Benz Lake Aquatic Vegetation Update 2017

Benz Lake is changing!

What's happening?

- Benz Lake is currently undergoing a change from a turbid water state (cloudy or muddy water) to a clearer water state. In the past, the water has been very turbid. Turbid water usually means algae growth, which includes potentially toxic blue-green algae.
- In 2016 water resource scientists noted that the water clarity dramatically improved. Clear water means sunlight
 can reach deeper water and helped aquatic plants grow.

Things are growing!

- Aquatic plants help to keep the water clear, which is a preferred state. It is expected that the growth of plants
 will lesson as the lake reaches a better balance. However, a large growth of aquatic plants makes it
 difficult to canoe, boat, fish or swim.
- Intense plant growth tends to begin to die back after the 4th of July.

Good plants:

- In June 2017 scientists saw that the main species present is Fern-leaf pondweed. This is a good plant for the lake. The pondweed flowered in late June, and the seeds on the flowers provide valuable food for wildlife. scientists saw many small minnows swimming in the lake and again noted significant water clarity.
- •Other plants that were found include white water-lily and Canadian waterweed.

Not-so-good plants:

- Curly-leaf Pondweed was also found, which is an invasive species (not naturally found in Minnesota lakes) and
 can harm the lake. It is important to be careful to not provide places for it to grow, as it can begin growing under
 the ice in the spring and out-compete native plants.
- The best way to deter Curly-leaf Pondweed is to help native plants grow. It is too late in 2017 to consider an herbicide treatment, as it must be done early such as late April or early May.
- Remember to clean, drain, and dry your boats and docks!!!

Identification guides for Curly-leaf and Fern-leaf are on the other side of this flyer



In 2009, there was a lot of algae on the water.



This photo, taken earlier this summer (2017), shows that there is no longer algae and aquatic plants are visible at the surface of the lake.



Native: Fern-leaf pondweed

Good plant!

Leaf: Fern-leaf pondweed has olive-green to brown leaves. The leaves are stiff and linear, and single leaves are attach in an alternating pattern around the stem.

Habitat: Fern-leaf pondweed grows completely underwater in shallow waters up to 15 feet deep.

Flower: Small flowers with 4 petals on spikes near the surface of the water.

Value: Provides food and cover for aquatic animals and waterfowl.



Photo by Joe Pallardy, EOR.

Invasive: Curly-leaf pondweed

A not-so-good plant

Leaf: Curly-leaf pondweed has olive-green to brown leaves. The leaves have distinct "teeth" and wavy edges. They are also attached in an alternating pattern to the stem, but may have multiple leaves.

Habitat: Curly-leaf pondweed grows completely underwater in shallow waters up to 15 feet deep. It is generally the first pondweed to come up in the spring, and dies back in the midsummer.

Turions: Curly-leaf produces turions, or small buds that look like greenish-brown pinecones.

Value: This plant is INVASIVE and harmful to lake ecosystems. It has been seen in the areas around docks where landowners have attempted to remove aquatic plants, especially along the south shore. The best way to deter Curly Leaf Pondweed is to help native plants grow.



Photo by Joe Pallardy, EOR.

Aquatic plant information is courtesy of the University of MInnesota and the Minnesota Department of Natural Resources.