

Bee Campus USA - University of Louisiana at Lafayette

Report on 2023

Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement projects in your community in 2023, and whether your committee hosted them or not.

In 2023, we enhanced 5 pollinator bed locations and created 2 new pollinator projects. We hosted almost all the projects/sites but we partnered with service events and other departments to get volunteers to help with the plantings. For the Big Event we enhanced the pollinator garden at our campus family apartments by adding 25 flowers to this bed and while working at this location we also weeded this bed and the adjacent community garden. (Service Learning - 10 Students for Sustainability Volunteers) At other sites during the Big Event, we created a fruit tree grove at our campus research park and behind our campus library by planting a total of 20 fruit trees between the two sites. (Service Learning - 50 Graduate School Volunteers + 10 Students for Sustainability Volunteers) During one of AmeriCorps service sites with the Office of Sustainability we planted native irises in the rocky area of the Wharton Hall Bioswale/Pollinator Garden. Volunteers added 50 more Red Velvet Elvis Louisiana Irises to the Bioswale/Pollinator area. (Service Learning - 6 AmeriCorps Volunteers) NEW: During Parish Proud's Service Day UL Lafayette student volunteers and committee members planted milkweed and 196 various other pollinator native plants grown at the UL Lafayette Ecology Center in the 2 urban raised planter beds behind our Campus Science Museum in Downtown Lafayette. (Service Learning - 30 AmeriCorps + SGA + Parish Proud Volunteers) NEW: For the new Judice Rickels Bioswale/ Pollinator Garden planting day we created a new garden behind our Honors building and added a ton of new native pollinator plants to the Judice Rickels and added some to the Wharton Hall Bioswales/Gardens. Volunteers planted 80 *Salvia coccinea*, 15 *Asclepias viridis*, 25 *Asclepias tuberosa*, 30 *Pycnanthemum tenuifolium*, 10 *Pycnanthemum albescens*, 10 *Hibiscus moscheutos*, 5 *Lobelia cardinalis*, 15 *Eryngium yuccifolium*, and 6 milkweed. (Service Learning - 12 AmeriCorps + Ecology Center + Honors College Volunteers) A month after the planting we were able to add in our Pollinator Habitat education sign and the no mow sign! During the celebration of First-Generation college students we hosted a campus beautification project in partnership with the Office of Diversity for First to Geaux week's Bee-U-Tification Project by adding 20 more native plants and flowers in the new Judice Rickels bioswale with 11 First- Gen Volunteers. (Service Learning - 11 Volunteers) The only project the committee did not host was the Monarch Butterfly Garden refresh. The student organization, BioSociety, planted 20 native flowers at the Billeaud Hall raised planter bed. (7 BioSociety Volunteers)

How many habitat projects did you help to create or enhance in 2023?

7

How many people (staff, volunteers, students, partners, etc.) helped with those projects?

How many projects benefit monarchs, milkweed, or nectar plantings?

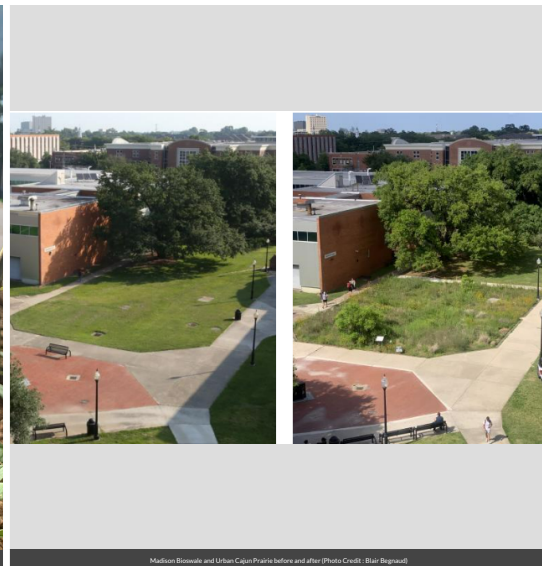
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How many total square feet of habitat were created or enhanced?

