

Riffles & Runs

Rogue River Watershed Project Newsletter

Grand Valley State University Annis Water Resources Institute

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Lawns & Water Quality - It's a Personal Choice

Jane Secord, Center for Environmental Study

Would anyone who is tired of fertilizing, watering and mowing your lawn please raise your hand? Good, keep it there. How about those of you who can think of something that you would rather spend your money on other than yard equipment? Please raise your hands. Okay, last question. How many of you have ever wondered how this whole lawn game got started? Great. Okay, those of you who didn't raise your hands have things to do (fertilize, water, and mow) so you can skip on to the next article, but I would invite those of you with your hands up to stick around for a discussion. Oh yeah, you can put your hands down now.

Lawns - what an interesting concept. They represent wealth and security, tidiness and responsibility. A green carpet of grass from property line to property line is often one of the ultimate goals and challenges for the homeowner. If the lawn is peppered with dandelions in the spring or dries out in the heat of summer, somehow we magically lose a degree of credibility. Lawns are powerful social icons in our great United States of America.

There is some speculation about how this all got started, but my favorite hypothesis is the one about the feudal castles. To protect the castle from a surprise attack, a grassy area the length an arrow could fly was kept free of trees and brush so there was no place for the attackers to hide. That allowed the native grasses to prosper. They developed a thick, rich looking green carpet that



Native plants and reduced lawn areas create attractive landscapes and require less watering, maintenance and chemicals.

complemented the elegance of the castle. It worked for the feudal lords, so why not for us?

Well, it does work for us, but it is also a lot of work for us. Since the grasses that we use are not native to our area, we have to provide an artificial support system (fertilizer, pesticides, water, etc.). And we pay a price, not only financially, but also environmentally. The fertilizer and pesticides that are not captured by the lawns wash out into the streets, down through the storm drains, and escape into our waterways. There they do what they are meant to do, encourage plant growth and kill insects - an okay practice on a lawn, but a disaster in a natural system like a lake or stream. The increased plant growth chokes the waterways and the loss of insects disrupts the food chain. Not a good thing if you happen to live in a water wonderland like we do.

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What is in Your Rogue River Watershed ?

Donna Stevens

As we all know, the Rogue River Watershed is a landscape of natural beauty. The watershed supports a very diverse environment and sometimes it is hard to notice the little things. As this watershed is studied and explored, any neat little things we stumble across we will take note of, conduct research on, and let you know about it through this newsletter.

If you are ever in Algoma Township be sure to drive down Pine Island Dr. off of 14 Mile Rd. You will find one of the two surviving "concrete through arch" bridges in Michigan. The bridge was built in 1924; the contractor was Peter Brill of Vriesland, Michigan¹. The bridge type is often referred to as a "rainbow" arch. The rainbow arch is more commonly found in the midwestern states, but the design never caught on in Michigan. Jack Lemon, the city engineer for the City of Adrian, designed both of the rainbow arch bridges still found in Michigan². He proved himself to be a true artist and engineer by producing a working bridge and a piece of art. The other rainbow arch bridge can be found on Merrick St. in Lenawee County crossing the South Branch of the Raisin River.

Pine Island Dr. concrete rainbow arch bridge.

On the Pine Island Dr. Bridge you will find a plaque at either end, explaining that it is a State Reward Bridge, built jointly by the State Highway department and the Board of County Commissioners. The bridge was a direct result of the State Reward Act of 1919, which required the State Highway Department to pay half the cost and supervise the construction of the bridge.¹ 

1. Charles K. Hyde, 1993. Historic Highway Bridges of Michigan. Pgs. 33-35

2. <http://www.michigan.gov/mdot.html>. 2001-2002


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What choices do we have to alter this trend? We could begin by inviting nature back into our lives and we could begin by planting a few native Michigan plants in our yards. In addition to being attractive, most native plants have a deep root system so they require less fertilizer and water. Not only have they adapted to the challenges of Michigan's weather, they also require fewer pesticides. Do plants have to be native to be good? Absolutely not, there are lots of wonderful non-native plants that fit nicely into our ecosystem - just choose wisely.

How about design? Here we are limited only by our imagination. A buffer of native plants around your yard would have many positive effects on the environment, from increased water quality to habitat restoration. Buffers also form an attractive sight and sound barrier that softens the activity of the outside world while providing year-round entertainment. In addition, buffers keep rainwater on our property and help reduce the impact of the pollution-loaded stormwater that is ruining our fresh water bodies.

