



# Bee Campus USA Annual Report Pollinator Conservation & Education 2019



## East Georgia State College Swainsboro, Georgia

### EDUCATION & OUTREACH



East Georgia State College hosted a community Earth Day Celebration focusing on pollinators and pollinator awareness on November 15 2019.



East Georgia State College held a fun-filled day of activities for the community that included the campus honey bees and pollinator information on September 21 2019.

Earth Day Celebration; Family, Friends, and Alumni Day; Honey Extraction Party; Arbor Day Celebration; Bobcat Beekeeping Club.

In September of 2019, the chair of the East Georgia State College Bee Campus USA committee organized a Beekeeping Club on campus to include interested students, faculty, and staff. The club met twice a month through the fall term to discuss honey bees, basic beekeeping equipment and methods, and the importance of pollinators. While every member did not attend every meeting, there are currently 32 people on the e-mail list for the club.

On August 20, 2019 Paul Cerpovicz, the East Georgia State College Bee Campus committee chair, spoke to nearly 30 community members of the Kiwanis Club of Swainsboro, Georgia about the

college's Bee Campus initiatives and the importance of pollinators to the environment.



East Georgia State College hosted a Honey Extraction Event for students, faculty, staff, and the community to educate attendees about honey bees, honey, and honey extraction. Here, students are uncapping and extracting frames of honey from the college's apiary.



Students inspecting hives in East Georgia State College's Bobcat Apiary. The Beekeeping Club was established in September of 2019 for students, faculty, and staff to learn more about honey bees, the basics of beekeeping, and pollinator protection.



East Georgia State College's Bee Campus USA committee teamed up with the college's Tree Campus USA committee on February 12, 2019 to host its annual Arbor Day Celebration.

The event featured a native tree (*Franklinia alatamaha*) dedication honoring a past employee. In addition, free pollinator-friendly trees (Tulip, Redbud, Red Maple, Silver Maple) were handed out to all attendees.

On September 28, 2019 Paul Cerpovicz, the East Georgia State College Bee Campus committee chair, gave a short presentation to about 200 members of the Georgia Beekeepers Association (GBA) during the fall meeting in Cummings, Georgia to update them on the progress made from the Buzz Fund grant given to the college by the GBA.

In November of 2019, East Georgia State College harvested honey from its apiary for the first time. The honey was extracted as part of a hands-on educational event for about 30 people that included students, faculty, staff, and members of the community. The next month, on December 14, the East Georgia State College honey was entered in a Welsh Honey Judging Show hosted by the Coastal Empire Beekeepers Association (CEBA) in Savannah, Georgia, and was honored to earn first place for extracted honey in the Novice Category!

On August 17, 2019, Ms. Katelyn Moore, Bee Campus Committee member and East Georgia State College's Community Relations and Marketing Coordinator, celebrated National Honey Bee Day with a post on the college's Facebook page. The post reached 1,086 people providing information about National Honey Bee Day, the campus apiary, and East Georgia State College as a Bee Campus USA institution.



# POLLINATOR HEALTH & HABITAT



The Magnolia Midlands Georgia Youth Science and Technology Center based at East Georgia State College, along with the Bee Campus committee planted a pollinator garden in Patriot's Park in Swainsboro, Georgia in the spring of 2019.



During East Georgia State College's annual Readiness Tour to 25 regional high schools to encourage students to consider college to further their education after graduation, the campus's mission as a Bee Campus USA institution was explained along with the importance of pollinators, the challenges they face, and how to best help them. A pollinator-friendly Eastern Redbud tree was donated to each school after explaining how can help support honey bees and other pollinators. Here a Redbud tree is being given to a Tatnall County High School official by President Robert Boehmer.



The herbs were planted as a class project by students taking Terrestrial Ecology, and the Mason Bee house is one of many made by art students enrolled in Three-dimensional Design.



A honey bee enjoying the mint planted in East Georgia State College's herb garden by biology students enrolled in Terrestrial Ecology.



