

Bee Campus USA - The University of Texas at Dallas

Report on 2022

Pollinator Habitat Creation & Enhancement

To increase and enhance pollinator habitat on campus students worked together to establish and maintain pollinator gardens, no-mow areas, and a 13,000 square foot vegetable garden. In a neglected area near the sustainability office, students took the initiative to plant a 100 square foot pocket prairie with native plants that will provide habitat and floral sources for pollinators. Students also maintained existing pollinator gardens on campus near our community garden, library, and apiaries. In collaboration with the City of Richardson, our sustainability office sponsored the planting of campus medians with wildflowers to provide nectar sources for pollinators and encourage passerby to learn more about our Bee Campus program. In partnership with the committee and the sustainability office Facilities Management cared for our monarch waystation and disc golf course which brings people together to enjoy pollinators, athletics, and the outdoors. Students also continued efforts in our Eco Hub vegetable garden which provides a floral source for pollinators as well as produce for our student food pantry. Students also assisted in installing a new campus apiary next to the Eco Hub. Students engaged in these activities gain hands-on experience protecting pollinators and understanding their needs.

How many habitat projects did you help to create or enhance last year?

8

How many total square feet of habitat were created or enhanced?

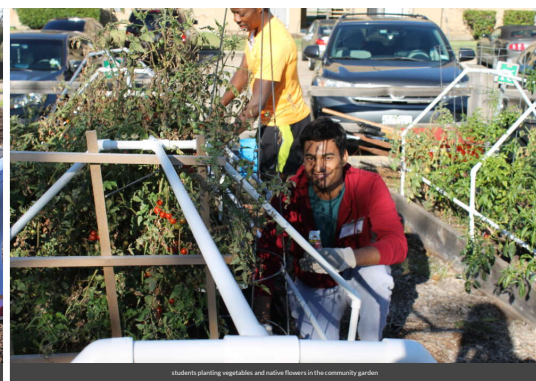
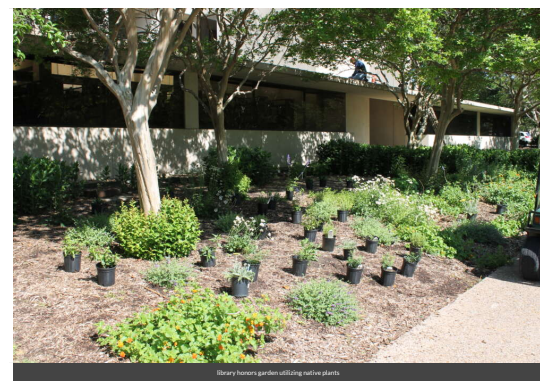
59600

How many volunteers helped with those projects?

65

Please check all that describe the habitats your affiliate helped to create or enhance last year with pollinator benefit in mind.

- Flower garden
- Vegetable garden
- Natural area with tree snags and stumps, and bare areas for ground nesting species
- Native pollinator-friendly tree planting
- Native pollinator-friendly shrub border/hedgerow planting
- Roadside/rights of way planting



