

Grandfather Mountain in the Footsteps of Asa Gray

By Alan S. Weakley, Curator, UNC Herbarium

Even the most casual visitor to North Carolina's Grandfather Mountain might quickly conclude that this scenic site is botanically important. Two historical markers dedicated to eighteenth-century French botanist Andre Michaux and nineteenth-century American botanist Asa Gray stand like dual sentinels flanking the entrance road. This impression is further reinforced by the prominent interpretation of Grandfather's rare flora in the Nature Museum on site. But of course, there is nothing to compare with walking the trails and *botanizing*. (Non-botanists often laugh when they first hear the verb "to botanize," asking if it is a joke or a made-up word. But no: this is a respectable term, dating back to at least 1767, and with equivalents in other languages, such as *botanisieren* in German and *botaniser* in French.)

Back around 1990, as a botanist for the North Carolina Natural Heritage Program, I was assisting employees of Grandfather Mountain, Inc. in placing a new trail on the north side of the mountain, and came upon an unusual umbel (member of the carrot family or Apiaceae) near Shanty Springs, tucked under cliffs near Calloway Peak. It was not in flower or fruit, but was a species I was quite sure I had never seen before. Trying to identify it, I leafed through all the eastern North American floras, looking for rare, native species that it could be, but came up dry.

A few years later, I returned to Grandfather and found the plant in flower. This time I was able to key it to *Conioselinum chinense*, hemlock-parsley. Despite the name *chinense*, I realized this could not be an alien species—not here in a pristine seep high on Grandfather Mountain. I was forced to conclude that I had overlooked this species in the floras I had consulted earlier because of the Latin name. A few more careful moments of reading soon revealed that *Conioselinum chinense* is native to northeastern North America and has nothing to do with China! Such botanical misnomers occurred frequently in the early days of botanical exploration, as European botanists, like Linnaeus, named thousands of species sent to them as specimens with sometimes erroneous associated information. As the first to be given to these plants, such names must be used, even if they are inaccurate.

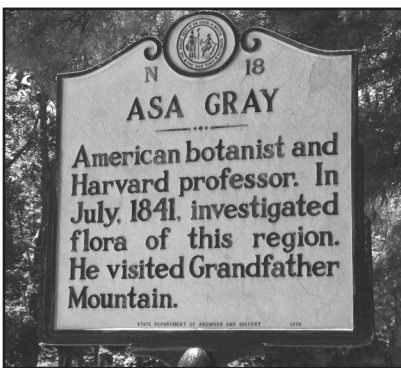
The *Manual of the Vascular Flora of the Carolinas* by A. Radford, H. Ahles, and R. Bell indeed listed *Conioselinum chinense* with the intriguing statement "Woodlands, Caldwell Co., N.C. Known in our area from only one early collection." This set me to sleuthing, but there were no specimens of *Conioselinum* from

North Carolina at the herbaria of UNC-CH, Duke, or NC State. I asked Bruce Sorrie, now a long-time North Carolina resident and UNC Herbarium associate but at that time the botanist for the Massachusetts Natural Heritage Program, to look for North Carolina *Conioselinum* specimens at the Gray Herbarium, Harvard University. The answer soon came back that, yes, there was a specimen, collected by Asa Gray and John Carey in 1841, from high on the north slope of Grandfather Mountain!

Asa Gray published an account of the 1841 botanizing expedition in the Southern Appalachians as "Notes of a Botanical Excursion to the Mountains of North Carolina." I heartily recommend it for its accounts of travel, plants, food, and culture of the North Carolina mountains in the mid 1800s (it is available free online through Google books). "The next day (July 9th) we ascended the Grandfather, the highest as well as the most rugged and savage mountain we had yet attempted." From this publication, it is clear that they collected *Conioselinum* from the same seep near Shanty Springs: "At this same place we also saw an Umbelliferous plant not yet in flower, which we believe to be *Conioselinum*, . . . a very rare plant in the extreme northern States and Canada, to which we had supposed it exclusively confined."

Two remaining mysteries troubled me. I had found *Conioselinum* in Avery County, but Gray and Carey's collection was described as being from Caldwell County. I knew that county boundaries change and discovered that, indeed, present-day Avery County was part of Caldwell County in 1841. The second mystery is harder to answer: why this extremely rare plant, far disjunct from its main distribution in the north, had never been considered of conservation concern by the Natural Heritage and Plant Conservation Programs. I suspect that the *chinense* epithet fooled other southern botanists before me.

To close the circle opened by Gray and Carey during their 1841 "Excellent Adventure," I made a second collection of *Conioselinum chinense* from Grandfather Mountain, 159 years after the first. The specimen will reside at the UNC Herbarium.



Note: 2010 is the bicentennial of the birth of Asa Gray. In honor of that occasion, the Gray Herbarium at Harvard is presenting an engaging collection of images and writings by and about the New England based botanist whose *Manual of the Botany of the Northern United States* remains a valuable tool for botanists and plant enthusiasts. http://www.huh.harvard.edu/libraries/Gray_Bicent/gray_main.htm