



# Public Garden

THE JOURNAL OF THE AMERICAN PUBLIC GARDENS ASSOCIATION VOL. 33, ISSUE 4, 2018



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# Public Garden



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VOLUME 33, ISSUE 4, 2018

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Photo: Paul Swanson,  
University of Alberta Botanic Garden

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Participation matters.

In this issue, the Association's Immediate Past President, Sabina Carr of the Atlanta Botanical Garden, tells the story of how she became Association President, beginning with her volunteering for the Program Planning Committee of the Annual Conference. When she joined the Committee, she met another volunteer named Casey Sclar.

At the time, neither of them envisioned that they would one day work together as the Association's Board President and Executive Director.

But that's what happened.

And that's part of the fun of volunteering—you never know what you will learn, who you will meet, or where you will ultimately wind up. There is also real pride and enjoyment in working to make your Association better for the benefit of everyone in the public garden community.

Coming soon, there will be opportunities to join Association Committees like Diversity and Inclusion, Awards, Program Selection, and others. Visit the "Committees" page on the Association website to learn more—you can find it in "Who We Are" under the "About Us" tab.

Finally, at next year's Annual Conference, the leadership of the Association Communities will be up for a vote. Communities help connect public garden professionals from around the country for professional development and networking. If you haven't joined one or more, you can find them under the "Professional Development" tab on the website, where you can also find suggestions in the "Find Your Specialty" area. Look for the leadership announcements in the Community Forums.

Best regards,

RAD

Richard A. Doran

# EDITOR IN CHIEF'S NOTE



Aga Khan Garden

Photo: Paul Swanson,  
University of Alberta Botanic Garden



# WHAT'S OUR BACKUP PLAN?

## A LOOK AT LIVING COLLECTIONS SECURITY

Abby Meyer

Few who read this article will be surprised to learn that conservation of biodiversity is imperative, and that the array of over 3,000 public gardens around the globe represents an important safety net to protect plant species. In fact, one out of three known plant species are maintained in cultivation, including at least 41 percent of globally threatened species. Yet one-tenth of globally threatened species in collections are held in just a single institution (Mounce et al., 2017). This presents a major conundrum: not only must the public garden community increase plant diversity in cultivation but we need to ensure species are replicated and grown by many more institutions. The average garden is already maintaining hundreds or thousands of taxa, so to ask them to do more with their limited resources becomes a daunting task. Solutions do exist, however; I'll highlight some of them here. In an era of uncertainty and change for global biodiversity, public gardens and their living collections offer incredible resources. I propose we start using a coordinated approach to building collections called integrated collections development.

Radford et al. (2003) wrote, "No botanic garden can act effectively alone with single accessions...It is therefore essential to establish links with other gardens...for exchange." We can't realistically expect or allow one garden to be the sole caretaker and sentinel for the long-term survival of a single plant, accession, lineage, or species. All plants have a finite lifespan and will eventually die. And all living collections are vulnerable to human error, institutional and staff changes, natural disaster, pests or disease, theft, and vandalism, among other potential risks.

Public gardens across North America have recently endured some of the most severe natural disasters on record. Climate change projections tell us to expect more of the same. Disaster preparedness has recently been a particular priority for the public garden community. Recommended activities include sharing priority backup material for safety duplication (Bachtell et al., 2016; Dosmann, 2012). Disaster planning requires a concerted effort by the institution prior to a disaster actually happening. And disaster preparedness should include planning and prioritization of living collections.

Botanic Gardens Conservation International (BGCI) manages PlantSearch to track progress toward the *ex situ* collections-focused Target 8 of the *Global Strategy for Plant Conservation* (BGCIa, 2018; CBD, 2010). As the only global database of plants in permanent living collections, PlantSearch holds over a million records from more than 1,500 institutions worldwide. PlantSearch also elucidates taxonomic and geographic *ex situ* gaps and synergies to guide collections development. For the individual institution, PlantSearch provides benchmarks for prioritizing collections management and disaster preparedness activities.

### NORTH AMERICAN THREATENED SPECIES

For almost a decade BGCI-US and the United States Botanic Garden have been monitoring native threatened species representation in the living collections of North American public gardens using PlantSearch (Kramer et al., 2011). The most recent assessment, completed in 2017, found 3,598 of 7,662 (47%) native threatened species represented in plant and



▲ *Torreya taxifolia* is a critically threatened conifer from the Florida panhandle. Starting in the late 1980s, extensive cuttings were taken from wild populations by The Arnold Arboretum of Harvard University and distributed to several other gardens as backup collections. A 2010 inventory of these collections revealed significant losses of unique lineages across institutions. In recent years, the Atlanta Botanical Garden took backup cuttings of all remaining unique lineages in collections and incorporated them into their conservation program. Monitoring and rebuilding backup collections through time has been important for this species.

Photo: Michael Wenzel

◀ First collected by E. H. Wilson in 1901 in Hubei Province, China, *Kolkwitzia amabilis* was brought to The Arnold Arboretum in 1907 and was the only lineage in North American collections for the next eight decades. The species was finally recollected in Hubei Province in 1994 and brought to The Arnold Arboretum as well as other gardens. By this time *Kolkwitzia amabilis* was threatened in the wild in China so both lineages represented valuable genetic diversity for conservation of the species. The 1994 seedlings grown at The Arnold Arboretum were accidentally sold in a plant sale. Thankfully, a portion of the seeds collected on the expedition were put in short-term seed storage at a partner institution, and the Arboretum was able to replace their lost material. When possible, seed storage and banking are great components of an *ex situ* program.

Photo: Michael Dosmann

seed collections. The findings highlight the exceptional collections and conservation work being done at public gardens across the continent, and also point to the important conservation work we still need to accomplish. For starters, one-third of the species currently found *ex situ* are maintained by a single institution. The genetic diversity, as well as security and long-term survival, are questionable for species underrepresented in *ex situ* collections. This is certainly not where we want to stop, but are we making enough *ex situ* progress to prevent species extinction in North America?

### GLOBALLY UNIQUE BOTANICAL TAXA

Taxa maintained in only one or a few collections have less chance of long-term *ex situ* survival than taxa that are maintained in many locations. Many collections represent species, populations, and genetic diversity that is difficult and even impossible to replace. According to PlantSearch, there are 68,235 botanical taxa that are maintained in only one collection worldwide, of which 10 percent have been assessed as threatened (BGCIb, 2018). This simultaneously represents an extraordinary threat and opportunity for these species, as they could be easily lost but they already exist in a collection somewhere. It also points to a potential need to increase the quantity and quality of collections data reported to PlantSearch. Notably, the United States ranks first among nearly 100 countries in which public gardens report globally unique taxa (Table 1). U.S. public gardens are among the most well-resourced in our community, and focus on this group of plants could make a large conservation impact for a relatively low amount of input.

◀ *Austrotaxus spicata* is an endemic conifer species of New Caledonia that is unusual and difficult to grow. The specimen shown here was maintained in the University of California Santa Cruz Arboretum's living collection until 2014. Arboretum staff shared cuttings with botanic garden colleagues prior to losing their specimen. This conifer is now grown in one botanic garden in the United States. Even though not all backup collections survived, one successful propagule prevented complete loss of this rare material.

Photo: Chad Husby

TABLE 1. TOP TEN COUNTRIES WITH PUBLIC GARDENS REPORTING GLOBALLY UNIQUE BOTANICAL TAXA IN THEIR COLLECTIONS.\*

COUNTRY	TOTAL GLOBALLY UNIQUE TAXA REPORTED	TOTAL INSTITUTIONS REPORTING GLOBALLY UNIQUE COLLECTIONS
United States	17,103	205
United Kingdom	16,484	39
Australia	4,000	35
Germany	3,757	40
France	3,641	31
China	2,617	20
Russia	1,555	22
Netherlands	1,496	16
Indonesia	1,358	5
South Africa	1,155	10

\*Including species and infraspecific taxa (excluding cultivars and cultivated hybrids) reported by a single institution to BGCI's PlantSearch database (BGCIa, 2018).

### EXTINCT AND EXTINCT-IN-THE-WILD SPECIES

Whether intended or not, public gardens are the final sanctuary on Earth for many plant species. Radford et al. (2003) recommend that special attention be given to species that are extinct in the wild, as this is the singularly unique conservation role public gardens can play. PlantSearch tells us that gardens around the world report 54 (17%) of the 300+ extinct or extinct-in-the-wild species designated by the International Union for Conservation of Nature (IUCN) or



NatureServe. Interestingly, this includes eight species assessed as Extinct by IUCN, five of which are reported in the United States. Of the extinct or extinct-in-the-wild species reported by collections worldwide, 19 (35%) are reported by a single institution and 39 (72%) are reported by fewer than ten institutions. Among the forty-four countries where gardens report these species, North American collections potentially hold many of the last known representatives of entire species (see Table 2). Public gardens could have a giant conservation impact by using a relatively small amount of resources on verifying and propagating these species. And what better message to give our stakeholders and the public than, “We’ve saved a species from permanent and complete extinction?”

