

Beargrass Creek

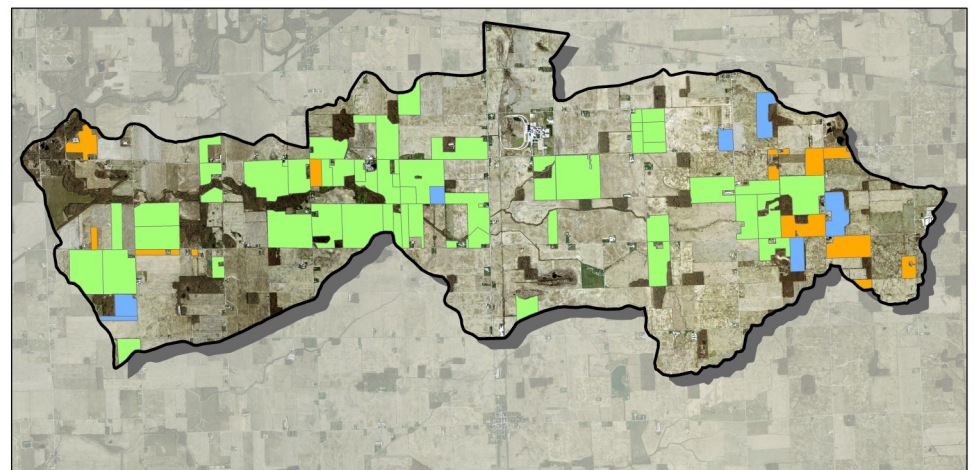
WINTER 2016

Continued Involvement in Beargrass Creek

Since 2009 continuous research has been conducted within Beargrass Creek watershed.. Research began with the initial section 319 grant funded through IDEM to analysis a section of the Eel River watershed in terms water quality managements.

With initial result from the 319 grant, it was clear that Beargrass Creek was a complex agriculture watershed and that it needed a more in-depth analysis. In 2013. a paired watershed grant began to analysis Beargrass Creek more extensively. This grant led to federal multi agency grant from the environmental defense fund (EDF) funded grant to start in 2014. Since then intensive water quality monitoring has been conducted looking at pollutant loading, fish communities structure, and habitat evaluation. All these analyses have provided many benefits about the current health of Beargrass creek.

Most recently a new 319 grant was awarded and focused completely on Beargrass Creek watershed. This new grant comprises of cost share money provided to local producers to implement agriculture best management practices (BMP) targeted at reducing pollutant loading to the stream. With this new grant implementing BMPs across the watershed. Other grants will document the net benefit from the practices. All grants help build upon each other and provided new insight into the watershed.



2016 Beargrass Creek Watershed Winter Cover

Legend

-  Cover Crops: 2,902 Acres
-  Hay: 378 Acres
-  Winter Wheat: 264 Acres

0 2.5 5 Miles



New Beginnings



Dylan Scott was hired as the 2016—2017 Environmental Studies Scholar. Dylan graduated in the spring of 2016 and is eager to be a part of the research going on at Manchester University. Graduating with a degree in both biology and environmental studies, Dylan is open to a large assortment of research

areas. Dylan enjoys camping, hiking, and playing the drums. During his time as the scholar position, he will continue to develop field and writing research skills, and be a key contributor to helping build a healthier environment within our ecosystem. This opportunity will provide an insight to technologies, meth-

ods, and networking opportunities that will enhance further his future professional career. Dylan stated “I look forward to this upcoming year with great optimism for the chance to learn, teach, and grow as an individual”. We are very glad that Dylan joined our team and will help further the mission of Manchester University Projects!!

Non-point source pollution and you

What Is Nonpoint Source Pollution? Nonpoint source pollution, unlike pollution from point sources such as industrial and sewage treatment plants, comes from many diffuse sources. Polluted runoff is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into watersheds through lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. It is the leading cause of impaired waters nationally.

Why Should I Care About It? Chances are that you don't have to look any farther than your neighborhood stream or pond. Water pollution in your town, and perhaps in your own backyard, can result in anything from weed-choked ponds to fish kills to contaminated drinking water. The bottom line is that both polluted runoff and its management are likely to affect you.

What Causes Polluted Runoff? We all do. Polluted runoff is the cumulative result of our everyday personal actions and our local land-use policies. Major types of pollutants are listed below.

Pathogens: Pathogens are disease causing microorganisms, such as bacteria and viruses, that comes from the fecal waste of humans and animals. Exposure to pathogens, either from direct contact with water or through ingestion can cause a number of health problems. Pathogens wash off the land from animal waste and can also enter our waterways from improperly functioning septic tanks and leaky sewer lines.

Nutrients: Nutrients are compounds that stimulate plant growth, like nitrogen and phosphorous. Under normal conditions, nutrients are beneficial and necessary, but in high concentrations, they can become an environmental and health threat. Over fertilization of ponds and lakes by nutrients can lead to algae blooms, the decay of which can create odors and rob the waters of life sustaining dissolved oxygen. Nutrients in polluted runoff can come from agricultural fertilizers, septic systems, home lawn care products, and animal wastes.

Sedimentation The most prevalent source of water pollution is soil that is washed off fields. Rain water carries soil particles (sediment) and dumps them into nearby lakes or streams. Too much sediment can cloud the water, reducing the amount of sunlight that reaches aquatic plants. It can also clog the gills of fish or smother fish larvae. In addition, other pollutants like fertilizers, pesticides, and heavy metals are often attached to the soil particles and wash into the water bodies, causing algal blooms and depleted oxygen, which is deadly to most aquatic life. Farmers and ranchers can reduce erosion and sedimentation by 20 to 90 percent by applying manage

What lurking around Beargrass Creek





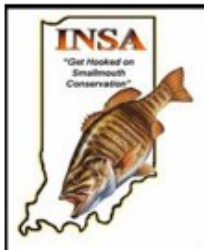
THANKS TO ALL OUR PARTNERS!!!



Local Farmers/Land Owners



Miller's Canoe Rentals



North Manchester Center for History

County Highway Departments



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