We are grateful to the following for making possible this Plant Collections Network issue:

- Bulbophyllum echinolabium photo: Julie Rotramel

On the Cover:
Bulbophyllum echinolabium in Nationally Accredited Orchid Collection™, Smithsonian Gardens

We are pleased to offer you this Special Issue focused on Plant Collections Network. A flagship program of the American Public Gardens Association, the Network coordinates a continent-wide approach to plant germplasm preservation among North American public gardens and promotes high standards of plant collections management. It began as an idea among members of the Association who formed the original consortium in 1992. Plant Collections Network accreditation has become the recognized standard of excellence in plant collections management and demonstrates a garden’s enduring commitment to global efforts to save plants.

Our long-standing partnership with the USDA Agricultural Research Service in the Plant Collections Network spans over two decades and has been pivotal in the program’s development. The Network has grown and been improved through the guidance of a board-level committee and a collaborative community sharing expertise, plants, and research. In stewarding this program over sixteen years, I have been privileged to work with some of the most knowledgeable curators and progressive organizations in the field. The synergy brought about by collaboration and a commitment to promoting excellence in plant collections management drives our peer site review process, a hallmark of this program.

We invite you to learn more about the benefits of participating in Plant Collections Network, and how to find your collections niche and benchmark your current holdings. Our newest Nationally Accredited Plant Collections™ demonstrate how contributions can be made from organizations of any size and type, ranging from an arboretum at a leading tree care company to botanical collections at zoos. Explore creative ways to connect to collections throughout your organization, and leverage accreditation for funding and new partnerships. Use our Standards for Excellence as a compass for progress in charting a course for improving your collections program. Just as succession planning is necessary within any living collection, as responsible stewards we will work together to cultivate the next generation of curators and prepare our collections to be relevant, resilient, and robust into the future.

We would like to thank our generous underwriters who made this Special Issue of Public Garden possible: USDA Agricultural Research Service, Bartlett Tree Experts, Mount Auburn Cemetery, and The Arnold Arboretum. Further appreciation goes to members of the Plant Collections Network Committee who helped shape this issue, Nationally Accredited Plant Collections™ holders who contributed articles, and advocates from throughout Plant Collections Network who lead the field in excellence.

Pamela Allenstein
Plant Collections Network Manager
American Public Gardens Association

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The United States Department of Agriculture (USDA) officially began collecting and conserving plants in 1897, when David Fairchild established the Office of Foreign Seed and Plant Introduction. Since then, more than six hundred thousand plant introductions have been distributed, and they or the genes they carry have contributed to a systematic effort to improve and enhance agricultural crops in America. This introduction and conservation effort evolved into what is now the National Plant Germplasm System (NPGS) (www.ars-grin.gov/npgs), a component of the USDA’s Agricultural Research Service (ARS) (Seeds for our Future www.ars-grin.gov/npgs/pibooks/scans/sof/2.html). In 1988, the United States National Arboretum (www.usna.usda.gov) joined the NPGS when tasked by the USDA with the conservation of more than two hundred genera of woody landscape plants. This was a seemingly impossible task given the diverse edaphic and abiotic factors required of the country’s most popular ornamental plant genera and their varying responses to long-term seed storage.

In the early 1990s, the American Public Gardens Association (then known as the American Association of Botanical Gardens and Arboreta) approached the NPGS to collaborate on its developing Plant Collections Network program, a continent-wide effort among public gardens to conserve woody and herbaceous plant germplasm. Following a pilot phase, in 1995 the National Arboretum’s extensive boxwood (Buxus) collection became the first collection recognized by the Network.

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An example of a successful partnership is the Network’s Quercus (oak) conservation effort. This genus, with five hundred naturally occurring taxa distributed throughout the Northern Hemisphere across diverse and oftentimes harsh environments, is threatened by biotic and abiotic stresses. The only effective ex situ conservation effort is through distributed, comprehensive collections." The Network’s Nationally Accredited Quercus Multisite Collection, begun in 2007, now comprises twenty organizations with a combined total of 12,716 trees representing over five thousand accessions. This type of conservation is impossible for any one institution, but through collaboration it’s not only possible but is succeeding.

As Conservation Resource

Plant collections are the heart of public gardens. Through our plant collections, we learn, we educate, and we celebrate the amazing diversity of the plant kingdom. And by using these collections creatively, we make beautiful exhibits and compelling gardens. Though every plant collection has value, the most useful and important conservation collections are well documented and well curated. Excellent collections contain plants whose origins and history are thoroughly recorded, whether wild-collected or obtained from other gardens. For institutions focused on cultivar collections, these, too, have lasting value in conserving a breeder’s work or heritage varieties. Also, well-documented cultivar collections are important for accurate horticultural displays and landscape performance evaluation.

In an age when we are losing natural habitats throughout the world at an alarming rate, it is more important than ever to document and preserve plants in our public gardens. Because of the enormity of the task, we may question the impact that one garden can have. Yet, precisely because of the size of the task, it is necessary that all gardens work together as colleagues and that each do its part. Simply put—no one garden can do everything, but through broad collaboration and individual focus, much can be achieved.

The American Public Gardens Association’s Plant Collections Network, formerly known as the North American Plant Collections Consortium, was established in 1992 with this collaborative mission in mind. Today, 125 Nationally Accredited Plant Collections have been recognized by the Plant Collections Network. This is a significant achievement, but we have an opportunity to do so much more. Of the Association’s six hundred institutional members, seventy-four institutions now hold accredited collections. The remaining 526 gardens are all potential partners.

Over the past twenty-five years, great progress has been made in the development of inter-institutional collections planning and collaboration. The Plant Collections Network has played an important role in facilitating this advancement, as has advancing technology. The ubiquity of digital tools, conference calling, and shared databases that span the globe have enabled curators to stay in touch and share information and plants in efficient ways that were not available even thirty years ago.

I urge all gardens to aspire to participate in the Association’s Plant Collections Network. Though many gardens have a small staff and limited resources, most could commit to taking on one concise plant group that is within their own mission and accessions policy. An accredited collection brings prestige to its host garden and gives curators an opportunity to work with colleagues across the continent to share talents as well as plants. Through the replication of collections, risks of accession loss to insects and diseases are mitigated. Think emerald ash borer or Dutch elm disease! Most important, having well-documented and accredited collections enables you to give your visitors a compelling story of plant conservation and positions your institution as a national public garden leader.
Holding a Nationally Accredited Plant Collection™ provides added recognition of your institution’s long-term commitment to plant collections preservation and to achieving a high standard of excellence in plant collections management. Participants maximize the potential value of their collections by making efficient use of available resources through a coordinated continent-wide approach and strengthen their collections through collaboration with others.

