



Little Rock Lake drawdown

Boy Scouts, Minnesota Master Gardeners and lake association members join effort to establish aquatic plants in exposed mud flats — one element of Benton SWCD's ongoing efforts to improve water quality in a lake known for algae blooms



RICE — Volunteers and lakeshore property owners planted nearly 46,000 aquatic plants over the weekend in ground exposed by a Little Rock Lake drawdown that started Aug. 1.

The six-week drawdown is one piece of Benton Soil

& Water Conservation District's ongoing effort to improve water quality in Little Rock Lake. Over the past 10 years, SWCD staff has worked with willing landowners throughout the watershed on conservation projects to curb runoff.



Clockwise from left: Volunteers planted aquatic plants Aug. 3 at public access points where mud flats were exposed after the Little Rock Lake drawdown. Jai Meyer of Sartell shared a laugh with another volunteer as she worked with her sons Zach and Sam, who are members of Boy Scout Troop 211. At Benton Beach County Park east of Rice, Boy Scouts used carts and sleds to haul flats of plants. The 12 species planted included varieties of rushes and sedges, plus cordgrass, giant bur-reed, sweet flag and blue flag iris. Photo Credits: Ann Wessel, BWSR

Runoff carries phosphorus, which feeds the algae that turns lakes green.

A severe blue-green algae bloom in 2007 prompted Minnesota Pollution Control Agency tests, which found toxins that created a health risk. The lake was put on the impaired waters list in 2008.

The 3-foot drawdown targets in-lake phosphorus sources.



"The planting will help utilize some of the phosphorus sources in the lake, and will help stabilize some of the shoreline," said Amanda Guertin, Benton SWCD water plan technician Guertin.

The Minnesota Department of Natural Resources expects fish and wildlife habitat benefits, too.

The \$295,000 drawdown project — including related work such as erosion control and educational outreach — includes a \$198,250 Clean Water Fund grant from the Minnesota Board of Water and Soil Resources. Other project partners include the DNR, the Little Rock Lake Association and Eagle Creek Renewable Energy.

On the morning of Aug. 3, about 45 volunteers planted 12 species of native plants at public water access points.

At Benton Beach County Park,



Top: Sam Meyer, 15, of Sartell, was among the Boy Scouts from Troop 211 who earned service hours on Aug. 3 by planting aquatic plants at public water access points on Little Rock Lake. **Bottom:** Siblings and third-generation cabin owners Julie Kellerman of Oak Grove and Jeremy Hartman of Clear Lake, left, pitched in to help.

Boy Scouts and Minnesota Master Gardeners hauled flats of sedges, rushes, cordgrass, blue flag irises, pickerel weed, giant bur-reed and sweet flags onto the wet swath of newly exposed lake edge. Volunteers poked cone-shaped holes in the sand, and then planted the 2-foot-tall plants.

Most wore knee-high rubber boots and gloves.

They planted as far as wooden stakes that marked the expected post-drawdown waterline. By the morning of Aug. 3, the receded water had exposed 10 to 20 feet of lake bottom along the shore.

Siblings and third-generation cabin owners Julie Kellerman of Oak Grove and Jeremy Hartman of Clear Lake pitched in to help the Little Rock Lake Association on Aug. 3 at the park.

"The algae bloom over the summer can be downright

stifling. You can't even be at the cabin. It smells. We end up just packing up and going home," Hartman said. "The fishing becomes terrible during the summer."

The drawdown mimics a natural drought cycle on Little Rock Lake, where water levels have been controlled for 100-plus years. The Mississippi River pool upstream of the Sartell Dam is also affected.

A combined 400 acres of sand and mud flats on the lake and river will be exposed.

"You're essentially ecologically restoring the lake to improve water quality," said Brad Wozney, BWSR clean water specialist. "The general idea would be to consolidate lake sediments and to expose mud flats to encourage vegetative growth that would later hold the sediments down."

Wozney toured a few sites on the Mississippi River and

Little Rock Lake on Aug. 1 with Jason Weinerman, BWSR board conservationist.

The drawdown is projected to reduce in-lake phosphorus by an estimated 589 pounds, and to affect water quality for 10 years.

Some residents who turned out midmorning Aug. 1 to see how much levels had dropped since Eagle Creek started letting more water through the Sartell Dam said they expected a more dramatic result. Guertin explained the lag time: The drawdown started at midnight as planned, but the channel that connects Little Rock Lake to the Mississippi River creates a bit of a bottleneck.

Weinerman compared the drawdown to draining a bathtub.

Lowering the water levels will allow Little Rock Lake to empty into the Mississippi River, which acts like a dam to the lake.

Meanwhile, Benton SWCD and Stearns County SWCD staff will take advantage of lowered levels on the Mississippi River to work with willing landowners on a few streambank stabilization and bluff restoration projects.

The Minnesota Board of Water and Soil Resources' mission is to improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. www.bwsr.state.mn.us.

