



This newsletter is being sent to you because our records show that you own or reside on streamside property in the Beaver Lake Watershed. *If you would prefer to receive a digital copy only or have your name removed entirely from this mailing list, please notify the Beaver Watershed Alliance by calling 479-750-8007.*

Inside this issue:

Beaver Watershed Alliance is Growing	1
Glossary	1
War Eagle Creek Watershed News	2
How Do Floods Affect Water Quality?	3
BMP Spotlight: Alternative Watering Sources	3
Waste Disposal & Recycling Options	4
Invasive Plant Alert: Garlic Mustard	4
Rain Garden Mini-Grants	5
Cost-Share Available For Pasture Renovation	5
Free Native Plants	5
Upcoming Events And Property Assessments	6

Beaver Watershed Alliance is Growing

Hello Beaver Lake Watershed Resident, Landowner, or Manager,

As we turn 5 years old here at the Alliance, we are excited about our new staff additions which will help us continue to meet landowner interest in our shared effort to voluntarily protect our regional water supply, its associated watershed, and environment, and our economic and recreational well being. Bethany Alender was hired to replace Courtney Thomas as Outreach Coordinator where she will organize outreach events, excite our awesome volunteers and landowners, communicate our voluntary clean water protection message, assist with grant writing, and work with landowners when she can. We also added another Program Coordinator, Jennifer Ogle, to primarily work with landowners although she will be involved in many aspects of our programming. They both look forward to developing new relationships with landowners and volunteers.



Bethany Alender
Outreach Coordinator



Jennifer Ogle
Program Coordinator

Now that we have a bigger staff, we are eager to bring you even more high quality *Source Water Protection Services*. Working together, we can implement best management practices that will protect our way of life, quality of life, and drinking water for generations to come. Take a look at page 6 to see how you can be involved.

Hope to see you out there!

Glossary of Newsletter Words

Alluvial bottomland—low lying land next to a creek or river

Ecosystem—a community of plants and animals viewed within its physical environment

Hydrologic modification—the alteration of stream flow by conversion of land use from forest or pasture to roads, sidewalks, parking lots, and subdivisions

Alternative watering sources—off-stream livestock watering sources such as tanks or ponds

Special thanks to sponsors and partners:

Invasive plant—a plant capable of spreading aggressively, displacing native plants and the wildlife dependent upon them, and altering the **ecosystem**

Impervious—a surface that does not allow water to pass through

Pasture renovator/aerator—a tool that slices holes into the soil surface, allowing for increased water infiltration, nutrient retention, and forage growth

Rosette—a cluster of leaves originating from a central point at a plant's base

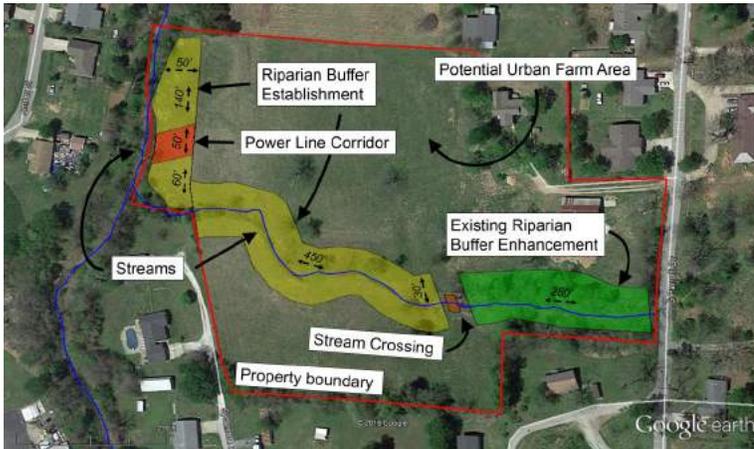


War Eagle Creek Watershed News



Dear War Eagle Creek Watershed resident, landowner, or land manager,

Spring is just about here so you know what that means: time to put some new plants in the ground! We have



Example of a site plan we developed for a landowner in Huntsville planning to establish new riparian buffers using our free tree giveaway this spring. We can develop a plan for you based on your goals and needs.

native tree and shrub seedlings, grasses, and wildflowers that we are giving to landowners again this year. If you are interested in planting a new riparian buffer or enhancing an existing one, reforesting part of your property, or just adding plants that are good for wildlife, let us know. I have been visiting landowners all winter, helping them develop plans to add native plants to their properties, and I would love to help you do the same. I have also been meeting with landowners in the War Eagle Creek Watershed over the past year to assist them with other issues they are experiencing on their property. Anything from looking at why a gravel drive is scouring out each time it rains to major streambank erosion and loss of property--there really is no problem that is too big or

or too small for us to provide resources to address or, at the very least, give you free advice. Please do not hesitate to give me a call or email if you are having a problem that is affecting your land or water quality, or a soil and water conservation goal that you would like to achieve. That is what we are here for!

