and conspicuous in the 2018 flora, but it is not expected to bloom and crash as it did in late 2017.
- ~ Wild celery and wild celery flowers (white-stemmed curly “Q’s”) created nuisance conditions throughout most of the lake. Large mats of floating wild celery were also creating nuisance conditions in many areas of the lake. Unfortunately, there are still no known reliable and reasonable treatments for this plant. Wild celery production was much higher than normal in most Michigan inland lakes and it is hoped that production levels will drop to a more “normal” level in

Narrative

The 2017 plant growing season appears to be winding down in Pleasant Lake. Many Michigan inland lakes were afflicted with excessive weed growth, algae blooms, and rapid weed regrowth in 2017. Conditions in Pleasant Lake were good for most of the summer and the lake has nearly recovered from the ecological disturbance that was caused by the bloom and collapse of a large amount of ebrid milfoil biomass in the winter or early spring of 2017. Ebrid milfoil production recovered in the early summer and it was treated with a selective herbicide combination in mid June. By early September, native Michigan pondweeds and wild celery were clearly the dominant plants. Ebrid milfoil absent in most of the lake AROS as a result of effective treatment. Excessive biomass accumulation can occur in some lakes prior to the onset of winter and this can result in undesirable conditions in the following spring. It appears that Pleasant Lake will not be afflicted by these conditions in 2018. Treatment recommendations are developed as a cooperative endeavor by residents of the lake, county representatives, and the lake management advisor in late May or early June of each year.

Recent evaluations strongly suggest that herbicide treatments that were completed in early June provided better control, more rapid weed drop, and protected the lake from rapid weed recovery for a longer time during the summer. Despite the possible presence of weedy conditions in late May, treatment is likely to be delayed until the treatment outcome can be optimized in 2018.