



# NEWSLETTER

 January 2019  
 Vol. 1, Issue 1

## INTRODUCING THE EMORY HERBARIUM

The Emory University Herbarium is located in an unassuming building off of Clifton road in Atlanta, Georgia. Its collections sit inside metal, green cabinets. In an adjacent room, herbarium volunteers come together to repair old specimens, edit labels, or do any other needed tasks for keeping the specimens in their best condition. The herbarium currently houses close to 23,000 specimens and has five different special collections, including a collection focusing on medicinal plants. Currently, work is underway to digitize the collections into the databasing program, so that this valuable information can be accessible to anyone, anywhere. Last year (2018) was an exciting one for the Emory Herbarium, team as we hit a major benchmark of successfully digitizing 20,000 specimens from the Emory Herbarium Collection. This digitization process involves the careful repair and annotation of specimens, databasing of collection information, and specimen imaging. These digitized specimens are now available online with the Southeast Regional Network of Expertise and Collections web portal ([SERNEC](#)).

## A NOTE FROM THE CURATOR

I'm excited to launch this as the first of many future newsletters to give the friends of the Emory University Herbarium a behind-the-scenes look at our activities. The core mission of the Emory University Herbarium is to serve as a botanical research and educational resource for Emory, Atlanta, and the global community. We strive to meet these goals through numerous community engagement activities with Atlanta schools, the Fernbank Science Museum, Atlanta Science Festival and group tours of the collection. These activities give our researchers and volunteers the opportunity to spread their love for and knowledge of botany with others. This year was especially notable for the herbarium team as we met a major benchmark of making more than 20,000 of our specimens accessible to the broader public through our digitization program. None of this would have been possible without the skills and dedication of our Collections Manager, Dr. Thara Samarakoon, and an amazing team of student researchers who have volunteered countless hours towards making this dream a reality. I hope you enjoy learning about this and our other research and outreach activities in the newsletter.—Dr. Cassandra Quave, Curator



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### POINTS OF INTEREST

- Introduction to Emory Herbarium
- Herbarium Research Symposium
- Volunteering at the Herbarium
- Ichauway expedition adding to plant knowledge
- Volunteer in the spotlight
- Effect of climate change on pollinators



# FALL 2018 NEWS UPDATES

Emory Herbarium's inaugural research symposium and celebration was a big success. Students and researchers from across Atlanta joined the symposium that featured talks of Emory faculty and researchers from Emory and the Atlanta Botanical Gardens. The evening poster session highlighted plant research underway across the state of Georgia and in a variety of international field sites.



*Emory sophomore Jimmy Zang (above) and Emory senior Wenying Zhu (below), received awards from President Claire Sterk at the Emory Herbarium inaugural research symposium and celebration event.*



## At a glance...

Emory's inaugural Botanical Symposium and Celebration

Celebrating and recognizing the work of volunteers

Herbarium outreach activities



*Students attend a lecture by Dr. Emily Coffey from Atlanta Botanical Garden at the research symposium.*



*Student researchers honored at the research symposium with Emory president Claire Sterk, Curator Dr. Cassandra Quave and Collections Manager Dr. Thara Samarakoon.*

At the Celebration event following the Botanical Research Symposium, Emory University President Claire Sterk recognized the invaluable contributions of our volunteers and student researchers at the celebration. They have collectively dedicated more than 6,300 hours to our efforts to digitize our herbarium collections.