We also have some great events coming up in the War Eagle Creek Watershed over the next few months that I hope you will want to check out. The Second Annual War Eagle Creek Cleanup will be held at Withrow Springs State Park on Saturday, March 19th. Last year our volunteers removed 4,000 lbs of trash from 10 miles of the creek! We will also be hosting a Rain Garden Workshop at Hobbs State Park on Saturday, April 2nd where you can learn how to build your own rain garden with a mini-grant from us. War Eagle Appreciation Day will be held at Withrow Springs State Park again this year on Saturday June 4th. This is a great family event that includes educational float trips, nature hikes, and exhibits as well as free lunch and music. Let us know if you are interested in attending any of these events and would like more information.

Bryant Baker

Program Coordinator

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War Eagle Appreciation Day features many educational exhibits such as this one about aquatic insects.



Beaver Water District



How Do Floods Affect Water Quality?

If you have ever driven over a creek after a big rain in this area, you probably noticed it was not flowing its usual clear or hazy blue color. No, it likely looked like flowing chocolate milk. Of course, it would taste a lot like mud rather than chocolate, which is because during flood events water becomes very good at removing rocks and soil from the landscape and transporting them downstream. Additionally, the stream itself can cut into the land during the process of streambank erosion. When water picks up soil and gravel from streambanks, dirt roads, or disturbed areas, we then call it sediment. So what you see in the picture to the right is sediment, which used to be valuable soil or road material. The real question is, what is the problem with sediment? Well, sediment is the number one pollutant to Beaver Lake. In simple terms, water with more sediment in it costs more to treat. All of that



good soil likely had some nutrients, too, causing algae to grow more in the lake, which also increases treatment costs. However, large sediment loads in streams such as War Eagle Creek can cause problems in the watershed before it ever reaches the lake. Water is more erosive when it is carrying sediment, especially gravel. In the December flood, the War Eagle's flow peaked at almost 50,000 cubic feet per second. Imagine a cubic foot of water as roughly the size of a basketball. So think of 50,000 basketballs worth of water, which are full of sediment, hitting the streambanks...every second! That is why streams can so easily eat away at a property. Fortunately, healthy vegetative buffers along streams can help hold the soil in place, even during a flood.

BMP Spotlight: Alternative Watering Sources

Cattle grazing is an important agricultural practice in our watershed. There is a good chance that if you are reading this, you graze cattle on your property. If so, you also know how important providing water to your livestock is, especially during the hot summer months. While streams on your property can be a source of water, they are also susceptible to streambank erosion from hoof action every time the cattle go there to drink. Not only that, but this may also mean your livestock are having to walk long distances to get water, loafing in the stream instead of grazing, and depositing nutrients from excretion in the water instead of the pasture where they are needed to drive forage growth. To prevent erosion, increase weight gain, and improve efficiency on your farm, consider limiting access to streams with fencing and providing **alternative watering sources** around your property to complement a controlled approach to grazing. There are many options in regard to type, materials, and construction of alternative watering sources depending on your property. Pump and pipe systems can be used to fill tanks, which can be made from concrete, plastic, steel, or even tractor tires. The areas around tanks will become heavily-trafficked, so it is also important to use gravel to reduce erosion in these areas. Ponds are another option as a watering source. Well-placed ponds can utilize groundwater and runoff to stay full. If you are interested in learning more about how to develop alternative watering sources for your property, contact us at info@beaverwatershedalliance.org or 479-750-8007.



Hazardous and Bulky Waste Disposal and Recycling Options

Are old tires, computers, paints, pesticides, oil, or other bulky and hazardous wastes over running your place? Benton, Washington, Carroll, and Madison Counties all have the ability to accept these items free or at minimal cost. Solid waste service providers all provide a wide range of valuable recycle, waste, and hazardous waste recycle options. Many people let old electronics, batteries, pesticides, paints, and used tires pile up. Instead of sending these unwanted items that can fit in the dumpster to a landfill, where they may sit forever, take up space, and contribute to environmental pollution, try recycling them or taking them to places that can dispose of them safely. You can contact your county's solid waste or environmental office and find out where to take them and how much disposal will cost. While many items, like 4 tires per month, are free to drop off, some items will carry a fee. If the fee is more than you can afford to pay, ask your local county provider when and if they plan to have a free bulky, hazardous, or e-waste roundup and mark your calendar! Finally, Boston Mountain Solid Waste District recently expanded their program to include the recycling of plastic shopping bags. To find out more about what your local service provider has to offer check out their websites or give them a call!

