



Bee Campus USA Annual Report Pollinator Conservation & Education 2019



University of Oregon Eugene, Oregon

EDUCATION & OUTREACH



Students removing mason bee cocoons for cleaning.



Springtime Mason Bee release.



Student Bee Friendly Campus Chair Maria Rechdouni spreading the word.

Some marquis events from 2019 include:

Weekly meetings of the student run Bee Friendly Campus Committee (BFCC).

Monthly tabling of BFCC members at the student union

Throughout the year, hosted events at the Student Craft Center are held making hummingbird feeders, bee baths, mason bee boxes etc.

Mason Bee spring and fall workshops

Native Plant bicycle tour in conjunction with the City of Eugene Bee Celebration May 2019

Mason Bee cocoon collection workshop Fall 2019

Many hands-on bee-related student projects and workshops are happening throughout the year. These occur both within the regular curriculum and as extracurricular events.

For example:

Mason bee sanctuaries have been installed at many campus locations and especially at the Urban Farm. These bees have become a wonderful addition to our pollination program and have captured the imagination of students and teachers alike. Workshops where we collect cocoons in the Fall and the springtime release are popular annual events.

The student Bee Friendly Campus Committee has been working closely with the City of Eugene's Bee City USA Team as well as Glory Bee's "Save the Bee" manager and our local non-profit partner Beyond Toxics.



UO Students celebrate Bee City event with Mayor Vinis.

POLLINATOR HEALTH & HABITAT

Some highlights from 2019 include:

We have undertaken a major restoration of the historic Millrace and the ongoing restoration of the Willamette River edge. Pocket gardens across campus have been created, using snags, fallen trees and the introduction of native pollinator species. Also, our 2 acre Urban Farm is an ongoing project that supports both native and european bees as well as a collection of dozens of other pollinators. Specific pollinator species plants have been introduced throughout the site and habitat consideration is embedded into the landscape design. Target species include of native bees, european honey bees, bumble bees, butterflies etc.

These projects reflect a growing partnership with campus grounds staff, faculty, and students.

In order to plant native species along the historic millrace, students worked to remove exotic invasive plants. This organic material was then used to make compost for nearby garden beds and designated perennial native plantings. This modest workshop project is an example of how we are teaching students about the intrinsic connectivity of native systems, fertility, the cultural vernacular, and the joyful pride of good work, well done.



Students attacking invasive species.



Students removing invasive plant species along the millrace.



Students creating compost from invasive plants.



Urban Farm students learning that overwintered arugula can serve as an excellent early nectar source for honey bees in the orchard.



The UO Urban Farm not only serves as an outdoor classroom where students learn to grow food, it is also a vibrant pollinator friendly ecosystem.

SERVICE LEARNING

- Planting and weeding native habitat on campus - all seasons (both course and student organization)
- Installing bee mason structures on campus - Spring (both student and course)
- Planting and mulching a pollinator garden at Huerto de la Familia Community garden - Spring (course)
- Planting and weeding at prairie restoration site (Walama restoration Project) Spring (course)
- Planting and weeding pondside at Delta Ponds and other Eugene Parks and Open Space locations - Spring (course)
- Assisting at City of Eugene Native Plant Nursery - Spring (course)
- Assisting at FOOD for Lane County Garden Program - Year long involvement (both student and course)

Assisting at the School Garden Project of Lane County - Year long involvement (both student and course)

Assisting at Mt Pisgah Arboretum - Year long involvement (both student and course)

Through the Landscape Architecture Department's Urban Farm program, as well as through a suite of courses relating to Food Studies, Field Botany and General Sciences, hundreds of UO students engage in countless service learning hours that are directly related to the intersection of food and pollination habitat. This intrinsic connection is key to understanding the important role honey bees and natives play in a resilient and productive ecosystem. This work happens all year long and has been going on for decades, especially through the Urban Farm.



UO Students working with City of Eugene Parks and Open Space restoring native habitat.



UO Students install native plantings on campus.



UO Students planting natives at the Delta Ponds.

CURRICULUM & CONTINUING EDUCATION

Within the general curriculum are many many specific course offerings that directly relate to native habitat, pollinators, and the ecological services they provide. To simplify this collection we can organize them into three groups: the natural sciences, landscape design, and food studies. Science courses such as Pollination Biology, Field Botany, and Entomology teach of issues relating to habitat, morphology etc. Landscape designers study topics such as habitat restoration, habitat loss due to climate change, native plant ecosystems, urban forestry etc. Of course, all of these sub-disciplines relate directly to pollinators. Students who take courses tied to our Food Studies curriculum also learn to respect the intimate relationship that native and european pollinators play in the food we share.

Although there are few courses specifically designated as continuing education, many UO courses can be taken by continuing ed. students, especially courses that draw students from a plethora of disciplines like the Urban Farm class.



UO Urban Farm students at work.

EDUCATIONAL & INTERPRETIVE SIGNAGE



Typical native plant site with downed timber and informational signage.



Native plant site with wildlife snag.

Campus policy discourages temporary signage and limits permanent signage. In order to provide information for designated pollination areas and pollination information, we have created and activated an interactive layer on the campus map specifically dedicated to pollination habitat. People can use this map App to click on Bee Icons that correspond with the site they are either looking for or have found. Upon clicking they will access photos of the site as well as links to pertinent pollinator information. We anticipate that this map layer will continue to grow as more designated pollinator sites are established. Simultaneously, will be regularly adding additional information including plant types and the target insects they provide habitat for, as well as links to information sites relating to bees and pollination, such as Xerces. <https://map.uoregon.edu/native-pollinators>

POLICIES & PRACTICES

As more and more campus areas become dedicated as pollinator areas, more and more acreage becomes pesticide free. Also, as awareness increases, so does the hesitancy to consider chemical interventions without exhausting a more benign option first. We are already seeing a paradigm shift in the manner in which we look at bees on campus. This change of perspective goes all the way up to the President's office. That our committee board includes officials from both the UO General Counsel's office and the office of Safety and Risk Services speaks to the depth to which the University has embraced our vision of bee friendliness.

University of Oregon IPM Principles:

- Monitoring for the presence of pests and pest damage.
- Establishing the density of the pest population, which may be set at zero, which can be tolerated or correlated with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic, or aesthetic thresholds.
- Treating pest problems to reduce populations below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical, and chemical control methods and that shall consider human health, ecological impact, feasibility, and cost effectiveness.
- Evaluating the effects and efficacy of pest treatments.

Recommended Locally Native Plant Species List —

<https://xerces.org/publications/plant-lists/pollinator-plants-maritime-northwest-region>

Regional Native Plant Supplier List — <http://www.doakcreeknursery.com/>

Pollinator Friendly Integrated Pest Management Plan —

<https://safety.uoregon.edu/integrated-pest-management>

CONTACT US!

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Website — <https://emu.uoregon.edu/bee-campus>

Social Media — <https://www.facebook.com/UObeefriendly>