2410

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

- Flower garden
- Natural area with tree snags and stumps, and bare areas for ground nesting species
- Pollinator-friendly lawn (with flowering clover, dandelions...)
- Native milkweed planting for monarchs and bees (where appropriate)
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Rain garden/bioswale



Education & Outreach

Please describe pollinator conservation events or outreach activities in your community in 2023, indicating whether your committee hosted them or not.

In Community: In 2023, we hosted a few outreach activities with our community hosted by our partners, committee members, and a student members of the committee. Four committee members tabled at Earth Day at the Bayou Vermilion District/Vermilionville event and passed out native wildflower seeds with bee campus information on the packets and talked to attendees about bee campus and tree campus initiatives on our campus. We discussed the benefits of pollinator plants and trees and details about how to plant more pollinator plants and trees in residential yards with community members. The chair of the Bee Campus USA committee visited a 5th grade classroom at a local school to talk about various topics of sustainability which included a few slides about Bee Campus, pollinators + their benefits. **On Campus engagement:** Our friends with the campus Hilliard Art Museum hosted native flower printmaking transfer art event for community members on their own where the benefits of pollinators were the main educational component of the event. (we did not help/ host this event so this event is not included in our count of pollinator events but it was worth a mention.) We provide education on pollinators to as part of our Class Visits and Tours program. Office of Sustainability offers Sustainability Class Visits and Tours to departments, organizations, and classes throughout the spring and fall semester with education about Bee Campus and pollinator habitats on campus in the PowerPoint and pollinator habitats are major stopping points and talking components of the tours. In 2023, we educated 419 students/ employees and 49 community members with the Class Visits and Tours program. This included 7 UNIV courses, 5 various other courses (not included in the listed pollinator related courses), 2 departments/colleges, and 2 organizations, and 4 community tours. We also took elementary aged kids camps on a tour of campus and played nature bingo where the kids had to spot birds, bees, butterflies, dragonflies, and various types of native pollinator plants while on the tour of campus to win at bingo and get a native wildflower seed packet. At the end of the 3 kids camp tours we lead we seed bombed our urban cajun prairie planting. We celebrated Honey Bees for National Honey Bee Day by tabling in the Dining Hall with Sunshine Clay & Hives(a local bee keeper) and they showcased some local worker honey bees, offered honey samples, and we passed out wildflower seeds and Bee Campus USA bookmarks and flyers. This event reached 150 students. **Bonus 2022 event:** In 2022, after we were designated as an affiliate our choir teacher heard about the new designation and told the committee that the next fall concert would be in dedication to pollinators. Saturday October 22nd, 2022 at 7pm UL Lafayette's Tenor/Bass and Soprano/Alto choirs was joined by the internationally acclaimed UL Lafayette Chamber Singers to bring attendees a stunning evening of music commemorating nature's smallest storytellers-insects! "The Songs of Smaller Creatures" was performed to a full performance hall and at the beginning of the concert Dr. William F. Plummer kicked off the evening by talking about the recent designation and roll pollinators play in our environment and the music pieces that were inspired by them that would be performed that evening. Participants were able to donate to the Organization "Save our Monarchs". (This was a super exciting event that was brought to the committee from an inspired Dr. Plummer after he heard about UL Lafayette achieving the Bee Campus USA Status- it was a wonderful way to kickstart our Bee Campus USA designation!)

How many pollinator-related events or outreach activities did you host or help with in 2023 (in total)?

10

How many people attended those events (in total)?

