

Researchers wade through muck tracking Minnesota's vernal pools



Name_____

Date_____

Directions: Read this science article and answer the questions about what you read at the end.

The unknown didn't stop Kristen Busch.

Standing in a murky pool, the science teacher had no problem reaching into a pail of pond muck. She dug out two shiny beetle larvae attached to each other in a fight.

The discovery — first seen in the water before being scooped up for a closer look — was exciting to the scientists and educators who surrounded Busch. The group was gathered in a wetland near Duluth, Minnesota.

They were learning how to find and map vernal pools. Vernal pools are small, temporary wetlands that form in spring. They are important habitat to the amphibians and insects that wind up being food for other northern creatures that live in forests.

“They could have pinched her,” said Ryan Hueffmeier, a Natural Resources Research Institute junior scientist, when asked about the bugs.

The day was part of a greater effort: a project to raise awareness of the value of vernal pools, to identify and map them, and start a state monitoring program to study them.

The Northland is dotted with thousands of these wetlands. They usually flood in the spring and can be living-room sized to an acre or more. Most of them are not shown on any maps and scientists don’t know where they are located.

“They are really tiny and support a huge number of wood frogs, one of the most common forest amphibians around here,” said Jennifer Olker, a researcher.

Because the ponds are temporary, fish don’t live in them. This means frogs, fairy shrimp and blue-spotted salamanders can lay their eggs with a better chance of survival.

Duluthian Jon Farchmin has been monitoring pools in Duluth parks. He discovered several vernal pools when the frogs started calling.

He described a recent foggy night in Hartley when he sat by a pool.

“I never heard frogs so loud,” he said. “It was a pretty surreal experience. I am hooked.”



Fairy Shrimp



Blue Spotted Salamander

Questions about Vernal Pools

1. Find the definition of a *vernal pool* in the article. Underline the definition.
2. Find two words you don't know the meaning of. Underline them in the article and write both words here.
3. Choose one word and look up its meaning in a dictionary or on the internet. Circle the word you looked up in #2 and write the meaning of the word here:
4. In what season do vernal pools have water in them?
5. Name three kinds of animals that you might find in a vernal pool behind your school.
6. Circle the animal in #5 that you would be the most excited to find in a vernal pool!