This semester the Emory Herbarium was involved in a couple of outreach activities at the FernBank Museum, Oak Grove Elementary and Kittredge Magnet School. At these events we brought along fun interactive activities about medicinal plants, poisonous plants and spices all



*Herbarium student volunteers at the Fernbank Natural History Museum on Adventures in Science Day (above) and Kittredge Magnet school (below).*

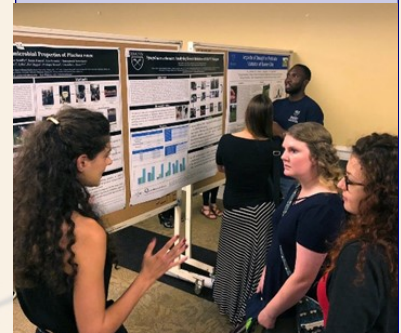
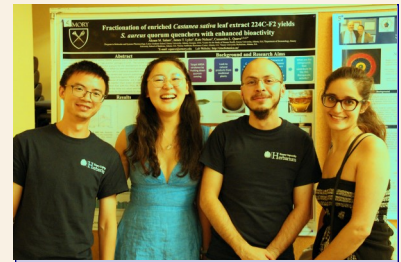


## **“BY VOLUNTEERING IN THE HERBARIUM I CONTRIBUTED TO THE PRESERVATION OF HISTORY”**



By Nathan Jacob

Volunteering at the herbarium was a very valuable experience for me. Many labs and programs at Emory require extensive background information relating to a specific field in order to join. However, when I joined the Herbarium in my freshman year, I didn't have much experience in botany. By the end of the semester, I was able to learn the basics and intricacies associated with botany, as well as gain experience in hands-on work with specimens. As a volunteer, I helped with many important tasks regarding preservation of specimens, such as mounting, organizing, and digitizing those specimens. Not only was I helping preserve history, but I was also learning a lot about botany under the guidance of the Herbarium collections manager, Dr. Samarakoon. By volunteering at the herbarium, I now have learned important fundamentals of botany and I would recommend it for any student that is interested in working in this field.



*Poster session on plant research at the Emory research symposium.*



*Herbarium student volunteers*







*Dr. Quave & Emory freshman Kat Bagger press plant specimens during Expedition Ichauway.*

“...the Medicinal Botany special collection is by far my favorite. Featuring plants all the way from Italy, Kosovo, and the United States, this collection demonstrates how important plant knowledge is to a variety of cultures around the globe”.

To read more about the Ichauway summer research experience at The Jones Ecological Research Center in Newton, GA visit beautiful multimedia feature “[The Plant Hunters](#)” that created by Emory News Center

## EMORY HERBARIUM SUMMER PLANT EXPEDITION AT ICHAUWAY PLANTATION

By Olivia Lowery

Thursday at the herbarium finds me mounting specimens recently gathered on a research expedition to Ichauway this past summer. Armed with gutsy determination and a team of highly motivated students, Dr. Casandra Quave was able to retrieve about 200 specimens from Ichauway. Four samples of each specimen were collected—one for Emory’s collection, one for Ichauway research center herbarium, for the University of Georgia’s collections and the fourth as a backup.

The three-week long expedition proved to be a valuable learning experience for those involved. For many of the students—Kat Bagger, Ella Vardman, Afam Maduka, Monique Salazar, and Annie Schiffer—it was their first foray into a plant expedition. Working with these plants and collecting

specimens can provide valuable, new perspectives which are critical for solving problems in the field of human health.

After these specimens have been dried and sorted, it’s time for them to be mounted and preserved. The specimens from Ichauway will find a new home in the Medicinal Botany special collection. In all of the collections and plants I have touched during my time at the herbarium, the Medical Botany special collection is by far my favorite. Featuring plants all the way from Italy, Kosovo, and the United States, this collection demonstrates how important plant knowledge is to a variety of cultures around the globe. It’s also simply amazing to see the sheer amount of knowledge of plants humans have collected over the years.



