Report from the Herbarium

The UNC Herbarium: A Centennial History

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The UNC-Chapel Hill Herbarium celebrates its centennial birthday this year. Home to over 750,000 plant specimens, 30,000 algae, 35,000 fungi, and 2,000 plant fossils, the herbarium had its roots in humble beginnings in 1908. But even earlier, UNC professors assembled plant specimens for teaching purposes. As the herbarium grew through the decades, it expanded outreach in research and education.

According to archival records, three nineteenth-century UNC professors required their students to collect and identify plants that they preserved as dried specimens. These specimens were placed in a cabinet housed in the University Museum on the third floor of Old East and called a herbarium. This practice began with William H. Smith, then Frederic W. Simonds, and next Joseph A. Holmes. Around 1891, when Holmes stopped teaching botany, the Museum collections were dispersed to various locations on campus, but the fate of that herbarium is unknown. Not until William C. Coker joined the Department of Biology at UNC in 1902 would botany again command prominence.

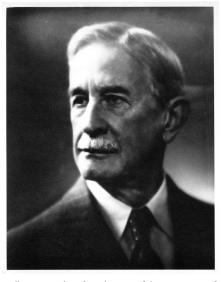
Upon his appointment as Biology's associate professor of Botany, Coker began developing botany courses as well as research. Soon the quarters in New East, where he shared facilities with zoologist Henry Van Peters Wilson, were over-crowded. When Davie Hall (also called the Biological Laboratory) was constructed in 1908, the Botany and Zoology departments were established and both moved into the new building.

The new quarters of the Botany Department provided space to expand services, including the construction of herbarium cases, which first housed a hundred or so plant specimens that William W. Ashe collected when he was a student under Holmes. During the next five decades, the herbarium quickly outgrew its space. Relief came in 1963, when the department moved into a new building, Coker Hall, where the herbarium occupied rooms on the fourth floor. By 1977, herbarium cases had overflowed into the halls of Coker Hall, a testament to sustained and even heightened interest in botany.

Guided by six directors (W.C. Coker, John N. Gouch, Albert E. Radford, Jim R. Massey, Mark Chase, and now under the direction of North Carolina Botanical Garden director Peter S. White), and run by a succession of dedicated curators and assistants, the herbarium grew and flourished during its first century. It was administered by its home department (Botany, later Biology) until June 18, 2000, when it became a unit of the North Carolina Botanical Garden. The collection increased not only through plants collected in the field by staff, faculty, students and other researchers but also through exchanges of specimens with other institutions; special acquisitions, such as the personal herbaria of W.W. Ashe (20,000 specimens) and Thomas G. Harbison (12,000); and

donations, such as one from Dartmouth College (around 8,000). Selected milestones in the approximate growth of the collection are: 100,000 specimens (1942), 250,000 (1964), 500,000 (1980), and currently about 815,000. The oldest specimen dates from 1827.

Building on its original objective of preserving plant specimens for research and teaching, the herbari-



William C. Coker, first director of the University of North Carolina Herbarium. The background image on this page is a drawing of *Lonicera sempervirens* by Alma Holland Beers, UNC's first woman botanist and one of many scientists who contributed specimens to the UNC Herbarium. (*Courtesy of the UNC-CH Biology/Chemistry Library*.)

um and its staff have adapted new technologies to expand their services. Some of these include loaning materials (as a digital copy or by mail), answering reference questions, and giving talks and teaching classes. The herbarium also provides online access to its collections and locally created research tools, which can be found at http://www.herbarium.unc.edu/ and http://www.lib.unc.edu/biology/. Particularly noteworthy, the herbarium features online sites for viewing type specimens, an atlas for plant distribution, a biographical resource on the collectors of the UNC Herbarium, and current curator Alan Weakley's ongoing "Flora of the Carolinas, Virginia, Georgia, and Surrounding Areas."

The UNC herbarium is now the largest museum and research collection of southeastern plants in the world. It also houses field notebooks, maps, original illustrations, photographs, and slides. The herbarium supports the publication of numerous books and research papers, including the landmark Manual of the Vascular Flora of the Carolinas by A.E. Radford, Harry Ahles, and C. Ritchie Bell (1968).

As the UNC herbarium begins its second century, it will continue its mission while resolving challenges and pursuing opportunities. A major need is expanded space to house the collection and to provide modern working and research areas. The North Carolina Botanical Garden's master plan includes a proposed research building for the herbarium. Opportunities include directing inventories of plant diversity, developing a botanical information system, and assisting land conservation organizations to identify natural areas in need of protection. The herbarium is poised to meet its challenges and to serve botany and the state of North Carolina.