All gardens can utilize the Standards of Excellence in Plant Collections Management developed by Plant Collections Network as an aspirational Compass for Progress. Specialized professional development opportunities and curatorial networking groups led by Network participants keep the public gardens community apprised of latest developments.

Preparing for the written application and peer site review focuses attention on your plant collections, helps drive strategic planning, and provides a measurable goal for staff. First-time applicants are eligible for a Mt. Cuba Center Challenge Grant that is intended to help offset application and review process expenses. Holders of Nationally Accredited Plant Collections™ can take part in grant-funded projects available through the Network’s collaborative activities. Participation is highlighted through features in American Public Gardens Association conferences, web resources, and publications—like this issue!

Association members are invited to submit accreditation applications to Plant Collections Network for their highest priority collections. You define the scope and specific focus of each collection most appropriate to your garden’s mission, growing conditions, and institutional capacity. Collections can be defined on the basis of a taxonomic designation, such as a genus, or by a geographic/Basin region, breeding program, historic timeframe, or additional parameters. Documentation linked to accessioned plants is critical as it is an institutional commitment to managing the collection at the highest level.

For more information about Plant Collections Network, go to publicgardens.org/programs/about-plant-collections-network

HOW CAN PLANT COLLECTIONS NETWORK BENEFIT YOUR ORGANIZATION? Pamela Allenstein

Finding Your Niche: A Single-Species Collection in the Making

Andy Schmitz

After learning about Plant Collections Network and seeing its member list of prominent arboreta and gardens from around the country, The Brenton Arboretum in Dallas Center, Iowa, began contemplating developing a Nationally Accredited Plant Collection™. It was 2004. We were a young institution whose first trees had been planted in 1997, and we were looking at developing a signature collection. Even though we wanted to be included on this list and to begin to make a name for ourselves, we had to decide whether that was a realistic goal for an arboretum with one full-time horticulturist, a small budget, and space limitations.

In fall 2005, I met with Mark Widrlechner, the Network’s Iowa Recruiter/Mentor, and we discussed selecting a species for which no comprehensive collection existed, one with a narrow geographical range, and, most important, one I would enjoy working with and collecting. The Kentucky coffeetree, Gymnocladus dioicus, was on my mind for its many ornamental attributes, its uniqueness as a North American single-species genus, and the fact that it was still under-utilized in the urban landscape. It definitely fit the criteria discussed, and achieving accreditation for a Kentucky coffeetree collection was a realistic goal for us to pursue. Thus began a long-term relationship between The Brenton Arboretum and Jeff Carstens, a horticulturist with the United States Department of Agriculture (USDA) North Central Regional Plant Introduction Station. Working with this species was mutually beneficial as it was under-represented in the National Plant Germplasm System (NPGS). The station could deposit seed for long-term preservation, and we could build a wild-collected ex-situ living collection.

Wild collected Gymnocladus dioicus represented by a planted accession at the Brenton Arboretum, Dallas Center, Iowa


In the past decade, we have conducted several seed-collecting trips, including five expeditions funded by the USDA’s Agricultural Research Service National Plant Germplasm System Plant Exploration/Exchange Office, and have traveled over twenty thousand miles in sixteen states, all in search of Kentucky coffeetree. The results of our efforts include 111 geo-referenced wild accessions growing at The Brenton Arboretum and eighty-five seed accessions representing one of the most comprehensive collections preserved within NPGS. “Having two curators from different agencies with mutual interest has resulted in a well-documented collection that is of a much higher quality and more expansive than if executed alone,” said Carstens. The Plant Collections Network motivated us to develop and expand our small group of Kentucky coffeetrees into an expansive wild collection. Our accreditation brings into focus the mission and purpose of our work and brings significance to our collection. We will continue to expand the coffeetree collection by collecting from geographical gaps and from unique habitats in this tree’s native range. But, for now, after achieving our long-term goal, we are delighted to just watch our little trees grow.

For more information on how to apply for collections accreditation and challenge grant guidelines, go to: publicgardens.org/nationally-accredited-plant-collections-how-apply

Andy Schmitz is Director of Horticulture/General Manager at The Brenton Arboretum
The survey gathered general information about orchid collection management practices implemented by the different gardens. Survey questions ranged from orchid collection composition and focus to nomenclature verification sources and collection database preferences. Data gleaned from these questions laid the groundwork for SG, other participating gardens, and the Network to create a cohesive plan for managing the Orchidaceae curatorial group, as the family's representation becomes a collaborative multi-site effort.

Complete species listings gathered from participating gardens were compiled into a master checklist for comparisons between institutions. A thorough analysis of collection holdings was conducted with a focus on the genus level. The total number of species represented per genus for each institution was determined; special note was made of well-represented genera. Survey responses indicated that several different sources are used to verify nomenclature. All species compiled in the master checklist were verified against SG's preferred sources, Kew World Checklist of Selected Plant Families (http://apps.kew.org/wcsp/home.do), in order to more accurately measure representation between institutions. The number of species represented was tabulated by counting the number of separate species held by an institution. So, for example, if an institution had both Aeriella houtteana and Aeriella houtteana 'Nutterer' this counted as only one species. Typical varieties, forms, and subspecies were not counted as separate species held by an institution. So, for example, if an institution had both Aeriella houtteana and Aeriella houtteana 'Nutterer' this counted as only one species. Typical varieties, forms, and subspecies were not counted as separate species unless they were delineated in the Kew Checklist. Species crosses or species names not found in the Kew Checklist were also omitted.

After counting the number of species per genus held by each institution, the percentage of total species represented in each collection was calculated. Since initial representation was determined relative to other institutions, these overall percentages are the best indicator of a collection's breadth in a particular genus. From this benchmarking study, we found that the approximately 2,200 tropical species orchids in SGOC had strong representation in several of the larger genera (Cattleya, Laelia, and Paphiopedilum) and a diversity of species in many other, smaller genera.

After completing our first benchmarking study in 2013, SG was able to step back and assess the process. We did many things efficiently, but other components can be improved in the future. First, our survey was a time-consuming process. Over four hundred hours of contractor time went into data collection, analysis, and writing the final report. For all that time spent, a benchmarking is only a snapshot in time. While SG's collection composition has changed dramatically since this initial survey, a yearly assessment of major additions or subtractions will no doubt help focus collecting goals. An added benefit of having a multi-site collection is that all sites reap the benefit of a new applicant's benchmarking study.

