

# Why Land Restoration?



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As people, we often think of ourselves first, asking how things benefit us. With plants and animals we have a tendency to wonder, “what is the point of some species?” The answer to those questions is actually quite simple. First, realize everything that benefits our natural systems is beneficial to us. We come from nature, just like every other living thing on the planet, so we are inherently dependent on it, whether we want to believe that or not. Secondly, the

*Mountain Mint (small white flower-lower, right of photo), Rattlesnake Master (the other white flower), Yellow Coneflower, Bee Balm (small purple flower), Pale Purple Coneflower (the other purple flower)*

point of life seems like more of a philosophical question, but the mundane truth is, the point of all life is simply to exist or to continue to live. For all life, that means doing everything you can to ensure your own survival in order to create future generations which will perpetuate your species. As a species, human beings have seen many things go extinct during our short stint on Earth. When conditions favorable to a species change too rapidly, the threat of extinction increases, which is why our interaction with the planet is so important.

Whereas with most articles we describe the processes involved in ecological restoration or discuss some plant or animal in detail, this time I thought maybe we'd get into the valuable unseen benefits of restoration work. By taking on landscape-scale ecological restoration projects, we're essentially repairing our natural areas to become more diverse and higher functioning quality habitats. Having diversity leads to a higher density of various plant species, which benefits all kinds of insects, birds, and other wildlife. That diversity, when compared to a parking lot, or even our lawns, does a much better job of capturing carbon. Photosynthesis is trading carbon for oxygen, and that naturally-occurring process makes our air more breathable, which is a good thing if you live on this planet.

When we burn our prairies or woodlands, there is obviously a carbon release. However, the amount of carbon captured during the following growing season in the above-



*Yellow Coneflower, Prairie Blazingstar (purple flower), Rattlesnake Master (white flower)*



*Wild Quinine (small white flower), Bee Balm (small purple flower), Pale Purple Coneflower, Yellow Coneflower - Jarrett Prairie Preserve (main site)*

ground structures of the plants, along with increased root mass, more than makes up for the carbon lost, resulting in a gain of natural carbon storage. Those large root masses, much larger than any mowed lawn at up to 14 feet deep, act as a massive underground filtration system for our water. As silt, carrying nitrates and other pollutants, is swept by water towards our rivers, streams, and drinking aquifers, root mats help to slow the erosion of our soil and trap harmful nitrates and pollutants from entering our waterways. The process doesn't end there, the nitrate-filled silt becomes intermixed with dead or dying root matter and nitrogen-fixing bacteria found in native legumes breaks down harmful pollutants, which combines with dead organic matter, forming a brand-new, highly fertile soil layer. Drinkable water and fertile soils are both good things if you live on this planet.

Not everyone is going to hike or walk their dogs or cross-country ski in our natural areas. Everyone isn't going to enjoy the wildflowers or go bird-watching either. However, realize everyone needs to breathe air, eat food, and drink water at some point in order to exist. Although the immediate goal of restoration is to see the native species of our natural areas flourish, the fundamental goal is to encourage our natural areas to function at a level which is exceedingly supportive of all life, which includes us. Land restoration is a good thing if you live on this planet.



Prairie Blazingstar at Howard Colman Hall Creek Preserve



Cream False Indigo and Pale Purple Coneflower at Jarrett Prairie Preserve

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