

Bee Campus USA - University of North Texas

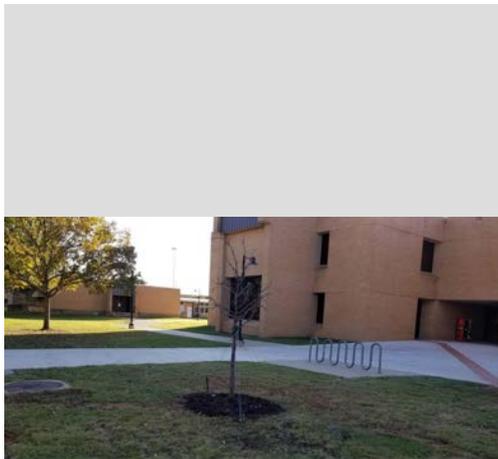
Report on 2020

Pollinator Habitat Creation & Enhancement

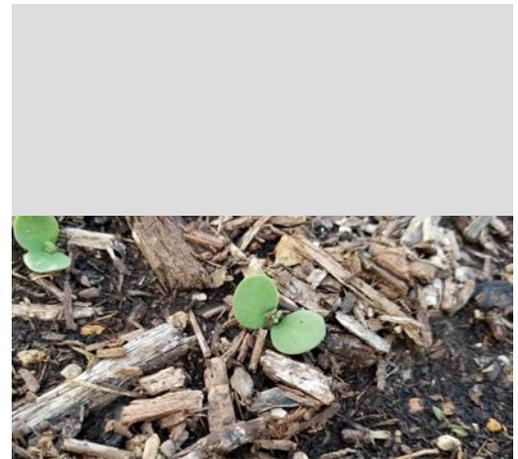
To commemorate Texas Arbor Day and diversify the campus canopy, UNT Facilities staff planted a Bur Oak tree and two Lacey Oaks. UNT Facilities also planted bluebonnet seeds on campus grounds and implemented a chain link fence to improve habitat preservation and keep plant species undisturbed. To further improve natural areas on campus, UNT Facilities has contracted Wildscapers Restorations, a UNT Alumni-owned business, to protect pollinators and remove invasive species. At the Pollinative Prairie, a four-acre area devoted to supporting native plants and pollinators, students and staff mowed and removed invasive plant species to make way for plants that support pollinators. To further advance the prairie, students of the UNT Chapter for the Society of Ecological Restoration grew over 1,200 prairie plants in the greenhouse including Little Bluestem, Blue Curls, Wild Hyacinth, Blue Flax, Mistflower, and five species of milkweed. The UNT Facilities Grounds crew set a new landscape maintenance strategy to preserve quality habitat at the Discovery Park pond to support biodiversity that frequents the pond. Members of the UNT Community Garden and Natural Dye Garden maintained pollinator-friendly gardens.



Students take special care of the greenhouse where five species of milkweed are grown for use on campus.



A Bur Oak planted on Texas Arbor Day stands firmly readying itself for an upcoming spring.



