In terms of sheer numbers, there are probably more willows (*Salix* species) in Washington Park Arboretum than any other type of tree. Thickets of native and weedy willows colonize the swampy edges of Foster Island, form verdant tunnels along the boardwalk through the swamp, and engulf the shore of Duck Bay in leafy green. Though I have no hard data to support this claim, it is undeniable to the observant naked eye.

Despite this impressive overall number, there are only 40 or so accessioned willow specimens in the Arboretum’s formal collection. Most of these arrived in the late 1950s to early 60s from American and European arboreta, some even coming from the former Soviet Union, during what was a rather chilly period of the Cold War. As collection plants, many are rather insignificant in that they’re common European species and cultivars. The early accessions primarily grow on the shores of Duck Bay, skirting the Linden Collection. There are also small groupings in the Witt Winter Garden and near Arboretum Creek south of the Viburnum Collection.

A second wave of willow enthusiasm in the 1990s and the first decades of this century brought more representatives of the genus—many from East Asia—to the Arboretum. These later accessions, mainly planted in the Winter Garden, added species and varieties with decidedly more ornamental qualities to the collection.
Willow Diversity and Natural History
Willows are cultivated in gardens for their interesting forms, cylindrical flower clusters (catkins), attractive foliage, and—in some cases—colorful shoots. Many folks are familiar with the iconic weeping willow tree (Salix babylonica) and its slender, pendant branches; silver-green, early-spring catkins; and narrow, lance-shaped leaves. However, the genus is remarkably diverse and variable.

Salix is a member of the Salicaceae, or willow family, which includes Populus (cottonwoods) and Azara. It’s made up of about 450 woody, mostly deciduous species, varying from tiny, creeping alpines to boreal subshrubs to lowland giants. Though generally all moisture loving, willows occupy a wide variety of ecological niches, growing at over 12,000 feet of elevation in the Himalayas all the way down to sea level here on Northwest coast. Most naturally occurring willows are found north of the Equator. They are a regular—and often large—part of the woody flora throughout temperate and subtropical Europe, Asia and North America and are considered keystone plants for supporting insect biodiversity. Only a scant few Salix species grow wild south of the Mexican border on this continent. The U.S. and Canada, however, are Salix hotspots, with the “Flora of North America” (floranorthamerica.org) listing about 100 native species.

How many species are native to Washington state? According to the Burke Herbarium at the University of Washington, it’s an impressive number—more than 30! One of the largest is the Pacific willow (Salix lasiandra), which grows to 35 feet tall, with lance-shaped leaves and pale-yellow catkins. It’s found on river banks, floodplains and lake shores, including in the Arboretum wetlands. Perhaps the smallest is the snow willow, Salix nivalis (syn. S. reticulata), a wonderful dwarf, prostrate, alpine shrub with round leaves and yellow spring catkins. It’s cultivated in gardens as an ornamental groundcover.

Hybridization & Naturalization
Willows hybridize quite readily, and this has played an important role in their evolution, as well as their development as cultivated plants. In addition to known species, there are another 200
or so listed hybrids in the world. Hybridization of willows—plus the fact that they have a rather fluid morphology already, not only within the genus but within species, and even on individual plants—can make the willows a hard bunch of plants to identify. For instance, the foliage can show a wide range of variability in size and shape, even on the same plant in the course of a growing season.

Humans have found willows useful in a whole variety of ways (see “Willow Ethnobotany: Buildings, Basketry, and Medicine” below), including horticulture and erosion control. This has come with a downside. Thanks to people, willows are now naturalized on nearly every continent except Antarctica. In Australia and New Zealand, which don’t have native Salix species, the European crack willow (Salix fragilis; syn. S. euxina) and white willow (S. alba) were widely planted in waterways for erosion control, but now the species and their hybrids are rampant and classified as environmental weeds that threaten native wetland and riverine vegetation.

These two species, and one of their hybrids (Salix × rubens; syn. S. × fragilis), also appear on the Washington State Noxious Weed Control Board monitor list. Several of these weedy willows can be seen in the Arboretum wetlands, especially around the peninsula currently occupied by the WSDOT 520 staging zone.

Willows produce copious, tiny, tufted seeds that are easily picked up by wind and spread near and far. Twigs, especially of Salix fragilis, are another method of dispersal, breaking from the parent plant and floating downstream to root into banks. This process, known as stem fragmentation, is important in willow colonization. Even logs of felled willows, if left lying, will sprout roots and branches.

**The Arboretum Willows: Wetlands**

The Arboretum was home to three of the most common native willows of Western Washington long before the idea of an arboretum was even conceived. Along with Pacific willow, Salix scouleriana (Scouler’s willow) and S. sitchensis var. sitchensis (Sitka willow) can still be found in the wetter parts of the park. Both are shrubby with elliptical leaves and can be hard to tell apart. You can experience all three up close on the Waterfront Trail, where they form large colonies and tunnels through which to walk.

