

Bee Campus USA - University of North Texas

Report on 2022

Pollinator Habitat Creation & Enhancement

In 2022, our committee finalized an installation of the Community Garden Native Bed- an area dedicated to pollinator friendly and native plants. This included the installation of a small pond, 'Water for Wildlife,' that supplies as a water source for birds as well as pollinators. Our Community Garden is also dedicated to organic practices that put pollinators first when growing healthy produce. They are sure to include IPM education as well as pollinator signage throughout the space. The 'Pecan Creek Pollinative Prairie' is a native North Central Texas tallgrass prairie reconstruction project that is home to over 700 species of plants and wildlife. In 2022, they implemented new educational flower beds that highlight native species of the prairie and the pollinators that utilize it. The prairie also hosts frequent Bioblitzes, planting days, and monarch tagging events. This prairie also has a greenhouse where students have grown over 3,000 plants in 2022! This year, the campus Bird Campus group revitalized a 'Parking Lot Preserve' which is a small pocket of greenery and native plants in the parking lot of our Environmental Sciences building. In this space, they hosted multiple workdays to plant native plants that are beneficial for birds, pollinators, and other wildlife. In 2022, two new 'Pollinative Patches' were implemented and expanded near the library on campus. One, the UNT Butterfly Flower Patch, is dedicated to North Texas butterfly host and nectar plants. The other, the Central Campus Pollinator Project, is dedicated to native and pollinator friendly plants that benefit birds as well.

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?

208188

How many volunteers helped with those projects?

541

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 milkweed planting for monarchs and bees (where appropriate)

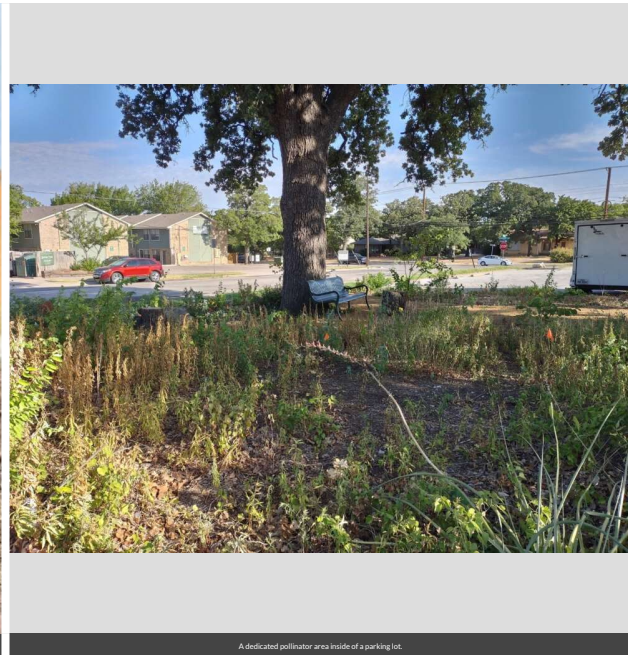
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Native pollinator-friendly shrub border/hedgerow planting
- Other



Students digging up dirt to plant native flowers.



Student planting native plants in the Central Campus Pollinator bed.



A dedicated pollinator area inside of a parking lot.

Education & Outreach

In 2022, our committee hosted a variety of Bioblitzes in our 8 dedicated pollinator spaces across campus. Furthermore, we had events that implemented educational flower beds in our 'Pollinative Prairie' that focus on native plant and pollinator education. A graduate biology student also came out and gave a pollinator talk to members of our UNT Community Garden. Our committee hosted an outreach event for No Mow May in the spring of 2022. This involved giving out native seeds, as well as talking to people about the importance of leaving lawns alone, especially in the months of May and April. In the fall of 2022, the 'Pecan Creek Pollinative Prairie' hosted a monarch tagging event in which 17 participants were able to learn how to tag and the importance of monarch tagging. Additionally, the Prairie has hosted events regarding solarization used in restoration projects. This has taught participants how to do solarization and the benefits of native species removal. Our committee also hosted various workdays to promote pollinator and native plant education; which included hands-on planting in our dedicated 'pollinative' patches.

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

12

How many people attended those events (in total)?

134



Image of student garden members learning about pollinators in the garden.



