



Ozark Watershed Tour

Explore Local Streams with the James River Basin Partnership

Love Your Water

The James River Basin Partnership provides exciting, hands-on environmental education to help develop a passion for the outdoors and respect for our natural resources. We believe it is never too early or too late to talk about the importance of protecting our local waterways. We're proud to partner with the City of Ozark to provide this Watershed Tour to help you understand the role you play in protecting our Ozarks streams.

For more information on our mission, projects, events and rebates, please visit www.JamesRiverBasin.com.

For information on your local storm water, please visit www.ozarkmissouri.com/151/Municipal-Separate-Storm-Sewer-Systems

Start with a Downspout Inspection

- How many downspouts do you have coming off of your home? _____
- Does the water from your downspout end up on a pervious (allowing water to pass through) or an impervious (not allowing water to pass through) surface? _____
- If you're having trouble understanding pervious vs. impervious, conduct an "in-home" science experiment by pouring water into a colander (pervious) and a bowl mixing bowl or dinner plate (impervious). Just be sure to clean-up any mess you make!

Do You Know Where the Rain Goes?

Identify your nearest storm drain. You might want look at a map online or take a walk with your parents to find out. What you find will help you with the next sections.

- Does the water from around your home run towards it? If not, where does it go?

- Where do you think water ends up once it enters a storm drain?

- What do you think would happen if pollutants like litter, motor oil, pet waste, and lawn chemicals ended up in the storm drain? Who could be affected downstream?



What's Your Watershed Address?

Your home and the storm drains on your street are all a part of your local watershed. A watershed address is similar to your street address: City - Ozark, County - Christian, State - Missouri. But what is a watershed? Simply put, a watershed is an area of land that drains to one common body of water. Watersheds are usually comprised of a complex network of creeks and streams that lead into larger bodies of water such as major rivers, lakes and the ocean. Many small watersheds make up larger drainage areas that are called "basins", like the James River basin. Everyone on Earth lives in a watershed!

What is your watershed address? On a map, find the Finley River and trace its route to the Gulf of Mexico, then write down it's long journey below. That's your watershed address!

Take a Stream-side Stroll!

The next part of your journey will take you to the O.C. in Ozark to walk the Bluff Spring Trails. There is a small spring-fed stream on the property which you can view and you even dip your feet in if it's a warm day.

Bring along a trash bag and help keep our Ozarks beautiful! As you pick up trash along the trail or stream, note the different types of trash, especially single-use plastic items like straws and other food packaging. It is estimated that 1.15 to 2.41 million tons of plastic are entering the ocean each year from rivers worldwide. We can all do our part and pick up trash before it ends up in our local streams – and take #TheLastStraw pledge to commit to reducing or eliminating using single-use plastics.

Streams are Home to More than Just Fish!

Streams are full of small organisms called macroinvertebrates that live on the stream bottom. These creatures can be seen with the naked eye, but many people are unaware of their existence and the important role that they play in the aquatic community. Macroinvertebrates can tell us a lot about the health of a stream. Certain species are sensitive to pollution and will only survive in a clean, oxygen-rich environment. Streams that are polluted or lack habitat usually have low numbers and diversity of macroinvertebrates, although there are some species that have adapted to survive under these harsh conditions.

A great resource for macroinvertebrate identification can be found on the Missouri Stream Team's website at www.missouristreamteam.org. You might also consider downloading the "Aqua Bugs" app from the Izaak Walton League before you go to help you identify these fascinating critters.

Get to Know Some "River Critters"

Find an area where you can safely access the stream. Pick up a few good sized rocks within the stream. Do you see any signs of life attached to the rocks or scurrying away as you removed the rocks from the stream?

- How would you describe this animals habitat? Why do you think it's living in this part of the stream?

- Describe one of the lifeforms that you see. How many legs does it have? How many main body parts? Are there any unique characteristics of this animal that make it stand out?

Continue Your Stream-Side Journey

Once you've finished observing life within the stream, continue along the Bluff Spring Trail. When you find yourself in a good spot near a wooded area, and close your eyes for a few minutes and listen:

- Do you hear any bird calls? If so, how different birds do you hear? _____
- What words can you use to describe what you're hearing?

- Why do you think the birds are in this area?

- Do you think it would have a positive or negative impact on birds and other wildlife if we removed the vegetation along the edge of the stream? Do you think that removing vegetation along the stream would have an effect on fish and macroinvertebrates within the stream?

The vegetation along a stream is known as the riparian corridor. A health riparian corridor holds the stream banks in place, provides cooling shade to the stream and serving as the last line of defense by capturing pollutants before they enter the stream. Riparian corridors also provide important habitat for many different plants and animals.

Congratulations! You've completed the Watershed Tour! Snap a few photos of your completed worksheets and email them to ToddWilkinson@MissouriState.edu for a chance to win one of our great prizes. Don't forget to send a picture of trash collected along the trail!