

Bee Campus USA - Indiana University Indianapolis

Report on 2024

Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement projects in your community in 2024, and whether your committee hosted them or not.

As part of ongoing campus landscape management practices, all existing pollinator habitats are maintained, with additional efforts in 2024 to create or enhance pollinator-friendly spaces on campus. These include a collaborative volunteer event led by the Tree Advisory Committee and the School of Health and Human Sciences to plant 500 native perennials behind the Natatorium in honor of a retiring faculty member. Additionally, a small woodlot with 87 native trees was established on a previously empty field. While a committee member managed the project and the woodlot, the initial planting was done by contractors. Further supporting campus biodiversity and pollinators, the university received funding in 2024 through an Indiana DNR grant to remove the 20 remaining Callery Pear trees on campus. As part of this project, a 2:1 replacement plan is being implemented, ensuring the removed trees are replaced with native species that provide greater ecological benefit, including improved habitat and forage for pollinators.

How many habitat projects did you help to create or enhance in 2024?

2

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

30

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

3

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

31000

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

- Vegetable garden
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Rain garden/bioswale

- School garden
- Other



Students from GEO-208 Environment and Society teamed up with IUI Sustainability, IUI Grounds, and Marion County's Soil and Water Conservation District to explore sustainable landscape/gardening practices and enhance pollinator habitats at one of the campus gardens as a test bed. Photo provided by IUI Sustainability.



Photo shows a volunteer event led by the Tree Advisory Committee and the School of Health and Human Sciences to plant 500 native perennials behind the Natatorium in honor of a retiring faculty member. Photo provided by IUI Sustainability.

Education & Outreach

Please describe pollinator conservation events or outreach activities in your community in 2024, indicating whether your committee hosted them or not.

In 2024, IUI's Office of Sustainability hosted or supported a variety of pollinator conservation events and outreach activities that promoted both pollinator health and education. These events included the 12th annual Arbor Day Tree Planting and Celebration, student-led garden workdays throughout the growing season, on-campus service-learning days, and IUI's second annual open honey extraction and honey sale. Additionally, other events and activities available to the campus community, though not hosted by the committee, included native seed collecting and scattering,

wintercreeper removal and trash cleanup, bush honeysuckle removal, and more.

How many pollinator-related events or outreach activities did you host or help with in 2024 (in total)?

5

How many people attended those events (in total)?

152

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

2



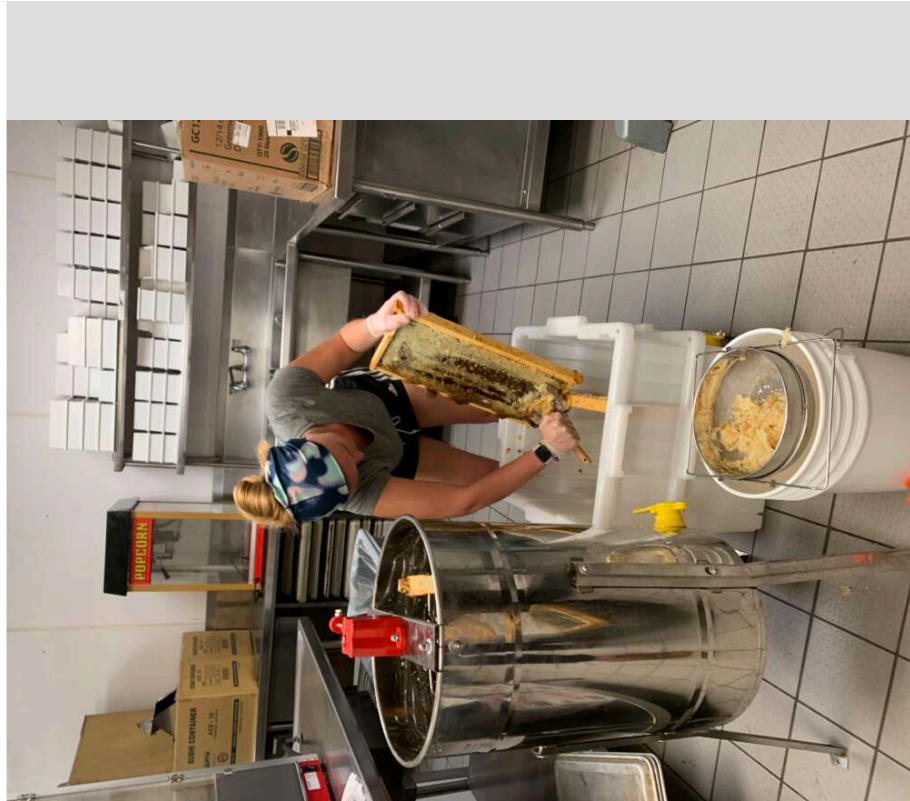
O'Neill Indianapolis is at IUPUI Ball Hall. ...

