

MAGNOLIDAE

Newsletter of the Emory University Herbarium

Volume I: Issue 1: Spring 2015

Notes from the Curator

Greetings from the Emory University Herbarium, also known by the acronym of GEO! This has been an exciting year for the herbarium as we are re-opened to the university and public for the first time in over a decade. Emory Herbarium is revitalizing and we could not be happier! Our revitalization has been made possible by generous private support from alumni and supporters like you and we are busy at work bringing the facility up to the scientific standards of today. Integral to this process is our Collections Manager, Dr. E. Jane Bradbury, and our undergraduate student volunteers, whom you will see throughout this newsletter. I hope you enjoy this update and stay tuned for highlights from what promises to be a busy summer!

Best Regards,

Caugher L'Oux

Cassandra L. Quave, PhD Curator, Emory University Herbarium

What is an Herbarium Specimen?

Most people are not very familiar with herbaria or herbarium specimens. At the Emory University Herbarium, we like to describe herbaria like "plant archives" – a collection of pressed, dried plants intended to survive in perpetuity.

Herbarium specimens come in many shapes and sizes, but the most common type of specimen is the specimen sheet (1). Plants are collected fresh, pressed in a plant press (2), and put in a drying cabinet until fully dry. Fully dried, and stored in the right conditions, a specimen can last indefinitely!

Herbarium specimens have many functions. Firstly, they are intended to serve as a visual record of all of the characteristics of any given plant. Originally, specimens were primarily used to teach healers and naturalists how to identify medicinal plants in the wild. Nowadays, they are used to document research (a process called "vouchering") in areas of inquiry ranging from the ecological effects of climate change to biochemical drug discovery to population genetics and evolution!



(1) Sheet specimens are imaged and stored in our collections room. (2) New plants are collected with a botanist's toolkit that includes a plant press, clippers, GPS, and a field notebook. Our samples come from nearby sites in Georgia and even more distant locations like Italy, Kosovo, and Australia! (3) One of the herbarium undergraduate volunteers, Lyn Kim, editing photos of specimens in Adobe Lightroom. The "Digitization Station" consists of a light box (white, in back of picture) with a camera mounted above it, connected to a desktop. (4) Our special collections features a unique group of medicinal plants from the Mediterranean, such as the the Elmleaf blackberry.

Emory University Herbarium in the Community

The Emory Herbarium is active in the community! In our first year "back in business" we have participated in several community science outreach events, including the Atlanta Botanical Gardens' "Science Café" (5), Fernbank Natural History Museum's special event on "The Power of Poison" (6), and the Atlanta Science Festival! We also hosted area educators for science curriculum training.

At each event we have brought along fun, interactive games and activities for the whole family, including informative specimen displays, medicinal plant coloring sheets, a "make your own herbarium specimen" display, "What's that Smell?" plant scent biochemistry matching game, and "Smell the World!", an map-based smelling game matching famous aromatic plants to their global area of origin. If you're interested in having the Emory Herbarium participate at your next event or staff training, please contact the Herbarium Curator (Dr. Quave) or Collections Manager (Dr. Bradbury). Contact information at the bottom right of this page.





Stay Tuned!

- Keep an eye out for our Summer 2015 newsletter detailing the exciting summer happenings at Emory Herbarium. Summer is the busiest season for herbaria and we can't wait to share what happens!
- We'll be making an exciting announcement about the Emory Herbarium this summer!
- We love visitors at the Emory Herbarium! We are open 9 am – 5 pm, M-F. Visit our website for more information on location and parking.
- Keep up-to-date with us online!
 - Visit our website: https://scholarblogs.emory.edu/emoryherbarium/
 - Follow us on Twitter: <u>https://twitter.com/EmoryHerbarium</u>
 - "Like" us on Facebook: https://www.facebook.com/EmoryHerbarium
 - Join our mailing list! Email Dr. Bradbury to sign up for our quarterly e-newsletter.
- Interested in donating your time, supplies, or funding to herbarium projects? Visit our website for more info or contact us!
- Dr. Quave can be contacted at cquave@emory.edu and Dr. Bradbury can be contacted at e.jane.bradbury@emory.edu or (404) 727-4865 for more info.

Student Spotlight: Micah Dettweiler

Micah was one of our original three student volunteers following the herbarium's re-opening Summer 2014. Micah participated in the year long Scholarly Inquiry and Research at Emory (SIRE) program. Micah's project, entitled "Plants Used as Antiseptics in the American Civil War" evaluated the eligibility of local medicinal plants for laboratory assessment of antimicrobial activity this summer through the Summer Undergraduate Research Experience (SURE) program. Micah is hard at work on his antimicrobial studies this summer in Dr. Quave's laboratory. Here he is pictured below (7) at the Spring SIRE Poster Symposium. We are excited to be able to offer Emory students exciting botanical research opportunities such as this one!

