# Riffles & Runs

Rogue River Watershed Project Newsletter

Grand Valley State University Annis Water Resources Institute

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### Why Protect Wetlands?

Lori Larsen, Center for Environmental Studies

So what's the big deal about wetlands? After all, they are just wasted space that produces mosquitos, right? And the only reason to save them is to ensure the quality of life for frogs, correct? And by eliminating the wetlands on our property or in our neighborhood we have done the community a great service, right?

That certainly is the mindset that many of us grew up with, but is it true? Let's look at wetlands from a more recent point of view and decide for ourselves.

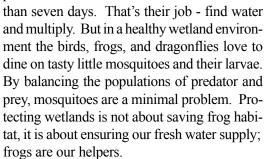
If you live anywhere in Michigan you live in the Great Lakes Basin. The Great Lakes Basin contains approximately 1/5 of the world's available fresh water. As the world's population increases and the need for fresh water also increases, the natural resource that is such a large part of our existence in Michigan becomes ever more valuable.

So what do wetlands have to do with the fresh water in the Great Lakes, in Michigan? The Earth is an organism that functions much the same way that our body functions; wetlands are similar to our renal system. Our kidneys and

bladder regulate, filter, and store fluids; wetlands do the same. Wetlands prevent flooding and filter the water as it passes through the wetland system so it is cleaned and cooled as it slowly enters our groundwater, lakes, rivers, and streams.

But is there a down side to having a wetland in your backyard? Maybe.

Mosquitoes will breed in any puddle of water that is present for more



What about the noise? Yes, healthy wetlands can be noisy. Frogs and birds are biological control agents for wetlands, but they are also the ultimate party animals. Frogs, for instance, talk and sing at the top of their little lungs like a group of teenagers at a slumber party. And much like teenagers they also eat through the night. (Anyone care for more mosquito larvae mix? It's a new recipe.) And the birds? They pick up at dawn when the frog party starts to quiet down. Noisy? Maybe, but personally the sounds of those little critters doing their jobs is comforting and reassuring to me. All that insect eating, seed planting, and flower pollinating is busy work that I really don't want to do. I'll let the wetland handle it for me.



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## What is in Your Rogue River Watershed?

Abigail Matzke

As we all know, the Rogue River watershed is a fountain 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 through this newsletter.

Kittentails (*Besseya bullii*) is a savanna species, listed as threatened in this state. This plant does not occur outside the area most recently affected by glaciers in the Midwest, including all of the Rouge River watershed, but several related species occur in the Great Plains and Rocky Mountains.

This plant has a rosette of ground-hugging, hairy leaves and produces yellowish-green flower stalks about a foot tall from April to May. It likes sun or semi-shade in well-drained openings such as prairies, pastures, young woods, and cliff tops. It is most often found in soil composed of gravel or calcareous substrates.



This would be a non-acidic soil, and could be hard, and could have limestone striping visible. This plant is threatened by soil compaction.

### When Development Happens, What Can You Do About It?

Abigail Matzke

Let's face the facts - development is going to occur. People in the United States like having space, they like owning their own homes, and they like their rights as homeowners to do what they want to with their own land. It's all part of *Americana*, everyone wants a shot at the American dream. There are negative issues that accompany this dream. One, more development means more runoff. Two, more development means more stuff (sediment, oils, fertilizer) is going into the environment, especially into the waterways. This causes thermal pollution, (the raising of temperature in the river, streams, and creeks) and sedimentation (how much free soil or particles are getting into the water system).

Thermal pollution and sedimentation are two of the most significant problems for the Rogue River Watershed. We need to balance the need for development with protecting this natural resource. What works well for communities and planning commissions to look for environmentally sound designs. A good design for the environment would take into consideration stormwater, the amount of impervious surfaces, clustered housing, riparian zones, and community green space. If you are a resident in this watershed, let your planning commission know that you support such developments as opposed to environmentally unsound plans.



"That which is not good for the beehive cannot be good for the bees." Marcus Aurelius (120-80), Roman emperor

# If You're Interested In Becoming Involved In The Rogue River Watershed Project, Please Attend Some Of These Upcoming Events!

