

OHIO BRUSH CREEK



OHIO
BRUSH CREEK...

THE PRIDE OF ADAMS COUNTY

FISH IT

FLOAT IT

ENJOY IT

PROTECT IT

Welcome to Ohio Brush Creek. It is a pleasure to provide this information to you. Although our focus is on Ohio Brush Creek it is important to note that regardless of where you live or what stream you are talking about, all streams are important. Most streams of any size in Ohio have been impaired by extensive development in their watershed if not directly on their stream banks. Reclaiming those areas are generally not practical due to the high cost of real estate in those areas. The Ohio Brush Creek Watershed on the other hand is mostly rural and undeveloped and therefore less impacted. This could change rather quickly and in a negative way.

What is a watershed? A watershed is any area of land that drains into a body of water whether it is a pond, lake, river, stream or ocean. Some watersheds are very small (a few acres) and others are huge (several states). An area of land can be in multiple watersheds. This location is obviously in the OBC watershed but because OBC drains into the Ohio River this same spot is considered to be part of the Ohio River Watershed also. The land use of a watershed is going to directly affect the quality of the water in that stream. There has been a lot of effort to form a Land Use Commission here in Adams County and it is critical to the future of our streams that the Commission considers the impacts of different types of land use on the streams.



A healthy stream is one that meanders or makes a series of “S” curves. The purpose of this is to slow the current down thus reducing erosion. This also creates different types of habitat such as riffles and pools. By maintaining different types of habitat you maintain diversity in the species of animals.

Many animals require very specific types of habitat in order to exist. OBC is blessed with numerous types of plants and animals, many of which are rare or endangered only because the other areas in which they naturally occurred have since been impacted by development such as stream channelization.



Heron Rookery



Glacial Conglomerate with Wild Columbine



Soft shell turtle

Another very important aspect of a healthy stream is a wooded riparian corridor. A riparian corridor is simply the area adjacent to the stream. The trees serve a multitude of functions such as stabilizing the banks with the roots, filtering excessive nutrient and sediment from surface runoff, shading the water to keep it cool, and providing valuable habitat and travel corridors for wildlife. A 50 – 100 foot wide wooded buffer strip should be maintained.



Sycamore tree roots create nesting cavities for wildlife and stabilize stream banks



Trash collected during Ohio Brush Creek Sweep

There are many impacts to OBC. The biggest is excessive sediment due to erosion. Each year nearly 1.2 million tons of topsoil is eroded from the watershed. This stream has some of the highest sediment loads in the state. This originates from crop fields, logging sites, areas lacking a wooded riparian corridor and ATV trails. In-stream gravel mining, failing home septic systems, municipal waste, livestock waste, fertilizer and pesticide runoff, illegal dumping and litter also degrade water quality.

The 2014 fish consumption advisory from Ohio EPA warns anglers about the mercury levels in spotted bass taken from OBC. Mercury, PCB's and other toxins are being passed right up the food chain through what is known as bio-magnifiers. The higher up the food chain, the more concentrated these toxins accumulate. And guess who is at the top of the food chain? That's right, you and me! A new issue that we are becoming more aware of is the pharmaceuticals that pass through the human body and through our septic systems. They are taking their toll on some of the wildlife in the streams.

Another impact throughout the entire watershed is the presence of non-native invasive species. These are plants and animals that were not originally found here and therefore lack natural predators or are able to out-compete the native species and create monocultures. Once introduced, invasive species are very difficult and costly to control. Most are accidentally introduced and spread rapidly along roadsides and streams. Garlic mustard was a new one we were just hearing about only 10 years ago. Now it is abundant along much of OBC. Zebra mussels are often considered to only be a problem for Lake Erie. They are now abundant in the Ohio River including the backwater of OBC. Other common invasive species throughout the watershed include but are not limited to: Bush honeysuckle, Autumn-olive, Multiflora rose, Tree-of-heaven, Japanese knotweed, Poison hemlock, Johnson grass, Asian clam, and Carp.

Adams SWCD partners with numerous agencies such as USDA Natural Resources Conservation Service, OSU Extension, Adams Brown Recycling and Litter Prevention, Adams County Farm Bureau, Ohio EPA, The Edge of Appalachia Preserve, other county SWCD's, and many of the different divisions of Ohio Department of Natural Resources. Together we provide environmental education to the public, particularly to our youth, through events such as Conservation Field Days, Fishing Days, Envirothon, Conservation Consortium at the county fair, field trips to the Edge of Appalachia Preserve, creek sweeps, and summer science camps, just to name a few.

We promote and assist landowners in applying conservation practices to their property such as, livestock exclusion fencing, riparian buffers, livestock stream crossings, alternative watering systems, cropland conversion to hay or pasture, etc.



