Wool-gathering in the Herbarium

By Carol Ann McCormick, Assistant Curator, UNC Herbarium

Visitors to the Herbarium frequently ask, “Why were all these plants collected?”

The Herbarium’s primary mission is to document the flora of the southeastern United States. Thousands of plants were collected by Dr. Al Radford, Dr. C. Ritchie Bell, and Harry Ahles as documentation for the Manual of the Vascular Flora of the Carolinas, published in 1968. Hundreds more were collected by students for masters and doctoral theses, with projects ranging from plants found on derelict heavy metal mining sites to the vegetation of high-elevation rock outcrops in the Southern Appalachians. Plant collecting continues today as Herbarium staff, N.C. Natural Heritage Program botanists, and others strive to describe, document, and protect the flora of our region.

In the 1950s, as part of the “Flora of the Carolinas” project for the Manual, Harry Ahles and John Haesloop repeatedly visited the Santee Wool Combing Mill (Berkeley County, SC) and the Wellman Wool Combing Mill (Florence County, SC).

Why did these mills warrant such attention? The unusual plants, of course!

And why would wool mills sport interesting flora?

“In those days [1940–1950] we bought wool a boxcar-load at a time,” said Richard Whitlock, a wool buyer for Wellman Combing Company. In that era the Wellman mill operated “full-out, running 3 shifts, 7 days a week.” Wool arrived at the mill dirty, greasy, and full of seeds from wherever the sheep lived—the Great Plains, the Midwest, or Mexico. The mill cleaned, graded, and processed the wool, then sold it to textile mills. The refuse—dirt and seeds—was discarded on the grounds of the mills. Sometimes those seeds germinated and grew. It was these botanical oddities that were sought: plants from Utah or South America or even Australia were thus unintentionally introduced to South Carolina.

The UNC Herbarium and the University of South Carolina Herbarium (in Columbia) have hundreds of specimens of these wool mill plants. Some have been fully identified and filed accordingly. Some are identified only to genus or family and await further study. However, some of these plants, stranded hundreds or thousands of miles from their normal homes, are not even sorted to family! These plants can be from virtually anywhere, and so it takes a botanist with a broad knowledge of an entire plant family worldwide to identify these specimens.

For example, Dr. Guy Nesom (Botanical Research Institute of Texas) found 73 different species in the Aster family among the wool mill specimens at the UNC Herbarium. Fifty-nine (59) are not native to South Carolina; of those, 30 are native to other regions of North America, and 29 are native to continents other than North America. Twenty-eight species were entirely new to the flora of the state, and six were the first reports for North America.

Linda Lee of the University of South Carolina Herbarium has revisited the Santee and Wellman Wool Combing Mills and reports that there are many changes, both botanical and industrial. The wool combing mills came on hard times in the 1970s when synthetic fibers became popular and wool prices plummeted. Instead of processing wool in South Carolina, Wellman began to export raw wool to Europe. Today, although Wellman is still in operation, it uses exclusively synthetic fibers. The Santee Wool Combing Mill, now owned by French textile company Chargeurs, still processes wool. However, instead of the seed-laden refuse being dumped around the mill, it is now taken to a landfill and buried.

Ms. Lee reports that very few of Ahles’s plants have persisted to produce offspring around the South Carolina wool mills. Moreover, the source of new seeds—dirty wool—has dramatically declined, and their is little opportunity for new seeds to germinate, as the mill refuse is taken away. I consider it good news that these exotics did not flourish and spread from the South Carolina mill sites. I also consider it good news that they do persist as herbarium specimens for us to study. Anyone who wants a botanical challenge is welcome to wade into the wool mill specimens and begin keying!

Notes

A Conservation Garden: Celebrating & Protecting North Carolina's Botanical Diversity

Mondays, 7–9 pm • October 3, 10, 17, 24

Andrew Bell, Johnny Randall, Alan Weakley, and Peter White will teach this class through UNC's Friday Center for Continuing Education, “Community Classroom Series.” Contact . . .

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