The city of Ann Arbor, Michigan contains 1,200 acres of natural areas in its park system. The staff is committed to protecting and restoring the native, and in some cases, state-endangered plant and animal species living among the undeveloped parkland. Unfortunately, non-native invasive species, including garlic mustard (Alliaria petiolata), have also populated these areas and pose a threat to the multiple ecosystems within Ann Arbor’s borders.

Challenge:
Garlic mustard originally migrated to the U.S. from Europe in 1862 as a potherb, used for culinary and medicinal purposes. It’s a biennial herbaceous plant and thus survives through one winter season. It is also a self-germinating plant, which means one plant can reproduce on its own. Seeds can remain viable in soil for up to seven years. An aggressive plant, with no natural enemies in the United States, it quickly escapes from gardens and private landscapes, establishing dense stands and wiping out native vegetation. In 1993, when the City of Ann Arbor parks system established its Natural Area Preservation (NAP) department, garlic mustard had already carved out its place in the community.

Solution:
Every year NAP works with volunteers to push back invading garlic mustard from targeted natural areas in and around the city. The control program began eight years ago and is designed to identify, inventory and minimize invasive plants in Ann Arbor’s natural areas. The team in charge of the program has managed to create completely weed-free zones in their highest quality nature preserves. With these areas clear of garlic mustard, the staff is now focusing on pushing back the invading line of garlic mustard every year.

This spring they will host the 8th annual “Garlic Mustard Weed-Out Day,” when Boy Scouts, Girl Scouts, schools and other community members spend a few hours voluntarily pulling garlic mustard. The first year the group pulled 3,400 pounds of garlic mustard from the ground, and now continues to pull more than one ton each year.

Result:
Old and young alike have taken pride in weed pulling and the chance to enhance the ecological health of Ann Arbor. Every year, volunteers move the visible line of invading garlic mustard back by at least 50 feet in numerous natural areas. While the city of Ann Arbor has a lifetime of work ahead managing the existing species that encroach on the fragmented ecosystems in its park system, they also keep a vigilant eye on new invaders – brought into the U.S. by people unaware of the problems associated with invasive plants. With routine plant and animal inventories at the top of the preservation team’s list of priorities, “weed-free” zones have a strong shot at staying that way in the long-term.