

Bee Campus USA - University of Utah

Report on 2021

Pollinator Habitat Creation & Enhancement

3 observation nestboxes installed on campus 75 nestboxes via sponsorship of HTHF event Ask facilities partners (John Walker) 4th nestbox installed on upper campus? Continued maintenance and repair of Pollinator Conservation Garden? Installation of 6 bee boxes Braided grasses for winter habitat Left leaf piles about and a lot of grasses uncut for winter habitation



Installation of an observation native bee nestbox on campus by University of Utah students, with plenty of bare soil for ground-nesters too



Univ of Utah student, Derek Kober, showing off the inner cavities of our native bee nestbox. Four of these were installed across campus.

Education & Outreach

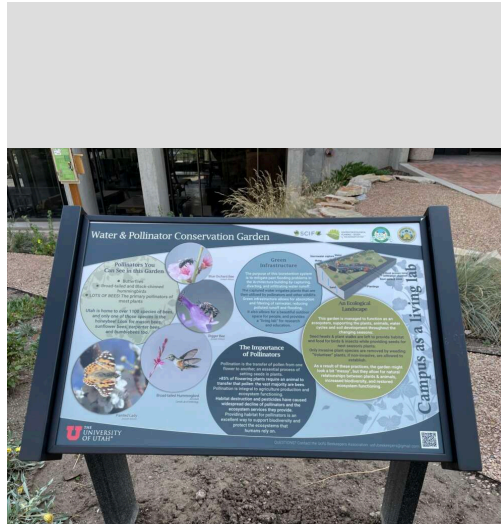
Lifelong Learning Classes: total of 7 classes (9 hours of instruction) and 17 people UofU Beekeeper Events o Biweekly meetings o Installation of 3 native bee nestboxes o Honey harvest party Tour of Pollinator Garden: 3 (total of 8 people) Meetings for Pollinator Conservation Garden sign (include photos!) o Sooo many meetings...10? Hollow Tree Honey Foundation events/board meetings: Peterson Farms nestbox event (75 people + 4 board meetings) Outreach presentations o Bennion Center (8 people) o Urban Ecology (25 people) o Student Services employees (10 people) Red Butte Garden hosted an in-house exhibit from May through October all about pollinators called "Polleneighbors", with elements continuing through the winter. o Within the exhibit we had monarch caterpillars on display from late June to



October, showing their life stages and tagged and release the adult butterflies. o In addition we had set ups for native caterpillars, including: Viceroy, Two-tailed swallowtail, Weidemeyer's Admiral, Gray hairstreak, and Mourning Cloak. o Installation of 6 bee boxes 2 We had multiple summer camps that included education on and about various pollinators. We reached about 50 campers. 2 We also had a Garden Adventure Kit all about insects and pollinators that was purchased by 24 children.2 SLC Bee fest (did it happen in 2021?) 2 Polleneighbors was open for self-guided tours from April through October. Some signage is still up for the winter. Admission to Red Butte Garden and Polleneighbors exhibit: Admission month Child Adult TOTAL May-21 3481 18565 22046 Jun-21 3036 13797 16833 Jul-21 2981 11696 14677 Aug-21 2082 9617 11699 Sep-21 2184 11806 13990 Oct-21 * * 20665 Total: 99910



Prepping our brand-new Pollinator Conservation Interpretive sign at the University of Utah



The new sign at our Pollinator Conservation Garden.



Students from the Fall 2021 Lifelong Learning class "Pollinators and their Habitat"; this course is offered 3x per year.

Courses & Continuing Education

The University of Utah has pollinator-friendly curriculum in both their undergraduate education and continuing education programming. Matriculated students can take Entomology for a full-blown exploration of the insect world, or can take Conservation Biology and Global Environmental Issues for a broader exploration of pollinator conservation and ecosystem functioning and services. The Continuing Education Program offers a Pollinators & Their Habitat class, offered three times per year by the Chair of the Bee Campus USA Committee and also offers a honeybee keeping class.





