



Self-Guided Nature Guide: Grand River Trail

1/4 mile relatively flat trail along the beautiful Grand River with 1/4 mile return through old field mowed path

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

#1 Poison Ivy...look but don't touch

"Leaves of three, let it be." This is good advice whenever you are outdoors in NE Ohio because it can keep you safe from poison ivy, which is very common here. Poison ivy always has three closely connected leaves with pointy tips. It can appear as single plants, dense clusters low to the ground or vines that climb trees. Contact with any part of the poison ivy plant can cause itchy blisters on the skin, even touching the hairy vines climbing tree trunks on which there are no leaves. Stay on the trail to lower your risk of touching it. Why might an animal like poison ivy?



#2 Dead Trees...the forest supermarket

Why do we allow dead trees, called snags, to remain standing? Many woodpeckers, including the pileated, red bellied, hairy, downy and flicker find insects and other food within them. These same birds make their homes in tree cavities, as do nuthatches, chickadees, bluebirds and numerous ducks and owls. Mammals, including mice, squirrels, weasels, raccoons and porcupines also find shelter in tree cavities. In addition insects, lichens and fungus live in and consume dead trees. Where would all these creatures and organisms live or find food if all the dying and dead trees were removed from a forest?

#3 White Oak Tree...can you guess its age?

This huge White Oak tree is 14ft in circumference and estimated to be 250 years old. White Oaks grow slower & live longer than most other trees. Native American canoes probably passed beneath its young branches. It was a small sapling in 1776 when the Declaration of Independence was signed. White Oak is highly prized for timber, due to its hardness, close grain, & rot-resistant qualities. It is used for making baskets, shakes, flooring, fine furniture, & barrels for aging. Its "sweet" acorns are lower in tannins than others, & occur every year. They are one of the most sought after foods in the forests. Oak trees host the caterpillars of over 500 species of butterflies & moths, which are a main food source for many of our most colorful songbirds during their nesting periods. Sadly, the White Oak is in serious decline due to its desirability for wood products. While once it comprised 40% of Ohio's forests, presently, this has been reduced to 11%. Humans value the white oak for many reasons. Do you see evidence that animals are using this tree for shelter beneath its roots?

#4 Animal Tracks...proof they live here

If you look below this bridge you may be able to see a variety of footprints created by our forest friends on their way to, or from, the river. Deer, otter, raccoon, beaver are just some of the animals that have been spotted on the banks of the Grand River. Why are they coming to this spot?



#5 Muddy Water...but a clean river

Wow! The Grand is kind of muddy. Why do you think that is? Why are there so many trees down at the river's edge? You probably know the river floods a lot. In fact, in its long journey north through Farmington, Jefferson, and Painesville it crosses the ancient bed of Lake Warren on its way to Lake Erie at Fairport Harbor. Notice the banks aren't rocky, they're made of silt and clay from thousands of years ago. Flowing water is a powerful force! In fact, it gets so high that the bridges are actually under water sometimes! Do you think it can stir the water enough to make it brown? Oddly enough, in a wild river like the Grand, muddy water makes it cleaner because the moving water scours everything clean! And that's why living there are so many kinds of fish, frogs, mussels, beavers, otters, muskrats, minks, mudpuppies, crayfish, insects...the list seems endless! Can you find any evidence of animals "sliding" into the river down the muddy banks?

#6 Erosion...a valley shaped by water

As you look away from the river at this stop, you will observe a valley created by water runoff moving material from one spot to another which is called erosion. If you look more closely, the valley isn't a straight line, but curved. The roots of the trees growing on the bank have held on to soil causing the water to seek a route around the roots through which it can move more easily. Does the shape of a valley affect the rate of water runoff during a storm?

#7 A Forest...look closely to see the diversity

How many different trees do you see here? Do you know what kind they are? You should identify Red Oak, Sugar Maple, Shagbark Hickory, Basswood, & Beech. Witch-hazel & American Hornbeam trees grow in the low light of the understory. This diversity of our forests is constantly threatened. Years ago, the American Chestnut would have comprised 25% of this very forest. It has all but disappeared along with the bushels of chestnuts, & superior lumber that it provided. The American Elm, which graced many of our city parks & main streets with its graceful arching limbs, is also nearly gone. Recently, Ash trees have suffered the same fate. Hemlock & Beech trees are now also under attack. Why is this diversity important? All trees contribute oxygen to the air we breathe, shade to keep us cool, lumber for homes, fruit, nuts, & seeds to eat. Many butterflies & moths lay eggs on certain species of trees. Birds then feed on those caterpillars, & nest in the treetops. Can you think of other ways trees benefit you, even as you stand here in the forest?

#8 Rotting Logs...trees being changed into soil

As you walk along this part of the trail you may notice many fallen trees in various stages of decomposition. As a tree begins to rot on the forest floor it is providing nutrients to the ecosystem, decreases erosion and helps the forest floor retain moisture. It also is a micro ecosystem creating food and shelter for many species of plants and animals such as insects, mosses, lichens, salamanders, toads, frogs and snakes. As the wood continues to decay, the nutrients in the log are broken down by fungi and microscopic bacteria, benefiting the quality of the soil beneath. Crush some of the rotting log in your hand. Is it more like wood or soil?

#9 Wetlands...nature's water filter

Welcome to the filter! Why do we call a wetland a filter? Notice how the water is shallow and still. It's flat and full of plants like ferns, sedges, mosses, and dogwoods. If the Grand is fast flowing and scours the banks, wetlands do the opposite. Wetlands hold up nutrients that speed growth and pollutants that are broken down by bacteria, enzymes, and other natural processes. If there are fewer pollutants flowing down, what does that do for the cleanliness of the river? This is the Riparian Zone and lots of frogs, salamanders, and insects are born in its shelter. Can fish from the river get up here to eat them?