TABLE 2. TOP TEN COUNTRIES WITH GARDENS REPORTING EXTINGUISHED AND EXTINGUISHED-IN-THE-WILD TAXA IN THEIR COLLECTIONS.\*

COUNTRY	NUMBER OF EX SITU SITES	NUMBER OF TAXA REPORTED
United States	94	42
Germany	20	20
United Kingdom	20	20
France	14	20
Spain	11	7
Australia	10	11
Netherlands	9	13
Canada	8	7
Russia	7	10
Belgium	5	5

\*Including extinct and extinct-in-the-wild taxa ranked by the IUCN and NatureServe, reported by collections to BGCI's PlantSearch database (BGCI, 2018).



## WHAT CAN BE DONE?

As we consider backup collections in the future, I suggest the use of an **integrated collections development** approach in which institutions take into account their holdings, as well as the holdings of others, to make complementary and synergistic collection management decisions including acquisitions, propagations, and distributions, in order to maximize diversity within and across species. This can also facilitate the rational allocation of limited resources across institutions to share responsibility and collectively achieve the greatest conservation impact for species with the greatest need. This approach requires conservation and cooperative ethics within and among institutions across the public garden community.

Ideally, seed of a species is strategically sampled from wild populations to capture maximum genetic diversity, placed in a long-term seed bank, and complemented with representative clonal plants maintained across multiple institutions. However, there are many obstacles to this model, including the fact that many species don't produce orthodox (bankable) seeds, or any seeds at all. For these exceptional species, living plant collections are sometimes the only option for long-term *ex situ* preservation (Pence, 2013). Momentum has been forming around several plant groups where coordinated *ex situ* action is a priority (e.g., the Association's Plant Collections Network multi-site collections, BGCI's Global Rhododendron Collections Consortium, the Center for Plant Conservation's National Collection, The Morton Arboretum's Global Oak Conservation Network, and the Royal Botanic Garden Edinburgh's International Conifer Conservation Program).

So where to start? Your institution can take a few deliberate actions to minimize threats to collections security—while at the same time making a big conservation impact. And while they may seem basic, they are worth reviewing and engaging with at your institution:

- **Complete regular collection inventories.** Knowing what you have is a good starting point (Dosmann, 2012). Whether you set a three- or thirteen-year inventory goal, starting is the key. Incorporation of activities into regular workflows can help to identify manageable tasks to tackle through time.
- **Share collections data with the broader community.** Your collection can only be useful if potential users know about it. BGCI's PlantSearch is one of the only options to connect your collections to the global botanical community; contributing is free and simple.

◀ *Solanum ensifolium*, an endemic woody plant from Puerto Rico, may have recently gone extinct in the wild following the 2017 hurricane season. Staff at the Fairchild Tropical Botanical Garden had collected the species from the wild but all *ex situ* plants were lost in the mid-2000s. Luckily, in 2003 they had shared backup material with the University of Connecticut Biodiversity Education and Research Greenhouses, which inadvertently became the only known representatives of the species. Staff at the University of Connecticut have been working to create additional backup collections and repatriate the material back to Puerto Rico.

Photo: Jennifer Possley

- **Assess your collection.** Collection assessments can uncover previously overlooked or unknown information, and engage your staff in collection management activities. PlantSearch can help you identify the taxa in your collection that are threatened and underrepresented in collections. Comparing with other collections can also help you identify strengths and gaps for your collection.
- **Duplicate and distribute plants.** Duplicate priority specimens that are most vulnerable and establish backups within and outside of your institution. Propagation of priority plants may be complicated by taxonomic uncertainty, difficulty in producing viable propagules, or lack of available germplasm to use. It also often requires input from several individuals, which involves an additional level of coordination.
- **Support legal and ethical plant exchange.** Inform yourself and your staff about sharing plant material. Review or establish your institution's policies and practices surrounding plant exchange. This includes obtaining or renewing phytosanitary certificates and documentation associated with relevant legal or international frameworks such as the Convention on Biological Diversity.
- **Collaborate.** Find ways to work with other institutions in collections development. Seek out institutions that hold globally unique species your institution could accommodate. Other collaborative activities could include taxonomic verification, exchange of propagation knowledge, *in situ* versus *ex situ* species gap analyses, and expeditions aimed at diversifying *ex situ* collections. 🌿

### Acknowledgements

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▲ *Magnolia tarahumara*, an endemic to the Sierra Madre Occidental in Mexico, is thought to be threatened in the wild. A seedling was originally wild-collected and planted at a staff residence of The Huntington Botanical Gardens. The specimen was subsequently neglected and forgotten until it was rediscovered by Tim Thibault in 2016. It is the only known *ex situ* collection of this species, and researchers at The Huntington have since developed tissue culture protocols for propagating the species. Today the plant is being propagated in their tissue culture lab, and the original living plant's health is poor. Future goals include distribution of backup material to other institutions, including repatriating to Mexico.

Photo: Abby Meyer

Kramer, Andrea, Abby Hird (Meyer), Michael Dosmann, Ray Mims, and Kirsty Shaw. 2011. Conserving North America's threatened plants: Progress report on Target 8 of the Global Strategy for Plant Conservation. Botanic Gardens Conservation International U.S.

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# SUCCESSION PLANNING

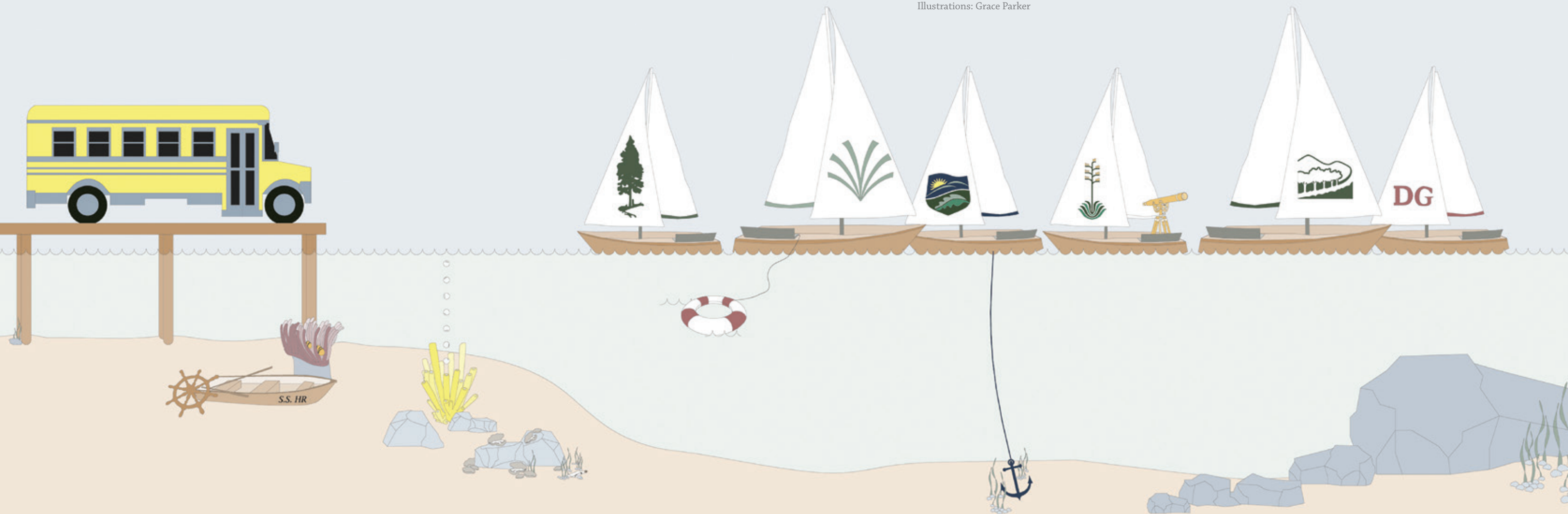
Grace Parker

WHETHER A WELL-EARNED RETIREMENT, A PLANNED DEPARTURE, OR AN UNFORTUNATE CIRCUMSTANCE, THE DEPARTURE OF A PUBLIC GARDEN LEADER HAS AN IMPACT ON STAFF, BOARD, AND POTENTIALLY EXTERNAL STAKEHOLDERS.

