

# PublicGarden

THE JOURNAL OF THE AMERICAN PUBLIC GARDENS ASSOCIATION

VOL 29, NO 2 • 2015

*Celebrating*

**75**  
YEARS

**A P G A**

**APGA 2015-2020  
STRATEGIC PLAN,  
PRIMULAS,  
AND MORE**





# REGISTER NOW!

Online registration now open

## BIODIVERSITY FOR A BETTER WORLD Wild Ideas Worth Sharing

St. Louis, MO • April 26–May 1, 2015  
BGCI's 9<sup>th</sup> International Congress on Education in Botanic Gardens

Connect with a global network of botanic garden professionals from around the world and inspire each other to shape a world in which biodiversity is understood, valued, conserved, and strengthened.

More than 170 botanic garden educators and directors will lead panel discussions, workshops, world cafés, and more; and a series of tours, including a 3-day tour to Chicago Botanic Garden, will let you experience St. Louis's and the Midwest's culture, history, neighborhoods, and natural areas.



To learn more and to register, visit

[www.bgcieducationcongress2015.org](http://www.bgcieducationcongress2015.org)

#BGGCI2015EDU



MISSOURI BOTANICAL GARDEN

# ROUGH

CONSERVATORIES



*The Rough tradition of excellence continues at Tower Hill Botanic Garden*

Since 1932 Rough has been building and maintaining large, high-quality glazed structures, including:

- arboretums
- botanical gardens
- conservatories

We have the experience, resources, and technical expertise to solve your design needs. For more information about Rough Brothers' products and services, call 1-800-543-7351, or visit our website: [www.roughbros.com](http://www.roughbros.com)

**DESIGN SERVICES  
MANUFACTURING  
SYSTEMS INTEGRATION  
CONSTRUCTION**

5513 Vine Street  
Cincinnati OH 45217  
ph: 800.543.7351  
[www.roughbros.com](http://www.roughbros.com)



Imagine  
your  
ad here.

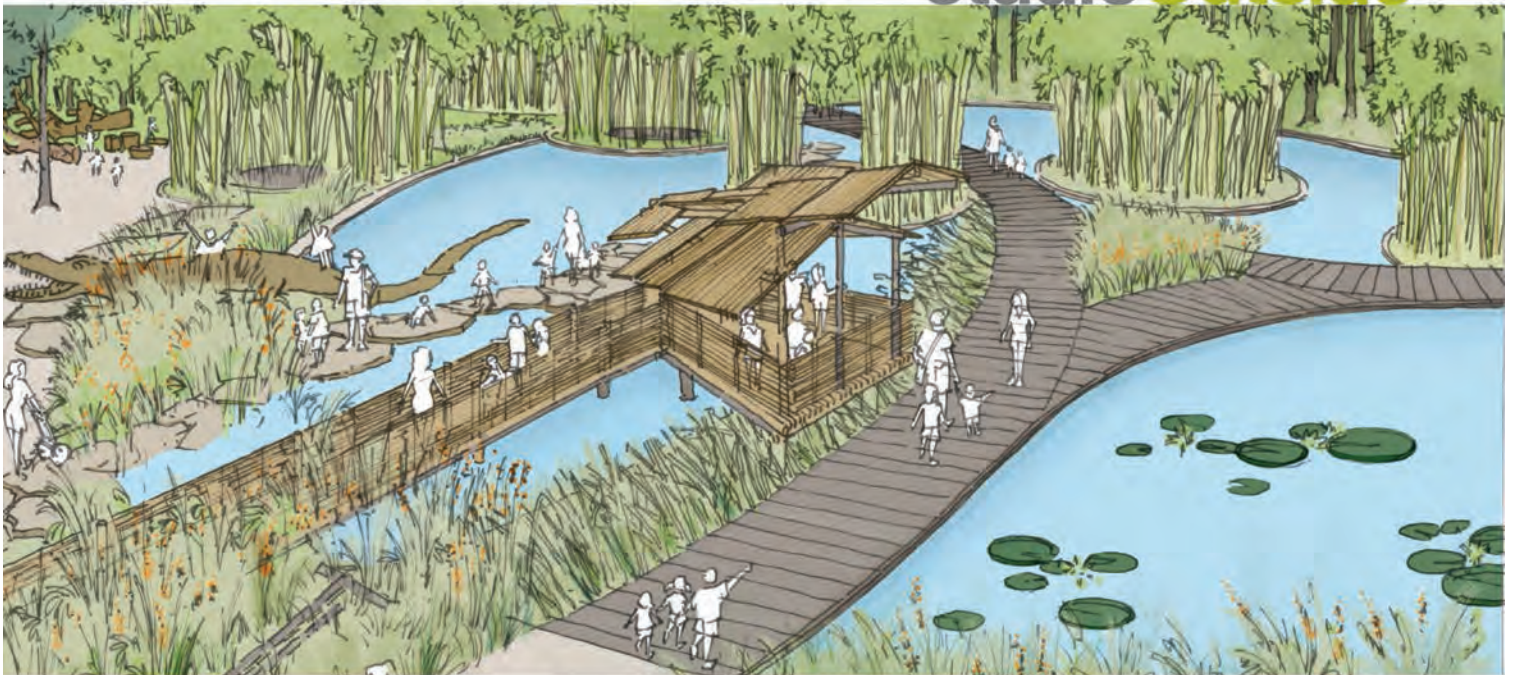
Request a media kit from  
[PublicGardenMag@publicgardens.org](mailto:PublicGardenMag@publicgardens.org)



