

## In Service to Nature . . . and Music

By Carol Ann McCormick, Assistant Curator, UNC Herbarium

My sister brought her oboe to a recent family gathering to play duets with my twelve-year-old daughter and flutist, Rose. Auntie Barbara also brought two extra oboe reeds so seven-year-old Lily could see what playing an oboe would be like. Much to her delight, Lily quickly learned to “crow” on the reed.

I wondered exactly what a reed is in the botanical sense. “They come from France,” is all that Barbara could offer. My godfather, Lt. Col. Gil Mitchell, told of how an oboist in the United States Army Band profited handsomely from investments in reed farms in France following World War II. Oboe reed farms?! I had a wonderful mental image of little oboe reeds growing in rows . . . men in berets on hands and knees plucking the corky bases from the soil . . . “Oui, madame, in the row ici, we have the red thread reed, the ones there are the black thread variety. The bass saxophone reeds, need deux seasons before they mature!”

I called customer service of the Charles Double Reed Company in North Conway, New Hampshire, and was informed by

Jennifer that all reeds—whether for oboe, saxophone, or shawm—are made from the same plant, *Arundo donax* L.

A quick run upstairs in the UNC Herbarium to the Grass Family cases confirmed that a botanist need not go to France to find this plant. The Herbarium has specimens from Alamance, Cumberland, Dare, Richmond, Robeson, and Scotland Counties in North Carolina, as well as specimens from South Carolina (14 counties), Arkansas, Florida, Georgia, Louisiana, Tennessee,

Texas, Arizona, California, Bolivia, and Spain. Oddly enough, we have none from France! (I volunteer to be sent on a mission to collect it in the south of France—it should only take a few weeks, and with any luck, the reed farms will be close to vineyards!)

*Arundo donax*, commonly called “giant reed” or “wild cane,” is a perennial grass up to 20 feet tall. The flower clusters are large—up to 2-foot-long plumes—which make the plant attractive in an autumn landscape. Some sources list it as native to India; others give its original range as the Mediterranean. Giant reed was introduced to southern California in the early 1800s, most probably as an ornamental or for erosion control. Today it is categorized as a “noxious weed” in 45 states! According to the Plant Conservation Alliance, giant cane chokes riversides, crowds out native plants, and ignites easily to cause intense fires. Woodwind reeds are made from the culm, the main aerial shoot to

which the leaves and flower heads attach. Oboe reeds are whittled from the smallest diameter culms, while larger reeds for bassoons and bass saxophones are cut from lower, larger portions.

Perhaps I can do a service to nature *and* to music: start making woodwind reeds from this Alamance County weed! It would be a profitable venture, since one-half pound of reed sells for \$50, and finished oboe reeds go for \$8–18 each! Unfortunately, there seems to be a bias against any cane except that grown in France. “Cultivation of cane for woodwind reeds has been largely limited to a very small area in southeast France in the adjoining departments of Var and Alpes Maritimes,” writes R. Perdue in *Economic Botany*:

Most musicians and reed makers hold the opinion that the environmental requirements for the production of quality cane are highly rigid and that there is something highly specific about the soils and atmosphere of southern France that is responsible for the production of good cane. Beyond this there is little agreement as to the most satisfactory conditions. The opinion held by some is that the cane should be grown in clay soils while others firmly believe that only loose sandy soils will produce the finest quality materials. It is generally agreed that low atmospheric humidity is desirable.

Alamance County has clay soil in profusion, and loose sandy soils can be found along the Haw River, but I am afraid that low atmospheric humidity is uncommon anywhere in North Carolina!

Since one mission of the UNC Herbarium is to document alien plants, we will continue to collect *Arundo donax* from the southeastern United States. And the next time I am botanizing along Varnels Creek in Alamance County, I plan to find the population that botanist Dr. George Ramseur documented in 1956. I’ll then cut off a segment of culm, and start making reeds for Lily, my budding oboist.

### References Cited

- Benton, N., G. Bell, J.M. Swearingen. 2005. Giant Reed. Plant Conservation Alliance, Alien Plant Working Group. <http://www.nps.gov/plants/alien/fact/ardo1.htm>
- Perdue, R.E. 1958. *Arundo donax*—source of musical reeds & industrial cellulose. *Economic Botany* 12(4): 368-404.