Invasive Plant Alert: Garlic Mustard

Be on the lookout for aliens as you walk through your woods this winter! Garlic mustard is an **invasive plant** that grows in forest understories in many parts of the U.S., including the Ozarks, and has become one of the most aggressive non-native plants in riparian forests. It contributes to a decline in forest health by displacing native plants, including some tree seedlings. Late winter is an ideal time to remove garlic mustard because most native herbs are dormant at this time and its dark green rosettes are easy to see and remove. The most effective method to remove garlic mustard is to simply pull plants out of the soil by their roots. Once pulled, **rosettes** can be left on the ground to decompose. However, if plants have begun to flower and are setting fruit, pulled plants need to be bagged, removed from the site, and destroyed.

Key Identifying Features: Winter **rosettes** are dark green and have kidney-shaped leaves with wavy edges. Flowering plants have triangular leaves and produce groups of small white flowers on one or more tall stalks in mid-spring.



A **rosette** of invasive garlic mustard (left) crowding out a native yellow trout-lily in early spring.



A patch of garlic mustard in full flower, invading a shaded fence row in mid-spring.



Rain Garden Mini-Grants Available

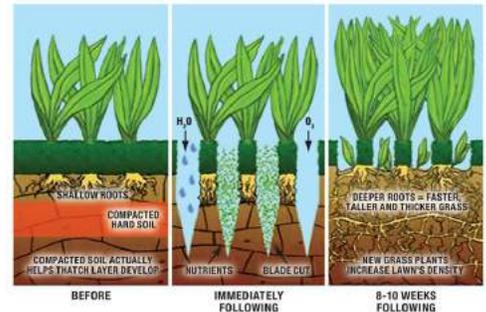
Rain Gardens have the ability to treat polluted water from runoff by allowing the water to settle in and temporarily pond instead of racing overland to creeks, streams, and rivers. Plants then have the opportunity to break down or use the bacteria, metals, and nutrients carried in the water and the water has time to soak into the soil, which naturally filters and cleans the water before it enters the groundwater supply. Rain gardens can also help offset localized flooding caused by increased **impervious** areas like sidewalks, paved roads, parking lots, and rooftops. To find out how you can apply for a grant, give us a call at 479-750-8007 or email us at info@beaverwatershedalliance.org



Cost Share Available for Pasture Renovation

Benton, Washington, Madison, and Carroll County Conservation Districts all partnered with BWA to allow cost-share on the use of pasture drills and aerators. If you are not familiar with the **pasture renovator/aerator**, it is an implement that can provide some very beneficial results – especially in times of high fertilizer costs. The use of a **pasture renovator** has been shown to decrease runoff and fertilizer loss, while also increasing forage production. If you are looking for increased forage production, and aren't planning to fertilize at a high rate – the use of the pasture renovator may be the advantage you are looking for this year. Additionally, if you are planning to fertilize but would like for more of it to stay in the pasture – the use of the aerator will do the trick!

Money is limited and going fast, so don't miss out on this great opportunity to renovate your pasture before spring kicks into full green! If you are interested in finding out more about how much cost share is available, check in with us at 479-750-8007 or info@beaverwatershedalliance.org.



Native Plants Available to Landowners for FREE!

Don't miss out on your opportunity to utilize the free native plants that we have available for landowners and land managers in the watershed to assist with creating and increasing riparian buffers, and reforesting **alluvial bottomlands** and upland areas on private lands in the watershed, like yours! Not only does increasing riparian buffers and forested areas (including urban forests like the lawn in your yard or at your business) help prevent soil erosion, offset **hydrologic modification**, and protect water quality, but it also helps improve habitat for wild turkey, quail, smallmouth, monarch's, and honey bee's. Many landowners are taking advantage of this program, and resources are limited so don't wait, check in with us today at info@beaverwatershedalliance.org or at 479-750-8007 get your order started.





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Inside:
Free trees, shrubs
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available!



Free Programs	Time	Date	Location
Streamside Management Workshop	9:00 am - 3:00 pm	03/05/16	Carroll Electric, Huntsville
Riparian Planting Event	9:00 am	03/12/16	Various locations
National Agriculture Day	1:00 - 4:00 pm	03/15/16	Northwest Arkansas Community College
War Eagle Creek Cleanup	9:00 am - 1:00 pm	03/19/16	Withrow Springs State Park
Rain Garden Workshop	9:00 am - 2:00 pm	04/02/16	Hobbs State Park Visitor Center
White River Cleanup	TBD	04/23/16	TBD

Please email info@beaverwatershedalliance.org or call 479-750-8007 to RSVP or request more information.

Free Landowner Property Visits

Are you interested in finding out more about how you can help maintain and improve the water quality of Beaver Lake and the health of its watershed, while also saving some money or improving wildlife habitat and other natural resource values on your property, then check in with us at info@beaverwatershedalliance.org or 479-750-8007 today to arrange a FREE appointment. We will be more than happy to meet with you at your convenience about your particular concerns, goals or interests. No issue is too small or too big.