



University of Toledo students had witnessed the good in restoring both natural and human assets through service learning opportunities at local nature preserves and native plant installations in Northwest Ohio. They wanted to bring this message into view on campus for those who were missing the opportunity to interact with these projects.

As a result, Greening UT through Service Learning (GUTS) became a student-led initiative to replace select areas of turf grass across campus with native plantings. GUTS began as a senior capstone project led by undergraduate Jeanna Meisner in the Department of Environmental Sciences. She was then joined by graduate student Jessica Collier and advised by Jon Bossenbroek and myself as the project moved forward.

GUTS was made possible with funding provided by the Student Green Fund, which is generated by a \$5 optional student fee each semester. The fund finances student-led projects focused on making the University of Toledo more sustainable. Approval of the GUTS proposal marked the first time SGF funded a paid position for students on campus. This is a remarkable new direction for how the fund would be allocated. To date, SGF has funded \$38,000 worth of GUTS proposals, which is not small change!

Meisner began inventorying existing installations and determined potential sites for installations. We were also able to purchase the first round of supplies for our projects. Linnea Vicari, the 2017 UT recipient of the Oak Openings Region Chapter Wild Ones Student Award, and Hannah Blice joined shortly thereafter and began to work with Department of Environmental Sciences volunteers. Their first tasks were to clean, stratify and germinate seed that had come from my home, along with native seed donated by MetroparksToledo. We were also able to obtain greenhouse space in the Plant Science Center and students began

*Students plant little bluestem (*Schizachyrium scoparium*) and wild columbine (*Aquilegia canadensis*) at Carlson Library. The area features select species in a formal planting, yet sets a firm break for a less formal planting.*

Greening the **University of Toledo** *through service learning*

By Todd Crail

All photos courtesy Todd Crail

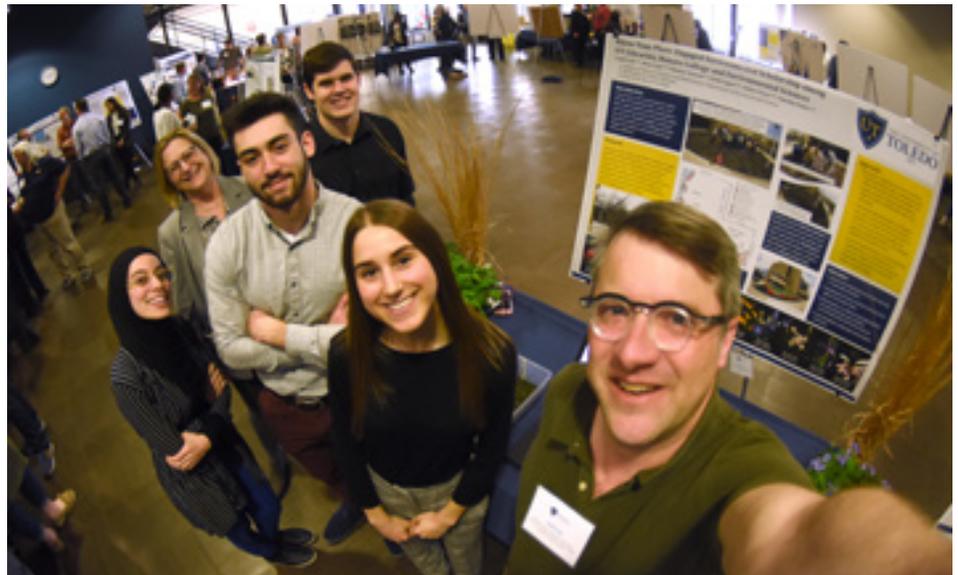


Above: Year two of a prairie installation in front of the Bowman-Oddy Science building. Right: Students in the *Know Your Place* course presented at the University's Community-Engaged Research Symposium where they discussed native plantings with University neighbors, partners, professors and administrators, including University President Sharon Gaber.

documenting the lessons we learned as we went along.

Once we began to understand processes and expectations, the GUTS project team connected with students in DES environmental courses to host their own service learning events. By participating in an event, students gained experience relevant to their program, while providing GUTS an on-going stream of volunteers. Service-learning tasks included collecting native seeds from native gardens across campus, cleaning those seeds, "bumping up" young plants, and planting inside garden plots.

Each semester, the service learners discover that native prairie plants work with the ecosystem,



rather than fight against it. They learn these plants have root systems that can store as much carbon as a forest while balancing water and nutrient cycles, removing the need for fertilization and watering. They learn these plant species also feed the ecosystem through food web interactions with insects and birds. They learn that ultimately, these installations reduce the costs of main-

taining a landscape, and we hope to demonstrate to them that this different aesthetic is acceptable, if not beautiful and inspirational.

But this isn't just about how we shape the student volunteers or the landscape. The deepest impact that we have is on the GUTS employees themselves. Each student employee has been forced outside their comfort zone by leading their peers in these



efforts. They are suddenly “the adult in charge” and the effect on their confidence has been exciting to watch.

Perhaps most so for Bernadette Barror, the 2018 UT recipient of the Wild Ones Student Award. Barror loves greenhouse husbandry, the quiet sanctuary of nurturing plants and cleaning seeds, but was unsure of herself in a leadership role. She felt comfortable enough with seed cleaning that she was ready to take on a group, and then quickly discovered she only needed to know a little more than her participants to be seen as their leader. She learned that it was very easy for her to talk to her peers about why it all was important to her because she was discussing her passion. And she hasn’t stopped since. Barror regularly attends the local Wild Ones chapter programs and is volunteering on their native plant sale in order to earn a second year membership to Wild Ones.

Has the project worked? We are proud to say that in two growing seasons GUTS has grown and planted 20,000 plugs across campus

among nine installations, successfully installed a half-acre prairie from seed, convinced the grounds maintenance crew that this is a viable landscape cover, and worked with approximately 300 participants compiling nearly 1,000 hours of service learning time. We needed to add additional personnel to meet service learner demand and fill spaces left by students who are graduating. Most of all, GUTS has created nearby outdoor classrooms with easy access from traditional teaching spaces that have caught the attention of the campus community.

Our flagship 2019 project is a high-profile garden complimenting the Carlson Library renovation. We were able to leverage past SGF investment to get the Library to match the project costs 60/40, where their investment is largely the materials and our buy-in is time and knowledge. Best yet, the project involved an Honors College class (called “Know Your Place,” an exposure to their local county environmental issues) that did the planning, growing,

Service learners help stratify, germinate and bump up native plants for GUTS installations, as well as place the plants in native installations across campus.

planting and interpretation. Through this experience, the students gained a campus-wide audience with whom they can explain why we should be investing in projects such as this. Over 1 million people per year will walk by this new installation.

Our work was also recognized by the Wild Ones Oak Openings Region Chapter through a Native Landscaping Award in 2018. Outside recognition helps to make the effort real to the students. We are thrilled to have received it from our local chapter and also by National through this article in the *Journal*. We look forward to the days ahead as we train a new generation of champions for our local natural resources!

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