*The research team from the Ichauway summer plant expedition with Dr. Kier Klepzig, director of the Joseph W. Jones Ecological Research Center in Newton, GA.*

## VOLUNTEER SPOTLIGHT: ANNA WASSEL



Anna Wassel has earned the first volunteer spotlight by contributing more than eighty hours of her time as a volunteer researcher in the herbarium. She is a senior studying environmental science, with a focus on botany. Anna's relationship with Herbaria started her sophomore year when she was curious about the distribution of a state-threatened plant, and from there she went on to work a summer at the Missouri Botanical Garden with herbarium specimens from Madagascar. After a semester in Costa Rica and a summer working in the plains of Kansas, she wanted to continue in her work with plants and engage in opportunities to learn more about the crucial role that herbaria play in botany and the natural sciences in general, which led her to volunteer at the Emory Herbarium. She enjoys the art behind mounting specimens, the living history encapsulated by plants collected decades ago, and the wonder and awe when she experiences when handling a specimen of an endangered species. She has enjoyed and appreciated the opportunity to spread the joy and wonder of plants through outreach to a local school where she taught 5-6th graders (and their parents) about the surprising power of poisonous plants. Most young people (and adults) are more fascinated by fauna than flora, but Anna likes the challenge of making people get excited about the Plant Queendom.

Thank you to our  
Fall 2018

### VOLUNTEERS

- Angelina Tran
- Anjali Mann
- Anna Wassel
- Burhan Mubeen
- Claire Torre
- Daisy Li
- Denver Roberts
- Georgia Lynn Spies
- Gloria Jung
- Nguyen Hung
- Jordan Argrett
- Kate Frances Chandler
- Nathan Jacob
- Nia Dubon-Robinson
- Rachel Deininger
- Tanika Deuskar
- Loy Xingwen
- Zoe Price

### OUR MISSION

The mission of the Emory University Herbarium (GEO) is to serve as a botanical research and educational resource for the Emory University and global community. GEO aims to foster understanding of the human-nature interface by collecting, preserving, researching and exhibiting botanical specimens and ethnobotanical objects.





## MEET A SCIENTIST

A third year PhD student in Dr. Berry Brosi's lab at Emory, Loy is studying how climate change affects plants and their pollinators.



## GET TO KNOW OUR RESEARCHERS

*Loy is a plant community ecologist at Emory University. He is a 3<sup>rd</sup> year PhD student in Dr. Berry Brosi's lab and is currently studying the pollination of wildflowers at one of the country's most historical research stations, the Rocky Mountain Biological Laboratory in Colorado.*

### How did you become involved in science?

I've always loved plants and animals but I didn't care much for school. I didn't want to go to college and instead pursued technical training in horticulture. It was then that I became captivated by the field of plant ecology and so I pressed on in academia. Heeding my inclination changed everything.

### Tell us more about your latest project - why is it important?

Most of the world's flowering plants rely on pollinators like bees for reproduction, including many of our food plants. We're interested in how climate change affects plants and their pollinators. While the impacts of climate change are global, they are often stronger at high altitudes, like in the Colorado Rockies. We conduct experiments in mountain meadows to understand how climate change could affect pollination, in hope that we may better mitigate the consequences of pollinator declines.

### What is your favorite aspect of your work?

Being an ecologist lets me to look into the clockwork of ecosystems, admiring the simplicity of parts of it, whilst having a deeper appreciation for incredible complexity of the whole. I just like to know how things work!



# DO YOU KNOW THIS PLANT?

See bottom of this page for the correct answer.

#1



#2



#3



#4



Like us on our Facebook & follow us on Twitter and Instagram to stay up to date with all our exciting activities!



@EmoryHerbarium



@EmoryHerbarium



@emory\_herbarium

Answers :  
 #1: Virginia spiderwort (*Tradescantia virginiana* COMMELINACEAE)  
 #2: African iris (*Dietes bicolor* IRIIDACEAE)  
 #3: Southern magnolia (*Magnolia grandiflora* MAGNOLIACEAE)  
 #4 Thread-leaved sundew (*Drosera filiformis* DROSERACEAE)



## HERBARIUM CONTACT INFO

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Schedule a visit or tour! We are open 9 a.m.-5 p.m. Monday-Friday.

Support our research and outreach activities with a tax-deductible donation. Information on how to give is available [HERE](#) or on our website.

Learn more on our website:

[https://  
scholarblogs.emory.edu/  
emoryherbarium/](https://scholarblogs.emory.edu/emoryherbarium/)