SGOC's goal moving forward is to aid public gardens as they conduct their own benchmarking analyses prior to submitting an application to the Network. The process will become more streamlined as more institutions join the Network and the Association figures out the best way to conduct multisite analyses and fill gaps in the collaborative Orchidaceae collection.
MULTI-INSTITUTIONAL COLLABORATIONS:

Due to no small part to their beauty, many botanical gardens and arboreta boast large Magnolia collections. The Scott Arboretum of Swarthmore College and The Henry Foundation achieved Nationally Accredited Plant Collection™ status for their Magnolia collections in the early years of Plant Collections Network. However, the size and breadth of a group consisting of at least two hundred species and as many as one thousand cultivars make it impossible for one or two institutions to adequately represent a living collection containing all taxa of botanical and horticultural interest. Like the Multisite Acer and Quercus Collections™, the Multisite Magnolia Collection was initiated to help meet this need.

Diversity in both scope and growing conditions was achieved by recruiting institutions with diverse collections of botanical taxa, such as the University of California Botanical Garden at Berkeley and University of British Columbia Botanical Garden, as well as Bartlett Tree Research Laboratories and Arboretum, which has a wide scope of cultivars. Many smaller institutions have also proven equally valuable recruits, bringing high-value collections into the overall group inventory. For example, Moore Farms Botanical Garden specializes in Magnolia grandiflora cultivars. Though young, the collection is well maintained and organized in a fashion that allows for easy side-to-side comparison. The University of Florida—North Florida Research and Education Center, which consists of 627 Magnolia taxa.

The group meets at the annual American Public Gardens Association conference to discuss both short- and long-term goals, and progress made to date. Many initiatives have focused on gap analysis: identifying high-value taxa held by only one institution or insufficiently represented across the group. For an example of the former, Magnolia oippara, an East Asian species endemic to the Chinese Province of Yunnan, is only held at Quarryhill Botanical Garden. By propagating and distributing this species to other institutions within the group, the germplasm will be much more protected. For an example of the latter, the Magnolia Curatorial Group has taken an active role in the Association/USFS Tree Gene Conservation Project, undertaking three collecting and scouting trips that targeted mid-Atlantic populations of Magnolia virginiana var. virginiana, the at-risk Magnolia fraseri var. pyramidata, and the Puerto Rican endemic Magnolia portoricensis, all with little to no wild-collected germplasm prior to the initiation of these projects. A similar project by the JC Raulston Arboretum, targeting Magnolia kachirachirai and M. commerson, in Taiwan, was supported by The Magnolia Society International Dedicated Research Fund, which provides a certain degree of precedence to members of the Multisite Magnolia Collection when considering applications for funding.

As we consider future directions, we are cognizant that new Magnolia species are continuously being discovered in the neotropics, many of them narrow endemics of conservation concern. Recruiting a local partner in this region as well as additional institutions that can reliably cultivate these taxa would be of great benefit for ex-situ conservation initiatives. With regard to cultivars, many new selections are being bred using the red form of Magnolia insignis as a parent, which will likely result in new deep-pinkish-red flowering cultivars being introduced soon.

The Magnolia Multisite Collection Group Members:

- University of California
- Of Swarthmore College
- Arboretum
- Powell Gardens
- Arboretum
- Arboretum of Swarthmore College
- University of California Botanical Garden
- Magnolia Campbellii
- Magnolia veitchii
- Magnolia veitchii
- "Sarah's Favorite" on left, "Franks' Masterpiece" on right

Matthew Lobdell has served as Head of Collections and Curator at The Morton Arboretum since 2014. Matt has led two existing collecting trips targeting Magnolia and Quercus taxa of conservation concern through the American Public Gardens Association/United States Forest Service Tree Gene Conservation Partnership, and currently serves as Group Coordinator for Plant Collections Network Magnolia Multisite Collection.
Bartlett Tree Experts is a 110-year-old, family-run tree care company. A commitment to safety, science, scientific-based tree and plant health care, and sustainable landscape management has been a constant thread throughout our history. Over fifty years ago, our research laboratory was moved from Stamford, Connecticut, to the countryside south of Charlotte, North Carolina. This carefully chosen 350-acre site is situated in an ideal location for our diagnostic laboratory and an Arboretum, which grows a wide range of plant material and offers ample room and opportunity for research and training. Early in his career, Robert Bartlett Jr., third generation Chairman and CEO of Bartlett Tree Experts, saw the potential to develop and build a world-class collection of plants and further advance arboriculture and horticultural research that could not only help serve the customers under our umbrella of care, but also the green industry and public horticulture community. Slowly, but with an ever-quickening pace, collections were plotted and planned. In spring 2005, Robert Bartlett hired me to be the first Arboretum Curator. I was given the demanding task of relabeling, upgrading the collection database, and working towards specific goals: to increase interaction with the public horticulture community, expand and focus on the diversity of the collections, and get involved in plant conservation. With a highly qualified staff, a wealth of resources at our disposal, and a voracious appetite for plants, we set to work. The relabeling process got underway, and BG-BASE brought the documentation crucial to managing the collections into a new era for the Arboretum.

Through my entire horticulture career, the American Public Gardens Association has played a crucial role. This influence began with the old regional meetings and continued with the national meetings. The networking, interactions, and friendships built have continued through today. Over the last eleven years, my involvement with the Plant Collections Network has grown and driven our focus toward a high standard of plant collection management with partners both large and small. We currently have five Nationally Accredited Plant Collections®. Our first is part of the Multiisite Magnolia Group, a natural fit since we hold one of the largest collections of magnolia cultivars in the world. The second collection accredited is part of the Quercus multiisite group, and was quickly followed by Acer, Ulmus, and Hamamelis. Two additional collections have applications pending review. Robert Bartlett and I have pledged to continue being involved with our collections and help our partner gardens and arboreta fulfill their plant collection goals.

We also are committed to working with partner organizations through carefully planned, researched, and focused plant collection trips. Through the Network, we can professionally share wild-collected plants with other organizations that may not have time or staff available to participate. We have been involved with several trips focusing on endangered oak, magnolia, and other important species throughout the United States and abroad.

How does this commitment to plant collections and plant conservation benefit Bartlett Tree Experts? The Arboretum is a living, breathing classroom that we use for training and sharing with customers, clients, universities, fellow researchers, and the greater green industry and public horticulture world. Most important, this legacy of plants; of the conservation of rare, threatened, and important plant species; and of the personal interactions with those who have visited and walked through our gardens, woodlands, collections, and research plots is invaluable and almost immeasurable. Finally, leading by example, sharing, and exchanging with the public horticulture community is the right thing to do. Additionally, in the spirit of the networking and friendships built through many years of interaction in the Association, we also strive to share our research and sustainable landscape management and safety culture with our colleagues in the public horticulture realm. This legacy of green space will be here forever. All these components are a direct result of Robert Bartlett seeing that potential and pushing toward that dream both now and into the future.

Greg Paige is Arboretum Curator at Bartlett Tree Research Laboratories and Arboretum. He serves as the Nationally Accredited Multisite Quercus Collection Coordinator, a site reviewer for the Network, and has been a team member on two Network/USFS collecting trips.