The herb garden at East Georgia State College is visited by a wide variety of pollinators!



1. Faculty, staff, and students started a wildflower garden (roughly 200 square feet) on the campus of East Georgia State College in April of 2019.
2. Throughout the year, faculty and students taking Terrestrial Ecology worked to expand the campus's herb/vegetable garden to include pollinator friendly African Blue Basil (*Ocimum kilimandscharicum* × *basilicum* 'Dark Opal'), cucumbers, squash, and eggplant.
3. On May 21, 2019, a community garden with pollinator-friendly plants was established by Magnolia Midland's Georgia Youth Science and Technology Director, and campus faculty and students in Patriot's Park in the town of Swainsboro.
4. East Georgia State College's Tree Campus USA and Bee Campus USA committees worked together to host an annual Arbor Day celebration on February 12, 2019. The event featured the planting of a native *Franklinia alatamaha* tree to honor a past employee, as well as handing out free pollinator-friendly tree seedlings (Silver Maple, Red Maple, Tulip Tree, Redbud) to all attendees.
5. The Magnolia Midlands Georgia Youth Science and Technology Director (and Bee Campus USA committee member) worked with local middle schools throughout the year to plant pollinator-friendly gardens on the public school campuses.
6. Representatives from East Georgia State College visited 25 regional high schools throughout February of 2019 to promote the campus and recruit students to attend East Georgia after graduation. Among the presentations the Bobcat Apiary and the campus's role and goals as a Bee Campus USA institution were featured and a pollinator-friendly Eastern Redbud tree was donated to each school.

The chair of the East Georgia State College Bee Campus USA committee wrote and received a grant from the Georgia Beekeepers Association in the amount of \$1500 to set up a second apiary about a mile from the college campus in the town of Swainsboro, Georgia. The grant also funded the purchase of two packages of honey bees, hive boxes, and additional bee jackets and tools. The apiary was set up in May of 2019 and will soon include signage that designates it as part of the college's Bee Campus USA initiative.

## SERVICE LEARNING



On April 20, 2019 East Georgia State College students, faculty, and staff hosted an Earth Day Celebration for the local community. The event featured the campus honey bees, along with hands-on activities focused on improving pollinator-awareness, their importance to our environment, the challenges they face, and how people can help protect pollinators and improve their habitats. In all, 15 volunteers helped to better educate nearly 80 community residents on a variety of pollinators and their habitats.

A Bee Campus USA committee member and an East Georgia State College (EGSC) student set up a pollinator-awareness table at a Langston Chapel Middle School Science, Technology, Engineering, Arts, and Mathematics (STEAM) event held on March 28, 2019 in Statesboro, Georgia. Here, the EGSC student, dressed as a honey bee, examine the real honey bees in an observation hive with a visitor.



A Bee Campus USA committee member and an East Georgia State College (EGSC) student set up a pollinator-awareness table at a Langston Chapel Middle School Science, Technology, Engineering, Arts, and Mathematics (STEAM) event held on March 28, 2019 in Statesboro, Georgia. Here an EGSC student honey bee poses with a little beekeeper!



On September 21, 2019 East Georgia State College (EGSC) hosted a campus-wide Family, Friends, and Alumni Day for the community featuring a variety of activities and games for people of all ages. Among the events was a table describing EGSC's role as a Bee Campus USA institution and its goals to increase public awareness of pollinators and their importance to the environment and our lives.



East Georgia State College (EGSC) joined other groups for the annual GreenFest event held in Statesboro, Georgia on October 5, 2019. Students, faculty, staff, and honey bees from EGSC saw nearly 200 visitors that day to talk about bees and other pollinators, the important role they play in the world, the perils they face, and how we can all help to protect them. Handouts were available on integrated pest management, ways to help pollinators, and how to raise honey bees. In addition, wildflower seeds and pollinator-friendly African Blue Basil plants, redbud trees, and red maple trees were available for the visitors.