BEING PROACTIVE IN KNOWING HOW YOUR ORGANIZATION WILL MEET SUCH CHANGES BEFORE THEY UNFOLD CAN BE A SOURCE OF REASSURANCE AND STABILITY.

THERE ARE THREE TYPES OF SUCCESSION PLANNING, AND MANY MISPERCEPTIONS ABOUT THE PROCESS. IN MY THESIS RESEARCH, "SUCCESSION PLANNING: A DIALOGUE FOR LEADERSHIP CONTINUITY," I STUDIED SIX DIFFERENT ORGANIZATIONS, EACH OF WHICH TOOK A UNIQUE APPROACH TO TACKLING THIS CHALLENGE. HERE, I SHARE THE TYPES OF SUCCESSION PLANNING, AND SOME OF THE KEY POINTS I LEARNED FROM MY INTERVIEW WITH THE EXECUTIVE DIRECTOR OF THE DESERT BOTANICAL GARDEN IN PHOENIX.

Illustrations: Grace Parker





## THREE TYPES OF SUCCESSION PLANNING

While strategic planning provides a roadmap for organizational growth and master planning provides a vision for the built environment, succession planning ensures an organization's capacity to respond to change in top leadership. Ideally woven into a strategic plan, succession planning aligns staff development opportunities with the perceived future needs of an organization, increasing institutional flexibility, and staff competencies. In the event of a leadership change, a succession plan also outlines one or more courses of action to navigate times of uncertainty with minimal disruption to mission delivery.

The three types of succession planning are: emergency, departure defined, and strategic leadership development. The first two pertain primarily to "key positions," which each organization defines differently, but can be thought of as mission-critical. (The executive director position is a prime example of a key position.) The third type of planning is more holistic, involves more staff positions, and is infused throughout an institution.



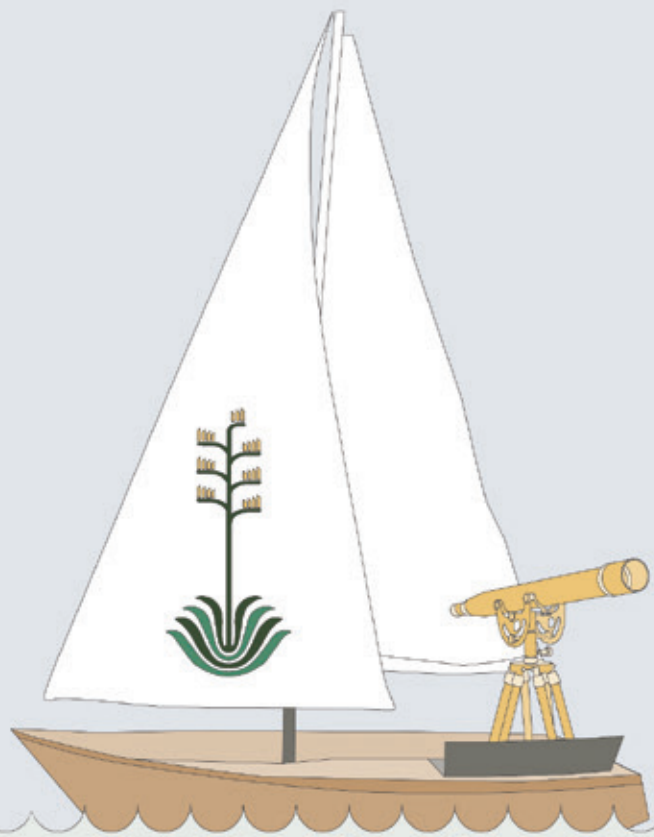
Emergency succession planning aims to address a sudden, unexpected departure of a key position. It is characterized by a sense of urgency, especially if the board is only given a few days' or weeks' notice. You might think of this as the "What if our CEO were hit by the proverbial bus?" strategy.



Departure defined planning begins when a key executive announces their planned departure, typically providing one to three years' notice. The advance notice in this case often prevents panic on the part of the board and staff, but the luxury of time must be used wisely to assure the best selection process and a smooth transition for the new leader. The benefits of formalized emergency and departure defined succession plans are tremendous, especially in the case of a director's departure. Not only is the organization equipped to respond through predetermined roles, timelines, communication procedures, and allocated resources including time and money, but the board can also make critical decisions regarding the organization's future from a place of clarity and confidence. In both of these types of plans, it is the board's responsibility to conduct an inventory and analysis of what the organization needs from its next leader, a step commonly overlooked when organizations feel pressured to launch an executive search and select the next leader as quickly as possible.



Strategic leadership development is the third way to ensure an organization's capacity to respond to a change in top leadership. This approach involves constructing a vision of your organization in the next five years, identifying the skills and competencies necessary to translate this vision into reality, and sourcing these skills either from internal talent or, if necessary, the external labor market. Strategic leadership development supports the concept that the organization's success does not depend entirely upon one individual, namely the executive director, but rather on the continued advancement of staff at every level, contributing to a culture of organizational excellence. As they say, a rising tide lifts all boats.



## TACKLING CONCERNS ABOUT THE PROCESS

I found some of the reservations about undertaking the succession planning process result from a misunderstanding of its basic tenets. I was able to identify a number of ways museums and public gardens may allay their fears. Here are just a few examples from the perspective of Ken Schutz, who has been the executive director of the Desert Botanical Garden (DBG) in Phoenix for sixteen years. In 2015, he and his board decided to create succession plans for all the senior managers at the garden, starting with his own position.

### WON'T IT BE TIME-CONSUMING?

Those who suspect the process will be time-consuming and expensive may be surprised to learn that DBG's emergency and departure defined succession plans, authored by the board's Succession Plan Committee, only required four meetings over the course of six months and had virtually no cost. Schutz recalled:

"WE CREATED A SMALL TASK FORCE COMPOSED OF BOARD MEMBERS AND ME, AND WE TALKED ABOUT WHAT WE WOULD DO IF I EVER WERE HIT BY THAT PROVERBIAL BUS. WE DISCUSSED WHAT WOULD BE THE BEST PROCESS TO USE IN FINDING MY SUCCESSOR—WHEN THE TIME WAS RIGHT. WE BENCHMARKED WITH OTHER INSTITUTIONS THAT ALREADY HAD SUCCESSION PLANS AND WERE WILLING TO SHARE. AND WE INVESTED IN A COPY OF THE BOARD SOURCE PUBLICATION *CHIEF EXECUTIVE SUCCESSION PLANNING: ESSENTIAL GUIDANCE FOR BOARDS AND CEOs*."

### WHO WILL SERVE AS BACKUP?

Another misconception is that succession planning determines a "backup person" to permanently assume the executive director position in the event of a departure. In fact, this approach more closely resembles "replacement planning" and is not a recommended strategy, as it has the potential to create tension in the workplace. Additionally, identifying an internal heir-apparent does not give the board the opportunity to discuss what kind of leader the organization needs when a transition is actually taking place. As a means to bypass this scenario, DBG's plan denotes that an interim

executive director will be appointed by the board until the new director is selected. It also stipulates the interim will not be a current member of the senior staff. Because succession planning is primarily the board's responsibility, progress can be made in a unified and neutral manner that does not invite disharmony among staff.

### HOW DO I APPROACH THE SUBJECT?

One of the most common reasons leaders are not inclined to undertake succession planning is the uncertainty of how to approach the subject. For instance, if an executive director suggests that the board construct a succession plan, this may give the board the impression of a desired departure, even if that is not the executive director's intent. Conversely, if the board makes the suggestion, the executive director cannot help but wonder whether they are performing adequately as the leader of the organization. DBG started the conversation in an unusual manner. "We have a strong network of foundations in Phoenix that are committed to the growth and vitality of the arts and culture sector," explained Schutz. "In pursuit of a grant from one of these funders, we needed to audit our current policies and procedures. We were shocked to learn that our garden lacked a board-approved succession plan for the executive director. That's how my conversation with the board began. It wasn't about my needs, and it wasn't about the board's needs. It was about doing what was in the garden's best interest. Framed that way, the conversation about succession was very easy to start."

### WORDS OF ADVICE

"Looking back, I can see that I avoided the topic of creating a succession plan for myself," commented Schutz. "It was always there in the back of my mind. I told myself I'd get to it someday, but other priorities just kept getting in the way. From start to finish, I enjoyed the journey—especially after we found a comfortable way to begin the conversation. And our garden was a stronger institute after we finished our work. I will end with a word of caution. If you undertake this task, do be prepared for some moments of quiet introspection that can be quite profound. After all, a key part of the succession planning process requires us to imagine a time when our museum will carry on its mission without us, and vice versa." 🌸

Grace Parker is the Assistant Manager of Interpretation at Mt. Cuba Center.