Greg Paige is Arboretum Curator at Bartlett Tree Research Laboratories and Arboretum. He serves as the Nationally Accredited Multisite Quercus Collection Coordinator, a site reviewer for the Network, and has been a team member on two Network/USFS collecting trips.
San Diego Zoo Global’s (SDZG) plant collections at both the San Diego Zoo and the San Diego Zoo Safari Park are living, growing examples of SDZG’s commitment to education, awareness, and connecting with other organizations in the global effort to conserve habitat. With nearly two million plants spread throughout the two parks, the grounds represent truly world-class botanical gardens—gardens that have been recognized by the American Alliance of Museums since 1993 and by the American Public Gardens Association’s Plant Collections Network, which bestowed Nationally Accredited Plant Collection™ status on the Cycad and Orchid Collections in 2011 and 2015, respectively. In addition, the Erythrina and Ficus collections will soon be submitted for Network review. The varied gardens are crucial in educating visitors about biodiversity and the importance of habitat preservation, and the collections are a resource for other zoos, botanical gardens, and universities.

One benefit of a zoo having an extensive botanical collection is the value it brings to its animal collection. In general, the botanic collections found throughout the Zoo and Park grounds enhance the animal areas but are protected from the hungry mouths of the furred, feathered, and scaled inhabitants. SDZG has a separate, dedicated browse program of non-accredited plant items that are added to the animals’ diets for their vital nutritional needs and to provide behavioral enrichment. This interplay between flora and fauna occurs in other ways that many botanical gardens don’t have the opportunity to experience; for example, horticulture staff worked with chimpanzee researchers to determine what chimpanzees eat in the wild. Seeds removed from chimp feces were sent to the Zoo for propagation. Two decades after germination, one plant was determined to be *Ficus sansibarica*, a new species to the Zoo’s collection.

Since 1986, the Zoo and Safari Park have served as USDA Plant Rescue Centers for rare and endangered plant species. In 2005, the San Diego Zoo acquired a micropropagation lab through a grant awarded by the Association of Zoological Horticulture and the Disney Conservation Fund. The lab is primarily used to propagate threatened orchid species; however, additional work has been done on aloe, bamboo, *Erythrina*, and Hawaiian native plants.

In 2016, a new partnership bloomed when the Center for Plant Conservation moved its base from St. Louis to the San Diego Zoo Institute for Conservation Research. The new plant conservation umbrella allows for the seamless merging of both organizations’ botanical collection planning and plant conservation research efforts. SDZG’s wildlife conservation efforts have long included both plants and animals. This new partnership will significantly enhance the efforts of both institutions to save plants on the brink of extinction.

Being part of the Network allows SDZG to have contact with other botanical gardens that share its conservation goals. It also allows for member institutions to focus on what they can grow best; for example, African cycads can be grown here but not in Florida. This collaborative, coordinated effort makes for a greater impact for conserving species.

Wendy Perkins is a writer for the San Diego Zoo Global’s marketing team.
The Desert Legume Program (DELEP) was established in 1988 as a joint project of the Boyce Thompson Arboretum (BTA), established in 1924, and the University of Arizona College of Agriculture and Life Sciences (CALS), established in 1885. The intent was to bring these two institutions closer together. In doing so, DELEP has brought the world closer together.

DELEP’s mission is to develop a comprehensive seed collection of wild taxa in the Legume Family (Fabaceae) from the world’s dry regions, to preserve this germplasm long term, to provide seeds and information to individuals and organizations working with these plants, and to promote the conservation of Fabaceae. This collection includes 3,912 accessions representing 1,491 taxa in 224 genera of sixty-five countries on six continents. The United States Department of Agriculture recognized the value and uniqueness of the collection and started backing up offsites of DELEP’s seeds at the National Center for Genetic Resources Preservation in 1996. Subsequently, accessions were backed up at the Global Seed Vault in Svalbard, Norway, in 2011 and 2012. DELEP and BTA also participated in the BGCI/Arnold Arboretum/US Botanic Garden Svalbard, Norway, in 2011 and 2012. DELEP and BTA also subsequently accessions were backed up at the Global Seed Vault in Svalbard, Norway, in 2011 and 2012. DELEP and BTA also participated in the BGCI/Arnold Arboretum/US Botanic Garden Svalbard, Norway, in 2011 and 2012. Subsequently, accessions were backed up at the Global Seed Vault in Svalbard, Norway, in 2011 and 2012.

Expanding DELEP’s collection of wild-collected seeds requires a committed cadre of staff and volunteers. Finding the right plant is not easy, but finding one with ripe seed pods is even harder. Current efforts are focused on obtaining seeds of native Arizona Fabaceae not yet represented in the seed bank. University of Arizona (UA) students have participated with DELEP, gaining valuable experience in plant propagation and seed banking. DELEP has provided seeds and other plant material to CALS researchers for a variety of projects. Program staff have given lectures on seed banking for UA horticulture students and on landscaping with legumes for Cooperative Extension System programs.

A seed bank is only part of the story. For researchers and the public, living plants are needed to complete the story. Besides sharing germplasm with scientists from around the world, DELEP has propagated plants for BTA, the Wallace Desert Gardens (WDG), and several other botanical institutions. BTA received accreditation for the multi-site Quercus collection in 2012. The current collection of thirty-one taxa of southwestern oaks is being augmented by partnerships with UC Davis Arboretum and The Morton Arboretum through sharing acorns of Quercus grisea and Q. havardii for propagation and planting at the Arboretum. These partnerships are critical to the success of both programs. BTA’s emphasis on ex-situ conservation and germplasm preservation is also reflected in its partnership with the WDG in saving its collection of roughly six thousand plants and over one thousand taxa. Of these, 152 taxa are threatened in the wild. The WDG plants include a unique collection of sixteen taxa of Ephedra and several hundred large Yucca specimens as well as a diversity of Cactaceae and Fabaceae.

Combining the collections of BTA, the WDG, and DELEP creates a botanical institution with over five thousand taxa of arid land plants.