**American  
Public Gardens  
Association**

[publicgardens.org](http://publicgardens.org)

studio**Outside**



Beaver Pond at the Coastal Georgia Botanical Gardens Children's Garden

Master Planning and Garden Design

214 954 7160

[www.studiooutside.us](http://www.studiooutside.us)



# 2015 APGA CONFERENCE

**WATERING OUR ROOTS**  
TO GROW OUR COMMUNITIES  
MINNEAPOLIS / ST. PAUL



Keynote Speaker



## Andrew Zimmern

TV personality, chef, food writer, community builder, teacher, and local food expert who calls Minnesota home

[2015.publicgardens.org](http://2015.publicgardens.org)

# PublicGarden contents

THE JOURNAL OF THE AMERICAN PUBLIC GARDENS ASSOCIATION | VOL 29, NO 2 • 2015



18



6



24

## {Focal Points}



**6** 75<sup>th</sup> Anniversary  
Highlights of APGA's first seventy-five years

**8** Making Public Gardens Indispensable  
After fifty years in public horticulture, Richard W. Lighty believes that as public gardens share successful strategies with each other, the public will become increasingly convinced of the value of gardens.

**9** Looking to the Future  
What insights do young public garden professionals have about the greatest challenges and opportunities we face in the years ahead? Read their thought-provoking and sometimes surprising responses here and online at [publicgardens.org/content/current-public-garden](http://publicgardens.org/content/current-public-garden).

**14** APGA 2015-2020 Strategic Plan  
APGA's new strategic plan is introduced by Director-at-Large Paul Kuenstner.

**28** Flora of North America North of Mexico  
A Flora of North America has been envisioned for nearly two centuries. Eighteen of thirty volumes have now been published, and work continues on the rest.

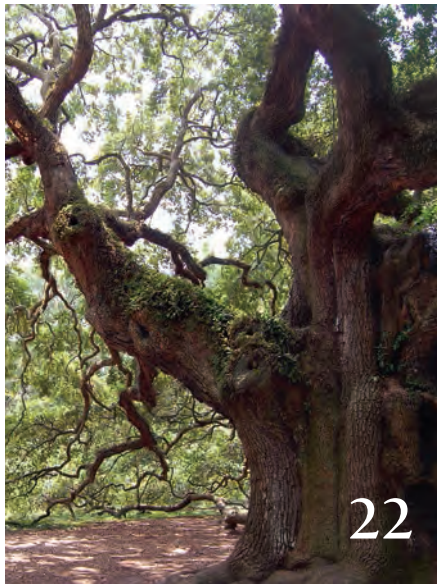
## BACKBONES

SMALL GARDEN, BIG IMPACT

**18** Growing Together  
Toledo Botanical Garden has been committed to showcasing the arts for its entire fifty-year existence. Each year it has hosted the Crosby Festival of the Arts, a juried arts festival that attracts thousands of visitors to the garden and the surrounding community.