As Chair of the Emerging Professionals Community, she hopes the newly debuted Mentorship Program will promote strategic leadership development across the field. Her thesis, "Succession Planning: A Dialogue for Leadership Continuity," is available in the Association's online Resource Library.

This article has been adapted from its original publication, the October 2017 issue of *Museum* magazine.





◀ The Association's Board of Directors at their Fall Meeting at Frederik Meijer Gardens and Sculpture Park

Photo: Steve LaWarre, Frederik Meijer Gardens and Sculpture Park

HOW DOES YOUR GARDEN GROW?

# THE GIFT OF SERVICE



Sabina Carr

WHAT DOES IT TAKE TO BE A LEADER IN YOUR INDUSTRY? I BELIEVE ONE BIG PART OF IT IS SIMPLY BEING A VOLUNTEER. VOLUNTEER SERVICE IS A "WIN-WIN" THAT WILL ELEVATE YOU AND YOUR ASSOCIATION TO EVEN GREATER LEVELS OF EXCELLENCE. YOUR ASSOCIATION TRULY CANNOT ACCOMPLISH WHAT IT DOES WITHOUT THE TIME, TALENT, AND TREASURE OF YOU—OUR MEMBERS.

WE NEED YOU TO SERVE—TO SHARE YOUR EXPERTISE AND CONTRIBUTE. YOU'LL CONNECT WITH OTHER MEMBERS, AND YOU'LL GROW FROM THE EXPERIENCE. YOU WILL BE ENGAGED AND DEVELOP PROFESSIONALLY, PARTICULARLY AS YOU BECOME MORE AWARE OF ALL THE ASSOCIATION HAS TO OFFER. YOUR UNIQUE PERSPECTIVE WILL HELP THE ASSOCIATION ACHIEVE EXCELLENCE, AND YOU HAVE MANY OPPORTUNITIES TO LEAD. ALL OF OUR COMMUNITIES, COMMITTEES, STAFF, AND BOARD NEED YOUR MEMBERSHIP AND LEADERSHIP IN THE FORM OF SERVICE.

My own path began in 2007, when I volunteered to serve on the Program Selection Committee. Pretty new to the industry, I felt like I knew no one. I met some terrific people planning that Southern California Conference—now more than a decade ago—and they are my friends and trusted colleagues to this day. In fact, one of those original connections around the planning table in Pasadena became my good friend. Today, he is the Association's Executive Director, Casey Sclar! The experience prompted me to help out more to get involved with

other Marketing and Communications professionals. A year after that, I was nominated to serve on the board while Atlanta hosted the Annual Conference in 2010.

Opportunity knocked in 2012. I never dreamed that I would be asked to lead the Association as its President, but looking back on it, my committee and community service prepared me to do so. I've advanced my own career, developed my own professional network, and more—simply because I volunteered.

As Past President of the Board of Directors one of my current roles is supporting the Association's Strategic Plan that highlights these major goals:

- Member Value and Engagement
- Professional Development
- Awareness
- Organizational Excellence
- Leadership and Advocacy

As a board, we collectively donate our time and talent to help achieve these goals. Hopefully you've experienced them firsthand in one way or another as part of the many benefits of your membership.

My service on the board lasts until June 2019. My primary role now is to help select future board members. This fall we called for nominations for consideration by the Nominating Committee to stand for election in 2019. All proposed names are being considered, and we look strongly at previous Association service as one of several criteria to advance the diversity and depth of your board. Soon, we will be calling for nominations to Board Committees and seeking nominations for Community Chairs and Vice-Chairs. All nominations will be accepted for consideration in this upcoming 2018/19 cycle.

My own service enabled me to lead three major efforts that made positive changes to the Association including leading a brand refresh, having a more equal balance of women and men serving on the board, and now, creating a more transparent and inclusive process for board nominations. In all of these efforts I've received much more than I've given in the form of friendships, connections, and impact.

You never know, one day you too could serve as our Board President! We know you're out there right now. Anything is possible. Please volunteer, or answer the call to do so when asked. Together we lift this wonderful industry to even greater heights. 🌿

Sabina Carr is Vice President, Marketing and Guest Experience, at the Atlanta Botanical Garden. Additionally, she is the Immediate Past President of the Association's Board of Directors.



# Autumn,

## EAST WOODS OF THE MORTON ARBORETUM

In northern Illinois, maples usually turn their color during the last week of October. At The Morton Arboretum, maple color in the East Woods can be spectacular and usually attracts large crowds.

In 2017 the end of October passed and the leaves on most trees remained green with some unattractive browns mixed in. I was beginning to wonder whether this was just going to be a bad year for fall color. Finally, on November 5, virtually overnight, maple foliage began to turn.

Next morning the light was fantastic. Conditions were bright. High, thin clouds filtered the sunlight so there were no harsh shadows to contend with. Everything came together perfectly for this shot, capturing the essence of autumn at The Morton Arboretum.

HARMUT KANNEGIESSER  
THE MORTON ARBORETUM  
PHOTOGRAPHIC SOCIETY





AMERICAN PUBLIC GARDENS ASSOCIATION



TAKING A WALK ON THE WILD SIDE

## WHAT I LEARNED FROM PLANT COLLECTIONS NETWORK ACCREDITATION

Mary Villa

THE DECIDUOUS NATIVE AZALEA COLLECTION OF THE CONNECTICUT COLLEGE ARBORETUM WAS RECENTLY GRANTED NATIONAL ACCREDITATION BY THE PLANT COLLECTIONS NETWORK OF THE AMERICAN PUBLIC GARDENS ASSOCIATION. THE SCOPE OF OUR COLLECTION INCLUDES ALL DECIDUOUS *RHODODENDRON* SPECIES (AZALEAS) NATIVE TO NORTH AMERICA.

The Connecticut College Arboretum was established in 1931 as a place to grow and display native plants at a time when exotic plants were more valued in the gardening world. The Arboretum was open for the enjoyment of the public and used for teaching by the college's botany department. The focus was to assemble only those trees, shrubs, and woody vines that are native to eastern North America and can be grown successfully in southeastern Connecticut. Our southern New England climate is well suited for native azaleas. Bordered by Long Island Sound to the south, New London is in USDA Plant Hardiness Zone 6B. Being coastal, it is among the mildest areas of New England. Summers are frequently hot and humid; winters are cool with a mix of snow and rain.



*Rhododendron vaseyi* photos from far left to right: emerging buds, blooming flowers, fall colors. Photos: Connecticut College Arboretum

Our earliest native azalea accessions date from 1947. *Rhododendron viscosum* (swamp azalea) was collected in a sphagnum swamp near Little Pond, Thompson, Connecticut, on September 1, 1947, by Richard H. Goodwin, arboretum director, and K. P. Jansson, horticulturist. Our collection includes three Connecticut native species represented by plants that were locally wild-collected: *R. periclymenoides* (pinxterbloom azalea), *R. prinophyllum* (roseshell azalea), and *R. viscosum* (swamp azalea).

During the 1970s, the native azalea collection was expanded considerably by Connecticut College Botany Professor Emerita Sally Taylor. With a deep appreciation for native azaleas, Sally would often return from personal travel with her car full of plants that she had purchased for the arboretum. When a donor stepped forward in 1978, the Nancy Moss Fine Native Azalea Garden was established.

In 2015, I began an intensive study of our native azaleas for the purpose of verification. The identification procedure I use includes comparing morphological traits with scientific literature and with known specimens. Digital photographs taken during peak bloom periods are also helpful. Currently 91 percent of our native azaleas are determined to be correctly identified. The remaining 9 percent includes plants not seen in flower.

I confess, at the start of the accreditation process during the summer of 2017, I had no idea what I was getting into. I thought we had a representative native azalea collection. Examining it under the accreditation magnifying glass helped not just to quantify, but to *qualify* what we had. Our collection contains 185 accessioned plants, representing 15 of the 20 species of North American deciduous native azaleas. The collection also includes natural hybrids and cultivars that were not considered for the benchmarking requirement.

For benchmarking I compared our collection with the native azalea holdings in thirteen other gardens and arboreta. While our collection had respectable standing when it came to species richness, we came in dead last in the category of wild-collected species (only three), and wimpy in the number of wild

individuals (sixty). Our data revealed that only 32 percent of our plants came from documented wild sources. Goals for the collection began to come into focus.