The Department of Environmental Quality and the Center for Environmental Study are collaborating to develop a series of booklets, *Landscaping for Water Quality*. The booklets strive to meet the combination of needs when looking into changing your landscape, from basic "why" information and design ideas to detailed tables intended to help you choose your plants. (Available at no charge through the DEQ offices beginning spring 2003.) If you just don't want to wait until spring to start, you can also investigate the information from the Wildflower Association of Michigan at www.wildflowersmich.org. They have some interesting database information that may help you in your plant quest. Asking questions of your area plant nurseries may also guide you in your project AND have the secondary benefit of encouraging the nurseries to carry more varieties of Michigan native species.

Whether you decide to completely redo your landscape or just want to start with a small project, be creative and let nature be your guide. Plant a rain garden or a frog pond. Build a sun garden or a shade garden. The possibilities are unlimited. Enjoy! 

Fall Team Leader Training and Stream Search Event

Donna Stevens

Once again, Fall has come to Michigan and with it our Fall Stream Search Day and Team Leader Training.

Stream Search Day

Our Stream Search Day is a great family fun activity! Groups of three are led by a team leader to a stream location. At the location you will look at the physical characteristics of the stream, and participate in an intense insect search and identification. This is a great time to experience how diverse nature really is. After the Stream Search we will provide you with a free lunch! The Stream Search will take place on Saturday, **October 19, from 9am-12pm** at the Rockford Boy Scout Camp on Rector Rd. We do ask that an adult accompany children under the age of 10.

Team Leader Training

Our Team Leader Training is a great way to become a citizen aquatic scientist. The training course will teach you how to take physical measurements of the stream, collect stream insects, and identify the types of insects that can be found in a stream. Upon completion of the class you will receive a certificate and you will be qualified to lead a group



Volunteers having a great time identifying insects during our Spring Stream Search Day.

of volunteers on our Spring Stream Search Day 2003! The class will be held on **Saturday, November 2, from 8:30am-3pm** at the North Rockford Middle School. 💧

For questions, more information, or to sign-up please call Nichol Stout, at 616-895-3092, or e-mail at stoutn@gvsu.edu.



Wandering Through Your Watershed

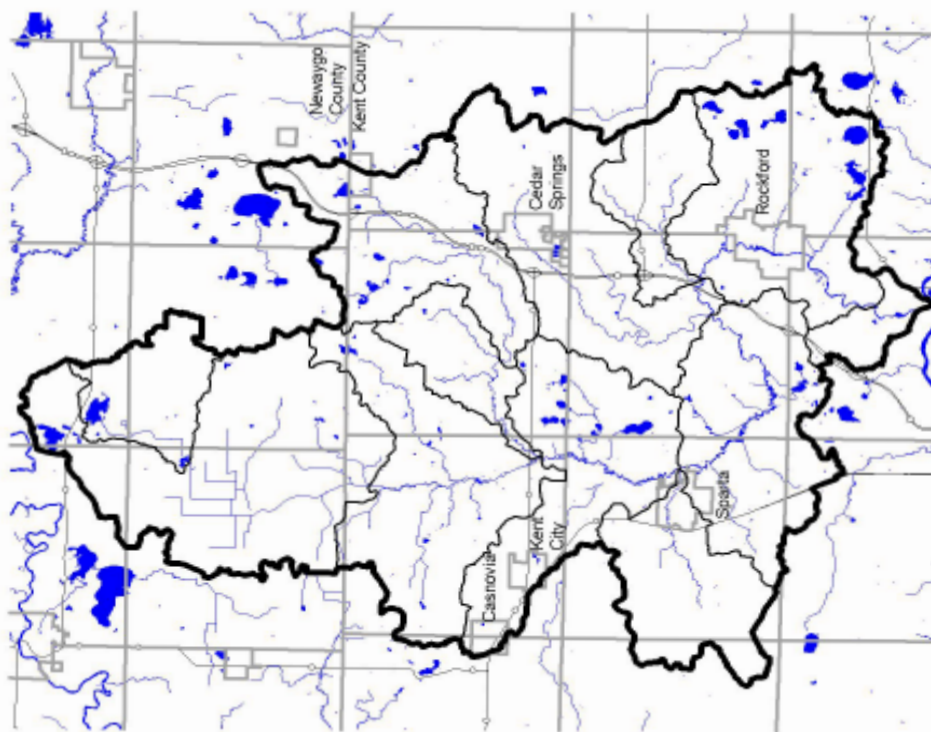


Welcome back to another exciting adventure! Did you guess Childsdale Avenue last time? If so, you were correct! Childsdale Avenue is the location of the old Childsdale Paper Mill Dam. The dam collapsed in 1987 due to high waters. Pieces of concrete from the dam can still be seen in the river today. Can you guess where this location is?



If you have questions about this newsletter or the Rogue River Watershed program, please call Nichol Stout at (616) 895-3092 or e-mail her at stoutn@gvsu.edu.

Rogue River Watershed



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