For its own purpose, DELEP has maintained field evaluation sites where over six hundred legume species have grown. In 2016, a comprehensive summary of twenty-two years of data on two hundred species of legumes grown at the UA Yuma Mesa Agricultural Center appeared in the journal Desert Plants, published by BTA. BTA is sponsoring Legumes of Arizona—an Illustrated Flora and Reference. Scheduled to be published in 2017, this book will include approximately four hundred species of native and cultivated legumes found in the state, and will feature descriptions, dichotomous keys, and information on ecology, uses, and horticultural information for these plants. Line illustrations and photographs will complement the text. Like Plant Collections Network, an idea to bring institutions closer together has brought the world closer together in preserving and conserving our natural resources.
CONNECTING TO COLLECTIONS THROUGHOUT YOUR INSTITUTION

Kris R. Bachtell

At The Morton Arboretum, having six collections accredited by Plant Collections Network helps us focus our efforts to engage visitors, members, donors, and even employees with our collections. For example, three of our Nationally Accredited Plant Collections™ have handcrafted benches, functional artworks based on words and inspired by the qualities of the trees: “Strength” for the Oak Collection, “Change” for the Maple Collection, and “Graceful” for the Elm Collection. When we were planning these projects, it was natural to prioritize the collections that have been recognized as especially wide and deeply curated. The benches provide places to sit and enjoy the trees. Nearby interpretive signs explore the trees’ biology, history, and benefits. It’s a great way to communicate the trees’ value to visitors.

Three more of the Arboretum’s Network-accredited collections—magnolias, crabapples, and lindens—are in line to get word-based benches and interpretation in the next few years, with signage that notes the accreditation. The Arboretum’s application for funding for these projects from the Institute of Museum and Library Services highlighted the collections’ Network accreditation. According to our development department, the designation significantly bolsters our credibility with funders. When I lead VIP donors on tours of our top collections, they’re fascinated by the science and lore of these trees.

Many other Arboretum activities feature these six top collections. For example, we had a successful whiskey-tasting event on the theme of oaks—whose wood provides the barrels for aging whiskey—and another that paired magnolias with mint juleps. Visitors can sip the craft beer Arbor Oak Amber Ale, which is flavored with wood from a felled Arboretum white oak. Many classes and talks focus on these collections.

Our curator, Matt Lobodak, a magnolia specialist, often leads walking tours in the collections for visitors, donors, employees, and volunteers. It’s his job to maintain the meticulous records and make the planting and care decisions that are the basis for the Network accreditation. The Network designations also help focus our scientific and curatorial projects. When Matt or our researchers are deciding which plants to prioritize among the almost four thousand taxa in our collections, Network accreditation helps to narrow the field.

Oaks, for example, are at the center of much research and conservation work at the Arboretum. Matt and Forest Ecologist Sean Hoban both went on collecting trips in 2016, seeking specimens of endangered American oaks for research and to improve the biodiversity of public garden collections. I’ve done the same with paperbark maples in China. Our outreach efforts often highlight Network genera. OAKtober, a month of outreach and celebrations intended to raise the profile of oaks in Illinois, is one example. It’s promoted by the Chicago Region Trees Initiative, an Arboretum-based partnership of institutions and organizations, to improve the area’s urban forest.

The tree collections are often featured in marketing efforts. As especially wide and deeply curated.

For example, a game developed for Arbor Day and featured a crab + a picture of an apple = crabapple. Every day, our social media channels encourage visitors and friends to post their photos and to explore the Arboretum’s trees. Our quarterly member magazine regularly explores the six Network collections. A weekly newspaper advice column, covering subjects from choosing the right magnolia to how an acorn becomes an oak, promotes the Arboretum’s collections as sources of nuts-and-bolts help: A Chicago-area gardener who’s planning to plant a flowering tree can see hundreds of species and cultivars in bloom in May in the Arboretum’s Crabapple Collection. Beyond the Network collections, the Arboretum has many others that offer opportunities to connect trees with visitors. The Destination Asia festival at The Morton Arboretum creates connections between the trees and the cultures of Asia.

Young visitors to The Morton Arboretum take a tree quiz at the Passport Europe festival, which is based on the Arboretum’s collections of trees from Europe. The Natural History section of the Google Arts & Culture online museum showcases the collections, science, and conservation of The Morton Arboretum. On this page, Kris Bachtell, Vice President of Collections and Facilities, is shown teaching in the Arboretum’s Nationally Accredited Oak Collection™.

The Destination Asia festival at The Morton Arboretum creates connections between the trees and the cultures of Asia.

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The Arboretum’s smartphone app offers tours such as the Great Trees Trail, which includes trees in the Nationally Accredited Crabapple Collection™.

The smartphone app leads visitors on walking tours of great known trees such as witch-hazels and pawpaws. A smartphone app leads visitors on walking tours of great trees that are also featured in the Arboretum’s exhibit in the Natural History section of the Google Cultural Institute.

Network accreditation doesn’t just showcase some of our finest collections. It also helps us improve how we care for, conserve, study, showcase, and teach about them, and that innovation benefits all of our 1,700 acres of trees, gardens, and natural areas.

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USING YOUR PLANT COLLECTIONS
NETWORK COLLECTION TO LEVERAGE RESOURCES AND PARTNERSHIPS

Andrew Bunting

The value a Plant Collections Network-accredited collection brings to an institution is multifaceted: amplified national attention, the ability to better leverage resources, and an increased number of important, new relationships and partners.

In 2015, the American Public Gardens Association, Botanic Gardens Conservation International (BGCI), Plant Conservation Alliance (PCA), and Center for Plant Conservation (CPC) signed a Memorandum of Understanding to form the North American Botanic Garden Collections Network which leverages each institution’s strengths to coordinate efforts and advance conservation. Network staff have been developing and implementing strategic actions related to ex situ conservation objectives. Paramount to the success of the Association’s Plant Collections Network have been the cooperative agreement signed with Agricultural Research Services (ARS) in 1995 and the subsequent agreements concluded over the past two decades.

The US Forestry Service has partnered with the Association to provide grants to Association members, with preference given to those institutions that have had a Nationally Accredited Plant Collection™ since 2014. These grants are awarded to help institutions collect and safeguard targeted taxa in ex situ collections. The Morton Arboretum has received four of these grants to conduct field collecting trips and ultimately disseminate germplasm to other Network collections for Magnolia virginiana var. virginiana, Magnolia fawazi var. pyramidalata, Quercus oglethorpensis, and Quercus havardii. To date, nine grants have been awarded. Similarly, the Magnolia Society International awards research funds yearly. Funding priority is given to botanical gardens and arboreta that are members of the Network’s Multisite Magnolia Group. The JC Raulston Arboretum received funding for a trip to Taiwan to collect Magnolia compressa and Magnolia kuchirachus, the latter being a Taiwanese endemic.

The Tyler Arboretum near Philadelphia has used the Network status of its Nationally Accredited Rhododendron Collection™ to obtain grants from the Stanley Smith Horticultural Trust, as well as grants from the American Rhododendron Society. In fall 2016, the Institute of Museum and Library Services (IMLS) granted $440,000 to several institutions, including The Arnold Arboretum, BGCI, CPC, Chicago Botanic Garden, and the USDA to develop tools to safeguard our plant collections by determining and communicating best practices for efficiently and effectively curating genetic diversity of living plant collections. To determine these methods, several important conservation taxa, including Quercus hypoleucoides, Magnolia macrophylla subsp. ashei, and Zamia decumbens, will be used as predictive models.

