

## AmeriCorps Joins Forces with WMU's Natural Areas Program



AmeriCorps NCCC is a government-funded national service program consisting of young adults, ages 18 to 24. Their main areas of focus include, urban and rural development, infrastructure improvement, energy conservation, environmental stewardship and conservation, and natural and other disasters. This AmeriCorps team worked with the WMU Landscape Services Natural Areas Program from May 19 to June 30, 2011.

Listed from left to right: Back row: Jaymie Scott, Chicago, IL; Kaylea Bridwell, Vancouver, WA; Nastassia Donoho, Portland, OR; Kenya Johnson, Boca Ranton, FL; Middle: Dan Craig, Allen Park, MI; Kellie Olson, Portland, OR; Front: Jordan JimCoily, New Orleans, LA; Rico Hernandez, Austin, TX.



Kazoo School presents research on Japanese Knotweed, an invasive species

Kazoo school students are presenting a research project on Japanese Knotweed in collaboration with researcher, Joe Dauer, from MSU. Japanese Knotweed is a highly aggressive invasive species which is very problematic due to its ability to establish itself in riparian areas. It is a growing problem at Kleinstuck Preserve as well as across the nation. Kazoo school, a neighbor to Kleinstuck Preserve is looking at various methods of eradication of this species.



Nate Fuller explains planting methods at Kleinstuck

Nate Fuller is the Conservation and Stewardship Director for the Southwest Michigan Land Conservancy. He came to Kleinstuck Preserve to teach AmeriCorps how to properly plant native vegetation.





AmeriCorps building a new trail at Kleinstuck

AmeriCorps built a new trail to a bench overlooking the marsh at Kleinstuck Preserve in order to direct visitors and prevent trampling of native vegetation. They used downed trees as a trail border.



Jordan JimCoily and Rico Hernandez removed a giant tree stump blocking the trail

Jordan and Rico worked very hard to remove this stump for visitors' safety.



AmeriCorps worked with a St. Augustine class to clear invasive vegetation and plant native vegetation in an area of Kleinstuck

Mr. Maihofer's 7<sup>th</sup> grade class from St. Augustine Cathedral School adopted this area of Kleinstuck Preserve. With guidance from AmeriCorps, they learned proper ways to remove invasive vegetation, and then planted native vegetation grown in WMU's Finch Plant Science Greenhouse. They will continue to care for this area.





AmeriCorps pulled the invasive species, garlic mustard, with volunteers from the Michigan Church of God

Every year, the Natural Areas Program has a “BIG PULL.” With the help of 100+ volunteers, we target the most problematic populations of garlic mustard at both Asylum Lake and Kleinstuck Preserve. This year, AmeriCorps helped with our “Big Pull” by leading high school student volunteer groups.



## **BEFORE**

Garlic mustard in Kleinstuck

This was an area in Kleinstuck Preserve in which invasive species garlic mustard had crowded out all other native vegetation and produced a monoculture. AmeriCorps pulled garlic mustard for a full day in this area.





**AFTER**

No more garlic mustard!

AmeriCorps made a huge difference in this area by removing the garlic mustard. It now resembles a healthier habitat, and there is room for native wildflowers to grow.



Celebrating their victory in the garlic mustard decomposition hole!

This is a giant hole which was dug at Asylum Lake to use as a garlic mustard decomposition site. We are hoping to be more sustainable by experimenting with this method, rather than using garbage bags and sending the plant debris to a landfill.



The top left photo shows Rico Hernandez removing glossy buckthorn, an invasive, from Asylum Lake. The other photos are taken on WMU's campus at Goldsworth Valley Pond where AmeriCorps removed Canada thistle, another invasive which was crowding out native vegetation around the pond.





Two WMU students developed native landscaping plans for the WMU Gibbs House for Environmental Research and Education with the overall goal of making the yard more sustainable. They wanted to reduce the use of resources and creation of waste, increase native flora and fauna biodiversity, and create an example of urban native landscaping. With the help of AmeriCorps they added native planting plots which increased food and habitat for native wildlife and minimized grass cover.



The beginning of an erosion control project

Many of the trails at Kleinstuck and Asylum Lake are severely eroded due to the shape of the landscape, human traffic, stormwater flow, and other natural elements. AmeriCorps used water bar techniques to repair and close the eroded trails. As these water bars collect soil and debris, plants will colonize the area and prevent further erosion.



Creating a new trail to replace an eroding trail

Kellie Olson of AmeriCorps is working on raking and lining a new trail so visitors can more safely walk through Kleinstuck Preserve.