PUSHING THE BOUNDARIES

**22** The Race for Plant Survival  
Learn how APGA members and others are racing to ensure the survival of plants endangered by habitat loss, global warming, and other phenomena. Get your downloadable online toolkit offering ways public gardens, large and small, can make a real difference.



22

## PERENNIAL SELECTIONS

**5** Director's Note

**16** PHOTOSYNTHESIS

**21** THINGS WE LOVE THIS WINTER

NAPCC COLLECTION PROFILE

**24** *Primula* at Jensen-Olson Arboretum  
Primroses thrive in the cool, maritime climate of Juneau, Alaska. Merrill Jensen shares how he has developed the collection from humble beginnings and grew it into a national collection.

## Editor-in-Chief

**Abby Spencer** APGA

## Managing Editor

**Dorothea Coleman** APGA

## Editorial Advisory Group

**Shari Edelson**

*The Arboretum at Penn State University*

**Susan T. Greenstein**

*Growing Minds Consulting*

**Virginia Hayes** *Ganna Walska Lotusland*

**J. Eric Jackson** *Powell Gardens*

**Carol Line** *Fernwood Botanical Garden*

**Sharon Loving** *Longwood Gardens*

**Tracy Magellan**

*Montgomery Botanical Center*

**Janet Marinelli**

*Blue Crocus Publishing + Interpretation*

**Tracy Omar** *Garden Tourist Consulting*

**Don Rakow** *Chair, Cornell University*

**Melanie Sifton** *Brooklyn Botanic Garden*

**Caitlin Simkovich** APGA

## Editorial Consultant

**Gail Brodhead-Kae** *GBK Research, LLC*

## APGA Board of Directors

### PRESIDENT

**Kenneth J. Schutz** *Desert Botanical Garden*

### VICE PRESIDENT

**Sabina Carr** *Atlanta Botanical Garden*

### TREASURER

**Kara Newport**

*Daniel Stowe Botanical Garden*

### SECRETARY

**Ray Mims** *United States Botanic Garden*

### IMMEDIATE PAST PRESIDENT

**Paul B. Redman** *Longwood Gardens*

### DIRECTORS AT LARGE

**Patsy Benveniste** *Chicago Botanic Garden*

**Carmia Feldman**

*UC Davis Arboretum and Public Garden*

**Rick King** *Kittleman & Associates, LLC*

**Paul Kuenstner** *Fidelity Foundation*

**William M. LeFevre**

*Sarah P. Duke Gardens*

**Jane O. MacLeod**

*Cheekwood Botanical Garden & Museum of Art*

**Mark Runciman** *Royal Botanical Gardens*

**Shane D. Smith** *Cheyenne Botanic Gardens*

**Brian Vogt** *Denver Botanic Gardens*

### EX OFFICIO

**Scott LaFleur**

*Sherman Library and Gardens*

**D. Casey Sclar** *Executive Director, APGA*



American Public Gardens Association  
351 Longwood Road  
Kennett Square, PA 19348  
610.708.3011, Fax: 610.444.3594  
www.publicgardens.org



Longwood Gardens' Waterlily Display, pictured here in summer 2014, will be featured in our next issue.

PHOTO CREDIT: KEITH NEVISON

## Corrections for the last issue:

Page 16-17 – Photo Credit: Rhoda Mauer

Page 27 – The caption for photo at the bottom of the page should have read: *Salix* 'Scarcuzam' Scarlet Curls provides interesting color and form. Photo Credit: Julie Magura

## Advertisers Index

### AMERICAN PUBLIC GARDENS ASSOCIATION

- 1 Media Kit
- 2 Annual Conference
- 31 Native Plants Symposium
- \*bc National Public Garden Day

### BOOKS

- 29 Oxford University Press

### CONFERENCES

- \*ibc ASLA Annual Meeting and EXPO
- \*ifc BGCI's 9<sup>th</sup> International Congress on Education in Botanic Gardens

### CONSERVATORIES AND GREENHOUSES

- 1 Rough Brothers, Inc.