Other ways that we can help is to form a watershed group made up of volunteers that are interested in protecting OBC from further degrading. Many watersheds throughout Ohio have such groups and are very successful in helping to protect the water quality.



Canoes purchased with grant from ODNR Division of Watercraft

The nearest one to our area is The Friends of Scioto Brush Creek. They are dedicated to "helping maintain and improve the water quality of Scioto Brush Creek through education, awareness and the involvement of local residents".

Another way to help the stream is to promote paddle sports (canoeing / kayaking). Paddle sports in Ohio increased 34% from 2003-2009 according to ODNR Division of Watercraft. We have found that those that enjoy this type of low impact recreation are the same individuals that are interested and willing to help protect it. This group as a whole generally practices the "leave no trace" policy while boating or camping. In order to better utilize this natural resource we need to provide better public access. The access for today's excursion was provided by private landowners allowing us to use their property for the put-in and take-out points. Wouldn't it be better for everyone if we could develop good public access points to get more people on this beautiful stream and boost tourism in Ohio?



Ohio Brush Creek Sweep

In summary we need to be more proactive in protecting OBC. It is far more cost effective to maintain it as is than to try to fix it after it has been impaired. We all make decisions both at home and at work that have the potential to affect the watershed in some way. Whether it's your call as to which field trips to fund for the school kids, or overseeing the placement of a culvert that could restrict the movement of fish up stream, or making the decision to mow roadsides before seed dispersal of an invasive species, we all need to work together to help protect Ohio Brush Creek.

THIS IS WHAT WE DO TO KEEP OHIO BRUSH CREEK
HEALTHY AND BEAUTIFUL



2014



2013



2012



2011



2010



THE FRUITS OF OUR LABOR

Ohio Brush Creek Sweep

Every year volunteers have given of their time to get in a canoe and get dirty picking up trash on Ohio Brush Creek. The most recent Sweep was held on May 9 this year. During the twenty-three years of conducting the Ohio Brush Creek Sweep there has been approximately 50 tons of garbage removed from the creek. Adams Soil and Water, along with Adams Brown Recycling and Litter Prevention and assistance from other partnering agencies have facilitated this event since 1992.

It's working. We are pleased that the total trash removal from this year's Sweep, like last year and some years before, was less than what we typically experienced in the early years of conducting the Ohio Brush Creek Sweep. Why is there less trash? Is it because we have cleaned this section before? Is it because it is located further up in the headwaters of the stream? Is it because litter laws are stricter than before or there is more enforcement of them? Is it because it is no longer socially acceptable to litter? Is it because residents are taking more pride and ownership of the watershed? Is it because there are some individuals taking it upon themselves to clean up the creek while they are out paddling the creek? The answer is all of the above. There is no one thing that can be credited to a cleaner stream. It takes the effort of everyone to make it that way and keep it that way. Thanks to all of you that help keep our streams clean.

The health of our stream is directly related to the land use of the watershed. Since the entire watershed is rural we lack the problems associated with industry like you find in the urban areas. A major factor in maintaining good water quality is having a forested riparian area. The riparian area is simply the area along the stream. By having trees growing along the stream it does many things such as: filters surface runoff, stabilizes stream banks which prevents erosion, shades the water keeping the water cooler, as well as providing valuable wildlife habitat by providing food, cover, nesting cavities and travel corridors. Results of water sample tests confirmed that Ohio Brush Creek is one of the cleaner streams in the state.

Thanks to grants provided by ODNR-Division of Watercraft and OEEF we were able to purchase 16 canoes and equipment needed to facilitate these events. In addition to the Sweep, the canoes are used for boating safety education courses as well as a variety of other educational canoe floats. Partnering agencies in Adams and surrounding counties have benefited from these canoes because of the various events that Adams SWCD participates in, and much of the general public has been exposed to Ohio Brush Creek through the annual Sweep and a host of other educational events.

OHIO BRUSH CREEK WATERSHED FACTS

Watershed size: 278,400 acres

Ohio Brush Creek length: 57.1 miles

Watershed area by county:

Adams = 68%

Brown = 4%

Highland = 23%

Pike = 4%

Ross = 1%

Primary land use groups:

<u>Use</u>	<u>Acres</u>	<u>Percent</u>
Cropland	107,090	38.5
Pasture	58,412	21.0
Forestland	95,687	34.4
Other farmland	15,426	5.5
Other land	1,785	0.6

FACTS:

- 1,184,466 tons of soil leave fields each year as the result of sheet and rill erosion
- 263,000 tons of soil reach the Ohio River each year
- 125 rare plant and animal species can be found living in the watershed
- Over 100 illegal dump sites are located in the watershed
- Four major bedrock types can be found in the watershed