

Milfoil Control

Let Nature take its Course?

The Phillips Chain of Lakes, made up of Duroy, Elk, Long, and Wilson Lakes, is located adjacent to the city of Phillips in rural Price County. The invasive and problematic Eurasian watermilfoil (EWM) was first found in Duroy Lake in the fall of 2000. By 2002, all four lakes contained EWM. Duroy contained extensive beds, Wilson contained smaller scattered beds, and Elk and Long contained very small, scattered beds.

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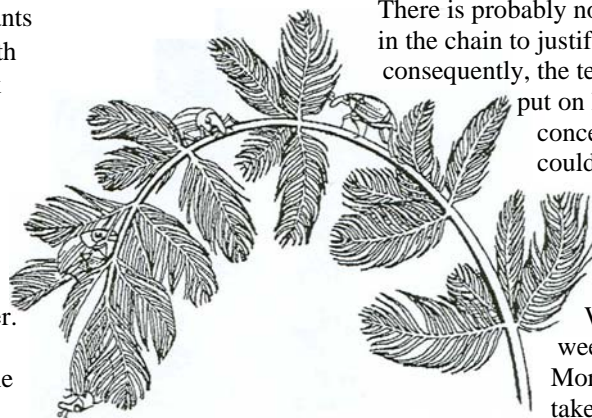
In 2005, concerned about the amount of EWM in the lakes, the Phillips Chain Lake Association requested an over-winter drawdown to reduce the invasive plant in the chain. In response, Craig Roesler and Dan Kephart of the DNR performed an assessment with assistance from lake association volunteers.

Surprisingly, the assessment revealed the EWM population had declined substantially since 2002. Duroy Lake showed a major decline, with an estimated 90% reduction in visible plants. Large areas of EWM beds were reduced to occasional plants. Most surviving plants were heavily damaged with few remaining leaves. Elk and Long Lakes had hardly any EWM. In Wilson Lake, the declines ranged from almost total destruction of plants in one bed to no obvious impacts in another.

What was happening in the lakes to reduce the EWM populations? Upon examination of the damaged plants, evidence showed that the milfoil weevil, *Euhrychiopsis lecontei*, was hard at work. Numerous adult weevils were found and many of the damaged EWM stems showed the blackened stem segments caused by larval feeding.

Milfoil weevils are about 3 mm or 1/8 inch long. They are naturally present in most Wisconsin lakes that contain native milfoils. There had been no introduction of weevils made on the Phillips chain, so the native weevils present simply adapted to feeding on EWM. Up to now, milfoil weevils had shown significant impacts to EWM in a very small percentage of lakes. The reasons they are unsuccessful in most lakes are uncertain, although predation by abundant bluegills has been shown to be one factor. The extent of the weevil impact to EWM in the Phillips chain appears to be greater than that reported in any other lakes where impacts have been observed.

The lakes of the Phillips chain have dark waters, heavily stained from wetland drainage. They also are eutrophic and experience significant summer algae blooms. EWM is only present in water depths ranging from 2.5 to 5 feet. It is unknown whether these conditions may have contributed to the weevils' success.



There is probably not enough EWM left in the chain to justify a draw down and consequently, the technique has been put on hold. There was also concern that a drawdown could disrupt the booming weevil population and have other negative consequences.

What's next in this weevil vs. EWM saga? More observation will take place over the next few summers to see if the weevils' effectiveness continues in the fight against EWM. .

by Craig Roesler

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