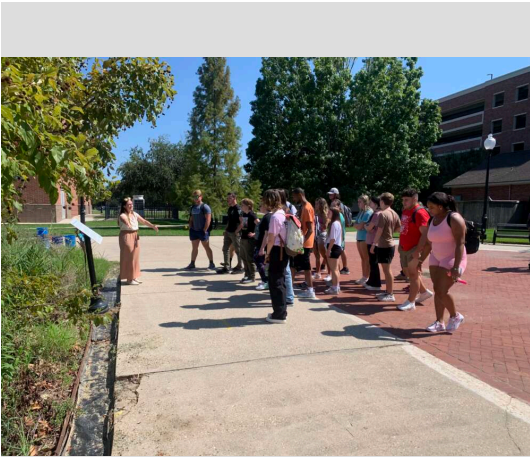
740

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

4

Number of temporary interpretive/educational/Bee Campus USA signs installed in 2023?

3



UNLV Sustainability Class Visit: Tour stopping at one of the largest pollinator habitats on campus, the Madson Bioswale * Cedar Prairie (Photo Credit: Lida Lancaster)



Students sampling honey on National Honey Bee Day. Tasting with Bee Keeper and her bees and passing out whiteflower seeds (Photo Credit: Blair Bergwald)



Kids Camp playing sustainability bingo / searching for butterflies at the BeeSociety's Monarch Garden (Photo Credit: Blair Bergwald)



Curriculum, Continuing Education, & Service Learning

Please describe the curriculum your campus engaged in 2023, indicating whether it was part of a for-credit course or continuing education.

We do not have continuing education that are related to landscapes or pollinators but we have 8 reoccurring curriculum courses that are offered. In 2023, 4 out of the 8 courses were held and the 4 courses held had 718 students. 4 courses that were not held in 2023 may not happen every year because they are higher level courses but they are directly related to pollinator education. The Biology Courses listed below are taught by committee member, Mark Genung for his Louisiana Native Bee Lab and Environmental Science courses are taught regularly by committee member, Jim Foret and various professors in the College of Geoscience. For credit courses that are offered: BIOL 321: Entomology – 3 Credits – 2 Hours Lecture, 2 Hours Lab – Structure, life histories, classification, ecology, economic importance, and control of insects. Special emphasis on insect ecology and insect effects on human society. (17 participants) BIOL 427G: Experimental Design and Analysis – email biology@louisiana.edu – 4 Credits – 3 Hours Lecture, 2 Hours Lab – Fundamentals of designing and implementing field experiments from the initial planning stage to data analysis, interpretation, and publication. BIOL 575: Statistical Ecology 4 Credits – 4 Hours Lecture -Design, analysis, and presentation of results of ecological experiments and field studies, with emphasis on hypothesis testing and statistical modeling. Includes frequent R labs as well as paper discussions to understand how statistics are used in modern ecological literature. BIOL 595: Community Ecology – 3 Credits – 3 Hours Discussion – Discussion of current research and debates in all areas of community ecology. Includes grant-writing practice. (1 participant) ENVS 150: Plant Science – 3 Credits – 3 Hours Discussion – Scientific principles of growth, reproduction, commercial usage, and environmental impact of plants. (679 participants) ENVS 151 – Plant Science Laboratory – Credit Hours: 1 – Lecture Contact Hours: 0 Lab Contact Hours: 2- Plant science laboratory. (21 participants) ENVS 360: Native & Other Distinct Plants – 3 Credits – 3 Hours Discussion – Recognition, use and basic considerations of selected native, naturalized and exotic plants in terrestrial and aquatic environments. ENVS 424 – Sustainable Systems Design- Credit Hours: 3- Lecture Contact Hours: 2 Lab Contact Hours: 3- Permaculture-based approaches to regional self-reliance and appropriate technology.

How many of your for-credit courses included pollinator-related information in 2023?

4

How many students attended those for-credit courses?

