

# Bee Campus USA - Blackburn College

Report on 2020

## Pollinator Habitat Creation & Enhancement

Maintenance work continues at the Native Planting located at the Mahan Science Center and the native roadside planting on the southeast corner of campus. Plants are tended to, weeded and mulched with leaf mulch. Many of the plants in the Mahan planting are now large enough to split and use to fill other plantings on campus. Areas around campus have been refurbished and some with total re-landscaping. Total landscaping work that includes native, blooming plants and trees has been completed at the Phoenix Sculpture and the Demuzio Student Center. Smaller pollinator pockets are being installed in areas that would have normally had small patches of grass to be mowed. Many native trees have been planted around campus. Grants have been secured and work has started on the Charles Robinson plantings under the 7 acres of solar panels, the understory of the 2 acre Walnut Grove and on Stoddard Hill. Students in the College's Work Program and in the Biology Department work with our Grounds Supervisor and are involved in the installation and maintenance of all campus plantings. Members of the Bee Campus Committee have been involved with Carlinville's Bee City Committee on plantings in the community. See Carlinville's Bee City renewal for more detail on those events.



Blackburn College native garden at Mahan Science Center.



Phoenix Sculpture before



Removal of overgrown yews.



Phoenix Sculpture after

Blackburn College re-landscaping of the area around the Phoenix Sculpture.



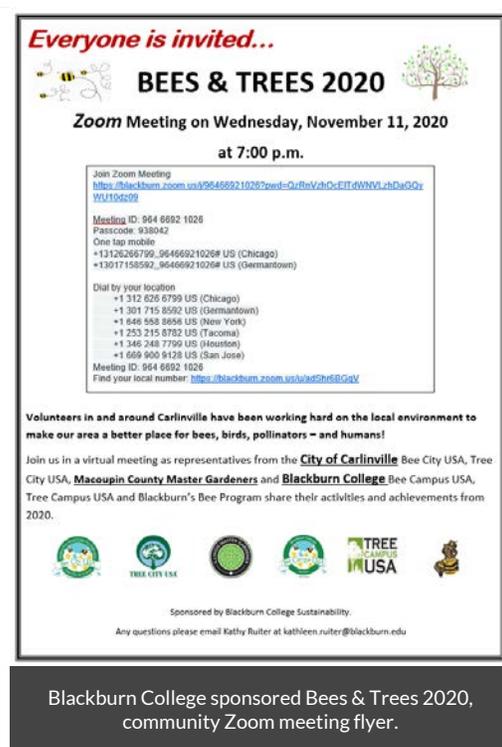
Blackburn College - planting work begins around the solar panels and the Walnut Grove (to the right of the solar field).

## Education & Outreach

Blackburn College's was granted Bee Campus USA designation in April, 2019. This renewal report includes activities in



2019 and 2020. Blackburn's committee is a partner with Carlinville's Bee City USA committee and the committees include each other in many planned events. Blackburn's 2019 events included: Spring Lunch & Learn series - 1-23-19 Benefit of Campus Trees, 2-27-19 Blackburn Bee Project, 3-27-29 Hummingbirds, the other pollinator; 9-23-19 Importance of Native Plants in the Landscape by Dr. John C. Marlin; 10-27-19 Carlinville Halloween Parade where students and committee members marched in the parade wearing yellow t-shirts with "Keep the Buzz Alive" on the front and the Blackburn Bee Campus logo on the back. Students carried logo signs and handed out packets of pollinator seed mix collected from Blackburn's native gardens to parade observers. Our Bee Program has conducted various presentations/demonstrations for local elementary students. COVID restrictions prevented the college from hosting any face-to-face events in 2020. We did celebrate Earth Week and Pollinator Week through electronic means. Information and educational materials were shared with the campus community through our "Daily Announcements". Blackburn's Bee Campus and Tree Campus came together with Carlinville's Bee City and Tree City on November 11, 2020 in a Zoom meeting to celebrate activities and accomplishments. The meeting also included the U of I Extension Macoupin County Master Gardeners and a presentation by Dr. John C. Marlin on the importance of native plants. The recording of the meeting can be viewed on YouTube - Bees & Trees 2020 <https://youtu.be/iQJ1cgxBM4w>



