



Water Background Info

- Sources of water in the Conservancy:
 - Water flowing from the main channel of Pheasant Branch Creek (corridor running through the city between the middle and high schools.)
 - The Springs
 - Runoff collecting in the retention ponds at Orchid Heights Park.
- Pheasant Branch Creek is about seven miles long.
- Groundwater feeds the springs. The water from the springs is a constant 55 degrees Fahrenheit.
- There are two large sets of springs. They feed the arm of Pheasant Branch Creek that runs through the northern part of the Conservancy, providing about 1,840 gallons of water each minute (18 bathtubs full). This is 2.6 million gallons per day.
- Once water leaves the springs it flows through marsh (wetlands) to Lake Mendota.
- In Wisconsin, groundwater does not come from hundreds of miles away. Most precipitation which becomes groundwater moves only a few miles from the point where it soaked into the land to the point where it comes out in springs, streams, rivers or lakes, or is pumped out of the ground from wells.
- An underground rock formation that can store water is called an aquifer. Wisconsin has thick layers of rock (bedrock) where aquifers form. Beneath our soils are deposits of dolomite, a brittle rock that is similar to limestone. It contains groundwater in the cracks of its layers. Underneath the dolomite are layers of sandstone. In sandstone, groundwater seeps not only into cracks, but into the pore spaces of sand grains as well.
- It takes about 3 and a half years for a drop of rain water to fall in the watershed and eventually emerge at the springs or be pumped into our water towers.
- Most communities in our part of the state tap into aquifers for their sources of water.
- The water in the retention ponds comes from runoff from the neighborhoods next door to the park and from the parking lots and mowed areas of the park.
- Looking down from the bridge along the creek, the water in the creek represents drainage from about 24 square miles (the Pheasant Branch watershed).
- The Pheasant Branch Watershed includes the growing urban centers of Middleton, Springfield and parts of Madison. The northern section of the watershed is devoted to agricultural lands.



Water Exploration Guide

While walking, pause to listen. What do you hear? Which sounds are related to the water nearby? What is making those sounds? Is the water moving or still?

Collect a sample of water. Offer the opportunity to touch it. What do you see in it? Note color, odor, critters.

Observe the stream, height of trees, color of water, leaf color.

Observe leaves for evidence of feeding or other food sources for animals (berries, insects).

Listen for birds – Can anyone identify them? Are any of them birds that need open water as part of their life cycle?

Read these quotes. Share a thought or reflection.

Our minds, as well as our bodies, have need of the out-of-doors. Our spirits, too, need simple things, elemental things, the sun and the wind and the rain, moonlight and starlight, sunrise and mist and mossy forest trails, the perfumes of dawn and the smell of fresh-turned earth and the ancient music of wind among the trees. For observing nature, the best pace is a snail's pace.

~ Edwin Way Teale



Edwin Way Teale is an American naturalist, photographer and writer. Teale's works serve as primary source material documenting environmental conditions across North America from 1930-1980.

In every walk with nature one receives far more than he seeks.

~ John Muir

John Muir is the father of our National Parks. Co-founder of the Sierra Club. He was educated at UW-Madison.