Image of students with the educational flower beds at the Pecan Creek Pollinative Prairie.



Image of students setting up a solarization project in the prairie to get rid of invasive species of grasses.

Courses & Continuing Education

Pollinator related information was covered in various courses through the UNT Department of Biology. These courses ranged from very basic introductions to pollinators in the ecology and environmental science labs, to more in-depth courses related to specific pollinator functions in the environment. The ecology and environmental science students have requirements in the curriculum to do research in the Pecan Creek Pollinative Prairie, where many pollinators and native plants thrive. Other offered classes include an Insect Biology course and a Behavioral Ecology course; both of which are open to graduate and undergraduate students. These both have course content related to pollinators and pollinator protection.

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

5

How many students attended those for-credit courses?

824

How many of your continuing education courses included pollinator-related information last year?

How many participants attended those courses?



Service-Learning

Two student organizations, the Society for Ecological Restoration and the UNT Geography Club, both attended conferences where they presented on the pollinator habitats and research happening on our campus. This included the growth process of native plants and milkweed in our campus greenhouse, our partnership with the Lake Lewisville Environmental Learning Area, the over 700 species that have been spotted at the Pecan Creek Pollinative Prairie, and other student research projects focused on pollination. Also through the UNT's partnership with the Lake Lewisville Environmental Learning Area (LLELA), students are able to participate in service-learning projects such as Bioblitzes, bird banding, and blacklight moth events. Additionally, students had the opportunity to participate in a Lewisville Plant Median Conservation Project.

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

9

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

141



Students using gear to observe moths in UV light.



Students helping the city with a median conservation project.

Educational Signage

We installed a total of 26 temporary signs in the UNT Community Garden that spotlight different plants and pollinators that can be found in the garden. These signs have a photo of the pollinator or plant, along with descriptions about each pollinator/plant.

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

3

Number of temporary interpretive/educational/Bee Campus USA signs installed last year?

26



Image of a pollinator spotlight sign for an Eastern Carpenter Bee.

Policies & Practices

The University of North Texas Grounds Department uses only the safest, lowest toxicity products for effective control of pests. UNT prohibits the use of pesticides containing neonicotinoids, and pesticide use was avoided altogether in areas with designated pollinator habitats. The Grounds Department has been increasing their efforts to use non-pesticide management methods, such as propane torches, frequent mulching, and the use of hand tools for weed control. Additionally, in 2022 the team implemented a 50-50 rule, meaning products must be at least 50 percent organic across campus. Many plants sourced for campus grounds are from local landscaping shops, and any contractors used for campus grounds are encouraged to use these sources as well. The team also works diligently to identify and mitigate non-native species of plants that currently exist on spaces on campus. The Community Garden at UNT uses only organic methods of

pest management, as well as removal by hand. The Garden Facilitator teaches garden members the basics of organic Integrated Pest Management. This year, this included using mosquito dunks in our water sources, and various types of fire ant control in our garden plots. The Pollinative Prairie at UNT also only uses organic and hand removal methods of pest management and has seen hawks as a natural predator for pests that are present.

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
- Eliminated use of neonicotinoid insecticides on city or campus grounds
- Distributed educational materials to residents or students to encourage the reduction or elimination of pesticide use
- Sourced plants for city or campus grounds using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)
- Sourced plants for city or campus grounds that were not treated with neonicotinoids
- Encouraged developers and private landscapers to source plants using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)
- Encouraged developers and private landscapers to source plants that were not treated with neonicotinoids

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

No

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?

Our Grounds Team supervisor has been in communication throughout the year with Microlife on trainings for strictly organic practices on campus. They have been visiting campus and consulting our team on ways to move forward. Our grounds team has also been involved with the University Landscape Manager Association which has included training

on organic landscaping practices as well as integrated pest management.

Integrated Pest Management Plan:

<https://studentaffairs.unt.edu/sites/default/files/sustainability/ipm-plan.pdf>

Recommended Native Plant List: [UNT Preferred Native-Adaptive Plant List.xlsx](#)

Recommended Native Plant Supplier List:

Learn More

<https://beecampususa.unt.edu/wemeangreenfund@unt.edu>

<https://www.instagram.com/untwmgf>