## Courses & Continuing Education

FOR COLLEGE CREDIT Curriculum: The following courses contain at least one component covering the importance of



pollinators and the plants they serve and need to survive. Biology majors may be required to take a number of these courses and may be counted more than once in the enrolled student count above. The BI 350 course is an in-depth study of the relationship of pollinators and plants. The COVID pandemic slowed the progress of this class working towards their goal of beginning to create a pollen database to identify local pollen and honey sources. Some photos, permanent slides and plants, along with dates were collected and will eventually be posted on an online resource. Students did continue working remotely but we did not accomplish as much as we intended to. In addition to this course, there is an active proposal for a Beekeeping class yet to be reviewed by Blackburn's Biology Department and the Committee on Academic Policy. BI 100 – Fundamentals of Biology BI 202 – Botany, BI 208 – Environmental Science, BI 307 – Ecology, BI 350 – Pollinator Biology, BI 413 – Plant Physiology NON-CREDIT COURSES: Blackburn's Bee Program was established in the fall of 2016. The Program offers students learning opportunities within the College's Work Program, internships and volunteerism. The Program currently maintains 16 bee hives, 13 of them are on campus. Students gain experience in beekeeping activities such as monitoring hives through the year, prepping hives for winter by checking queens, feeding if necessary, wrapping boxes and placing mouse guards; using swarm traps, splitting hives, managing the hives for growth and honey production. In 2019 the Bee Program established a Bee Lab. In the lab students make slides and use microscopes to examine and photograph pollen grains & bee diseases. Bee Lab students also weigh hives, count varroa mites, and extract honey. They experimented with powdered sugar, heat treatment, and on how long bees can survive under water for mite control. In 2020 an attempt was also made to raise queens, however it was too late in the season. Also in 2020, two students became registered beekeepers and approximately 200 pounds of honey was harvested, packaged and sold to help fund further projects of the Program. In September the campus apiary was among 24 in Illinois that was sampled in the National Honey Bee Survey.





Blackburn College students working in the Bee Lab.

Tree  
Planting  
2020



Blackburn College Biology students and volunteers are involved with learning tree identification, planting and maintenance of our Walnut Grove and the campus arboretum.

## Service-Learning

Within the Blackburn Bee Program not all beekeeping activities have been with the hives at Blackburn. Three of our hives are located at Solomon Creek Farm in Hettick, IL. The Farm is an Illinois Naturalized area where all area students have an opportunity for experiential learning. Blackburn students have had opportunities to go with Arvin Pierce, Illinois Apiary Inspector and Blackburn Bee Program Consultant, to observe state hive inspections and help with colony removals from trees & houses, including both cut outs & setting up trap outs. One special opportunity came along in 2020 when the Lincoln Home National Historic Site in Springfield, IL contacted Mr. Pierce about putting a couple of hives there. Needing to be true to the 1850 era, it was decided the two hives would be built after the design of the originally patented in 1852 Langstroth hives. The Blackburn Beekeepers agreed it would be good idea to have one here on campus, so... they built three hives. Blackburn now has the distinction of likely being the only campus in the state, or possibly anywhere, to have an active, functioning 1852 model Langstroth hive! Students also help with the care of the 1852 hives at Lincoln Home. The