718

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

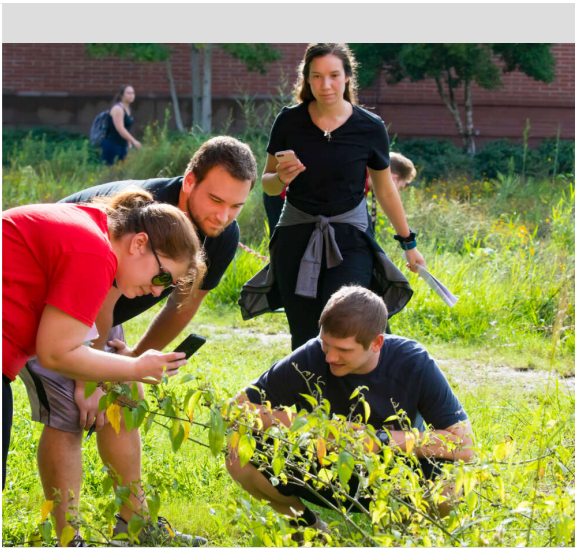
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How many students participated in service-learning projects in 2023 to enhance pollinator habitat on or off-campus?

100

Please describe the service-learning projects your students were engaged in 2023, indicating which, if any, were associated with a course.

The committee makes an active effort to ensure that service learning is built into any planting event that is taking place whether its project enhancement or a new project. These projects are not associated with courses, rather they are associated with service events for the most part. We start all planting projects with 15 minutes of education, background, and instruction about what we are doing and why before we get our hands dirty. Six of the planting events we held in 2023 included a service-learning component. See list and description of Service-Learning projects in the question "Please describe pollinator habitat creation or enhancement projects in your community in 2023, and whether your committee hosted them or not." The only exception is the BioSociety's Monarch Garden Planting since they hosted the event there was no service learning aspect just instruction because the BioSociety already knows the drill about pollinators and their importance since they refresh this garden every year.



ENVS 150: Plant Science class identifying native plants in the Madison Bioswale and Urban Cajun Prairie (Photo Credit: Doug Degan)



BIOL 595: Kimberly Hamm, Committee Member + PhD student in Native Bee Lab studying urban pollinators' pollination rates at one of her 12 pollinator spots (Photo Credit: Blair Bagnaud)



ENVS 151's Semester Garden: Environmental Science students grow / learn about pollination, seeds, plants, fruits, and vegetables (Photo Credit: Blair Bagnaud)



Parish Proud Day - Service learning with SGA, AmeriCorps, and Parish Proud Volunteers at the new science museum pollinator beds (Photo Credit: Blair Bagnaud)



Big Event - Students for Sustainability service learning enhancement at Cajun Village Pollinator Garden and community garden (Photo Credit: Blair Bagnaud)



First-Generation college students planting and learning about pollinators at the New Justice Ricks Pollinator Garden during First to Grow week's Bee-U-Tilation Project (Photo Credit: Amy Windsor)

Policies & Practices

Please describe actions taken to make pest management more pollinator-friendly.

We created and formalized the first Integrated Pest Management Plan for the University of Louisiana at Lafayette in coordination with UL Lafayette's Office of Facilities Management/ Grounds. Previously, our University's Intergrated Pest Management plan was not a formal written policy so thanks to Bee Campus USA we were able to get pollinator friendly procedures set in stone with our official living Intergrated Pest Management Plan for the university's Office of Facilities Management and contactors to follow. Our grounds management operations were already taking a few pollinator-friendly actions when it came to managing campus landscapes and these items have been included in the IPM plan. For example, many things were already in place like avoiding unnecessary treatments, removing unnecessary fence lines to be maintained, and the Prevention and Treatment Methods for Ants, Bees, Wasps, Termites, and Rodents but we refined these actions in the plan and put emphasis on prevention and more regular inspections/monitoring rather than treatment. Prevention over treatment is a theme of our University's IPM Plan because it saves money, protects human health, and reduces the need for unnecessary treatments. New actions that came from discussions about formalizing the IPM Plan and are now in the plan are the banned use of neonicotinoids (we were not using any, but we formalized this), we discussed and agreed to continue to tear down unnecessary fence lines in certain locations to eliminate the use fence line treatments, and most importantly we specified a preference for organic ground management (this continues to be an ongoing discussion as we find and approve alternative treatment options and test our their efficiency).