In 2008, the University of California (UC) Davis Arboretum received $150,000 from the IMLS to build the Oak Discovery Trail in the Shields Oak Grove. The latter holds their oak collection (at the time, it included eighty-seven taxa) which is part of the Network’s multisite Quercus collection. The trail is instrumental in educational programs focused on oaks and includes a ceramic, mosaic mural—created through a project of the UC Davis Art-Science Fusion Program—that depicts the flora and fauna of the California oak ecosystem. Emily Griswold, Director of GATEways Horticulture and Teaching Gardens at the UC Davis Arboretum and Public Garden, stated, “The Plant Collections Network status was critical for substantiating the importance of our work to protect the collection from the egret and heron colony that threatened the health of the trees from 2005 to 2009.”

Matthew Botanical Gardens and Nichols Arboretum is also leveraging its Network-accreditation status as it works to establish a two-million-dollar endowment for the ongoing care of its historic peony collection. Over the past ten years, I have been involved with the Network in a management role and as collection holder, previously while at the Scott Arboretum and now at Chicago Botanic Garden. I have seen how these collections serve as a catalyst on many levels for funding, partnering, and collaborating. On a recent visit to Moore Farms Botanical Garden in Lake City, South Carolina, I saw how their collection of Magnolia grandiflora cultivars has inspired nurserymen and private collectors to help them create a comprehensive collection.

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The Nationally Accredited Collections of Plant Collections Network are the highly visible portion of the program’s goal—coordinating a continent-wide approach to plant germplasm preservation—but the sometimes overlooked associated goal is what makes the program so effective. The Network strives to promote excellence in plant collections management and thereby raise the bar across our industry—from the largest institutions to the smallest public gardens taking their first steps in developing meaningful plant collections.

The question becomes: what is excellence? To answer that question, the Network committee, with input from collection holders and other experts, has developed a Compass for Progress articulating the Standards of Excellence in a succinct and accessible way. The Standards are intended to be aspirational, challenging collection managers and administration to think critically about their programs and look for ways to improve. The model can be applied across every size and type of garden, and this scalability is a powerful measure of the Standard’s utility.

Much like gardening, the product is never finished—striving for excellence is a continual process. While the Compass for Progress was developed with the Network in mind, all gardens will find the principles equally as pertinent to both long-range planning and daily operations. We hope the Standards will help gardens set strategic goals, measure success, and thereby raise the bar across our industry—from the largest institutions to the smallest public gardens taking their first steps in developing meaningful plant collections.

Along with the Standards, a self-assessment tool has been developed to help collection holders critically evaluate where they fall across the spectrum and provide a guide for future improvements. The self-assessment is currently in beta testing with several gardens and, after evaluation, will be made available to members. This tool should provide a readily accessible method to see where your institution excels and where there is room for improvement, in an easy-to-digest format for communicating with both collections staff and administration.

We hope the Compass for Progress and accompanying self-assessment help to promote excellence in plant collections management. Ultimately these tools will help strengthen our gardens, raise the standards across the industry, and promote the value of what we do every day.

Mark Weathington is Director and Curator of Collections at JC Raulston Arboretum.

| STANDARD 1 | Thorough records are actively maintained for accessioned plants tracking what/where/how plants were obtained, their garden location, and any conditions regarding their acquisition, use, or distribution. |
| STANDARD 2 | Durable accession tags and maps link plants in the collection to their documentation, and to any associated collections of images, herbarium vouchers, and DNA. |
| STANDARD 3 | Periodic field inventories are conducted, records and maps updated, and missing/damaged labels replaced. |
| STANDARD 4 | Records are kept of plant evaluations, verifications of identity and nomenclature, documented use, propagation, and distributions. |

| STANDARDS OF EXCELLENCE IN PLANT COLLECTIONS MANAGEMENT |
| Indoor and outdoor plant collections are obtained directly or indirectly from breeder/introducer. |
| Plants within collection represent broad taxonomic and genetic diversity, with current holdings comprising a minimum of 50% of the stated collection scope. |
| Plants are acquired legally and ethically according to their collection’s stated purpose. |
| Plant species are of known wild provenance for greatest conservation value; cultivars are obtained directly or indirectly from breeder/introducer. |

| Documentation | Use | Management |
| Reasonable access to the collections and their documentation are provided for researchers, breeders, and other professionals as well as the public, while ensuring the collection’s preservation and security. |
| Collection records are shared online through databases to maximize use and facilitate coordination with other collection holders. |
| Plant collections are utilized through the institution for education, engagement, evaluation, research, and/or conservation. |
| The institution commits to strengthening staff expertise through ongoing professional development and study of the collections. |
| Strategic partnerships with outside experts, relevant plant societies, and other public gardens are leveraged to maximize collection use and ensure relevance. |

Mark Weathington is Director and Curator of Collections at JC Raulston Arboretum.
The core of becoming a Nationally Accredited Plant Collection™ is the Site Review. This assessment and feedback process is conducted by a peer reviewer who verifies the information contained in the application submitted by the public garden under review. It is through the Site Review process that accreditation and participation in the Plant Collections Network is unique, and differs from a simple directory of contributed collections or self-reported accreditation.

In completing an application a garden has conducted a self-assessment based on a series of standards and best practices that have been formulated, over time, by members of the larger public garden community. Site reviewers are peers in the Network who volunteer their time in service to this program. The application and review process focus on a range of aspects of a well-curated plant collection, including collection records and management, horticultural suitability and maintenance, and institutional stability and support. Short- and long-term goals of the collection are spelled out. If the review is of a collection that will become part of a multisite collection, the relationship to the larger collection is articulated and examined.

The three possible outcomes of a site review are: full accreditation as a Nationally Accredited Plant Collection™, provisional status, accompanied by recommendations for changes that strengthen the application; or that a collection is not recommended for accreditation at the present time. In all cases feedback is provided in a positive and supportive manner, aimed at helping the institution meet its collection goals in the strongest and most effective manner.

The Site Review and the recommendations stemming from it are valuable tools for helping gardens use their collections in meeting their core mission. The process brings a garden’s staff, administrators, and supporters together in an invigorating and affirming exercise. Speaking from experience, both as an applicant and as a reviewer, National Accreditation has weight! It helps gardens gain attention, and hopefully support, from their boards, parent organizations, and communities. It can be eye opening for gardens to develop the strongest and most meaningful collections, and establishes connections with colleagues in the larger public garden community.

