Herbarium Report

Local Flora, Deaf Botanists, Type Specimens, Colombia, and Trains: A Typical Day in the Herbarium

by Carol Ann McCormick, Curator, UNC Herbarium

Each summer and fall, over a hundred undergrads learn the basics of plant identification and taxonomy from Herbarium director Dr. Alan Weakley in his Local Flora class. One lab session is devoted to a tour of the Herbarium. Students discover they can explore fungi, lichens, mosses, algae, and vascular plants from around the world simply by opening herbarium cases in Coker Hall.

Local Flora student Ellie Kravets (UNC-CH class of 2017) has now become a volunteer in the Herbarium, and she has delved into specimens collected by Herbert Huntingdon Smith. Smith and his wife, Amelia "Daisy" Woolworth were all-around naturalists, collecting insects, mammals, molluscs, birds, and plants in Brazil, Paraguay, Mexico, and the West Indies. Smith's botanical specimens collected in Colombia piqued Ellie Kravets's interest, and she has devoted all of her attention to them.

The UNC Herbarium has

hundreds of specimens that Smith collected in Colombia. All have minimal information – a typical label is "Plants of Santa Marta, United States of Colombia Collected by Herbert H. Smith, 1898-1901," the plant name, and Smith's field collection number. In 1910, Herbert and Daisy were jointly offered the directorship of the Alabama Natural History Museum in Tuscaloosa. The Smith's interests were diverse, and Herbert and Daisy were still processing the plant material he'd collected in Colombia, when Herbert (who was deaf) was killed by a train as he walked to work at the museum. This spot, on the University of Alabama campus, was known as "Smith's Crossing" for years afterward. (Amazingly enough, the Herbarium has the specimens of another deaf botanist who was hit by a train—Gerald McCarthy of North Carolina—but that's another story.)

"The events concerning the early naming and distribution of [Herbert H. Smith's] botanical specimens remain sketchy. The Carnegie Museum accessioned one set of Smith's Colombian plants containing approximately 2500 unidentified specimens. Smith arranged for most of the plant identifications to be made

at the New York Botanical Garden by Dr. H. H. Rusby [and the ferns] by Dr. L. M. Underwood. Specimens sent to New York for identification by Rusby and Underwood were accompanied by carefully noted habit, habitat, and locality data, handwritten in pencil on slips of paper. These slips were subsequently mounted with the plant material." Alas, the specimens acquired by the UNC

Herbarium lack these handwritten slips!

Since Smith collected so many plants that were new to science, his specimens from Colombia are type specimens—the botanical specimens upon which scientific names are based. In 1988, Dr. David Boufford (M.S. Botany, UNC-CH 1976) of the Gray Herbarium at Harvard University and Dr. Tina Avers of the Bailey Hortorium at Cornell University compiled a list of Smith's type specimens deposited in six herbaria in the United States, but not any of Smith's specimens here in Chapel Hill. Ellie Kravets used the



Herbarium volunteer Ellie Kravets works on specimens collected by Herbert H. Smith in Columbia circa 1900.

Boufford/Ayers list to scour the University of North Carolina Herbarium, and she found 103 type specimens! She has annotated each as an "Isotype" and moved them to the special herbarium case where we keep all our valuable type specimens. They will be among the first specimens to be imaged and databased for the virtual herbarium at sernecportal.org. Future projects include loaning Smith's specimens to botanists to confirm the identity of the plants, and comparing our labels to those at other herbaria to glean more habitat, locality, or date information so these can be added to the specimens.

Like Herbert and Daisy Smith, Ellie Kravets's interests include both the botanical and zoological. Ellie is back home in New Orleans for the summer, raising Mississippi Sandhill Cranes (*Grus canadensis pulla*) at the Audubon Nature Institute's Species Survival Center. She has promised to keep well clear of streetcars and other trains!

^{1.} http://en.wikipedia.org/wiki/Herbert_Huntingdon_Smith accessed on 28 April 2015.

^{2.} Ayers, Tina J. and David E. Boufford (1988) Index to the vascular plant types collected by H. H. Smith near Santa Marta, Colombia. Brittonia 40(4): 400-432.