The Arboretum, State Botanical Garden of Kentucky The University of Kentucky 500 Alumni Dr. Lexington, KY 40503

January 13, 2024

The University of Kentucky Student Sustainability Council C/o Mr. Shane Tedder, UK Office of Sustainability Via email: studentsustainabilitycouncil@uky.edu

Dear Student Sustainability Council:

The Arboretum staff would like to thank the University of Kentucky Student Sustainability Council for funding five UK students for Arboretum internships during the 2024 Season.

With two internship types offered, students were able to select the experience that most aligned with their future goals. Each internship, in the Kentucky Children's Garden (KCG), and Walk Across Kentucky (WAKY) Native Plant Collection, provided hands-on learning experiences in the fields of environmental education, horticulture, and environmental stewardship.

These five SSC-funded interns helped support our mission of education and sustainability throughout The Arboretum. Enclosed you will find a brief report outlining how these funds were utilized and some highlights from the student experiences that were supported.

Thank you for your continued support of The Arboretum through these student internships!

Sincerely,

Hannah Wells Education Coordinator & Kentucky Children's Garden Manager Jesse Dahl Grounds & Facilities Superintendent

The Arboretum, State Botanical Garden of Kentucky

2024 SSC Grant Report

Project Summary

The Arboretum was awarded \$20,815 in 2024 to support the employment of five student interns in two different sections of The Arboretum: the Kentucky Children's Garden (KCG) and the Walk Across Kentucky Native Plant Collection. Although these two position types carried different workloads, schedules, and learning opportunities, they both shared the commonality of supporting this unique public space and enhancing the education of University of Kentucky students.

Funding was awarded for three student interns to work in the KCG, and two student interns to work in the native plant collection.

Funds were used solely to cover the salaries of UK student interns – no materials were purchased with these funds. To attract competitive applicants and compensate interns with a fair, living wage, we established an hourly rate of \$14/hour. Because The Arboretum had been awarded funding twice previously, we obtained match funding from other sources to cover 50% of the internship costs. Match funding was provided by the Martin-Gatton College of Agriculture, Food, and Environment (MG-CAFE).

Through first-hand experiences in each of the two major disciplines, interns became better prepared for a career in the environmental sciences. Interns were also exposed to core principles of sustainability through environmental stewardship practices across The Arboretum.

Project Updates

Kentucky Children's Garden (KCG) Internships (3)

This season in the Kentucky Children's Garden, our three student interns helped lead 101 environmental education programs with 2,653 children that participated. 16,336 visitors, age 2 and above, came throughout the KCG season. This allowed our interns to receive hands-on experience with children and their families. Each intern was also able to research and develop their own educational lesson plan, then teach it in the garden. Interns gained experience developing and leading educational programming, planting, and maintaining garden spaces, interacting with children and their families, and learning about a range of environmental topics. We were also able to offer opportunities for our interns to participate in educational programs outside of The Arboretum, such as a hike through the Palisades at Floracliff Nature Sanctuary and a perennial gardening class administered by UK Extension. Through these professional development opportunities, we were able to provide our interns with more than simply a job, but a diverse learning experience. Abby Little was a Biology major who graduated this past December with an Appalachian Studies minor. Growing up in rural Eastern Kentucky, Abby brought a diverse perspective to our work here. She had a wealth of knowledge from working at her grandparents' farm and helped our plants and gardens flourish. For one of our annual events, Abby took the initiative to write scripts for our collection of costumes. On the day of the event, she donned the costumes and went around the garden teaching our visitors facts about each animal and plant.

Andrea Hicks is a senior Natural Resources and Environmental Science major with an Urban Community Forestry certificate. When choosing a topic to develop her own lesson plan, Andrea chose urban trees. This both incorporated her coursework and brought attention to an important topic in our community. During her internship, Andrea took a dendrology course with UK and was able to practice her tree ID skills in the garden to study for tests. In the future, Andrea hopes to help family farms and teach others how to farm more sustainably.