Bee Program began utilizing an inspection sheet that is use to regularly record observations that provides the opportunity to evaluate inside and outside influences on hive health and failure. Observations of the hives have been collected at various times but recording regular observations of individual hives over long periods will give us much more information to work with. Research depends on the ideas and creativity of the students and the equipment to carry that out. In the early spring of 2019, Blackburn's Alumni Association along with the cooperation of our Physical Plant personnel, our Biology professors and our Sustainability Committee organized the first Alumni Beautification Day that took place in April, 2019. This event brought together approximately 100 alumni, faculty, staff and students to 'spruce up' the campus grounds. Activities that day included planting 16 native blooming trees, removing old landscaping to make way for more environmentally friendly plantings and assembling and planting 19 hummingbird stations that were placed around campus. Alumni Beautification Day 2020 was scheduled to take place the Saturday after Earth Day-Arbor Day but had to be cancelled due to the COVID pandemic. However, that did not stop a small group of alumni to take a day and plant blooming annuals at the Blackburn front gates and sign. They also planted a portion of hummingbird stations with blooming plants that would attract pollinators. Student work crews maintained these plantings throughout the summer months. Student volunteers continue to work maintaining the native garden at the Mahan Science Building, help with the tree planting program and maintenance at the Walnut Grove.



Blackburn College - students record observations at the campus bee hives.



Blackburn College - Alumni Beautification Day 2019



Blackburn College - students help with 'spring cleaning' at the Native Garden at Mahan Science Center.

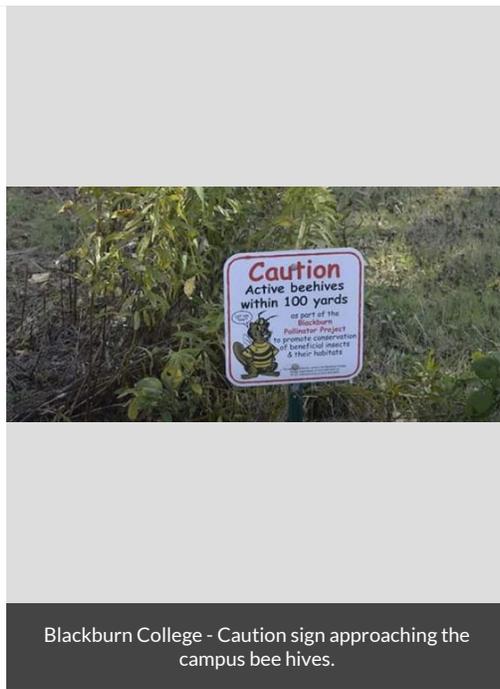
## Educational Signage

Two native planting signs were installed. One at the Native Garden at Mahan and one at the roadside planting on the southeast side of campus. A sign has been installed along the route to the campus bee hives. Two flags with our Bee Campus affiliate logo have been purchased. One to be flown on our main entrance flagpoles and one displayed in the Mahan Science Center.





Blackburn College - Native planting sign at Mahan.



Blackburn College - Caution sign approaching the campus bee hives.



Blackburn College - two flags purchased with white background. One 4x6 and one 3x5.

## Policies & Practices

Blackburn's Grounds Supervisor has a degree in Landscape Design and Turf Management, is a licensed pesticide applicator, and working towards becoming a certified arborist. Along with his Work Program Student Crew, they are responsible for the care and maintenance of the campus grounds, plantings and trees. As a supervisor in the College's Work Program, our Grounds Supervisor is a teaching supervisor and trains his student crew members in the appropriate care of the campus plantings. Within this training students learn the importance of 'the right plant in the right place'. Operating on this philosophy, it would reduce the need for chemical pest control naturally. Chemical controls have greatly reduced on campus and our students are becoming knowledgeable, and tolerant, of the 'good bugs'.

**Integrated Pest Management Plan:** [Blackburn - IPM PEST MANAGEMENT, 2019.pdf](#)

**Recommended Native Plant List:** [Blackburn plant list 2020.pdf](#)

**Recommended Native Plant Supplier List:** [Native Plant Suppliers.pdf](#)





Blackburn College, Demuzio Campus Center, student work crew removing overgrown and invasive plants in the summer of 2020, making way for re-landscaping with the 'right plant in the right place' philosophy.

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## Learn More

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