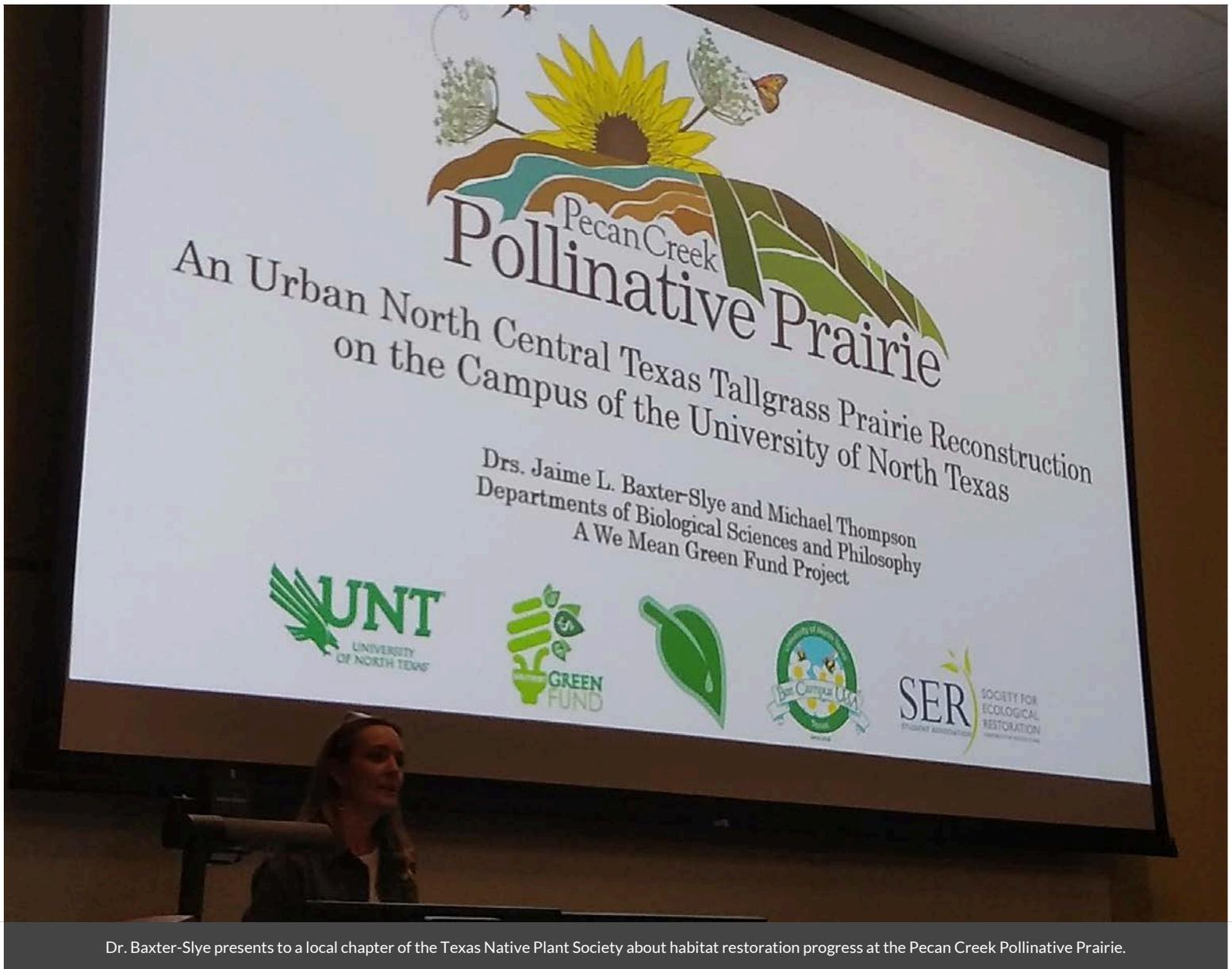
Bluebonnets, a Texas favorite, burst through the soil on the UNT Campus to add more native plants to the landscape.



Education & Outreach

Before the onset of COVID-19, students participated in a Bee Campus USA ‘pollinator tour’ through the UNT Community Garden to gain inspiration for upcoming art projects. Educational topics discussed included types of pollinators, the importance of pollinators, and the relationship between pollinators and agriculture. Also led by a Bee Campus Committee member, classroom visits to a documentary film class and a marketing class introduced a broad range of students to UNT’s Bee Campus USA efforts to expand pollinator outreach to more individuals. As an additional educational opportunity, Dr. Baxter-Slye of the Bee Campus USA Committee presented about the habitat restoration efforts at the Pecan Creek Pollinative Prairie to a local chapter of the Native Plant Society of Texas with an audience of over 75 community members. Other Bee Campus USA Committee representatives who also serve as leaders for the Society for Ecological Restoration UNT Chapter hosted an educational program in partnership with the Texas Parks and Wildlife Department to discuss prairie habitat restoration strategies, such as removing invasive species, conducting biodiversity evaluations, best practices for supporting pollinators and maintenance strategies such as prescribed burning. The Society for Ecological Restoration UNT Chapter also hosted a watch party of “Kiss the Ground” to learn about the importance of regenerating soil health and its impacts on pollinators.





Dr. Baxter-Slye presents to a local chapter of the Texas Native Plant Society about habitat restoration progress at the Pecan Creek Pollinative Prairie.