The Network's application and evaluation process helped us to define the goals for our native azalea collection:

- Emphasize wild-collected plants with known provenance as we work to build a larger, more diverse collection. All future acquisitions will be from documented wild sources, unless there is a compelling reason to make an exception. Over time we plan to obtain multiple acquisitions of each species from varying parts of their range to ensure broad genetic representation.
- Acquire the remaining species needed to complete our collection.
- Prioritize species that are under-represented (that is fewer than five plants).
- Replace plants with uncertain provenance with documented, wild-collected plants.

While reaching out to other gardens and arboreta for their native azalea data, I gained new friends and mentors. I am especially grateful for advice (and even plants), from professional staff at Davis, Jenkins, Morris, and Polly Hill.

What next, now that we have accreditation? Working with well-defined goals, we will be able to develop our collection in a more meaningful way. 🌸

Mary Villa is the Curator/Information Resource Manager at the Connecticut College Arboretum.

The Plant Collections Network recently updated its online Toolbox for Accredited Collections.

You can find Network and Collection logos, an elevator speech about the Collection program, and examples of how Accredited Collections are being publicized online and offline by your fellow member gardens.

You can find the Toolbox here: <https://www.publicgardens.org/programs/plant-collections-network/plant-collections-toolbox>





SMALL GARDEN, BIG IMPACT

# A TRANSFORMATIVE GIFT INSPIRES CONNECTION

## NORTHERNMOST ISLAMIC GARDEN OPENS IN ALBERTA, CANADA

Kerry Mulholland



In 2009, the University of Alberta (U of A) Botanic Garden received word of an unprecedented gift. His Highness the Aga Khan, the spiritual leader of the world's Ismaili Muslims, announced during a commencement address that he was bestowing the gift of an Islamic garden to the University. This new garden, located at the university's botanic garden southwest of Edmonton, would underscore the long-standing relationship between the University of Alberta and the Aga Khan University.

After nearly a decade of planning and eighteen months of construction, the Aga Khan Garden, Alberta opened to an expectant public in June 2018.

The Aga Khan Garden, Alberta is the northernmost Islamic-inspired garden in the world, and one of only two in North America. It is part of a worldwide network of parks and gardens built or refurbished by the Aga Khan Trust for Culture.

His Highness has said, "The tradition of Islamic gardens places an emphasis on human stewardship — our responsibility to nature, and to protect the natural world." Echoing the U of A Botanic Garden's mission to inspire connections between plants and people, the Aga Khan Garden is intended for all people, of all ages and backgrounds, created as a space to connect with each other and the beauty of nature.

Situated on the 53rd parallel, where aspen parkland meets boreal forest, the U of A Botanic Garden is not where you would expect to find a dazzling interpretation of Mughal garden architecture. Yet, just a few miles away from the North Saskatchewan River and fifteen minutes from the city of Edmonton's outskirts, the Aga Khan Garden nestles amongst the spruce trees, an 11.9-acre feature within the U of A Botanic Garden's 240 acres.

Before planning commenced, His Highness tasked landscape architects Nelson Byrd Woltz with visiting the world's great Islamic—and particularly Mughal—gardens. Those historic influences are visible throughout the Aga Khan Garden. Yet this garden is a contemporary space, designed to connect to the local topography and climate.

Water tumbles over scalloped stone, reflects the prairie sky in still ponds, shimmers across limestone walls, and gives way to a naturalized wetland surrounded by a *bustan* (orchard). A distinct quadrant, the central *chahar bagh* (four gardens), is a classic Islamic garden design element, as is geometric precision. Sunken beds hold exuberant displays of perennials, annuals, shrubs, and grasses, a plant palette selected for

The University of Alberta Botanic Garden (formerly the Devonian Botanic Garden) was established in 1959, and is a unit of the Faculty of Agricultural, Life and Environmental Sciences at the University of Alberta.



fragrance, beauty, texture, and, importantly, the capacity to withstand the extremes of Alberta's climate, in a growing region that teeters between Zones 3A and 4A.

Public response to the new garden has been one of overwhelming delight. Visitors have been flocking to see the new feature—attendance stats have doubled, and glowing reviews are being given, along with coverage in local, national, and international media.

"We're thrilled with the response to this important new garden," said director Lee Foote. "It is a symbol of the hope and unity that comes when people enjoy the beauty of nature together, getting a perspective on different cultures through the medium of a garden."

Volunteer docents, many from the local Ismaili community, are kept busy offering free tours of the Aga Khan Garden and another cultural favorite at the U of A Botanic Garden, the 5.5-acre Kurimoto Japanese Garden. Garden staff have been developing new interpretive units for the more than 17,000 school children who take part in its award-winning field trip programs, making connections between the plant world and geometry found in Islamic gardens. A web app, a grant-funded, multi-disciplinary collaboration between the University of Alberta and University of British Columbia scheduled to launch in 2019, will offer visitors wider, deeper understanding of botany and Islamic poetry, art, and music.

Anticipating the high levels of public interest in the new feature, the U of A Botanic Garden received provincial government funding for upgrades on visitor service infrastructure, including improved parking lots, wayfinding, and a new entry plaza, just in time to receive its many new visitors. 🌸

Photos: Paul Swanson, University of Alberta Botanic Garden

Kerry Mulholland is the Communications Coordinator at the University of Alberta Botanic Garden, and has been a witness to the beautiful unfolding of the Aga Khan Garden, Alberta, from the beginning of the project in 2009.





Photos from far left to right:

A newly “planted” orchid begins to take root on its pot.

A *Stanhopea* orchid growing on the outside of a larger clay pot.

The same pot, from another view, clearly shows a *Ficus* tree also growing on it.

HORTICULTURAL HOW-TO

# THINK OUTSIDE THE POT TO GROW ORCHIDS

T.J. Hartung

When I first heard about growing orchids on the outside of a pot, I was skeptical but curious. I was introduced to the concept by Larry Mayse, a retired airline pilot and orchid enthusiast, who is the creator of “Kool-Logs” ([www.kool-logs.com](http://www.kool-logs.com)). He currently has over 1,200 different species growing on them.

Larry lives in the southeastern United States, and was having difficulty growing some orchid species due to the warm temperatures of the region. He came up with the idea of using evaporation to cool orchids without fans, pumps, or other devices.

At the Vallarta Botanical Gardens in Puerto Vallarta, Mexico, we listened to Larry tell us about the advantages and benefits of growing orchids on the outside of a pot and were very interested in the concept. We decided to try it using locally-produced unglazed clay pots that were meant to hold liquids.

Our first challenge was that the pots we had didn’t have holes on their rims for hanging. We had to first wrap a wire around the neck, and then form a loop with it so the pot could hang. We soon discovered that iron-based wire wasn’t a good idea—it rusts. Plastic-coated or stainless steel wire works much better.

We mounted one or two small orchid plants on the outside of several pots using fishing line. (Personally, I prefer using twine—cotton, manila, or sisal—because it will decompose over a year or two and not damage the plant as it grows.) We filled the inside of the pots with water and hung the pots from horizontal supports. The fishing line was cut off a few months later as the orchids grew and became firmly attached to their host pots.

It wasn’t long before we noticed that orchids loved being on the outside of the pot. As can be seen in the photos, roots grew around the pots and were very robust, resulting in healthy orchid plants.

Since only a small portion of the root is in contact with the pot, the problem of root rot, common with orchids potted in growing medium, is eliminated. Since no potting mix is used, there is no need to repot as the mix deteriorates.

The orchids have a constant supply of water, because the water inside the pot slowly finds its way to the outer surface. There, the water that isn’t absorbed by the roots evaporates, reducing the temperature at and near the surface of the pot by 15–20° F (8–11° C) or more. Thus, orchids that prefer cool growing conditions experience cooler conditions at and near their roots.

At the Vallarta Botanical Gardens we had a few unexpected surprises. Being out in the open, our pots became recipients

of random airborne seeds. We soon found ferns and other plants growing along with the orchids. In one case (see photos) a *Ficus* tree grew on the same pot with a *Stanhopea*. Unfortunately, this pot was later damaged when it was being moved. However, both the *Stanhopea* and the *Ficus* have found new homes and are doing well.

We use rain water in the pots because it contains almost no dissolved minerals. If you try growing orchids on the outside of a pot, be careful about the water you use. The water in some cities can contain minerals which will build up in the pot, especially on the outside of the pot as the water evaporates. Buildup of these salts can damage an orchid. Using rain or reverse osmosis water is highly recommended.

In addition to healthier plants, growing orchids on the outside of a pot can have other advantages. You can hang them in several horizontal rows in a greenhouse, for example, increasing the number of plants that can fit in a limited space. One disadvantage we found at the gardens is that on the rare occasion that we have high winds the clay pots can break.

