

Bee Campus USA Annual Report Pollinator Conservation & Education 2019



University of North Texas Denton, Texas

EDUCATION & OUTREACH



Students who care for the UNT Natural Dye Garden are greeted in the spring by a happy patch of Texas bluebonnet wildflowers. We proudly display the Bee Campus USA banner!



The Pollinative Prairie, a North Central Texas tallgrass prairie reconstruction project, hosts many visitors throughout the year to broaden education about the importance of creating larger islands of pollinator habitat.



Sharing native wildflower seed packets is a great way to help feed and support local pollinators!

Education & Outreach Events

Native Plants and Pollinators Workshop 2/13/2019
Earth Day Garden Gathering 4/22/2019
EarthFest 4/25/2019
Eco-Social 4/29/2019
Staff Senate Lunch and Learn 6/27/2019
First Flight 8/22/2019
Gardening for Pollinators Workshop 9/4/2019

Rawlins Hall Community Garden Talk 10/21/2019

New Student Orientations 5/17/2020, 6/6/2020, 6/12/2020, 6/17/2020, 6/21/2020, 6/24/2020, 6/28/2020, 7/19/2020, 7/28/2020, 8/2/2020, 8/5/2020, 8/13/2020, 8/15/2020, 8/19/2020

POLLINATOR HEALTH & HABITAT



Pockets of campus explode with Texas bluebonnets (*Lupinus texensis*) in the springtime inviting pollinators to buzz about.



Two Painted Lady butterflies (*Vanessa cardui*) rest and indulge in the delight of a Purple Coneflower (*Echinacea purpurea*) at the Pollinative Prairie.



With assistance from professionals of the Denton County Beekeepers Association, a swarm of European Honeybees was relocated to a safer location away from a campus pedestrian sidewalk.



In the midst of summer, a field of wildflowers at the Pollinative Prairie provides a healthy native habitat for birds, insects, and animals of all kinds.



Students harvest broccoli and carrots at the UNT Community Garden while learning how to attract pollinators to their garden plots during a pollinator-themed gardening workshop.

To promote pollinator health and habitat, the Pollinative Prairie was expanded by seeding additional acreage of North Central Texas tallgrass prairie species after removing invasive Bermuda grass. This process was done over multiple workdays in coordination with the UNT Ecology and Philosophy Departments and the Society for Ecological Restoration student organization. Additionally, the Community Garden and Natural Dye Garden both received continued enhancement through planting native wildflower species and creating diverse pollinator habitat types. Both sanctuaries were registered as Monarch Waystations and have been supported by students, staff, and faculty over several workdays. The Community Garden installed two fruit trees including a fig tree and a pomegranate tree to provide pollinator habitat. The Facilities Department additionally hosted a handful of special campus

landscaping projects for volunteers to engage in to enhance areas on campus and better serve pollinators and our community. Student volunteers assisted in planting hundreds of pollinator-friendly plants such as Echinacea, Rudbeckia, Salvia, and Scabiosa varieties. Additionally, fourteen new native trees were planted in a campus parking lot, positively benefitting pollinators and many other environmental factors. The Facilities Department also maintains a natural no-mow area with space for ground-nesting species; many wildflowers such as Texas bluebonnets grow in this area. The Parking Lot Prairie garnered additional support from student volunteers at workdays to maintain another healthy habitat on campus for pollinators. During the summer, a swarm of European Honey Bees took refuge in a tree near a campus pedestrian walkway and to protect these flying friends, university staff members reached out to the Denton County Beekeepers Association for safe relocation of the swarm.

SERVICE LEARNING



During a summer service-learning project, student teams planted hundreds of pollinator-attracting perennials in Clark Park to be enjoyed by pollinators and students year after year.



With helping hands, hundreds of students helped enhance the Pollinative Prairie at Discovery Park by planting over 8,000 Texas native plants in the span of one week.



Members of the UNT Community Garden experimented with a chemical-free method for maintaining weeds in the garden pathways by layering cardboard beneath mulch. This pollinator protection project was expanded after seeing the impressive results when comparing areas that did and did not receive the weed barrier treatment.

Service Learning Projects

UNT Community Garden: Among many gardens across campus, this garden is a place for students, faculty, and staff to learn about natural gardening practices. Frequent garden workdays and workshops provide the perfect opportunity for UNT community members to learn about the importance of pollinators.

