

# Bee Campus USA - Randolph College

Report on 2021



## Pollinator Habitat Creation & Enhancement

Randolph College staff continues regular maintenance and enhancement of pollinator habitats as needed, in addition to this we hosted students to both expand and create new pollinator habitats in 2021. Our Organic Garden and Pollinator Garden were enhanced by staff and students during the spring and fall sessions of our organic gardening class. The Pollinator Garden was also expanded on Earth Day with a new section of native plants added. Herb and vegetable gardens were planted and shared by the community, manual invasive and exotic species removal was performed, trees in our orchard and food forest were pruned to promote healthy growth, and seeds sourced from our gardens the previous year were spread in our meadow and gardens.





Volunteers work in the pollinator garden digging holes for students to put more plants in.

## Education & Outreach

In 2021, Randolph College was still being cautious of COVID-19 which caused some difficulty in planning. In addition to this, there was a transition in our one-person Sustainability Office which required efforts to be focused on training the new employee. For Earth Day 2021 we had a hybrid celebration with in-person and virtual attendees. The in-person students were able to help with an expansion of our Pollinator Garden while learning about native species and take a small plant home from our give-away. We also hosted a Facebook live stream so that virtual students could attend and learn about the benefits of pollinator gardens and sustainable landscaping. Three students were also able to use the celebration to launch their new campus program, "Randolph Thrive," focused on improving campus mental health and encouraging environmental awareness through interaction with nature.





A student at the Earth Day 2021 celebration adding a plant to the new section of the Pollinator Garden.



A student loosening the roots on a plant before planting it in the Pollinator garden during the 2021 Earth Day event.



A student talks to our sustainability coordinator while choosing a plant to bring back to their dorm room.

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## Courses & Continuing Education

Introductory Biology, Evolution, Zoology, Zoology Laboratory, Botany, Botany Laboratory, Economic Botany, Developmental Biology, Ecology, Ecology Laboratory, Animal Behavior, Animal Behavior Laboratory, Principles of Conservation Biology (one-time course by guest faculty), Environmental Chemistry, Environmental Economics, Environmental Science: Systems and Solutions, The Ecosphere and Environmental Issues, The Ecosphere and Environmental Issues Laboratory, Quantitative Aspects of Global Environmental Problems, Research Design and Geographic Information Systems, Sustainability Principles and Practice, Climate Dynamics and Global Change, Laboratory in Climate Dynamics and Global Change, Environmental Problems: History and Culture, Natural History Collections, Collections Management, Environmental Philosophy, and Organic Gardening (physical education course 0.5 credit offered each semester). These courses have varying amounts of pollinator-related study where some courses, such as Principles of Conservation Biology, cover pollinators extensively including habitat creation, restoration, protection, and population study. Other courses do to go into the same depth, but are still notable. For example, in Economic Botany, there is a unit studying the economic benefits of pollinating insects and production improvements resulting from native pollinator visitation. In Developmental Biology, students study the different life stages and metamorphosis of insects. These courses fall primarily into the natural sciences, specifically biology and environmental science and studies, with a few departments hosting just one course with pollinator-related information, such as Environmental Economics or Environmental Philosophy. It is important to note that each course features a writing or research assignment where the student dictates the area of study.

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## Service-Learning

Students and community members had the opportunity to participate in 2 different workdays at our Pollinator Garden. We hosted a garden clean-up to help eliminate invasive species, staff were able to teach students proper removal methods



and why removal is important. We were also able to identify some of the pollinator species in the garden while we worked. Students in the organic gardening course were able to participate in a winter preparation workday to get the garden ready for the cold weather. The involved students learned about seed saving, pollinator life cycles, how pollinators overwinter, and the benefits of native plant species. Plant identification was of great interest to these students and they showed their knowledge by continuing to identify plants while they cut back the garden.



Analise Presley '22 helping to cut back plants to prepare the Pollinator Garden to overwinter.



Emilie Bryant '22 working in the Pollinator Garden to collect and save seeds to be planted in future years.



Brooke Williams '25 helping to pull smartweed and creeping charlie out of the Pollinator Garden.

## Educational Signage

A new campus nature program was launched for our community by a group of students which encourages people to spend time outdoors and educates them about the mental and physical health benefits that can be gained from this interaction with the environment; 5 educational signs were installed in new locations. These signs have been a valuable addition to our campus, community members have been seen spending more time outdoors and interest in our pollinator habitats has increased.





Abby Whitlock '23 and Sarah Greene '24 stand by one of the newly installed Randolph Thrive signs in the Botanic Garden.



A sign installed by the entrance to the Organic Garden shows the layout of the garden as well as educates readers about permaculture and Randolph Thrive.

## Policies & Practices

Randolph College has eliminated all pesticide and herbicide use in sensitive locations and on our lawns, due to this elimination the lawns are now a composition of different fescues, clover, dandelion, false strawberry, and other flowering “weeds.” The remaining locations where pesticides and herbicides are used are consistent with our written IPM. The lawns also continue to be maintained at a taller height and mowing starts later in the spring to ensure pollinators proper time to overwinter. The community has expressed an interest in learning more about alternative pest control methods; our Organic Garden and Pollinator Gardens are demonstration sites for these practices with hands-on learning experiences. By planting species that attract parasitic insects between and around vegetable plants, we have created a more visually appealing vegetable garden while eliminating the need for pesticide uses. Staff removed trees with Emerald Ash Borer infestations and replaced them with native species including redbud trees and flowering dogwood trees.

### Integrated Pest Management Plan:

### Recommended Native Plant List:

### Recommended Native Plant Supplier List:



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