Apr 26, 2024 · 🌐

It's [#ArborDay2024](#) and you know that means O'Neill students getting their hands dirty to help [IUI Sustainability](#) and [IU Indianapolis](#) keep their Tree Campus status. 🌳 They planted several trees in Ball Garden, including Bald Cypress, Ohio Buckeye, Northern Catalpa, Beautiful Autumn Gold Ginkgo, London Planetree, Black Cherry, Chinkapin Oak, and--of course--Tulip trees!



IUI celebrated Arbor Day by organizing tree plantings, in collaboration with event partners such as IUI Sustainability and IUI Grounds. The 12-year celebration of Tree Campus Higher Ed designation included 30 native trees being planted. Photos provided by IUI Sustainability and O'Neill Indianapolis.



IUI Sustainability hosted IUI's second annual honey extraction event. Pollinator education was provided throughout the extraction, bottling, and sale of the honey. Photo shows an IUI student and committee member harvesting honey from a frame. Photo provided by IUI Sustainability.



Signage posted near our beehives on the New York Street Garden Fence. Photo provided by IUI Sustainability.



Signage posted near our beehives in the New York Street Garden. Photo provided by IUI Sustainability.

Curriculum, Continuing Education, & Service Learning

Please describe the curriculum your campus engaged in 2024, indicating whether it was part of a for-credit course or continuing education.

IUI offered 4 for-credit courses in 2024 that covered pollinator-related information: Principles of Ecology and Evolution: A study of the interactions of organisms with one another and with their nonbiotic environments in light of evolution. This course is taught in the fall and spring each year and 250 students enroll annually. Suburban and Urban Gardening: Designed to expand understanding of the science and techniques of gardening with an emphasis on healthy soil and its impact on plant growth. This course is offered in the spring of even-numbered years and had 8 students enrolled in 2024. Environment and Society: Just as we shape the environment, the environment shapes us. From globalization to food production to climate change, learn how humans and environments interact by using the campus as a living-learning laboratory. The class is offered in the fall and spring each year and had 20 students enrolled in 2024. Principles of Sustainability: Exploration of sustainability topics by sector, including the built environment and landscapes. This class is offered every fall semester and had 29 students enrolled in fall 2024.

How many of your for-credit courses included pollinator-related information in 2024?

4

How many students attended those for-credit courses?

307

Please describe the service-learning projects your students were engaged in 2024, indicating which, if any, were associated with a course.

In 2024, IUI students participated in a variety of service-learning projects that benefited pollinators. These events included invasive species removal, collecting and spreading native seeds, surveying campus trees, cleaning up trash on and off campus, and more. Many volunteers were encouraged to participate by their professors for extra credit or as homework assignments. One notable course-based project was the New York Street Garden Enhancement initiative, which served both as an improvement to one of IUI's urban gardens and as a hands-on learning opportunity for students. As part of the Environment and Society course offered through the Geography Department, students worked alongside IUI Sustainability, IUI Grounds, and the Marion County Soil and Water Conservation District to explore sustainable landscape/gardening practices and pollinator conservation. By using the campus as a living-learning laboratory, students gained practical experience in native plantings, tree maintenance, and the use of cover crops to improve soil health and support pollinator habitats.

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

31

How many students participated in service-learning projects in 2024 to enhance pollinator habitat on or off-campus?

510



Fall environmental stewardship is drawing to a close with the penultimate service learning event of the semester: trash clean-up and invasive species removal at the Lilly ARBOR. A stalwart group of students braved iffy fall weather to engage in environmental restoration work. Sweeping through the northern half of the ARBOR, the group cleared out all the small bits of trash that had been overlooked by FFA teams that had been through earlier in the week (collecting the large pieces of trash).

Small pieces of plastics are especially important to remove because these small pieces degrade more easily into even smaller pieces known as nerdlies. Nerdlies can be mistaken for food and ingested by unsuspecting animals. Today's volunteers also pulled wintercreeper, an invasive ground-vine, wherever it was encountered. Wintercreeper is highly aggressive plant that, if permitted to grow unchecked, can crowd out native species. The resulting localized extinction of a species (from a portion of its range where it previously occurred) is referred to as extirpation.