Natural Dye Garden: This garden focuses on bringing an interdisciplinary community of students and faculty together furthering UNT's commitment to building a sustainable future. The natural dyes derived from the plants in the garden are used by students from the College of Visual Arts and Design while providing opportunities for other disciplines to utilize the plants in their own research and projects. Volunteers assist in many ways to ensure this campus destination is a healthy habitat for pollinators so they and the garden's mission thrive.

Pecan Creek Pollinative Prairie: The prairie serves as a pocket of pollinator habitat and features native grasses, wildflowers, and habitat to protect, preserve, and promote native pollinator populations. Volunteer planting days, irrigation tasks, and greenhouse efforts are just a few service-learning components of the project.

Parking Lot Prairie: This small plot of land settled on the main UNT campus is dotted with native shrubs and grasses that provide essential pollinator habitat. Students and faculty volunteer to maintain this area on workdays.

Big Event planting: As part of an annual effort, a group of volunteers helped beautify an area of the campus by planting flowering ornamentals for the benefit of pollinators and campus visitors.

Make A Difference Day planting events: Volunteers gathered to support two campus landscaping projects during Make A Difference Day including a tree planting at the community garden and a flower planting at a neighboring campus location.

Clark Park: Over 80 student volunteers helped enhance this central campus park with over 300 newly planted pollinator-friendly perennials.

CURRICULUM & CONTINUING EDUCATION

Through continuing education workshops such as "Native Texas Plants and Pollinators," "Gardening for Pollinators 101," and "Outdoor Space and Gardening," members of the Mean Green Family took home new knowledge and skills to benefit pollinators in the garden. Curriculum topics included: how to identify native plants, what pollinators prefer which plants, how to attract a diversity of pollinators to the garden, pollinator identification, pollinator food sources, and more. Other continuing education opportunities included a campus tree tour and a spiritual life gardening workshop, both of which highlighted the importance of pollinators in the environment we work, learn, and play in.

Students who enrolled in a variety of for-credit courses (such as Insect Biology, Biodiversity and Conservation of Animals, Philosophy of Ecology, Conservation Biology, and Interdisciplinary Environmental Science) learned a number of pollinator-related topics including colony collapse disorder, carbon sequestration in plants, invasive plant species, chemical contaminants, the importance of native biodiversity, plant identification, and insect and pollinator identification.



Students enrolled in an Environmental Science laboratory for non-majors explore the Pollinative Prairie through a bio-blitz exercise to document pollinator species they find buzzing through the prairie habitat using a citizen scientist app.

EDUCATIONAL & INTERPRETIVE SIGNAGE



Nearly eighty students proudly showcase the UNT Bee Campus USA banner to celebrate their volunteer efforts after planting over 300 pollinator-friendly plant species including Echinacea, Rudbekia, Salvia, and Scabiosa varieties.



The UNT Community Garden is one of many pollinator sanctuaries on campus that provides quality habitat for vital pollinator species. Other sanctuaries on campus are also indicated with new educational awareness signage.



A scissor-tailed flycatcher (*Tyrannus forficatus*), also known as the Texas bird-of-paradise, perches in safety at the Pecan Creek Pollinative Prairie no mow zone

In 2019, UNT installed 19 educational outdoor signs to identify healthy pollinator habitats found across campus and spread awareness about our Bee Campus USA efforts. We continue to display our Bee Campus USA banner at volunteer events and also have a no mow sign posted at the Pollinative Prairie.

POLICIES & PRACTICES

The University of North Texas Grounds Department uses only the safest, lowest toxicity products possible for effective control of pests.

UNT prohibits the use of pesticides containing neonicotinoids which are a known risk to pollinators.

The Grounds Department works diligently to identify problem weed species and remove them by hand or with tools when able. Additionally, frequent application of mulch helps reduce the amount of germination from weed seeds in the soil by blocking the sunlight necessary for weeds to germinate and grow.

Recommended Locally Native Plant Species List — <u>beecampususa.unt.edu</u>

Pollinator Friendly Integrated Pest Management Plan — https://studentaffairs.unt.edu/sites/default/files/sustainability/ipm-plan.pdf

CONTACT US!

Committee — UNT Bee Campus USA Committee

Website — beecampususa.unt.edu

Social Media —

https://www.facebook.com/UNTWMGF https://twitter.com/UNTWMGF https://www.instagram.com/untwmgf