

# Morality in the Herbarium



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One of my first jobs as the new Curator of our Herbarium (CSB) was a massive cleaning and organizational campaign. No cabinet, shelf or box escaped my fury. Although it can be dusty and tedious work, I thoroughly enjoyed it because of the element of mystery that's involved. It's like a treasure hunt; you never know what you may discover wrapped in old newspaper.

For example, one cupboard revealed a stack of yellowed newspapers cut into perfect 12 x 17 inch rectangles. The top sheet in the stack was the first page from the *Minneapolis Morning Tribune*, dated Monday, February 22, 1915 (Fig 2). The headline screamed, "American cotton-laden vessel sunk in North Sea, Reported in Contact with Mine off German Coast." Another article reported that the "Steamer Evelyn [is the] first U.S. ship to go down in belligerent waters." As anyone who has ever worked in an herbarium knows, reading old newspapers is one of the fringe benefits of the job. However, I wasn't quite prepared for the treasures inside.

Removing the top sheet of the stack revealed a neat row of 15 specimens of *Cypripedium candidum* Muhl. ex Willd (Small white lady's-slipper). On a 2¾ x 4 inch (10.3 x 6.8 cm) sheet of lined paper

was handwritten in pencil "White cypripedium/1e juin 1915 Waubun." Subsequent sheets yielded a total of 43 individual specimens of this orchid, presumably all of which were collected in Waubun, Minnesota (Mahnommen County) (Fig 1).



Figure 1. Specimen collected by ZL Chandonnet, June 1915, Waubun (MN)

Further down in the pile were: (1) 22 specimens of *Cypripedium calceolus* L. var. *pubescens* (Willd.) Correll (Small yellow lady's slipper) with a similar handwritten note that read "yellow cypri/1e juin 1915, Waubun;" (2) six additional samples of *C. candidum* with the label, "Lake Grove PO/1e juin 1915 White Cypripedium;" and (3) six *Coeloglossum viride* (L.) Hartm. var. *virescens* (Muhl.) Luer [synonym - *Habenaria viridis* (L.) R. Br. var. *bracteata* (Muhl.) Gray; Long-bracted orchid] labeled "Lake Grove/1e juin 1915."

Although no collector's name accompanied the specimens, these orchids were almost certainly collected by the Rev. Z. L. Chandonnet, a priest who was associated with our institutions from approximately 1880 until 1920. In addition to his style of using separately cut rectangles of newsprint rather than folded sheets to press/store his specimens, the handwriting on the labels, which is partly in French (*i.e.*, 1e juin = first of June), matches that on his herbarium specimens in our

permanent collections.

Chandonnet was a prodigious collector. We have many of his specimens. In fact, CSB purchased from his estate a large collection (about 4000 numbers) that includes specimens from all over the world particularly the Caribbean, Philippines and U.S. Dr. Anita Cholewa, former Director of the University of Minnesota Herbarium, told me that other herbaria, including hers, have collections by Chandonnet. Apparently, Chandonnet prepared sets of plants for sale/exchange and I stumbled upon some of his plants from an unfinished collection.

My initial excitement about this vintage collection from World War I was soon replaced by disgust. Before me was a large group of beautiful orchids, left to disintegrate in a newsprint shroud, much like the carcass of a bison that had been slaughtered for its tongue. The early settlers of the North American prairie saw nothing wrong or wasteful about killing a bison for just its tongue. Since bison were so plentiful, what difference would it make if a few were shot and killed? Today, because there are so few bison such an act would be considered despicable and immoral.

Garrett Hardin (1968), in his classic essay "Tragedy of the Commons", uses this story about the hunting of the bison to illustrate his conclusion that "morality is system sensitive". In other words, an act that may be acceptable at one point in time or under one set of conditions may be unacceptable at another.

*Cypripedium candidum* is a botanical bison. Years ago, in wet prairie regions of Minnesota these orchids must have seemed as common as a bison or mosquito. Even today, Smith (1993) reports that it is "...possible to stand in a [Minnesota] prairie and see tens of thousands of small white lady's-slippers in a single view." We can only imagine how Chandonnet must have felt scanning the seemingly infinite number of small lady's-slippers in Waubun. Sadly, only a fraction of the original Minnesota prairie remains. As a

consequence of habitat loss, in Minnesota "this species has become quite rare throughout most of its range" and it is an orchid of "special concern" (Smith, 1993).

Eighty years ago, orchids and their habitats were much more plentiful. Making a massive collection of these somewhat exotic plants wouldn't have been considered any more wasteful than leaving a tongue-less bison to rot in the prairie sun. No one, including the Rev. Z. L. Chandonnet, would have thought twice about the morality of such an act.

Obviously, times have changed. Today, plant collectors have well-defined rules for collecting to protect plants and avoid "throwing out the babies with the bath water". Plant systematics textbooks discuss the ethics of plant collecting (*i.e.*, Walters and Keil, 1996) and various groups have developed guidelines for responsible plant collections. For example, the Plant Conservation Roundtable (1986) suggests that, among other things, when collecting multiple specimens, make sure there is a clear need for the number of specimens you wish to collect. Chandonnet certainly violated this maxim.

Fortunately, the captain and 23 crew members of the *Evelyn* were rescued. And, I rescued a few orchids.

### References:

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