Lake: Wabeek Lake, Oakland County, MI

Date of Observation: 26 May 2012

Summary

The day was mostly cloud and the winds were still. The water clarity was fair, but plants were visible throughout the lake.

Nuisance conditions were not generally observed in Wabeek Lake on this date. The exotic and invasive plant species, Eurasian watermilfoil hybrid (Ebrid milfoil) was present as scattered plants or small patches in most of the lake. However, it was discovered growing at modest nuisance levels in AROS 15, 16, and 18 – 21.

Starry stonewort was not found at nuisance levels in any part of the lake and appeared to be only beginning to grow after a period of dormancy. It also appeared that it may have undergone a “typical” collapse in some places in the lake. These spots were devoid of any plant growth and this is typical of these collapse phenomenon. Nuisance growth is typically found near the drop off zones in Wabeek Lake (AROS 301 – 314) where Ebrid milfoil will grow all of the way to the surface of the water. The absence of this nuisance plant growth is believed to be related to starry stonewort growth and the impact that it can have on lake bottom sediments.

The primary goal of the lake management plan is to enhance or conserve the biological diversity of the plant community and other components of the ecosystem. It is also important that the quality of the plants that contribute to higher biodiversity be “good plants” or those plants that have characteristics that are consistent with the over all goal and expectations of the lake users. Very small patches of a broad leaf pondweed were found at AROS’s 8, 9, 13, 14, and 20. This is a very good sign and it hoped that these plants can be conserved and possibly encouraged to grow in more areas of the lake.

Herbicides were applied to the lake the day before this survey. Despite the very brief time between the treatment and this survey, considerable impact was apparent on the Ebrid milfoil. It appears that the treatment will be very successful in controlling the growth and production of milfoil and curly leaf pondweed.

Horned pondweed is an unusual plant that typically grows early in the spring and flowers, sets seed, and collapses before Memorial Day. There was a relatively large amount of horned pondweed in the lake at the time of this survey. It had begun to collapse and was close to dropping out of the water column.

Other species present at the time of the survey include: Curly leaf pondweed, thin leaf pondweed, water lily, and spadder dock (yellow flowered water lily). Curly leaf pondweed is an undesirable, exotic, invasive plant, but it was not particularly dominant in the Wabeek Lake flora. Thin leaf pondweed can be a nuisance, but it was found at low levels and was not considered to be a nuisance.
Summary Prescriptives

Management Zone Level 3 (MZL-3)

It appears that the treatment of MZL-3 (yellow/brown) is going to be successful. Impact was noted on the several patches of milfoil that were growing at nuisance levels.

Starry stonewort was not yet presenting as a nuisance; however, it is an algae and it is expected to become a problem later in the summer. Unfortunately, it is not possible to predict when this may happen because the plant does not seem to follow a regular growth pattern. Residents of the lake need to monitor the lake for the possible “bloom” of this species when it begins to become problematic. It can be treated with algaecides when it becomes a problem and these are rapid acting. Nuisance conditions can be eliminated in less than a week. There are still no prophylactic treatments for algae and starry stonewort as there are for some of the rooted weed species. Residents of Joslin Lake must keep a keen eye on conditions and notify the Lake Board when they see nuisance conditions beginning to form.

Management Zone Level 1 (ML1)

These areas are generally reserved for the most selective treatment of the most weedy species. Historically, Ebrid milfoil has been a serious nuisance in these areas. Aggressive management is recommended for these areas should milfoil grow to nuisance levels later in the season. Milfoil is expected to begin to grow to nuisance levels in August. An application of 200#/acre, 2,4-D BEE is recommended.