Land of opportunity: Cleveland empty lots yield environmental benefits

Decades of population losses have left the city of Cleveland with 3,600 acres of vacant land, while some 1,000 homes are demolished every year.

Currently, Cleveland plants turfgrass on empty lots, but it’s expensive to maintain and offers few benefits. “Alternative plant communities could offer greater environmental benefits such as support of biodiversity and improved storm-water infiltration to reduce flooding,” said Ohio Agricultural Research and Development Center entomologist Mary Gardiner.

Last year, Gardiner started a large-scale, never-before-attempted project that examines the impact of eight different landscape treatments on the biodiversity and ecosystem function of 64 empty lots in eight Cleveland neighborhoods. The five-year project’s main goal is to gather data that will inform future green space design in Cleveland and other cities engaged or interested in vacant-land management.

“With the right combination of plants and increased ecosystem services, urban vacant land can be seen as an asset for community development rather than as an eyesore,” Gardiner said.

More: ale.cfaes.ohio-state.edu/home
As the research arm of The Ohio State University’s College of Food, Agricultural, and Environmental Sciences (CFAES), the Ohio Agricultural Research and Development Center (OARDC) employs nearly 650 scientists and staff members throughout the state.

Ohio State’s Wooster campus is the largest agbioscience research facility in the U.S. OARDC scientists work closely with researchers in Ohio State’s Colleges of Education and Human Ecology, Medicine, Public Health, Veterinary Medicine, Biological Sciences and Engineering.

At any given time, OARDC researchers are engaged in nearly 400 research projects. Primary focus is in three signature areas:

- Advanced Bioenergy and Biobased Products
- Environmental Quality and Sustainability
- Food Security, Production, and Human Health

The Ohio General Assembly established OARDC as the Ohio Agricultural Experiment Station in 1882. It is supported by a line-item appropriation from the Ohio General Assembly, competitive grants, gifts, contracts, federal grants and other sources. OARDC uses these funds to provide direct research support and economic development for Ohio’s annual $100+ billion agbioscience industry. OARDC is not funded by student tuition or any other general funds of The Ohio State University.