Chris Carmichael recently retired as the Associate Director of Collections and Horticulture at the University of California Botanical Garden. He has been involved with the Plant Collection Network in a variety of capacities, including reviewer, reviewer trainer, an applicant for several collections, and leadership roles as part of the Plant Collections Network Committee (including Chair and Vice Chair).

The process of applying for national accreditation for Huntsville Botanical Garden’s Trillium Collection through the Plant Collections Network has been a real learning and growing experience for our plant collection management. The questions were challenging: how do we document, maintain, back up, and protect our collection? To answer them, we had to reevaluate our processes and procedures. After submitting our application in 2014, Amy Highland, Curator of Mt. Cuba Center, performed a site review of our collection. She deemed it, “by far the most extensive public collection of eastern North American native Trillium.” At that time we were given an eighteen-month provisional status to address some important collections management procedures outlined in her report. We addressed the issues, documented our activities in a report, and in 2016 became the proud custodians of the Nationally Accredited Trillium Collection™.

At first we were daunted by the sheer number of Trillium at our garden. Our collection of 10,000 plants is home to thirty-one Eastern Trillium species and over 800 documented accessions. One of our highly admired volunteers at the Garden, Harold Holm, created the Holm’s Trillium Garden in 2007. He also plants, maintains, propagates, researches, and shares his Trillium knowledge worldwide. Holm and another volunteer, Frank VanLandingham, along with Curator Mike Gibson tackled the job of documenting, mapping, tagging, and photographing our collection.

One of the biggest challenges was tying our accessions list to our mapping and labeling system. With so many accessions, this was a lengthy project, especially given the time constraints involved in mapping a spring ephemeral plant. We developed a successful ground tagging system that will also be used on other garden collections. Additionally, we developed one- and five-year collection maintenance and protection plans, as well as a disaster mitigation plan.

The Huntsville Botanical Garden’s Nationally Accredited Trillium Collection™ is a multi-faceted research and educational collection aimed at expanding the knowledge of Trillium species with emphasis on their diversity and the best protocols for propagating, transplanting, and growing them. Having a nationally recognized collection through the Plant Collections Network is one way we are fulfilling our garden’s mission of education, conservation, and preservation. We look forward to submitting future collections to the program and encourage other gardens to do the same.

Chris Carmichael

Carol Lambdin is Special Projects/Exhibit Coordinator at Huntsville Botanical Garden.
FROM PROVISIONAL TO FULL ACCREDITATION: WESTERN US PENSTEMON COLLECTION

Ann DeBolt

The Idaho Botanic Garden (IBG) is located in Boise, towards the northern edge of the Intermountain Region, an area generally typified by hot, dry summers and cool, moist winters. This climate is ideal for growing Penstemon. The genus Penstemon is commonly known as beardtongue, because of the prominent staminode, or infertile stamen, which is extremely hairy in some species, and may protrude from the corolla, giving the appearance of a fuzzy tongue. The tubular flowers of beardtongue are perfectly shaped to accommodate nectar-seeking hummingbirds. Many other pollinators also seek Penstemon pollen and nectar. The western US is the epicenter of beardtongue diversity, with at least forty-two species naturally occurring in Idaho.

The American Public Gardens Association’s Plant Collections Network Pacific Region Organizer first urged the IBG to establish a Western US Beardtongue (Penstemon) Collection in 2010. At the time, IBG had just 1,200 members and a four-person horticulture staff. While we received plenty of encouragement from the Network along every step of the way, it was a big leap to commit the resources, not only to complete the application package, but also to maintain, document, and grow this collection into the future.

Thanks to an American Penstemon Society grant, we received both the financial boost and botanical reassurance we needed to move forward with the project in 2011. This funding was specifically for the preparation of the collection and for off-setting new signage costs. The stars seemed to align for us, as our collection received provisional accreditation in 2012, and we were well-prepared to present the collection when we hosted the Society’s annual meeting in central Idaho.

Penstemon confusus is native to the southern Great Basin but grows well in southern Idaho.

P. humilis subsp. humilis growing in the Lewis & Clark Native Plant Garden at IBG

P. montanus var. idahoensis is endemic to high elevation sites in central Idaho.

All photos: Idaho Botanic Garden

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CULTIVATING THE NEXT GREAT CURATORS: TAKING BOTANICAL GARDENS INTO THE TWENTY-FIRST CENTURY

Douglas Justice

University of British Columbia (UBC) Botanical Garden holds a unique position among botanical gardens in Canada. Its association with the University of British Columbia, a well-known research university, and its long-established affiliations with plant collectors and botanical institutions internationally have made it a garden of considerable renown. Its success is also due in large part to its location in the southwest corner of the province, where the mild maritime climate supports the cultivation of an enormous range of temperate plants.

Since 2008, UBC Botanical Garden has had a gradual but complete turnover of its curators-horticulturists. Curatorial positions are critical not only to the maintenance and integrity of the individual gardens—the David C. Lam Asian Garden, the North American Gardens, Nitobe Memorial Garden, and the E.H. Lohbrunner Alpine Garden all have individual (and young) curators—but also to the direction of the garden as a whole. Our curator positions require not only critical thinking and expertise, but a high degree of energy, creativity, and resourcefulness. While meaningful post-graduate training is certainly an advantage, these are jobs for thinking gardeners, not academics or managers.

In our recent hires, we made sure that candidates knew the physical demands of working outdoors year round in Vancouver, but we were also keen to identify people with the ability to teach students and inspire and work alongside others. The intersection of beauty, information, and technology meet in the botanical garden, so we need exceptional people who can manage (juggle?) all of those demands.

Curatorial challenges, such as improving data quality, working with limitations on site (horticultural and budgetary), and gauging the value of individual plants or collections in light of the institution’s goals and mission, are approached in a collaborative and cooperative manner. How well curators make decisions relies largely upon experience and training, but at UBC we feel that continuing professional development is the key to sustaining curatorial vitality. This involves teaching (the garden runs a vocational horticultural training program) as well as external opportunities provided by professional associations and the university. The American Public Gardens Association offers exceptional professional development for curatorial staff, especially opportunities to work with other garden professionals through the Plant Collections Network, webinars and symposia, and we continue to take advantage of those offerings.
An essay about the Plant Collections Network’s future must acknowledge the centrality of global change and other unacknowledged challenges. To wit, the best defense mitigating change will be collections that are strongly defined and curated, as I articulated here in 2012 (editor’s note: Public Garden 27 [Summer/Fall]: 28–29) about managing collections in the midst of climate change.

While not purely cause-and-effect, the Network has profusely impacted gardens by establishing and enhancing a collections ethic. Prior to its establishment, with few exceptions, specific collections within gardens lacked prioritization, and were not recognized as collections of national significance. Onomastically, many gardens “focused” on being symaptic. However, that paradigm shifted to one where broad collections are now anchored by specific, Nationally Accredited Plant Collections™, managed with intent and for purpose, and curated at Standards of Excellence™. The Network influenced how gardens value collections, as illustrated throughout this issue. No small feat. Yet to meet The future, our next steps must be bolder.

