Sustaining Our Plant Collections:

Are We?

Michael S. Dosmann

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es, another issue of Public Garden dedicated to sustainability. In case you missed them, others have been “Education and Sustainability” (Vol. 22, No. 1), “Gardens in a Changing Environment” (Vol. 22, No. 4), and “Green Leadership” (Vol. 23, No. 1). Is yet another necessary, due to the omnipresence of sustainability in our lives and work? I believe the answer is yes — the theme of “Sustainable Collections” is essential and timely. However, I want to stretch our perspective to consider sustainability not just for the sake of environmental stewardship, but for the sake of maintaining our living collections and the core missions they serve.

We hear about sustainability on the news almost daily; it crops up in conversation around the water cooler; it crosses our minds when we get groceries and even choose retirement funds. Excluding those terms that have only recently been invented (like gastric bypass, internet, and google), few have become so much a part of our daily lexicon. Just the other day, I “googled” sustainable and came up with nearly 70 million hits; botany only got me 20 million. And the rise to fame has been sudden. A survey of the scientific literature over the last century using Web of Science® brought up 31,335 scientific papers that have sustainable listed as a topic — over 90 percent from the last 15 years alone.

But before it became a rock star, the term sustainable simply described a practice capable of continuing for the long term; it referred to maintaining the level or integrity of some activity. Yet in
its modern context, sustainable has been almost exclusively linked to environmental stewardship and curbing natural resource depletion. This is of course due to society’s growing awareness of the environment’s predicament, our roles in causing that damage, and our obligation to fix it. Thus, we have two definitions of sustainable, and those of you familiar with taxonomic practice might appreciate my classification. We have the use of sustainable in the narrower, green sense or *sensu stricto* (s.s.), and sustainable in the broader, long-term sense or *sensu lato* (s.l.). For the purposes of discussing “Sustainable Collections,” I prefer the latter, which I suppose makes me a lumpier and not a splitter.

Do not get me wrong, I am a very strong proponent of minimizing our negative impacts on the environment through sustainable (s.s.) practices. However, I am concerned that as applied in many of our gardens, the sustainable perspective is too constricted. I wonder if we worry more about a slavish focus on green practices instead of considering our missions and the contributions that reach far broader horizons. Just think about the remarkable legacy our expertise and history uniquely position us to make: We conserve and document biodiversity; we facilitate research; we combat scientific and botanical illiteracy; we increase public awareness and understanding of environmental issues; and yes, we encourage eco-friendly practices in the home landscape and community. But if we are serious about sustaining (s.l.) these endeavors, then we must uphold the most central part of our gardens: our plant collections.

Plant collections are essential parts of our gardens, they are the tools that allow us to achieve our missions. Not to be overly simplistic, but what would a garden be without plants? By my broad definition, if a garden grows plants for specific programmatic needs, be those germplasm banking and research, education and training, aesthetic effects, or any combinations thereof, then those plants are part of a collection. I do not believe collections are just those plants deemed “research worthy.” Yet, this view is not always accepted in our community. Some argue that their garden or another possesses displays, not collections, or wonder if their plants can be referred to as collections because they do not serve research purposes. I am still amazed when gardens do not consider the cactus they use to teach children about desert habitats, the grove of trees that offer sanctuary in an inner-city garden, or the plants in the “home ideas” landscape as parts of a collection. It would be ludicrous to declare the paintings hanging on an art museum’s walls as displays simply because they are casually enjoyed by a visiting public more than they are researched, used in instruction, or banked as creative germplasm. The display program is an important function that these pieces of art support; our display collections do the same. All of these plants serve key roles in furthing the mission of the garden, they have purpose and thus are considered collections.

Sustaining collections has been a growing concern for other museums. The Smithsonian’s Andrew Pekarik made many excellent points in an essay dedicated to collection preservation. He argued that in many museums, long-term thinking has fallen out of fashion as emphasis shifts away from collection building, holding, and preservation towards short-term public service. In response to the “collections crisis,” IMLS and Heritage Preservation conducted a thorough review of museum collections and issued a sobering assessment titled *A Public Trust at Risk: The Heritage Health Index Report on the State of America’s Collections* (www.heritagehealthindex.org). The report revealed alarming percentages of
precious collections that are at great risk and in dire need of conservation. Under current management regimes, these collections are unsustainable. In many cases, this is because resources have shifted towards gate-driven activities to the point that many museums’ ability to actually preserve rare artifacts and archives is compromised.

We in the garden community do not have a health index like that described above, although it would be a great thesis project if there are any graduate students interested in collections and willing to take it on. I do believe, however that we have undervalued and placed our living collections at risk. And others, far more eloquent than I, have expressed these same concepts. I offer up Judy Zuk’s “Confessions of a collections advocate,” in which she challenged us all to become committed collection advocates as a means of safeguarding our plants, the backbones of our gardens.

I recognize that gardens face innumerable challenges these days. They must often do more with less and are drawn towards infotainment and other gate-driven activities just to keep the lights on. But if our living plant collections are not adequately advocated for, then I fear they will only continue to lose their integrity and substance. And with that loss, our gardens incrementally morph into something different, something less unique. How do you keep collections at the forefront when unforeseen circumstances arise? As new gardens with exorbitant design and hardscape costs are constructed, is it appropriate to shrink (or even eliminate) the plant budget? As summers become droughtier, do you stop providing supplemental irrigation to maintain your conservation collection or a colorful display enjoyed by thousands of visitors simply because it is the green thing to do? Do you wholesale deaccession species that may naturalize, even if those accessions possess robust documentation and represent wild genotypes now extinct in their natural range? Hitting close to home for me, the Asian longhorned beetle just showed up 40 miles away from the Arnold Arboretum. Faced with a similar situation, if a sure-fire control were available, yet hardly sustainable (s.s.), would you consider it in order to save your living collection? I am not proposing answers to these hypotheticals, for I believe that each of us must make our own decisions. But what I do propose is that we cannot make those decisions in good conscience without considering our collections. Sustaining (s.l.) collections and acting in ways that consider environmental sustainability (s.s.) are not mutually exclusive, nor should they be pitted against each other. However, to support the collections that serve our missions and an array of critical societal needs, we may need to justify resource consumption or other inputs that produce lower scores on “sustainability” audits.

If we truly want to have sustainable collections, then I challenge us all to consider the broad definition of sustainability. We owe it not only to the previous generations who placed them in our trust, but the future generations who will rue the day we ever let them slip away.

Michael S. Dosmann, Ph.D., is Curator of Living Collections at the Arnold Arboretum of Harvard University. He will be at the next APGA meeting bawking ‘Got Collections?’ bumper stickers and t-shirts. He can also be contacted at michael_dosmann@harvard.edu.

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