1. On April 20, 2019 East Georgia State College hosted a community Earth Day Celebration on its campus. The event was run by 13 students from the STEM Club and other clubs, as well as faculty and staff from the college. The pollinator-focused theme featured an observation hive with honey-bees from the campus's Bobcat apiary and hands-on activities for kids of all ages. Overall, approximately 80 members of the community left the event with a better knowledge of pollinators, the challenges they face, and how to help them survive.
2. An East Georgia State College student and faculty member brought an observation hive with honey bees and pollinator-awareness information to a STEAM (Science, Technology, Engineering, Arts, and Math) event held at Langston Chapel Middle School in Statesboro, Georgia on March 28, 2019. Over 200 children and adults attended the STEAM event.
3. Three East Georgia State College students assisted a faculty member during a Library Card Sign Up Day event at the Franklin Memorial Library in Swainsboro, Georgia on September 7, 2019. Among the many activities put on by various groups, the college set up tables with an observation hive, pollinator-information booklets, integrated pest management brochures, and handed out African Blue Basil plants to the 40-50 visitors that day.
4. On September 21, 2019 East Georgia State College hosted its annual Family, Friends, and Alumni Day event for the community. Hundreds of members of all ages came to campus to participate in the many activities held throughout the day. Among them was information about



pollinators and integrated pest management, as well as an observation hive with the Bobcat Apiary honey bees. Six students, along with faculty were on hand to promote the pollinator-awareness activities.

5. On October 5, 2019 East Georgia State College participated in the annual GreenFest event held in Statesboro, Georgia. Eight students from the college assisted faculty and staff with environmental-awareness activities that featured the campus honey bees, pollinator information, beekeeping equipment, and handing out pollinator-friendly tree seedlings and African Blue Basil plants.
6. Erin Youmans from the Magnolia Midlands Georgia Youth Science and Technology Center (GYSTC), met with students from Metter Middle School (Metter, GA), Oak Hill Middle School (Milledgeville, GA), Swainsboro Middle School (Swainsboro, GA), Wrens Middle School (Wrens, GA), David Emanuel Academy (Swainsboro, GA), South Tattnall Middle School (Glennville, GA), and Langston Chapel Middle School (Statesboro, GA) to discuss the significance of pollinators in our lives and the importance of planting and protecting pollinator plants and trees. The students were challenged to form groups and design a pollinator garden plan for their school campus. Four pollinator-friendly trees were donated to each school as part of a partnership with the East Georgia State College Tree Campus and Bee Campus Committees to be incorporated in the garden plan. Students at five of the schools (David Emmanuel Academy, Wrens, South Tattnall, Langston Chapel, and Metter) took up this challenge and planted campus pollinator gardens. In all 176 middle school students were involved in these activities.
7. In March of 2019, Regional Coordinator, and Bee Campus USA committee member, Erin Youmans from the Magnolia Midlands Georgia Youth Science and Technology Center (GYSTC), visited students at Metter Elementary School (Metter, GA) and Swainsboro Primary School (Swainsboro, GA). The honey bees from East Georgia State College were taken out to the two schools as a part of their Farm/Heritage Day in an observation hive. Erin gave the students a presentation on the importance of honey bees and other pollinators. As part of this presentation, pollinator plants and gardens were discussed, and students were encouraged to plant their own pollinator gardens. Students viewed dried honey bees and discussed the special features of honey bees that make them good pollinators. Approximately 365 primary and elementary students were reached through this outreach activity.