Education & Outreach

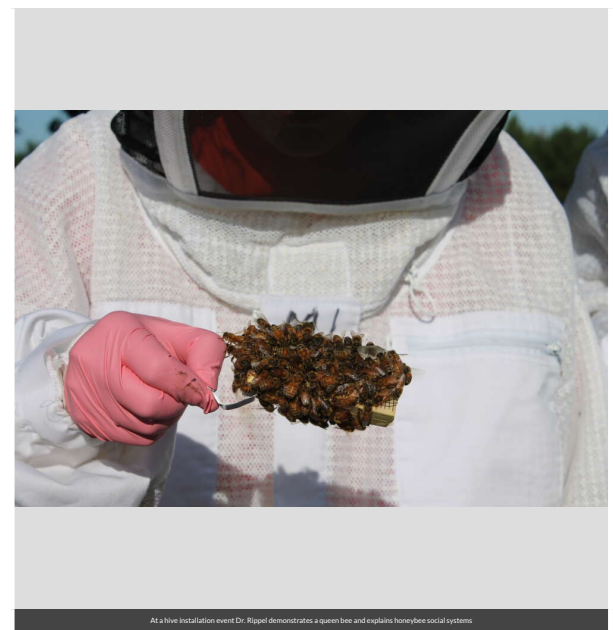
Our committee hosted 23 events and collaborated with our campus community to feature educational pollinator outreach in three additional events. Among the events our committee hosted were student led care for our campus honeybees as well as a biodiversity survey to raise community awareness regarding the life our campus landscape supports. To care for our honeybees, students set and managed swarm traps to catch wild bee swarms and prevent them from settling in university buildings. This project protected wild hives that would have been sprayed if they settled in buildings. Students collected the colonies from these swarm traps and integrated them into new hives that now provide educational opportunities for students. Our committee also provided opportunities for student volunteers to preform hive removals for members in our community. These events provided students with a leadership opportunity in serving our community and educating people on methods of pollinator protection, and pollinator friendly pest control. In partnership with our university's sustainability office, the committee also presented live honeybee demonstrations at the 2022 UT Dallas Campus Earth Fair and the 2022 North Texas Regional Center for Expertise Summit. These outreach events allowed our committee to connect with students and university staff as well as regional professionals in sustainability and present our efforts to protect pollinators on campus. Hosting these outreach events are important to our committee because they allow us to reach wider audiences and increase campus-wide support for our initiatives. A common theme across all of our committee's events is educating students about the roles humans and pollinators play in shaping our environment. Students learn that we would not be able to survive without pollinators and that it is crucial for us to act on their behalf to conserve current populations. By encouraging students of all majors to join us we aim to give students practice in using interdisciplinary approaches to environmental problems.

How many pollinator-related events did your affiliate host or help with last year (in total)?

26

How many people attended those events (in total)?

51



At a hive installation event Dr. Rippel demonstrates a queen bee and explains honeybee social systems



Students inspect a beehive to examine the health of the colony



Students shift hive boxes to manage our campus colonies

Courses & Continuing Education

UT Dallas offers two separate for-credit courses relating to pollinator health and habitat. Collegium V honors students may take HONS 3199.HN1 – Honey Bees and Society. This class discusses honeybee biology, the colony, and beekeeping, and is taught by Dr. Scott Rippel and Dr. Christina Thompson. Biology majors have the opportunity to take BIOL 3388 – Honey Bee Biology which covers honeybee anatomy, nest architecture, caste development and social organization, reproduction and genetic diversity, pheromones and communication, foraging behavior, colony reproduction, pest and disease management, and basic beekeeping and is taught by Dr. Scott Rippel. In both classes students have multiple hands-on opportunities to interact with our campus beehives as well as view wild swarms and hives. Students regularly visit the apiary to check overall hive health and diagnose potential health issues while viewing and learning about bee behavior outside of the classroom. Both classes leave students with knowledge not only about how bees live but the problems and challenges facing them today as well. By making a quality effort to educate students about these issues and potential solutions we hope to create advocates for pollinators in the fields of biology and other sciences. For students who do not have the opportunity of taking these classes, many volunteer events are available that enable them to experience service learning. This way we engage all majors in pollinator education.

How many of your for-credit courses included pollinator-related information last year?

2

How many students attended those for-credit courses?

35



Service-Learning

Associated with our honeybee courses, HONS 3199 and BIOL 3388, students participated in hive inspections and conducting their own pollinator research projects using data collected from our beehives. These students were given the exceptional opportunity to interact with our bees for prolonged periods and gain an in-depth understanding of honeybee biology. Their research projects were presented to other students and provided another outreach opportunity for our Bee Campus program. Student volunteers, not associated with courses, were invited to learn how to complete hive inspections and honey collection. These events are led by Dr. Rippel and our Bee Campus Eco Rep who work together to provide a memorable and informative experience for our students. These events encourage lively discussion on topics such as pesticide effects on pollinators, materials bees need to survive, and what honeybee behaviors students witness while examining the colonies. Student volunteers also worked together to provide campus outreach in the form of honey tasting at our Earth Fair. This event provided students a positive leadership experience in guiding others through the nuances in honey and using that as a segway into discussions about pollinator protection.

