

Bee Campus USA - Gonzaga University

Report on 2022

Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement event(s): At the start of the summer, the City of Spokane donated four large planters for a new transit plaza servicing the east side of Gonzaga University's campus. Soil and flowering plants were provided by Gonzaga University to improve the habitat for pollinators. At the end of the summer, we transplanted additional blanketflower (*Gaillardia aristata*) into an existing pollinator habitat behind a large Gonzaga athletics facility.

How many habitat projects did you help to create or enhance last year?

2

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

2000

How many volunteers helped with those projects?

5

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

- Flower garden
- Herb garden
- Native pollinator-friendly shrub border/hedgerow planting



Michael, Brooke, Jake, and Sophie after planting blue salvia and blanketflower for pollinators in a new planters provided by the City of Spokane.

Education & Outreach

The community hosted 3 events, 2 of them were by our committee hosting young students from our community to learn about bees and pollinating conservation!

How many pollinator-related events did your affiliate host or help with last year (in total)?

3

How many people attended those events (in total)?

40

Courses & Continuing Education

In the Laboratory sections of Environmental Biology (ENVS 103L), 32 students spent two weeks describing patterns of biodiversity on campus. Several students looked at the associations of pollinators with particular flowers on campus flower beds. In the Insect Ecology Research course, students worked to collect, analyze, and present data on interactions between different bee species on campus. In particular, the European wool carder bee arrived on Gonzaga's campus around 2016. Male wool carder bees are territorial and interfere with the foraging activities of bumble bees, honey bees, and other pollinators. We are evaluating whether wool carder bees are interfering with efforts to improve habitats for other pollinators

How many of your for-credit courses included pollinator-related information last year?

2

How many students attended those for-credit courses?

36

How many of your continuing education courses included pollinator-related information last year?

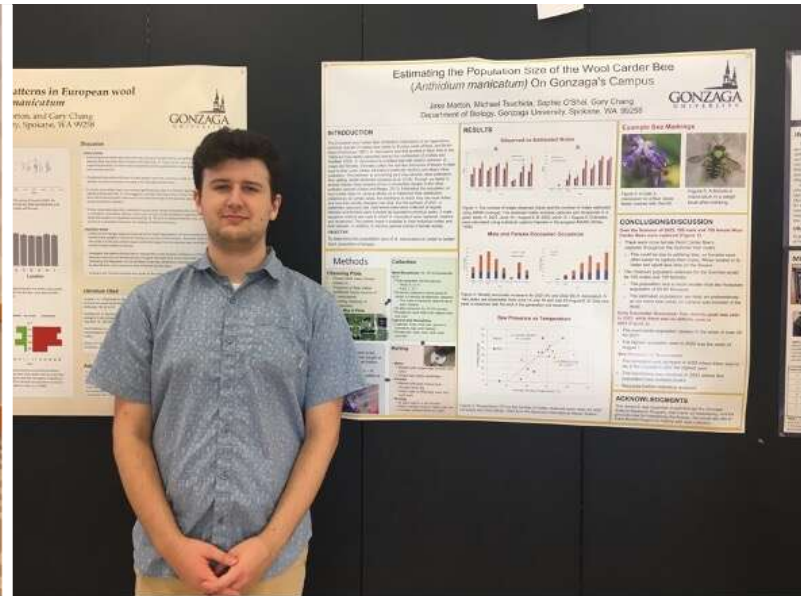
2

How many participants attended those courses?

36



Michael Tsuchida, Brooke Rogers, and Sophie O'Shei delivered an oral presentation titled "Wool carder bee behavior and population size on Gonzaga's campus" at the Murdock College Science Research Conference held in Vancouver, Washington, November 11-12, 2022.



Jake Morton with his research presentation titled "Estimating the population size of the wool carder bee (*Anthidium manicatum*) on Gonzaga's campus," presented during the Undergraduate Research Showcase at Gonzaga University, October 8, 2022.

Service-Learning

We had two classes from local elementary school come and learn about how to keep the bees healthy and alive and how important they are and that we need to work hard to make sure they stay alive. We had our local bee keepers come in

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

2

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

40

Educational Signage

We have 10 temporary signs that we stick in the ground when the snow is not on campus, describing what each plant is and how they help the bees in our area. We have 3 hives on campus that we tend to as well and have signs describing what the bees are, what they do for the community, etc.

Number of temporary interpretive/educational/Bee Campus USA signs installed last year?

10

COMMON SNOWBERRY

Symphoricarpos albus



Common Snowberry is a native shrub in the Caprifoliaceae (Honeysuckle) family that is found in many parts of the state, from the coast to east of the Sierras, primarily in moist, shady locations below 4,000 ft. It is a sparsely branched shrub 2-5 ft. tall, gradually forming a thicket 4-6 ft. wide. The slender, wiry twigs bear small, opposite leaves and flower clusters followed by large, snow-white berries which eventually turn brown. This hollow-stemmed shrub has tiny, pinkish-white, bell-shaped flowers in small terminal or axillary clusters.

Common Snowberries are pollinator plants for butterflies.



One of the signs on campus

PENSTEMON

Penstemon Pinifolius



Penstemon pinifolius is one of the very best western Penstemon, blooming in late spring, with a phenomenal display of bright-orange tubular flowers held over attractive, evergreen pine needle-like foliage. They emerge in late spring through the summer from the ends of the new growth. The blooms are bright, coral to red tubular flowers with the distinct lobed corollas of most penstemons. The perennial subshrub is native to elevated rocky outcrops in the forested mountains of southeastern Arizona and into western New Mexico.

Penstemon is a pollinator plant for butterflies and bees and attracts hummingbirds.



More signs on campus

Policies & Practices

As a direct result of attending a Xerces Society webinar, the Chang Research Group purchased a steam weeder ("Dynasteam DS2000-WGS") to use in certain parts of campus as an alternative to herbicides.

What actions have you taken to make pest management practices more pollinator-friendly?

- 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>)
- Encouraged developers and private landscapers to source plants using "Buying Bee-Safe Plants" methods recommended by Xerces Society. (See

<https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)

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

Yes, our plant services/grounds team is limiting the use of pesticides on campus, and are working to become pesticide free!

Please describe actions by your affiliate to attend training on ecologically-based Integrated Pest Management and/or to review IPM plans and programs considered of high quality by Bee City USA?

Gary Chang viewed the Xerces Society webinar “Practitioners Talk about IPM: Turning Lemons into Lemonade – the Story of Wilsonville, OR” (November 15, 2022).

Integrated Pest Management Plan:

Recommended Native Plant List:

Recommended Native Plant Supplier List:

[Learn More](#)