⚠ Thursday, March 21, 7:00 - 8:30 pm, Community Meeting about the watershed at Rockford City Hall

Tuesday, March 26, 7:00 - 8:30 pm, Community Meeting about the watershed at Sand Lake City Hall-Library

Sunday, April 14, 2:30 - 4:00 pm, Workshop for homeowners in the watershed at the VFW Hall in Algoma Township at 4195 13 Mile RD

Luesday, April 16, 7:00 - 8:30 pm, Workshop for homeowners in the watershed at Sparta High School

Monday, April 22, 7:00 - 8:30 pm, Workshop for homeowners in the watershed at Rockford North Middle School

#### **Before You Fertilize!**

Abigail Matzke

Many of us fertilize our lawns', after all, who doesn't like a lush, green, thick lawn? However, not all of our lawns need to be fertilized. Lawn fertilizers often increase the amount of phosphorus getting into our streams, rivers, ponds, and lakes. The result is an ecological mess. Leaving a thin layer of grass clippings on the ground and reseeding to fill in the thin parts of the lawn can accomplish much of what our fertilizers do. If you feel that you would still like to use fertilizer, get your soil tested first - it's easy!

Collect approximately 2 cups of dry soil, about a sandwich size bag. Take your sample to the nearest Michigan State Cooperative Extension Office. Take a few moments to fill out the corresponding paper work. Pay \$9.50 (less than some fertilizers) for the testing to be done. Wait 2-3 weeks for the results to be mailed to your home. You can call (616)336-3265, the Kent County office, for more information.

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If you would like to learn about wetlands there are many wonderful resources. For instance, you could join the Neighborhood Wetland Stewards for an evening with Scott McEwen from the Tip of the Mitt Watershed Council. Scott will present the Wonders of Wetlands on Thursday, March 14 at 7:00pm at the Grand Rapids Township offices, across from the Meijers store on Knapp Street. If you would like more information about the presentation please call the Center for Environmental Study at (616) 988-2854.



If you have questions about this newsletter, workshops, community meetings, or subwatershed groups please call Nichol Stout at (616)895-3092. If you would like more information about the Rogue River Watershed Project go online at www.gvsu.edu/wri/isc/rogue/index.htm.



### **Stoneflies Are HERE!**

Patricia Pennell, West Michigan Environmental Action Council

I first encountered winter stoneflies when I began making maple syrup, which can often be started in February if the weather is right. They were crawling around on me, and they were very cold! I got down on my knees and took a close look at them, and discovered they were adult

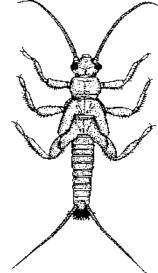
wingless stoneflies, an insect with aquatic nymphs and larvae. What were these little guys doing walking around on the snow in the middle of winter?

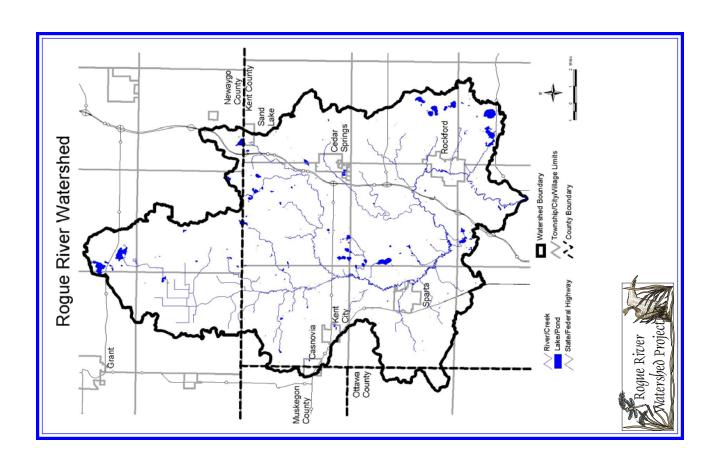
I did some research and learned that there are two kinds, or families, of winter stoneflies. While other insects go dormant in the fall, the winter stoneflies are just getting into action as the weather turns cold. These interesting insects have a growth spurt when the autumn leaves fall into the streams and rivers. The wet leaves form packs against stones and logs in the streams and rivers, and the stoneflies find these leaf-packs a fine place to live and forage. If you climb into a stream during the winter months, you may find them flourishing under the ice in their leaf-pack condos, chowing down on the decaying leaves.

Winter stoneflies require cold water with high oxygen levels, and this explains the wintery timing of their lifecycle. They get all their important business done (growing, mating, egg laying, and larval hatching) while the water is cold and holds more oxygen. They crawl around on the snow because it is mating season for them; at this time of the

year, they emerge from the stream as adults, mate, and lay their eggs. During the warm months, when the cold water they need can't be counted on, they go dormant.

Stoneflies of all kinds are extremely sensitive to pollution and are used as indicator species, which means that finding them tells us a stream is in healthy condition. If you live near a stream or river, bundle up and take a walk to look for winter stoneflies crawling on the snow. If you find them, good things are happening in your stream.







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