A Vision for Biodiversity in our Region

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They have been gathering for years to advocate for nature in Northeast Ohio. They are park rangers, wetlands biologists, wildlife specialists, and conservationists getting their hands dirty on a daily basis in natural areas. Increasingly, they have become the voice for nature in a region that has lost many acres of forests and wetlands to unplanned development.



A corps of khaki-clad and shovel carrying members of The Lake Erie Allegheny Partnership (LEAP) offer what it means to be good stewards. In January, after a prolonged discussion, LEAP issued counsel on ways to conserve nature in the future.

It begins with why biological diversity matters.

"Think about clean water and clean air and pollination services," explains former GreenCityBlueLake Institute Director, David Beach, who managed the project for LEAP. "There are a lot of ecological services that nature provides to us for free, that we can't duplicate."

Trees and streams provide shelter for insects, fish and birds. A forest or a river is a complex food web. The timing of migratory patterns are not mutable; if insects hatch a few weeks early, birds arrive famished and, without food, will not survive.

"We are worried," the LEAP report states.

The warning stems from new data that suggest the region's natural systems are in declining health. What concerns LEAP most is a loss of habitat for birds, bees, fish and insects, and the arrival of climate change in Northeast Ohio.

The <u>LEAP Regional Biodiversity Vision</u> seeks to get out ahead of the threat. It calls on community leaders and individual property owners to build natural defenses. Specifically, LEAP proposes that Northeast Ohio adopt these five priorities:

- Preserve large blocks of natural land
- Link natural areas
- Reduce habitat fragmentation
- Reduce the other stresses on nature
- Prepare for a changing climate

It will be especially important to help Ohio's forests and natural areas adapt to climate change. LEAP tapped data from the U.S. Forest Service's 2018 predictive model about which trees will survive — and which will struggle.

"Imagine, under the worst case (carbon) emissions model, our region could have 129 days a year hotter than 86 degrees," Beach says about the models that show average temperature, measured in Fahrenheit, spiking in the summertime. "Imagine more than four months a year of sweltering summer heat, day after day. The composition of our forests could change dramatically."

The great strength of the LEAP Vision is how it recognizes the patterns that work with nature.

"Nature doesn't obey local boundaries," says Beach. "You need to look at a larger 'ecoregion' to protect biodiversity."

The keys to conserving biodiversity in the future will be to protect larger blocks of natural areas and then to connect those blocks across the landscape with corridors for plant and wildlife migration. The LEAP Vision proposes four, mega-corridor possibilities — river valleys, the Lake Erie shore, the Portage Escarpment and the divide between the Lake Erie and Ohio River watersheds.

With climate change throwing all previous assumptions on their head, the region had better be prepared to absorb the punch of a more violent climate.

"We need to give nature more room to move and adapt," Beach says.

LEAP members plan to offer presentations to regional decision makers, as well as the general public, to share what they've learned from their efforts, says LEAP member and Cleveland Museum of Natural History Associate Director of Natural Areas, Renee Boronka.

"We all need to come together and make better choices to maintain and improve the native habitats of Northeast Ohio," she concludes.

For a wealth of resources on how climate change will affect our region, please visit www.leapbio.org.

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