Obviously, the network must expand: too many gardens are missing from the roster, and too many plants need stewarding. But, a list (of gardens, of taxa, of accessions) is just a list. Beyond re-accreditation, I believe that future success will follow collections development planning, planning that incorporates the latest that science informs and society demands, and planning that meets and links the needs of the Network and individual gardens alike. In 2015, The Arnold Arboretum launched its Campaign for the Living Collections, a collections development initiative to simultaneously preserve its legacy and secure its long-term future. Some results are immediate, but we intend the impact to resound for decades, if not centuries, to come. The Campaign was born after several years of deep thinking and thoughtful planning around the intrinsic value of collections, and how to improve them to best serve future generations’ purposes. Our current Network of plants played a central role in the plan’s development. We asked how to improve these six exemplars. For instance, what additional propagules of Carya ovata are of most importance to us to add to maximize that species’ diversity? And, we wondered how to improve other robust collections before their integration into the Network. While we may have the most diverse, wild-sourced Ginkgo collection in North America, what other cultigens or landraces are we missing that are of top priority? The plan now delivered, we are in the midst of enacting it. This has been a boon to us, and I cannot help but wonder what would happen if something similar was multiplied across all gardens, addressing their individual needs as well as those of the broader Network.

Beyond planning, we must further attend to collections documentation. Like the iceberg analogy, where the value and power of a collection (or network of them) lie not with above-the-surface plants but with the associated below-the-surface documentation. The surefire way to document collections is to use them and prepare them for future use. Curation should not be a passive venture, and it is through active collections engagement that new knowledge is generated, species are safeguarded from extinction, and the public becomes less plant blind. Otherwise, why do we profess to have collections? Use also means sharing. We must willingly distribute germplasm to gardens filling gaps, and never say no to scholars who need material. In fact, we should aggressively get our material into the hands of those who require it. These Nationally Accredited Plant Collections™ and what they embody must also be shared to our garden members, our visitors, and the public at large. They must always leave our gates knowing that their beautiful public garden possesses plants of global importance, and is in need of further support.

The future of the Plant Collections Network will be as bright as we will it to be. Bold development planning coupled to active documentation, broader use, and generous sharing is guaranteed to deliver a bright future that benefits the Network and gardens alike.

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Michael S. Dosmann
Curator of Living Collections at The Arnold Arboretum of Harvard University.

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The standards set by the Network have helped us to think about how we curate our plants and forced us to ask important questions for management today and in the future. If we have no standards and do not learn how others are managing collections, how can we improve and advance plant science and public horticulture?

MARY MAYER, PROFESSOR AND EXTENSION HORTICULTURIST, UNIVERSITY OF MINNESOTA LANDSCAPE ARBORETUM

Our participation in the Plant Collections Network provides staff with a sense of pride in the curatorial work and quality care they provide to our plant collections. Also, this program provides a greater context for our collections work, which adds relevance to our nearly ninety-year-old mission of tree conservation.

LUKE MESSINGER, EXECUTIVE DIRECTOR, THE DAWEIS ARBORETUM

As a member of the Plant Collections Network’s accredited Multisite Magnolia Collection, we have access to tools and a network of experts to elevate our curatorial and plant documentation standards. The value of our living collections now extends far beyond our garden walls and across the planet through our contributions to ex situ conservation.

CYNTHIA SAYRE, CURATOR OF COLLECTIONS, VANDUSEN BOTANICAL GARDEN

As a relatively new and relatively small public garden with limited resources, involvement in Plant Collections Network has afforded us opportunities we otherwise would not have had including a richer visitor experience and a wider community of collaborators. Additionally, it has broadened and enhanced our vision for long range planning as an institution.

MERRILL JENSEN, ARBORETUM MANAGER AND HORTICULTURIST, JENSEN-OLSON ARBORETUM

I have had the good fortune to be on both sides of the Plant Collections Network review process. It is the most powerful educational tool in our profession.

TIM THIBAULT, CURATOR OF WOODY COLLECTIONS, HUNTINGTON BOTANICAL GARDENS

The Plant Collections Network has enabled the Polly Hill Arboretum to focus our collections development on select plant groups that have value as conservation taxa and are outstanding ornamentals for home gardeners. In recent years we have engaged in six separate expeditions focused on the collection of the native North American species of Stewartia. In doing so we have discovered many new populations never documented in the wild. We have also worked out the propagation protocols for these species. As a result of our work, the Arboretum was recently established as the International Cultivar Registration Authority for the genus Stewartia by the International Society for Horticultural Science.

TIM BOLAND, EXECUTIVE DIRECTOR, POLLY HILL ARBORETUM

The Network and gardens alike.

Michael S. Dosmann
Curator of Living Collections at The Arnold Arboretum of Harvard University.

In 2016 he joined the Association’s Board as Director of Horticulture.

Desc. Carya ovata,* Ostrea, a Japanese hop-hornbeam acquired from Japan in 1888. photo: Michael Dosmann

The genus of hop-hornbeams, *Ostrya*, is a rustically represented genus at The Arnold Arboretum and positionned for future accreditation. Shown here is accession 3359*A*, *Ostrya japonica*, a Japanese hop-hornbeam acquired from Japan in 1888. photo: Michael Dosmann

The genus *Ostrya* (hickory and pecan) collection was already notable when it became accredited. In 1965, it had been dramatically expanded and refined over the past twenty years through many new acquisitions. *Ostrya* is pecan, *Carya illinoinoensis*, accession 22546*A*. photo: Michael Dosmann

The Arboretum’s *Ginkgo* collection represents one of the most significant repositories of its kind in the country, making it well poised for accreditation. This accession (*G. biloba* 2002*A*) was collected from one of the few wild populations existing in China. photo: Ned Friedman

Michael S. Dosmann is Curator of Living Collections at The Arnold Arboretum of Harvard University. In 2016 he joined the Association’s Board as Director of Horticulture.

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Curator of Living Collections at The Arnold Arboretum of Harvard University. In 2016 he joined the Association’s Board as Director of Horticulture.
With five nationally accredited plant collections of our own at the Bartlett Tree Research Laboratories and Arboretum, we know just how much woody plant specimens mean to the institutions charged with their care. In addition to being proud supporters of the American Public Gardens Association, Bartlett is privileged to provide scientific tree and shrub care to botanical gardens and arboretums throughout the United States.

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For more information about Plant Collections Network and how to apply, go to: publicgardens.org/programs/about-plant-collections-network