Amy Sibul leading pollinator outreach with high school student visiting campus from 5 different Native American Reservations, July 2021

Service-Learning

Students enrolled in both Global Environmental Issues and Conservation Biology courses participated in multiple pollinator-focused community engaged learning projects (we no longer use the outdated term of “service” learning, since the work goes beyond volunteering). Students worked with Salt Lake City botanists, state entomologists, non-profit organizations to restore pollinator habitat in wetlands, conduct surveys regarding bee knowledge in the general public, and increase participation in our statewide Community Science Project “The Utah Pollinator Pursuit”





Students from Conservation Biology, Spring 2021, propagating pollinator-friendly native plants for wetland restoration



This community-engaged learning project, "Wetland in a Box", led by Blake Wellard and James Young (shown), has University of Utah students help propagate and plant out over 100 species of native Utah wetland species to provide better habitat for Utah's pollinators and other wildlife species

Educational Signage

The UofU Beekeepers Association, the main body of our Bee Campus USA Committee, won a grant to design, manufacture, and install a beautiful, permanent sign for our Pollinator Conservation Garden. The information provided on the sign focuses on building awareness of pollinators and understanding how to garden for promoting wildlife habitat and maintaining natural ecological processes. We also include Bee Campus USA information on all of our observation native bee nestboxes. At Red Butte Garden installed a 'Polleneighbors' exhibit within the Children's Garden, and with a few signs posted throughout the rest of the garden. The exhibit talked about what pollination is and the many different pollinators there are as well as what their habitat is. Though initially a temporary exhibit, the garden is using it as a stepping stone for our first garden interpretive master plan, and will be expanded upon in many more areas of the garden in 2022.





Amy Sibul and Surbhi Ghodke showing off the mock-up of our new Pollinator Conservation Garden interpretive sign (which Surbhi, a UoU graduate student, designed)



Amy Sibul, Chair of the University of Utah Bee Campus USA Committee with the Red Butte Garden "Polleneighbors" exhibit

Policies & Practices

The University of Utah's integrated Pest Management program has a mission to develop and promote ecologically friendly and sustainable methods of pest control. The Horticulture team, including the greenhouse crew, is responsible for 61 acres of planting beds. We emphasize continual education to stay on the forefront of horticultural practices. The IPM team uses a variety of practices and controls in order to minimize environmental damage and health risks. We integrate cultural, biological and mechanical controls for pest management, and use chemical control only as a last resort. Biological Practices: Controls include using natural enemies, predators such as ladybugs and pathogens to regulate or eliminate a specific pest population. Maintaining a diverse plant environment and avoiding monocultures helps prevent unwanted pests and disease. It differs from chemical, cultural, and mechanical controls as it alone is not a means by which to achieve pest eradication because the biocontrol agent requires maintenance of its food supply in order to survive. Cultural Practices: these include adjusting mow height according to the time of the year to promote root growth and stress tolerant turf; fertilizing turf to enrich deficient soil; seeding and over seeding to fix winter damage and aerating turf to relieve soil compaction, break down thatch and stimulate decomposition. Proper sanitation of turf areas and equipment is essential to prevent unwanted pests and diseases from harboring, promoting or spreading. Practices for shrubs and trees include: proper pruning techniques and timing to maintain health, bloom and environment; widening tree wells and shrub beds to reduce soil compaction and to promote root growth; fertilizing deficient soils and removing and rejuvenating mulch to reduce organic matter that harbors pest insects and diseases; controlling the spread of disease by methodically sanitizing tools after use. Mechanical Practices: used when cultural practices have not eliminated persistent weeds. Done by hand pulling weeds or using simple horticulture tools such as a garden hoe or weed puller. If possible pest insects can be



removed by hand as needed. These practices must also include ensuring proper irrigation, to promote root growth and to reduce insect pressure and susceptibility to disease. As well as placing pheromone traps to catch and disrupt breeding of pests.

Integrated Pest Management Plan:

<https://facilities.utah.edu/landscape/ipm/>

Recommended Native Plant List:

Recommended Native Plant Supplier List:

<https://www.grandprismaticseed.com/natives>

Learn More