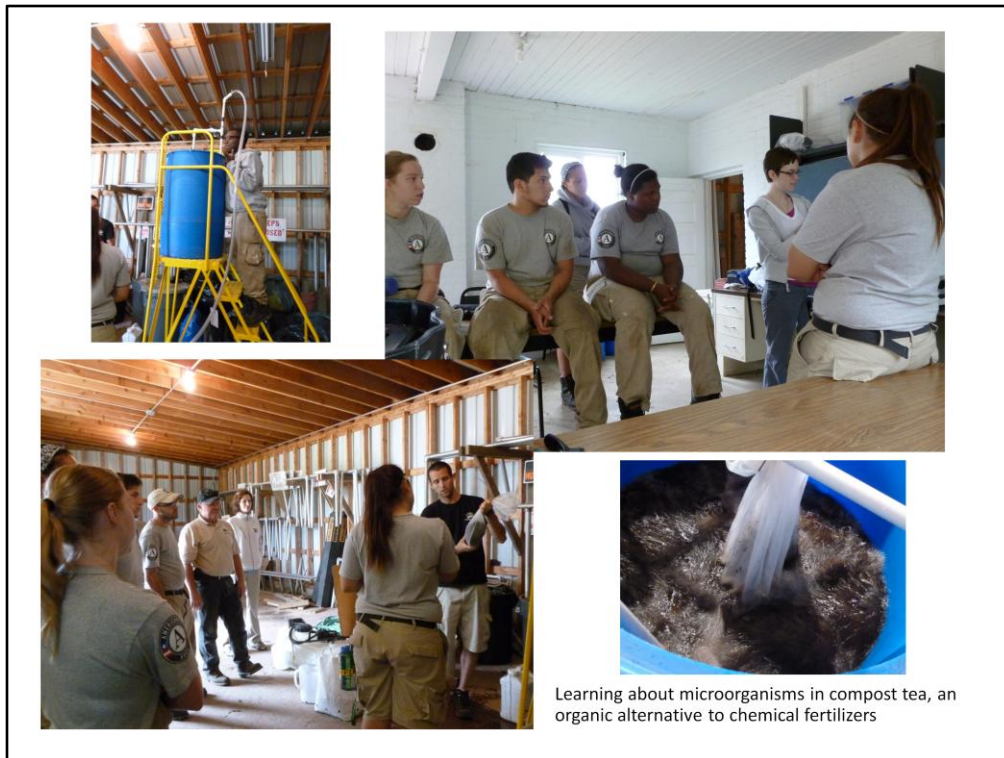
Carrying logs to fix an eroding trail at Asylum Lake

AmeriCorps used a log carrier to transport fallen logs at Asylum Lake. They used these logs and other natural debris from the forest floor to repair two eroded trails at Asylum Lake Preserve.



One project complete!

Educational signs at Kleinstuck Preserve and Asylum Lake Preserve to inform visitors about our ecological restoration projects.



Learning about microorganisms in compost tea, an organic alternative to chemical fertilizers

WMU's Landscape Services has recently been researching and experimenting with compost tea, an organic alternative to chemical fertilizers. There are test plots on campus set up to monitor the effects of compost tea and other fertilizers on the grass. We hope to one day be able to increase the sustainability of campus by using homebrewed compost tea on all campus lawns. AmeriCorps spent a day learning about the benefits of compost tea and how it is being used on WMU's campus.





The area known as Lawson Woods near Lawson Ice Arena has been transformed immensely thanks to the hard work of AmeriCorps. AmeriCorps removed invasive shrubs and planted native wildflowers and grasses. Once a dense forested area full of invasive vegetation, it is now easy to walk through, improving student and visitor safety on campus.



AmeriCorps taught the Stewards of Kleinstuck about erosion control

The Stewards of Kleinstuck (SoK) are a local volunteer group dedicated to improving the ecological health of Kleinstuck Preserve. They lead volunteer workdays at the preserve every first and third Sunday of the month. At this particular workday, AmeriCorps joined SoK to teach them about erosion control methods, and together, they repaired an eroded trail at Kleinstuck Preserve.



Field trip to Tillers International to learn about sustainable agriculture

WMU incorporated many educational opportunities for AmeriCorps during their time with the Natural Areas Program. We took a field trip to Tillers International where they learned about sustainable farming methods and then participated in volunteer work for the afternoon.





We were very fortunate to have so many professors and staff volunteer their time to educate AmeriCorps. Top left-Cari DeLong, WMU Natural Areas Manager teaches AmeriCorps about the importance of native plants. Top right- Steve Keto, Landscape Services Supervisor talks about invasive honeysuckle at Asylum Lake. Bottom right- Dr. Ide, Biology Dept at WMU, talks about his research on pesticides. Bottom right- Kristin Schinske, WMU Natural Areas Field Supervisor teaches AmeriCorps about threats of invasive vegetation at Goldsworth Valley Pond.

Of course, we have fun too!



WMU's Natural Areas Program is very thankful for AmeriCorps' hard work at the natural areas and on campus. We hope AmeriCorps had a wonderful experience here at WMU.