Repeated invasive species removals and trash clean-ups at the ARBOR are having a positive effect on habitat restoration. The habitat has improved to such a degree that a species not previously seen at the ARBOR was spotted today: an Eastern Box Turtle. Eastern Box Turtles, which were once common throughout woodlands and forests of eastern North America are now a threatened species, so it was very exciting to see one at the ARBOR!

Excellent work today volunteers!



IUI students remove wintercreeper and trash at Lilly ARBOR, an 8-acre strip of floodplain on the edge of campus along the White River, to create space for native plant species to thrive and preserve the forest ecosystem. Photos provided by CEES.



It was a picture perfect fall day for the last CEES environmental service learning project of the semester. Today's stewardship event was the annual Day of the Dead-heading. Student volunteers spent the morning collecting seed from the Indiana State Museum's native wildflower gardens. The group then headed down to the White River to scatter seed throughout the Monarch Sanctuary. The Monarch Sanctuary is an area along the eastern bank of the White River where the floodplain is being maintained as open meadow habitat. Located between the New York Street Bridge and the old Washington Street Pedestrian Bridge, the Monarch Sanctuary supports a wide diversity of flowering plant species, including milkweeds (which provide food for monarch caterpillars) and many nectar-rich plant species used by adult butterflies.

Climate change and habitat loss have impacted monarchs (and other species of insects), causing population declines. Monarchs have been particularly hard hit due to their migratory lifestyle. As they journey to their overwintering grounds, these butterflies rely on nectaring "way stations" - areas that supply an abundance of nectar-rich flowers that monarchs need to fuel their migratory journey. Natural areas that used to support wildflowers have been converted to other uses (housing, commercial development, agriculture), so food resources that were once abundant are now scarce.

Monarchs are not the only insects at risk: conservative estimates indicate that insect populations in general have been declining at a rate of approximately 9% per decade over the past 30 years. As charismatic mini-fauna, monarchs serve as an ambassador species, highlighting the problems faced by insects. Monarchs also serve as an umbrella species, since steps taken to protect monarchs will benefit other insects, too.

Today's work builds on many years of effort to create and improve meadow habitat along the White River. Our efforts will help increase the biodiversity of wildflowers in the Monarch Sanctuary, which will have a variety of positive impacts. The more diverse the plant community of an area, the more species of insects (and other animals) the area will support, and the higher (and more reliable) the level of function of various ecosystem services provided by the habitat will be.

Excellent work student volunteers! And many thanks to our project partners, Greg Harger (Urban Wilderness Trail) and the Indiana State Museum.



IUI students collected seed from the Indiana State Museum's native wildflower gardens then scattered them throughout the Monarch Sanctuary along the White River. Photos provided by CEES.

Policies & Practices

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

The Tree Advisory Committee, which supports both Bee Campus USA and Tree Campus USA initiatives, meets regularly throughout the year to discuss topics related to IUI's urban tree canopy, pollinators, native plantings, and more. Comprised of students, staff, faculty, nonprofit organizations, and community members, the committee

evaluates landscaping policies/plans and strategizes the best path forward for a more sustainable and biodiverse campus.

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

N/A

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

IUI's Grounds and Sustainability staff regularly participate in professional development and training opportunities focused on sustainable landscape practices. For example, in 2024, our Sustainable Landscapes interns, Grounds crew, and Facility Operations leaders attended the Indiana Green Expo to learn more about tree care, pest management, equipment electrification, and other sustainable initiatives. Additionally, Sustainability staff frequently attended webinars from organizations like the Xerces Society to stay up to date on best practices for pollinator conservation and integrated pest management.

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)

Any lessons learned you would like to share?

N/A

Committee Photo



Photo includes 3 members of the committee who also serve as the campus beekeepers. Photo provided by Liz Kaye, IU's photographer.

Learn More

Integrated Pest Management Plan: [IPM Policy IUPUI.pdf](#)

Recommended Native Plant List: [IU Indianapolis Tree Care Plan - 2018.pdf](#)

Recommended Native Plant Supplier List: [IU Indianapolis Tree Care Plan - 2018.pdf](#)

<https://sustainability.indianapolis.iu.edu/operations/grounds/index.html>
sustindy@iu.edu

<https://www.instagram.com/iuisustain>
<https://www.facebook.com/IUISustain>