While we originally questioned the idea of growing orchids outside the pot, it has proven to be a reliable method. Consider adding it to your garden’s horticultural practice. 🌿

T.J. Hartung retired to Puerto Vallarta about 24 years ago, after a thirty-year career as a computer systems analyst for hotel operations.

Since moving to Mexico, he has studied orchids in earnest. He has written a number of articles for *ORCHIDS*, the publication of the American Orchid Society, as well as books about *Vanilla* and fragrant orchids. He has presented talks to orchid societies throughout North America and Europe.

He is active with the Vallarta Botanical Gardens as a member of the board of directors, volunteer, guest lecturer, and sales manager for its Visitors Guide. He may be reached at [tjhartung@gmail.com](mailto:tjhartung@gmail.com)



## GLOBAL VIEW

IT'S HARD TO IMAGINE THAT I COULD GET PAID TO ADD CONTENT TO GOOGLE STREET VIEW, BUT THAT'S JUST WHAT HAPPENED AS I EARNED A NEW BADGE IN MY PERSONAL GARDEN GEEK-DOM. ALONG THE WAY, MORE THAN ONE PERSON COMMENTED ON MY RESEMBLANCE TO A ROBOT OR SPACE ALIEN! I'M SURE SOME OF YOU HAVE SEEN THE GOOGLE STREET VIEW CARS DRIVING AROUND YOUR NEIGHBORHOODS, AND MOST OF YOU HAVE PROBABLY USED STREET VIEW EITHER ON YOUR PHONE OR YOUR COMPUTER. IF YOU HAVEN'T, STREET VIEW IS AN INTERACTIVE, ONLINE TOOL THAT ALLOWS PEOPLE TO EXPLORE PLACES AND ROADS AROUND THE WORLD IN 360-DEGREE IMAGERY FROM EYE LEVEL. THE BEAUTY OF IT IS YOU CAN MANEUVER ALONG PREDETERMINED ROUTES MAKING IT FEEL LIKE YOU'RE ALMOST THERE.

[24, 25]

# GOOGLE TREKS TO NORTHWEST GARDENS

*Ben Streissguth*

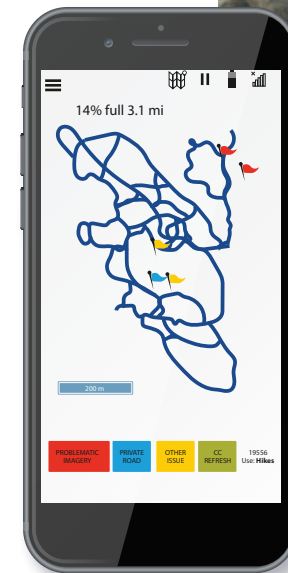
In 2012 Google introduced Street View Trekkers—the backpack-mounted version of that same camera system. Google not only loans them out but awards a modest donation for Trekking. As director of Streissguth Gardens, a steep hillside garden, I thought it would be an amazing tool for visitors who either couldn't normally maneuver the garden, or who were too far away to visit it in person. I later discovered many larger gardens have already done Trekking.

Since the application process for checking out a Street View Trekker is competitive, I feared that Google wouldn't loan this expensive equipment to a single, small public garden. So I reached out through Streissguth Gardens to a number of other public gardens in the Northwest that also belong to the Garden Conservancy Northwest Network. In the end, the project I proposed to Google included seven gardens. I've since learned that it seems likely Google would be willing to let a single garden check out a Street View Trekker.

In early April of this year, six boxes were delivered to me via FedEx. The Street View Trekker is a 45-pound backpack made up of a metal frame with shoulder straps on one side and a computer on the other side. About a foot above your head is a bright green “soccer ball”-like metal frame housing fifteen cameras. The Street View Trekker is very easy to use and is controlled via an app on a special cell phone that comes with the kit. Just press a button on the app, start walking, and let the computer do the work. The cameras automatically take multi-dimensional photos at preset intervals. The cameras take multiple overlapping pictures but have a dead zone around where you're standing. Neither Wi-Fi nor cell phone coverage is needed because the system only uses GPS to track your location.

Be warned: You need about eight feet of clearance. Low branches and other obstacles can literally force you to your knees; you can't bend forward or backward and still get useable images. Walking through the garden before I started recording helped me avoid extra wear and tear on my knees. Google recommends you only Trek between 10:00 a.m. and 2:00 p.m. because the quality of light is better, and shadows are less likely to interfere.

Many pedestrians were interested in the contraption I was wearing. While it's easy to have just a single person do the Trekking, I found having someone along to scout, help me get the equipment on my back, and answer questions was useful. I was able to complete most of the gardens I visited in under two hours walking at a normal pace, but it did take some planning.



After the equipment is returned, Google stitches the images together and then blurs faces and license plates for privacy reasons. At last the new Street View imagery is added to the system for everyone to explore. Trekking was an extremely fun and rewarding experience for me, and I hope more public gardens will apply to check out a Street View Trekker and indulge their inner geek-dom. While the gardens I Trekked haven't been added to Street View yet, there are other gardens already in the system. You can also check out <https://www.google.com/maps/about/treks> to see examples of some of the most incredible spaces in the world that have been Trekked. 🌿

Ben Streissguth has been the director of Streissguth Gardens since 2013. He grew up on the site and spent over forty years working in the garden.

He's always interested in bringing technology into this small public garden to help visitors connect with the space. His education includes horticultural and landscape architecture degrees. He may be reached at

[ben@streissguthgardens.com](mailto:ben@streissguthgardens.com).





GARDEN PROFESSIONAL SPOTLIGHT  
**JENNY WEGLEY**  
 VICE PRESIDENT OF HORTICULTURE  
 DALLAS ARBORETUM AND BOTANICAL GARDEN

**TELL US ABOUT YOUR JOURNEY IN THE GARDEN INDUSTRY.**

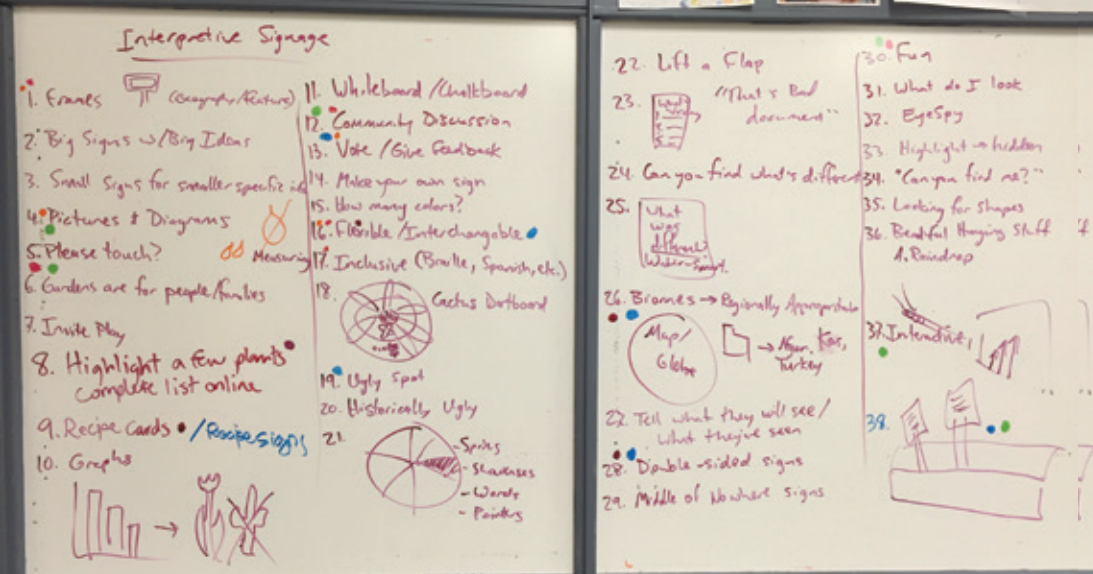
A lover of nature, I grew up in a small town, Midlothian, Texas. I began cultivating my love for horticulture when I was still in diapers playing in the flowerbeds and most likely eating dirt! I had my first garden at three, my first succulent trials at fifteen, and built my first koi pond the next year. Before college, I worked at King's Creek Nursery. I moved my way up in the nursery, working in propagation, greenhouse, and sales. I attended Stephen F. Austin State University and graduated with a B.S. in Horticulture (and recently received a Distinguished Alumni Award in Agriculture). I worked at Petal Pushers and at Calloway's Nursery. In 2009, I started as a greenhouse assistant at the Dallas Arboretum and am now vice president of horticulture and still playing in the dirt.

