

A Case for Collecting



Photo credits: Vasculum (circa 1914) of John Davidson, the first Provincial Botanist of British Columbia (Photo courtesy Daniel Mosquin, UBC Botanical Garden)

Jane Mygatt
UNM Herbarium

Time was when quality and craftsmanship were coveted; items from latchkeys to scientific instruments were carefully crafted of wood, glass, and metal. Some were complex, others simple, such as a botanist's companion- the vasculum.

A vasculum is a botanist's collecting case. These special cases were made of tin in the shape of a compressed cylinder and used for carrying freshly collected specimens (Fig. 1). They had handles or woven cotton shoulder straps for ease of carrying and came in varying sizes. To prevent wilting of the specimens, wet towels were put inside the vasculum to keep the materials fresh until they could be properly pressed at a later time.

The first written accounts of the vasculum appear by 1704 during *The Enlightenment* when botanical collecting became increasingly practical and profitable for the new science of medicine. Specialist societies began to form during this era of exploration and investigation, and as a consequence, an abundance of publications appeared. By the 1770s literature was available in English, as opposed to Latin, which widened readership. The British physician William Withering is recognized for writing a popular manual on British plants, and credited with introducing, in print for the first time, the importance of the screw down plant press and the tin vasculum.

In 19th century Britain, knowledge of the local flora was required for qualification in the medical field. Renown physician-botanists at the major universities undertook regular botanical excursions. Field collecting became popular and as a result of advances in technology, field equipment such as the vasculum became more available and affordable. By the 1820s students were expected to supply their own *vascula* which they used widely. Botanists now had that special air, that *esprit de corps* when equipped with their *vascula*.

In the 1830s the size of the vasculum increased and the shoulder strap was added. The length of the vasculum increased to accommodate larger specimens to fit the new standard of larger sized herbarium sheets. Notable at this time was the secondary use of the vasculum for accommodating another British invention, the sandwich.

D.E. Allen, author of *The Naturalist in Britain* wrote: "...it seems to have been British botanists' repeated use of their *vascula* for holding and preserving sandwiches - to such an extent that J.C. Dale, in 1838, actually dared to recommend, quite unequivocally, 'a vasculum (for sandwiches)' - that caused the standard design of this implement to be heavily influenced by that of the

sandwich-box, and so led to a British vasculum that is still markedly different in aspect from the usual models on the Continent."

In the United States, the vasculum may have seen its heyday from 1870-1945, when botanical explorations accelerated after the Civil War. Professionals and amateurs collected in search of new species. University faculty and students were encouraged to collect in the field and many individual state *Floras* were written during this period.

After World War II ended, taxonomy expanded into the science of Systematics, which focuses on understanding plant relationships. It was getting more difficult to find new species to describe. Few remote areas remained in the U.S. where new genera were likely to be found. The old science of taxonomy, once predominated by field collecting and describing and naming new species, took a back seat to the new taxonomic techniques used in the laboratory.

Plant collecting continues, but to a much lesser extent. Some of the older vascula are still in use by the more traditional taxonomists. There are many amusing anecdotal references to the vasculum. Debra Q. Lewis, Curator of the Ada Hayden Herbarium in Iowa, sent this story. "Duane Isely, a legume taxonomist here who passed away last year, used to tell a funny story about his graduate adviser at Cornell, W.L.C. Muenscher. One day Dr. Muenscher was sitting in a bus station with his vasculum on his lap. As Dr. Isely would tell it, a drunk in the bus station kept staring at the vasculum. Finally he loudly announced, "Hey, everybody -- that guy carries his mailbox with him!"

Sadly, these stories, like the older botanists and the equipment they used, are passing into oblivion. The UNM Herbarium has a few examples of vascula that were in use during the 1930-40s. They were used by the first curator of the herbarium, Edward F. Castetter, who collected throughout the state beginning in 1928. Subsequent curators and their students used them until the mid 1970's. These vascula are now bruised and battered, their straps long gone. Even in this condition they captivate the imagination. The well-preserved vasculum is now highly collectible.

Current field botanists who have used our vascula say they worked well for the "gentleman botanist", one who didn't need to hike long distances. They proved too unwieldy while hiking in remote areas in rough terrain. The straps would entangle in shrubs and foliage, the case itself chafed the hip. They became scorching hot in the desert heat and they were heavy. They may have had more utility in cool, wet climes.

New light-weight models of vascula are available from biological supply companies. One model is made of pattern-sheet aluminum, with a Velcro® type catch, and a polypropylene carrying strap. They cost around \$60 and weigh less than 2 pounds. Not surprisingly, they lack character and charm.

The traditional case for collecting plants has gone out of style with many botanists. Ease and convenience have prevailed; metal cases have been replaced with low-cost, lightweight plastic. Many botanical web sites extol the use of plastic bags. A quote from one of these sites read ..."Any botanist worth his or her salt knows that a garbage bag with its inside moistened works just as well as a vasculum."

Maybe, but it has no class.