## Eco Challenge project degrades waste with grass

October 3, 2015 By Garrett Neese (gneese@mininggazette.com), The Daily Mining Gazette

HOUGHTON - Last year's Houghton Middle School Eco Challenge team won a \$10,000 prize in the national competition. This year's team is looking to repeat - and also to make the area's stamp sands less contaminated.

Club members gave a presentation to fourth graders at Houghton Elementary School Friday and enlisted their help in planting bluestem, a grass that can be used to degrade the waste products from processing copper ore during the 19th and 20th centuries.

"The plant takes the heavy metals like copper into its roots system," said Houghton eighth-grader Gabrielle Roberts.



Alethea Oakley, a 4th-grade student at Houghton Elementary School, helps plant bluestem grass for her classroom during a Friday presentation by the Houghton Middle School Eco Challenge team.

The Eco Challenge program tasks students with creating an action plan for addressing an environmental problem in their communities.

"We decided that we wanted to reach out to the public, do some of our own experiments with water sampling and contamination, and experiment with remediation," said Eco Challenge team advisor Sarah Geborkoff. "We're hoping for a repeat win. They've worked really hard, and it's been really good for them."

The group began working together in mid-July. The research included taking a boating trip aboard Michigan Technological University's research vessel, the Agassiz.

In determining where to plant at the middle school, the group tested the level of dissolved copper in the water at three spots on campus: a ditch in the parking lot and two ponds at the school forest, one with and one without cattails. The pond without cattails showed the highest concentration of copper. It had 152.4 and 197.5 micrograms per liter, the latter of which is almost 50 times the natural amount found in groundwater.

The fourth-grade students got to help in planting bluestem for their classroom. If they wished, they could also take home some bluestem seed for their home.

The team might also take its presentation to the E.B. Holman School. "We're looking for a way to get word out to the public," Roberts said. For more information, go to hmsstampingmadgremlins.weebly.com .