How many service-learning projects did your campus host and/or support to enhance pollinator habitat on and off-campus?

29

How many students participated in service-learning projects last year to enhance pollinator habitat on or off-campus?

51



students help move beehives to be integrated into a campus apiary



students and staff participate in a workday at the community garden

Educational Signage

No new signage was installed last year

Number of permanent interpretive/educational/Bee Campus USA signs installed to date?

23



sign in our community pollinator garden with information and a link to a website to learn more about the plant



signs in our pollinator garden encourage people to learn more about these native plants

Policies & Practices

Part of our mission as a Bee Campus affiliate has been to serve as an example for others to show that beautiful landscaping can work in conjunction with pollinator protection. Our committee supports, encourages, and maintains landscaping that utilizes native plants on campus. Using native plants allows us to demonstrate and educate pollinator protection. Signage placed in these areas offers information about the important roles these plants fulfill in our local ecosystem. Our IPM plan limits the use of pesticides wherever possible. The committee frequently uses outreach events as an opportunity to advocate for pollinator-friendly pest management by helping people identify actions they can take in their daily lives to help protect pollinators such as reducing the use of pesticides on their properties and educating them about alternative methods of pest control such as companion planting. Our committee also advocates for the increase of no-mow areas on campus which currently total to approximately 39,000 square feet.

What actions have you taken to make pest management practices more pollinator-friendly?

- Implemented or maintained a written IPM plan
- Avoided use of pesticides in public sites containing designated pollinator habitat or other sensitive features (except when targeted use is deemed the best option for invasive or noxious weed, insect or disease management)
- Implemented non-chemical pest prevention and management methods on city or campus grounds
- Reduced the total area of city or campus-managed lands to which pesticides are applied
- Distributed educational materials to residents or students to encourage the reduction or elimination of pesticide use

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?

Yes, our monarch waystation is strictly a no-mow area other than the footpaths and is not sprayed with pesticides. Our IPM plan also limits the use of pesticides wherever possible.

Please describe actions by your affiliate to attend training on ecologically-based Integrated Pest Management and/or to review IPM plans and programs considered of high quality by Bee City USA?

Sustainability staff have attended webinars hosted by the World Bee Project on non-chemical methods of pest control and on topics such as managing community outreach efforts to reduce pesticide use.

Integrated Pest Management Plan: [Integrated_Pest_Management_Plan.pdf](https://sustainability.utdallas.edu/download/Integrated_Pest_Management_Plan.pdf)

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Recommended Native Plant List: [Bee_Campus_USA_PREFERRED_PLANT_LIST\(1\).xlsx](https://sustainability.utdallas.edu/download/Bee_Campus_USA_PREFERRED_PLANT_LIST(1).xlsx)

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Recommended Native Plant Supplier List:

<https://www.txnativeplants.org/portfolio/where-to-buy/>

Implementation

Education

The University will integrate the **Sustainability Policy** in educating faculty, staff, and students, promote the development and expansion of sustainability-related research and curriculum, support sustainability related service and learning opportunities on and off campus, and encourage sustainability-themed programming opportunities and events.

Campus Operations

In campus planning, operations and activities, the University will use resources in a manner that takes into consideration environmental, social and economic impacts. The University will seek to integrate sustainability considerations into all business decisions including but not limited to:

- Energy and water management
- Procurement
- Materials and resource management
- **Landscaping and grounds maintenance**
- Transportation
- Dining
- Building construction, renovation, operation, and maintenance.

Community Engagement

The University will seek to establish partnerships with government, business and community organizations that strive to foster environmental consciousness and lead to the betterment of our campus and surrounding communities, encourage research by faculty that benefits the local community, share experiences and provide outreach to the community wherever feasible, increase awareness and inform the community on sustainability-related issues.

our campus IPM plan

Learn More

<https://sustainability.utdallas.edu/campus/bees/>

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BCUSA

- BCUSA is an organization committed to helping and motivating universities to sustain pollinators by providing them with a healthy habitat, rich in a variety of native plants



slide from our quarterly committee meeting