**TELL US ABOUT A RECENT PROJECT YOU WORKED ON.**

I, along with Mark Bullitt, worked on A Tasteful Place, a 3.5-acre edible display garden filled with vegetables, fruits, and herbs inspired by growing, harvesting, and preparing fresh food. Not only are there four potager gardens, but there's a one-acre lagoon, a tasting pavilion, paths, and plenty of shade. This was a large-scale project, so the programming dictated what we would plant. We needed an evergreen backdrop to promote our mission of having a beautiful garden year-round and to really highlight the downtown Dallas skyline that you see from this garden. Our role was to design the landscape, perennials, woodies, and annuals. Several years ago as part of our acclaimed drought- and heat- tolerant testing program, I wanted to do even more, so we added vegetables, which are now used in this expansive garden.

**WHAT DO YOU FIND TO BE THE MOST REWARDING THING ABOUT WORKING IN THIS INDUSTRY?**

It's ever-changing and you can never know it all. There's always something new I can discover, especially at our arboretum and botanical garden. We want to be innovative, give people a reason to visit, and inspire them to create and grow their own gardens. From our public displays of 500,000 spring-blooming bulbs for Dallas Blooms to summer to Autumn at the Arboretum with our creatively fashioned pumpkin houses, our horticulture staff takes pride in our displays, the plantings, and the themes. I've learned that designing is fun and inspirational, but it also pushes me to do something that's new and exciting. 🌸



GARDEN EXHIBIT

DESIGNING MOTIVATIONAL SIGNAGE  
 IN A WATER-WISE GARDEN *Kari Ross Nelson*

How do you create signage that is visually interesting and motivates visitors to take action? That was the challenge for our design team in an IMLS-funded Water-Wise Garden within Ashton Gardens at the Thanksgiving Point Institute.

As a farm, garden, and museum complex in Lehi, Utah (the second-driest state in the United States), we wanted a new breed of signage that would communicate water-wise landscaping best practices in a compelling and aesthetically pleasing way. To accomplish this, we followed the Stanford D-School model of user-centered design: Empathize, Define, Ideate, Prototype, Test.

**EMPATHIZE**

We began by sending a survey to our constituents, asking questions about attitudes, understanding, and behaviors around water-wise landscaping. The survey was sent to 3,700 email addresses from our mailing list, and those who completed the survey were entered into a drawing for an annual membership. From the 427 responses received (11.5% response rate), we learned that when these respondents purchase plants, beauty is the top consideration, but water usage and nativity may not even be on their radar. We found that most people think water-wise landscaping is a good idea but perceive it as more arid than lush, and difficult to install and maintain.

**DEFINE**

With these findings, we decided that our top interpretive priority should be to convince visitors through **simple and replicable examples** that water-wise landscaping is **beautiful** and that **small changes can be significant**.

**IDEATE AND PROTOTYPE**

After refining dozens of ideas down to three signage designs, we fabricated and installed prototypes.

**TEST**

While evaluating the effectiveness of the prototypes through 31 unobtrusive observations and 27 visitor interviews, two distinct issues emerged:

1. Visitors take the easiest physical path through the garden, and pay the least attention to the traditional graphic signs on which we were presenting our most significant content.
2. There is an attitude of disconnect toward water waste and implementation of water-wise practices—other people are the problem, or it's just not reasonable "in my yard."

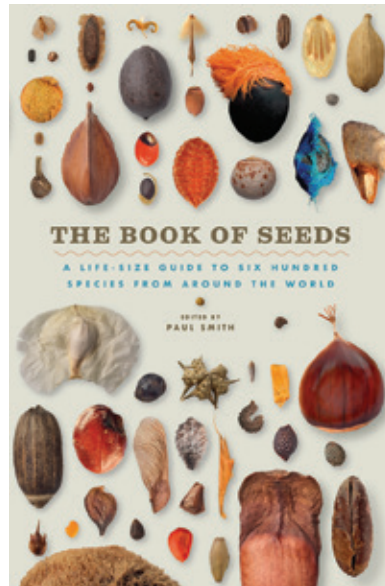
Based on these findings, we adjusted the final signage content to include phrases to prompt personal reflection and placed the most significant content along paths with the most traffic. Later evaluations, in the form of survey questions in a general exit survey, showed that those who visited the Water-Wise Garden had more positive perceptions of water-wise landscaping than the previous survey respondents. They were also more likely to agree that making their own yards water-wise would be easy to do and would make a difference in the larger water conservation issue. 🌸

Kari Ross Nelson is a Research and Evaluation Associate at Thanksgiving Point Institute—a 501(c)(3) farm, garden, and museum complex in Lehi, Utah. She may be reached at [kanelson@thanksgivingpoint.org](mailto:kanelson@thanksgivingpoint.org).





# THINGS WE LOVE THIS FALL



## BOOK OF SEEDS

This book, edited by Paul Smith of Botanic Gardens Conservation International, was the hit of the Association's Bookstore this June. The photographs are amazing. It would make a wonderful gift for anyone who loves plants and their infinite diversity.

<https://press.uchicago.edu/ucp/books/book/chicago/B/bo28265826.html>

Submitted by Dorothea Coleman, bookstore manager, American Public Gardens Association

## FELCO 801, ELECTRIC PRUNING SHEAR

This pruner makes large and small pruning jobs a breeze. I've been using this unit for five years and haven't had to replace a battery or blade. I make around 400 cuts a day, providing browse to the animals at the Zoo. This tool makes life much easier and saves my hands some major wear-and-tear. Durability, clean cuts, ease of use, and long battery life; that's why I love it!

[https://www.felco.com/us\\_en/news/2013-05-24\\_felco\\_801\\_en/](https://www.felco.com/us_en/news/2013-05-24_felco_801_en/)

Submitted by Sirena Aboumrad, senior horticulturist, San Diego Zoo



Photo: Tammy Spratt, San Diego Zoo

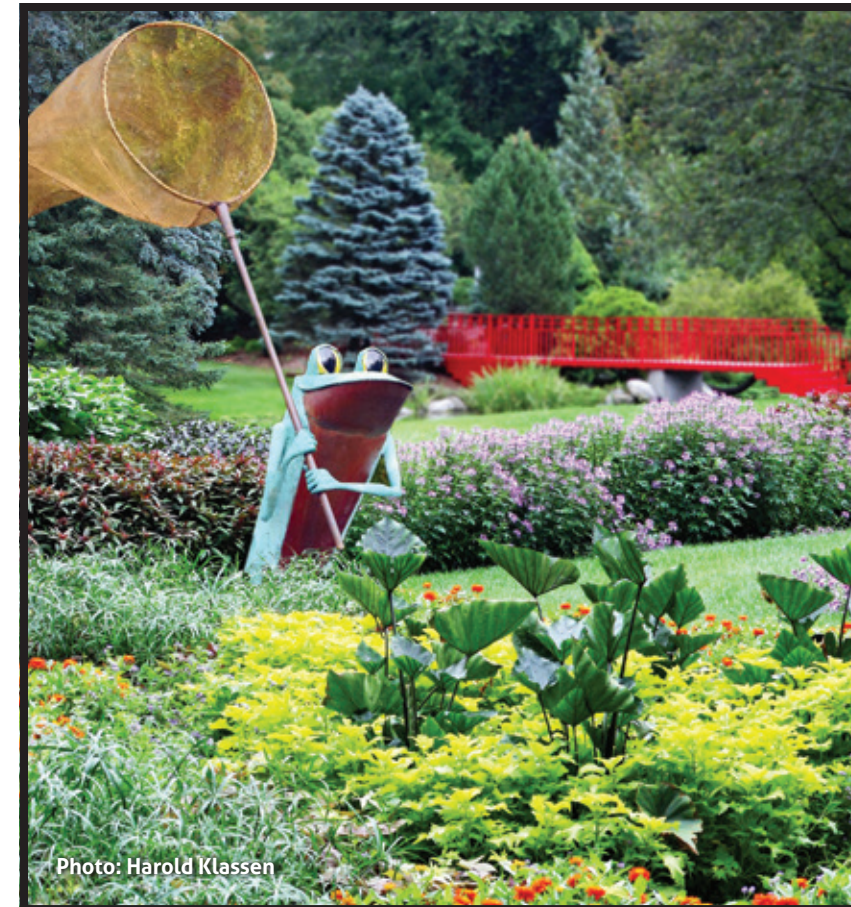


Photo: Harold Klassen

## Ribbit the Exhibit

*"To see the frogs in photos is an experience, but to see them surrounded by gardens... their personalities come to life in an unbelievable way! The size and whimsical nature of the frogs speak to garden-goers of all ages. Placement throughout the property helped us encourage exploration of the less-traveled areas of our gardens and programming opportunities abound."*

Carolynn Paten  
Dow Gardens Manager of Guest Experience

J.A. Cobb, Sculptor  
[www.ribbitexhibit.com](http://www.ribbitexhibit.com)  
910-617-2195

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TOURS TO-GO

The Toronto Botanical Garden has been using this new feature to showcase artwork from the ZimSculpt exhibition, and to offer visitors more information on the sculptures this summer.