Courses & Continuing Education

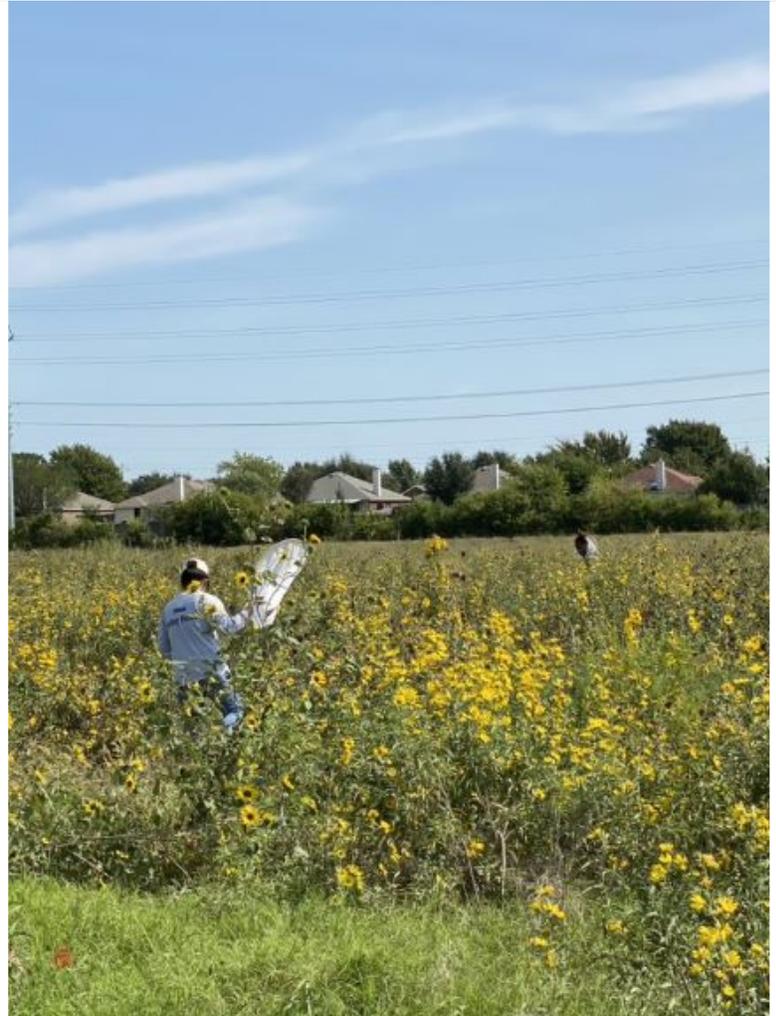
UNT welcomed Dr. Lichtenberg a new faculty member and pollinator expert to campus in early 2020 bringing a new edge to pollinator continuing education. The Lichtenberg Research Lab launched research projects on native grassland restoration for pollinators and bumble bee nectar robbing decisions which students are engaged in. UNT continues to offer for-credit courses (such as Ecology, Insect Biology, Biodiversity and Conservation of Animals, Philosophy of Ecology, Conservation Biology, and related labs) that study pollinator-related topics such as collapse disorder, chemical



contaminants, importance of native biodiversity, plant identification, and insect and pollinator identification. To provide virtual continuing education about pollinators, members of the Bee Campus USA Committee developed a virtual tour map of pollinator sanctuaries on campus, a digital storyboard about the Pollinative Prairie and its pollinator species that depend on its habitat, and hosted a semi-annual Ecology Lab Symposium online focusing on student projects related to pollinators. Students in Ecology and Biology related classes had the opportunity to visit Lewisville Lake Environmental Learning Area to take part in hands on habitat management practices like prescribed burns and make scientific observations of biodiversity.



Ecology students observe how to safely implement a prescribed burn to manage healthy habitat for pollinators.



Students document the biodiversity of pollinator species found at the on-campus Pollinative Prairie using iNaturalist.



Service-Learning

In early 2020 the UNT Natural Dye Garden and Community Garden hosted hands-on workshops to maintain these campus pollinator sanctuaries. Students helped remove invasive plants and grow desirable plants for pollinators. In the first two months of 2020, the Pecan Creek Pollinative Prairie, a prairie restoration project on campus, was bustling with activity to enhance pollinator habitat and engage students in the process. Students built a new raised flower bed structure to demonstrate the beauty and importance of using native plants in an urban landscape. As campus adjusted to safety needs brought on by the pandemic, outdoor lab classes provided students with a multitude of safe, socially-distanced service learning opportunities including tagging about 100 monarch butterflies, conducting bird surveys and plant surveys, participating in night moth surveys at two sites to understand the differences between moths observed at a newly developed prairie habitat versus a developed prairie habitat, and more. Students participated in the Fall Socially Distant BioBlitz for the DFW Urban Ecosystem, contributing 10% of all observations in the challenge. They also participated in the iNaturalist Texas Pollinator BioBlitz; students served as citizen scientists, easily contributing over 10,000 new biodiversity observations to the iNaturalist database.





Students assist in the harmless process of tagging monarch butterflies to help track migration pathways and survival rates.



During a prairie biodiversity assessment, a lucky student encounters a friendly dragonfly.

Educational Signage

UNT installed new types of educational signage in 2020: Permanent Monarch Waystation signs were added to the UNT Community Garden and the Pollinative Prairie and temporary native tree signs were posted to celebrate the thriving post oak saplings which will add to a more diverse canopy habitat. Additional temporary signage went up behind Willis Library to identify the no mow area as healthy pollinator habitat.





In January, signage was installed behind Willis Library in a no mow habitat area lining a pedestrian sidewalk to signify healthy pollinator habitat.

UNT's mascot Scrappy helps to display Monarch Waystation signage at the Community Garden.

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. The UNT Community Garden maintains pests with organic and hand removal remedies. The Pollinative Prairie crew removes invasive plant species by hand and through prairie stomps.

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





Some student, staff, and faculty members of the UNT Bee Campus USA committee meet virtually to discuss campus pollinator initiatives.