Of the early plantings around Duck Bay, probably the most interesting are some venerable crack willow hybrids. Only 60-years-old, yet as large as 300-year-old oaks, they slump in a rather gothic fashion along the swampy edges of the bay, close to the old 520 on-ramp.

Another dramatic old tree, a specimen of Salix koreensis, the Korean willow, grows along the Arboretum Loop Trail, near where Boyer Avenue meets Lake Washington Boulevard East. Its trunk and great limbs, slumped with age, are easy to climb. Children are often seen playing there, while friends and lovers stop to pose for selfies. The species bears lance-shaped foliage and handsome male catkins with red anthers.

**Witt Winter Garden and Beyond**

However, the most ornamental willows in the Arboretum can be seen in the Witt Winter Garden, especially in the beds on its
southwest corner. Here you’ll find two specimens of the bluestem willow, *Salix irrorata*, a bushy shrub from the southwestern U.S., grown for its stunning white-coated red stems (which can appear blue in color). Sourced from the Miller Botanical Garden in 2002, the plants are regularly coppiced to control for size and maintain the desired stem color. Two adjacent specimens of the golden willow, *Salix alba* ‘Vitellina’, are likewise coppiced for their yellow new growth. These plants also came from the Miller Garden and, like bluestem willow, look particularly attractive in winter.

Two willows are grown in the garden specifically for their colorful, late-winter catkins. *Salix gilgiana*, from Korea and Japan, offers red male catkins. *Salix gracilistyla* ‘Melanostachys’, a cultivar of the rose-gold pussy willow from China, Korea and Japan, bears mesmerizing black catkins.

Another beauty is *Salix acutifolia* ‘Pendulifolia’, a cultivar of the Siberian violet–willow, native to Russia and Eastern Asia. The species is a small, deciduous tree with thin, reddish-brown twigs and remarkably long, narrow, tapered foliage. ‘Pendulifolia’ is a male selection with vertically hanging leaves and two-inch, silver catkins that open to yellow in late winter.

One of the most ornamental willows, not only in the Arboretum but in general, is *Salix fargesii*. It can be found in the large southeast bed of the Winter Garden. Native to central China, this shrub is prized for its bright-red winter buds; glossy, purple-to-mahogany stems; and unusually large leaves. (The Arboretum specimen was donated to the collection in 2013 by local plantsman Riz Reyes.) Nearby are three lovely young specimens of hybrid corkscrew willow, *Salix* ‘Swizzlestick’, which offers twisted, ascending yellow stems and curly, green leaves.

Farther afield, along the Loop Trail in the future China Forest section of the Pacific Connections Gardens, two new specimens of magnolia leaf willow (*Salix magnifica*) are no doubt drawing the attention of passersby. Sourced from Far Reaches Farm in Port Townsend in 2017, this unusual species from Sichuan Province offers the largest leaves of any willow (up to 10 inches long and 5 inches wide) on purple-blushed stems. Four-inch, silvery-purple catkins rise above the foliage in spring.

Though it’s unlikely that willows will ever become more popular than the park’s beloved rhododendrons and flowering cherries, or last as long as its oaks, there are plans to create more space for them in the future. University of Washington Botanic Gardens Curator of Living Collections Ray Larson says, “There is a placeholder for collection development of *Salix* and its relatives in the Master Plan.”

Much of this is tied in with the return of WSDOT Peninsula—slated for the end of the decade, pending the completion of the 520
Willow Ethnobotany: Building, Basketry and Medicine

The generic name *Salix* comes to us from the Celtic word for willow, *sallis*, deriving from *sal* meaning “near,” and *lis*, meaning “water”—a reference to the plants’ penchant for wet environments. The Celts were master basket makers and are said to have taught the craft to the Romans. Willow basketry can be found in nearly every culture on earth. Some ethnobotanists speculate that willow might have been the first wood used by humans to build dwellings, with the pliable branches supporting structures made from animal hides.

Willow has also had a long history of use as a medicinal plant in all parts of the world where it grows, particularly as a treatment to reduce pain and fever. In the 19th century, a German scientist isolated the chemical salicin from willow bark, leading to the creation of aspirin. Today, you can still buy willow water in Persian grocery stores, marketed as a tonic for a variety of ailments. Locally, people of the Skagit tribe boil the bark of Sitka willow (*Salix sitchensis*), which they call *tsox’alo’ats*, also as a general tonic.

Daniel Mount is an estate gardener and garden writer. He lives on a small farm in the Snoqualmie Valley. Read more of his reflections on plants and gardening at www.mountgardens.com.