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

In terms of policy initiatives, most of our efforts went into developing the Integrated Pest Management Plan but during

that process we identified that there was a reoccurring problem with newly contracted out landscaping crews that would unintentionally mow our pollinator habitats even when we had no-mow signs in place. While making the Integrated Pest Management Plan we had contracts amended with maps to better identify the no-mow pollinator habitat areas of campus. This helped the issue of our pollinator habitat unintentionally getting mowed, but it did not completely solve the issue. We would have our Office of Facilities Management to inform the heads of the contracted landscaping crews of the mistake, but it would happen again. During these discussions we learned of a language barrier that existed and we learned that the temporary no-mow signs in just English was not working as intended so now that we are rolling out the first phase of permanent Pollinator Signs and no-mow signs in multiple languages. Signs were in the final stages of designs so we made that change and now all future signs will be bilingual and/or multi-lingual. While this was not a direct policy change, we did change contracts and design regulations for future projects to better protect our pollinator habitats. We have native plant buffer strips along fence lines of our campus coulees to protect our waterways by minimizing any treatment along coulee edges, protect the coulees from contaminants, and to stabilize soil erosion, and improve soil quality. We plan to continue to expand these efforts. The chair of Bee Campus also manages the University's Municipal Separate Storm Sewer Systems Permit (MS4) and Stormwater Management Plan so we regularly check for evidence of pollutants /contaminants in our waterways during our quarterly inspections. The Municipal Separate Storm Sewer Systems Permit (MS4) and Stormwater Management Plan already explicitly say that use of pesticides are banned near drains and campus coulees (term for drainage waterways in south Louisiana).

Did your committee participate in any continuing education on ecologically-based Integrated Pest Management planning?

Yes, the chair who developed most of the Integrated Pest Management plan watched a educational webinar about what a IPM Plan should include. When developing the IPM Plan the committee chair and the co-chair at the time, researched and referred to other University's IPM plans, Organic Materials Review Institute (OMRI), Environmental Protection Agency (EPA), The Xerces Society for Invertebrate Conservation, Louisiana Department of Environmental Quality (LDEQ), The National Institute of Environmental Health Sciences – National Toxicology Program , and the U.S. Department of Agriculture (USDA). The committee as a whole reviewed The Xerces Society “Smarter Pest Management: Pollinator Protection For Cities And Campuses” document at a committee meeting and during the first IPM Plan meeting with the Office of Facilities Management and Grounds.

Please check actions you have 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

- Restricted pesticides used to organic pesticides on city or campus grounds
- 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 that were not treated with neonicotinoids

Any lessons learned you would like to share?

Yes, see the response for question “In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?”. The language barrier we discovered when troubleshooting why our pollinator habitats were getting mowed was a big lesson learned for and we were very happy to be able to catch this oversight on our part while the permanent no mow and educational pollinator signs were still in the design phase.



Native plant buffer strips along fence lines of our campus coulees to protect waterways (Photo Credit : Blair Begnaud)



1st Bee Campus USA committee meeting made up of employees and students (Photo Credit : Blair Begnaud)

Learn More

Integrated Pest Management Plan: [UL Lafayette Integrated Pest Management Plan.pdf](https://sustainability.louisiana.edu/operations/landscape-and-habitats/intergrated-pest-management-plan)

<https://sustainability.louisiana.edu/operations/landscape-and-habitats/intergrated-pest-management-plan>

Recommended Native Plant List: [2023 Native Plant List.docx](https://sustainability.louisiana.edu/node/307)

<https://sustainability.louisiana.edu/node/307>

Recommended Native Plant Supplier List: [2023 Native Plant List.docx](https://sustainability.louisiana.edu/node/307)

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