

FIELD NOTES

Lake: North Lake, Washtenaw County, MI

Date of Observation: 05 September 2012

Summary

The day was mostly cloudy, warm, with mild winds. A light rain fell at the end of the survey. The water clarity was good and plants were visible to depths greater than 5'.

The deeper parts of the lake appeared to have been seriously impacted by the widespread decline of starry stonewort. These areas (5' to 10' deep) were practically devoid of any higher vegetation. Starry stonewort had been spreading rapidly in recent years and had covered much of the lake bottom by early this summer. Starry stonewort production was limited to a few patches of various sizes in the east end of the lake and scattered low growing plants scattered throughout the remainder of the lake.

Nuisance conditions were not generally found throughout the lake. Milfoil was conspicuously absent from most areas of the lake suggesting that recent treatments have been exceedingly successful. The few milfoil plants that were observed did not appear to be healthy. Wild celery, and variable pondweed were nearly all AROS's around the entire lake. It is disconcerting that wild celery was found at nearly all of the AROS's suggesting that it's growth had "exploded" this summer. Fortunately, the leaves were not growing vertically to the surface, but the white, "curly" flower pedicels were found everywhere around the lake. These are often considered to be a nuisance, even though the density of the pedicels never reaches density that can be reached by the leaves or foliar structure of the plant. New management tools are being developed for this plant where the focus is to prevent flower formation. Water lilies continue to grow at nuisance levels at the ends of many boat docks. Water shield is one of three water lily species that were found in the lake. It has a small, oval leaf, with no cleft, and the stems are red. It is rapidly becoming the dominant water lily in the lake and appears to be extirpating other water lily species. IT IS VERY DIFFICULT to control this particular plant because it is very resistant to all aquatic herbicides. Treatment is planned for the near future.

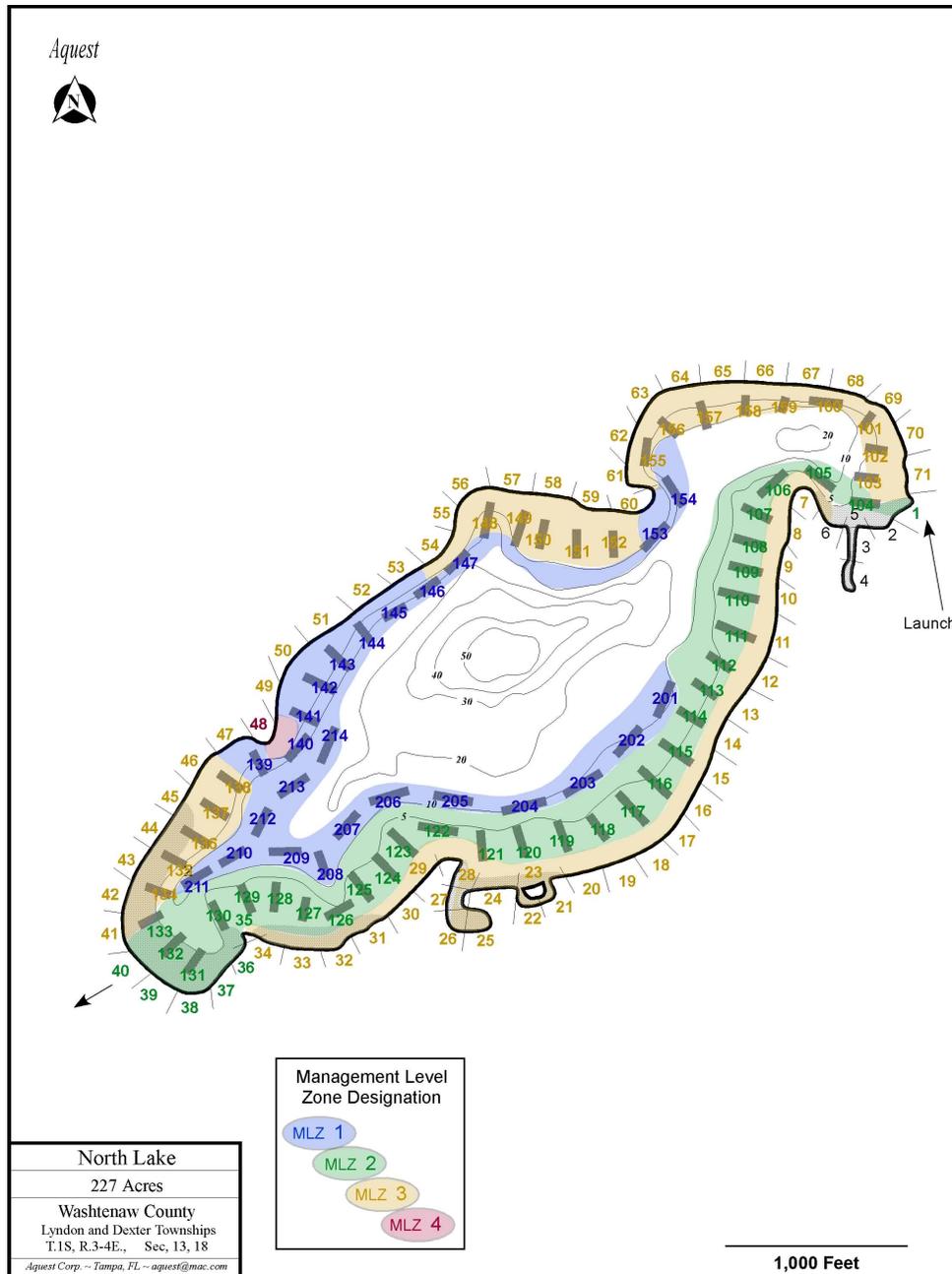
Details

Starry stonewort appeared to be in decline throughout most of the lake. Decline events are seemingly a common characteristic of this plant and these events have profound impacts on the lake ecology. Declines of sufficient magnitude are usually accompanied by bad odors and poor water clarity. The starry stonewort decline in North Lake did not appear to be large enough to create odorous conditions, but some may have noticed odors in the immediate vicinity of some of the declining patches. The most opportunistic and weedy plant species can rapidly colonize areas that have been vacated by declining starry stonewort populations and can become a serious nuisance. This was not observed in North Lake, presumably because the decayed starry stonewort has intoxicated the sediments. It may take several months before conditions in those sediments are again acceptable for plant growth. Starry stonewort will recover from this decline and is expected resume it's dominance of the lake flora by early next year.

Wild celery was observed throughout the lake. The most conspicuous part of the plant was the flower stalks or pedicels. These are very "tough" and can easily entangle and burden boat motors. For this reason, the flower stalks are often considered to be an extreme nuisance, even though densities are rarely ever as great as the leaves of common nuisance aquatic plants. Patches of variable pondweed were also detected at many of the AROS's around the lake perimeter. None of the plant growth appeared to be highly vigorous due to the conditions created by the collapse of starry stonewort.

Summary Prescriptives

No additional treatment is recommended for this year. The growth of wild celery shall be closely watched. Aquest is currently conducting a 3 year evaluation of new treatment options.



North Lake MZL Map