## CURRICULUM & CONTINUING EDUCATION

Nearly all the biology faculty at East Georgia State College (EGSC) include lessons to their students about pollinators, environmental factors that affect pollinators, and their importance to the environment in the courses they teach. In 2019, three of these faculty reported teaching a total of eight for-credit courses among themselves that discussed pollinators, pollinator-habitats, the challenges they face and ways to help protect them to 241 EGSC students. Fourteen students enrolled in a Biology II (BIOL 1108) course participated in two different labs dealing with pollination and pollinators. One lab on angiosperm reproduction looked at the anatomy of flowers and the role of pollinators in reproduction and the production of seeds and fruits. In a scavenger hunt activity, students were required to take pictures illustrating different concepts in evolution and ecology, several of which involved interactions between species, including pollinators. The students were specifically directed to the honey bee colonies in the East Georgia State College apiary and were talked to about the hives, bee behavior, etc. In addition, several in-class lectures on angiosperm reproduction included the basics of pollination biology, the economic importance of pollinators for agriculture, current problems with disease/colony collapse in bees, and the state of plant conservation - especially dealing with wild relatives of agricultural crops for increased genetic diversity. Another lecture dealt with symbiosis (community ecology), where species interactions, including specific references to the interdependence of certain plants with their pollinators (such as bees, moths, bats, etc.) was presented to students. In a

non-majors, Biology 1103 course, and an Integrated Science (ISCI 1101) course, the importance of pollination, the role of honey bees, the protection of their habitats and the need for apiaries was discussed to approximately 75-80 students.

Another instructor spoke to nearly 100 students in her Biology I (BIOL 1107) classes used honey bees as an example when teaching about enzyme production, chemical communication, and genetics. In her Biology II (BIOL 1108) course, 15 students learned about the co-evolution of pollinators and plants, using bees and wasps as examples of Mullerian mimicry, and honey bees as examples of intrasexual selection. Three students in a BIOL 3000 Evolution course were exposed to the critical role of bees and other pollinators in the evolution of angiosperm plants, their adaptations to predation, the life history strategies of social organisms, the evolution of cooperation and altruistic behavior, and using the honey bee-Varroa relationship as an example of host-parasite interactions. Throughout the semester, 21 students in an upper-level Ecology class (BIOL 3500), learned about the influence of pollinators on the range of historic plant species, the loss of genetic diversity in pollinator species, the effects of habitat loss and fragmentation, the conservation of critical pollinator habitats, the effects of climate change on pollinator and plant dynamics, and the impact of modern agricultural practices on pollinators. Colony collapse disorder was also discussed among eight students in a Science in Society (SCIE 1101) class when talking about the importance of honey bees to the environment and our society.

The numbers reported for courses taught and students impacted were gathered from three faculty members. More faculty members were involved in teaching many more courses and students about pollinators and pollinator habitats and their importance, who did not report exactly what they did throughout the year.

## EDUCATIONAL & INTERPRETIVE SIGNAGE



Metal, 2' x 3' signs were permanently installed at both entrances to East Georgia State College's main campus in Swainsboro, Georgia. The signs will improve public awareness of the mission East Georgia has as a Bee Campus USA institution.

Permanent, two-feet by three-feet metal signs were installed at each entrance to East Georgia State College's main campus in Swainsboro, Georgia.

A third, identical sign was also made but is not yet installed. The goal is to set it up at an off-campus site in the town of Swainsboro where East Georgia State College set up a second apiary about a mile from the campus.

Other small caution signs were set up at the campus apiary and the off-campus apiary to inform people of the presence of honey bees.

## POLICIES & PRACTICES

East Georgia State College has a continuing goal of minimizing the use of all types of pesticides and herbicides on campus.

**Recommended Locally Native Plant Species List** — <http://www.ega.edu/bee-campus/pollinator-list>

**Regional Native Plant Supplier List** — Not available

**Pollinator Friendly Integrated Pest Management Plan** — <http://www.ega.edu/bee-campus/integrated-pest-management-plan>

## CONTACT US!

**Committee** — East Georgia State College Bee Campus USA Committee, Paul Cerpovicz, [cerpovicz@ega.edu](mailto:cerpovicz@ega.edu)

**Website** — <http://www.ega.edu/bobcat-apiary>

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