Understanding Orchids: Part 2

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In <u>Understanding Orchids: Part 1</u> (June 2018), we learned how orchids interact with their environment, especially their dependency on the soil fungal network and other forest plants. We discovered that orchids are biological barometers, i.e., what is good for them benefits other species within that community. The article introduced several orchid species native to Northern Virginia. Whereas some of those species are commercially available, they are anywhere from difficult to impossible for most people to grow and the orchids waste away. Gardeners who would like to responsibly and sustainably give a Virginia native orchid a go have a couple of choices. Both options are bog orchids, requiring a moist, sunny location.

The easiest species to cultivate is the Chadds Ford orchid (*Spiranthes odorata*, sometimes listed as *S. cernua odorata*), also called fragrant ladies' tresses and marsh ladies' tresses. The "odor" part of their Latin name comes from the creamy white blossoms' strong vanilla smell*. Whereas it can grow in moist garden conditions, they thrive and reproduce in rain gardens containing acidic, low-nutrient soil. During dry periods, these plants need non-chlorinated water in this sourcing preference: 1) rainwater (retained from previous storms), 2) spring water, 3) reverse osmosis water, and 4) distilled water.

The grass pink orchid (*Calopogon tuberosus*) is another species worth bearing in mind for a home rain garden or other sunny, soggy spot. In the wild, it is most conspicuous when sprouting up along roadsides, turning the ditches pink during the summer blooming season. Unlike the Chadds Ford orchid spikes loaded rows of small flowers, the grass pink only produce a handful of scentless blossoms on stems approximately one foot tall. The intense, magenta flowers span an inch across. Whereas this plant is not a grass, its common name hails to the long, narrow leavesthinner than those of just about any other orchid species. In fact, when not in bloom, the casual observer could mistake this plant for a grass! In home gardens, grass pink orchid flourish under the same growth conditions as described for Chadds Ford orchids. However, grass pinks are more temperamental bloomers, sometimes foregoing annual flowering events. These orchids also reproduce slowly; dividing a clump—a common practice to create multiple smaller clones from a single "mother" plant-can injure the specimen.

The ideal way to study orchids is by observing them in the wild, which means they need healthy habitats populated by other native plants, fungi, bacteria, and pollinators. Anyone searching for local

*The interesting connection is that vanilla—the same spice flavoring many foods—is from an orchid, officially named *Vanilla planifolia*. Calling its edible seedpod a "vanilla bean" incorrectly implies that vanilla is a legume. Opening the fruit reveals miniscule seeds common to orchids. Due to crop failures, vanilla is now worth more than its weight in silver and is second only to saffron as the world's most expensive spice.



Figure 1. Chadds Ford orchids bloom in late summer and early autumn. The spiraling floral spikes reach approximately 14 inches tall. This specimen grows in a rain garden with carnivorous pitcher plants (background).



Figure 2. Found throughout the eastern half of North America, grass pink orchids are generally widespread though can be endangered at the state level.

orchid species will be out of luck in woods dominated by non-native invasive trees, such as Bradford pear (Pyrus calleryana), mimosa (Albizia iulibrissin), princess tree (Paulownia tomentosa), and Higan cherry (Prunus subhirtella, also called weeping cherry)-all of which are weeds targeted by the Fairfax County Park Authority (FCPA) Invasive Management Area (IMA) program. Likewise, orchids are absent in areas where exotic weeds smother the ground. Native orchids require natural, undisturbed habitat rich with native biodiversity-no encroaching, trampling, digging, dumping, draining wetlands, mowing, or other destructive actions.

When looking for orchids or other cool plants, please stay on the trail since recreational stomping through woods destroys those living treasures. Loving the parks is great but please refrain from loving them to death! In natural areas where people stick to the trails, orchids grow next to paths. Their dustlike seeds enable rapid dispersion so new orchids can settle onto a plot if the habitat is right. Case in point, <u>Part</u>

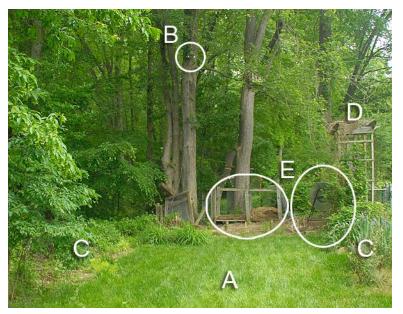


Figure 3. This picture might look like someone's private backyard, but it is actually all FCPA land after neighbors illegally encroached here. The disturbed land is unsuitable for orchids or any other sensitive native plants. This egregious example in Crooked Creek Park contains (A) mowed lawn, (B) wires and electrical lighting, (C) exotic gardens, (D) outdoor structures and furniture, and (E) composting operations. Beyond sight here are woody piles from cut trees and garden bushes. Enjoy the parks by respecting the land, not exploiting it.

<u>1</u> discussed how a cluster of lady's slippers were wiped out from Royal Lake Park. Now the good news: this spring, an IMA patrol found a single new pink lady's slipper growing far from where the others were! A tiny seed, from near or far, settled into ideal habitat and prospered!

Would you like to help make Royal Lake Park a better place for native orchids and other sensitive plants? Join us on Saturday, August 25, 2018, from 7:00-10:00 a.m. for an IMA habitat restoration workday! To RSVP and get the exact meeting site with workday details, send an e-mail to <u>greg@grsykes.com</u> with your request. At the end of the session, one lucky person who works the whole three hours will win a Chadds Ford orchid, which was locally garden-propagated and donated to us!

References and Bibliography:

Brown, Paul Martin and Stan Folsom. 1997. *Wild Orchids of the Northeastern United States*. Cornell University Press, Ithaca, New York. pp. 236.

Cutlip, Kimbra. February 28, 2018. Why the conservation of orchids is no simple matter. *Smithsonian Magazine*. <u>smithsonianmag.com/smithsonian-institution/why-conservation-orchids-no-simple-matter-180968270/</u>

Additional material is at these websites:

bgci.org/garden.php?id=4901 gardenista.com/posts/everything-you-need-to-know-about-north-american-native-orchids/ northamericanorchidcenter.org/, also under goorchids.northamericanorchidcenter.org/ usbg.gov/conserving-north-america%E2%80%99s-native-orchids

For information purposes only and not an endorsement, two companies selling sustainably propagated orchids are Plant Delights Nursery, Inc. <u>plantdelights.com</u> and Sunshine Farm and Gardens <u>sunfarm.com</u>.

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