Mae Hanna is a junior Natural Resources and Environmental Science major with a Distillation, Wine, and Brewing Studies certificate. She spent her time tending to our gardens, taking the initiative to set up an entire area of tomatoes that she started from seed. She also worked with another intern, Andrea, to restore soil in one of our unproductive garden areas. They worked all summer trying to restore the area, shoveling compost, keeping it moist, and planting crops that would renew nutrients to the soil.

Each of the interns this year were hard-working and dedicated to our mission here and gained many skills that they can take with them throughout their lives. The internships available in the Kentucky Children's Garden gave them an opportunity to receive hands on exposure and experience relevant to their degree while also using their knowledge to keep the KCG beautiful and serving the community's children and their families.

Walk Across Kentucky Native Plant Internships (2)

Two student interns were hired for full-time 12-week summer positions in the Walk Across Kentucky: Josh Craig, and Katie Taliaferro. Josh Craig is a senior Landscape Architecture student and Katie Taliaferro is a junior Horticulture student. Both Josh and Katie brought unique perspectives and ideas to the management of the native plant collection and educational programming. The Arboretum utilized remaining funding from the SSC for these positions to continue employing Josh and Katie part-time through the Fall semester.

Internship projects and experiences for both native plant interns included training in woody plant care – such as proper pruning practices, integrated pest management, and water management. Interns learned to identify many native and non-native invasive plants, and they learned how to manage these plants and native landscapes. They also learned about native plants through researching and producing educational social media posts and interpretive signage for The Arboretum.

While Josh and Katie each assisted with day-to-day Arboretum maintenance and plant records updates, they also took on leadership roles for more independent projects during the summer

season. Josh was instrumental in updating our herbarium collection. We maintain a collection of dried plant samples from the parents of our wild-collected plant collection. Katie developed and presented a poster at the International Plant Propagator's Society Eastern Region Annual Conference in Columbus, Ohio. Josh and Katie also assisted with leading volunteer groups in the maintenance of the collection and created weekly social media posts.

Project Impacts

Directly impacted groups:

- 5 UK students
- 2,600 children with educational programming in KCG

Indirectly impacted groups:

- 500,000 annual visitors to The Arboretum, State Botanical Garden of Kentucky collections
- 14,100 social media followers
- 16,300 visitors to the Kentucky Children's Garden

Financial Summary with Itemized Budget

Intern hours	Hourly wage	Total funds needed to pay for interns	Portion of funds received from SSC	Portion of funds received from other sources
Kentucky Children's Garden Internships (three 7.5-month positions)				
1,872	\$14	\$26,208	\$13,104	\$13,104
Walk Across Kentucky Internships (one 8-month position, one 3-month position)				
960	\$14	\$13,440	\$6,720	\$6,720
Fringe Cost 5% per hour				
2,832	\$14	\$1,982	\$991	\$991
Total Received for all Positions				
2,832	\$14	\$41,630	\$20,815	\$25,000*
Total Realized for all Positions				
2,256	\$14	\$33,639.80	\$16,819.24	\$16,820.56

*Note: Additional funds provided from matching source are intended to rollover into Fiscal Year 25

Photos



1 (From left to right) Abby Little, Mae Hanna, and Andrea Hicks in the Kentucky Children's Garden



2 All Kentucky Children's Garden staff at the Arbor Day event, hosting over 1,000 visitors



3 Andrea Hicks teaching children in a lesson on soil layers

4 Abby Little removing large bramble vines



5 Mae Hanna with a young Bullfrog found in the KCG

6 Abby Little in bluebird costume at Arbor Day



7 Mae Hanna with a Milk Snake on a field trip to Floracliff Nature Sanctuary



8 Katie Taliaferro with Luna Moth in the Arboretum Woods 9 Josh Craig helping with storm cleanup across The Arboretum