# FINANCIAL REPORT 2018

DELIVERING ON THE PROMISE

## TO OUR MEMBERS:

As our member gardens grow, our Association's enduring commitment to Connect, Protect, and Champion them does so as well.

A 19% growth in membership revenue coupled with a strong U.S. dollar and robust attendance at the Hamilton, Ontario, Annual Conference in 2017 provided a boost to the Association's capacity to invest back into member services such as Conservation Benchmarking and the Garden to Garden Disaster Response Center. Our commitment to careful management of expenses this year resulted in a healthy FY18 net operating surplus with no tap on strategic reserves for two years in a row. This puts the Association in the strongest possible position to serve our diverse membership now and in the future.

The board of directors and staff of the Association are thus pleased to share this first portion of our two-part annual report, our key financial highlights. Thank you for your participation and support.

Thank you,



Bill LeFevre  
President

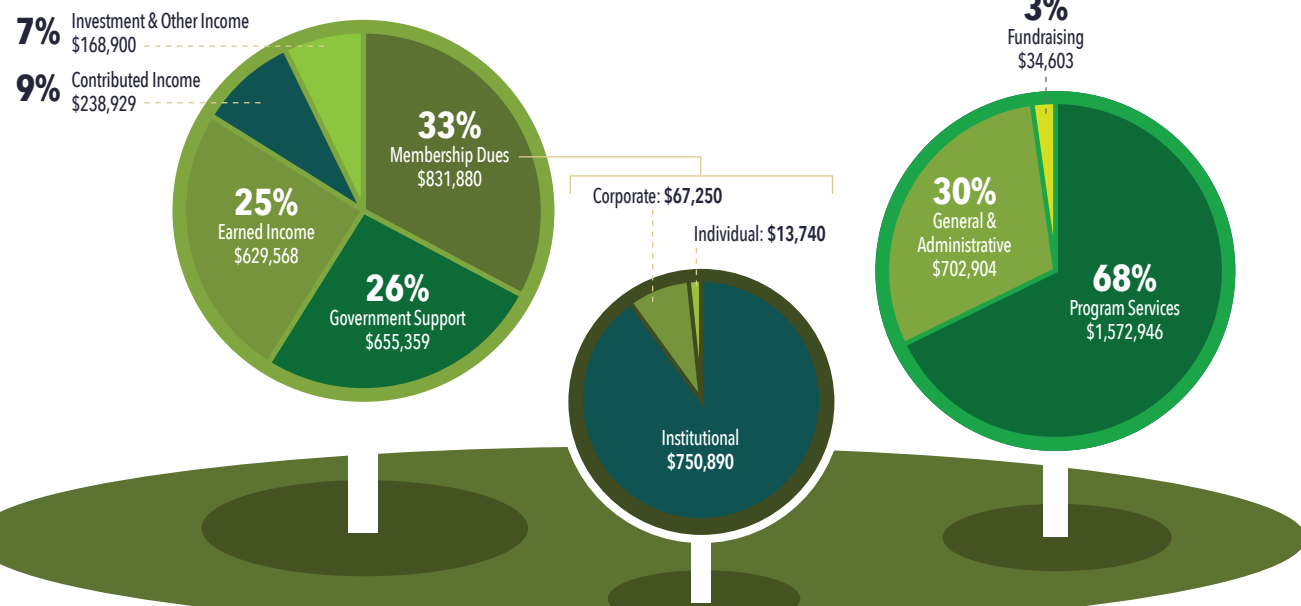


THE AMERICAN PUBLIC GARDENS ASSOCIATION'S IRS FORM 990 AND AUDITED FINANCIAL STATEMENTS ARE AVAILABLE AT [HTTP://PUBLICGARDENS.ORG/ABOUT-US/WHO-WE-ARE/GOVERNANCE/ASSOCIATION-FINANCIAL-DATA](http://publicgardens.org/about-us/who-we-are/governance/association-financial-data)

## INCOME AND EXPENSES (FOR FISCAL YEAR ENDING FEBRUARY 28, 2018):

FY18 INCOME: \$2,524,636

FY18 EXPENSES: \$2,310,453

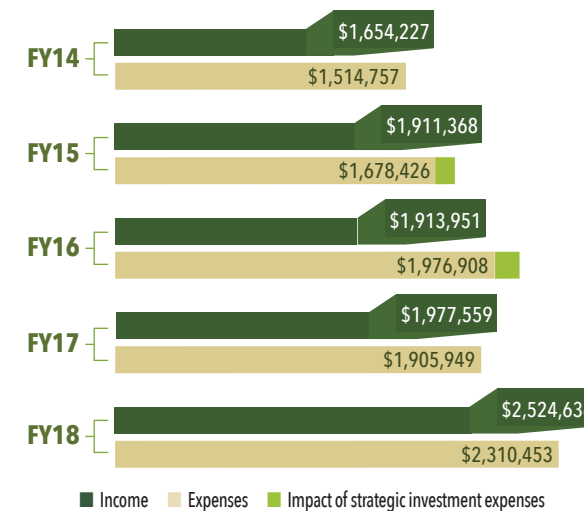


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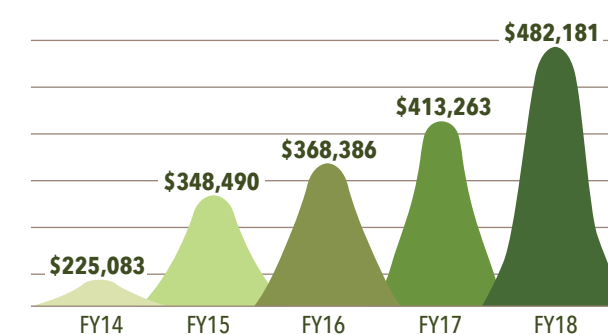


THE AMERICAN PUBLIC GARDENS ASSOCIATION HAS A 2018 GOLD SEAL OF TRANSPARENCY FROM GUIDESTAR. READ MORE AT: [HTTPS://WWW.GUIDESTAR.ORG/PROFILE/23-7110058](https://www.guidestar.org/profile/23-7110058)

## FIVE-YEAR COMPARATIVE INCOME & EXPENSE



## GROWING STRATEGIC RESERVES



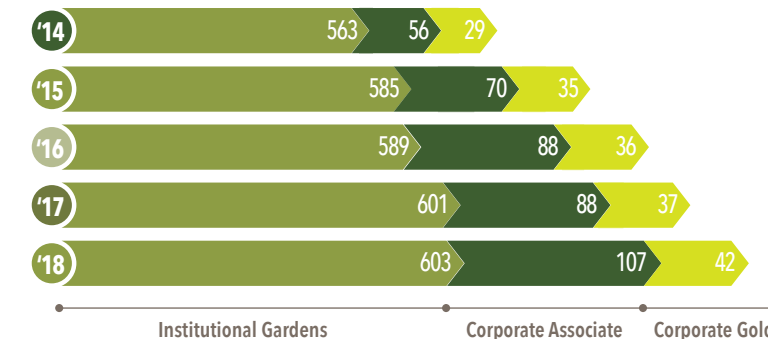
The successful management of our strategic reserves is a key indicator of the Association's financial strength. For the second year in a row, the Association did not need to tap into these reserves, enabling the fund to grow by 15% in FY18 to cover three months of operating income.

## INVESTING IN OUR MEMBERS

The Association continued its Strategic Plan focus on improving Member services. In FY18 we added and deepened our staffing structure and made technical upgrades to our website to facilitate greater member engagement. We also diversified the number of professional development offerings and added Conservation Benchmarking to our portfolio of member resources. We were able to keep all of these investments operationalized within our budget without having to draw from strategic reserves.

## GROWING MEMBERSHIP

**9,079** TOTAL MEMBER INDIVIDUALS AS OF 2/28/18 SURPASSED THE 9,000 MARK FOR THE FIRST TIME IN ASSOCIATION HISTORY.



OUR ANNUAL MEMBERSHIP REPORT, WITH KEY METRICS FOR MEMBER ENGAGEMENT AND PROFESSIONAL DEVELOPMENT, WILL APPEAR IN THE NEXT ISSUE.





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