\*bc Back Cover • \*ifc Inside Front Cover • \*ibc Inside Back Cover

### EXHIBITS

- 32 Cobb Studio
- 31 Origami in the Garden

### GARDEN FURNITURE

- 30 Country Casual

### INSURANCE

- 32 Berends Hendricks Stuit Insurance Agency, Inc.

### LANDSCAPE ARCHITECTS AND DESIGN SERVICES

- 1 StudioOutside
- 32 Terra Design Studios

### RETAIL SERVICES

- 31 Visualopathy

Volume 29, Number 2, 2015. *Public Garden* (ISSN 0885-3894) is published quarterly by the American Public Gardens Association (APGA), 351 Longwood Road, Kennett Square, PA 19348. ©2015, American Public Gardens Association. All rights reserved. *Public Garden* is self-indexed at <http://publicgardens.org/content/apga-publications>. Opinions expressed by contributors are not necessarily those of APGA. *Public Garden* welcomes editorial submissions but assumes no responsibility for the loss or damage of unsolicited material. APGA serves North American public gardens and horticultural organizations by promoting professional development through its publications and meetings; advocating the interests of public gardens in political, corporate, foundation, and community arenas; and encouraging gardens to adhere to professional standards in their programs and operations.

**SUBSCRIPTIONS** All members of the American Public Gardens Association receive a free subscription to the magazine. Subscriptions are available to firms and individuals interested in working with members of the garden industry as follows: in the US at \$48 per year; all others at \$90 per year (includes a postage and handling charge).

**CHANGE OF ADDRESS** Send new address, zip code, moving date, and old address label to APGA, 351 Longwood Road, Kennett Square, PA 19348.

**ADVERTISERS** For information about advertising, contact Abby Spencer, Director of Marketing and Outreach, APGA, 610.708.3011 or [aspencer@publicgardens.org](mailto:aspencer@publicgardens.org). Or request a media kit at [PublicGardenMag@publicgardens.org](mailto:PublicGardenMag@publicgardens.org).

# Director's Note



Dear Readers,

This year, APGA proudly celebrates one of the most exciting moments in its history: seventy-five years of being the preeminent association for public garden professionals in North America and beyond.

This year also finds the APGA team enthusiastically executing a new five-year strategic plan that represents the Association's further evolution, one that is aligned with its core principles. The plan allows us to act and think strategically, providing for a deeper and more meaningful connection to our members. It was developed by the board of directors and staff along with an outstanding consultant who is an expert at building strategic plans for nonprofit associations, with significant input by other key stakeholders. Since the board of directors is made up of active APGA members, and since I was an active member of the Association before becoming executive director, this plan was truly created by and for APGA members, with your needs and wants always at its forefront.

While change is inevitable in many ways, our vision—*A world where public gardens are indispensable*—remains the same and has our unwavering support. Our new mission statement—*APGA serves public gardens and advances them as leaders, advocates, and innovators*—is now more succinct and makes member service the top priority.

While reading this important issue of *Public Garden*, you will bear witness to the Association's evolution. We're celebrating our history; please join me in being grateful for the many APGA Board members, directors, and staff who have guided and grown the association from its inception to where we are today. And we're preparing for a strong and beneficial future for all of our members and public gardens everywhere—thanks to people like you.

Yours,

D. Casey Sclar  
*Executive Director*  
*American Public Gardens Association*

*Primula flaccida* is an introduction to cultivation by Forrest in 1914 from the forests and rocky pastures of Sichuan and Yunnan, China.

PHOTO CREDIT: MERRILL JENSEN



# APGA's TIMELINE

## the first Seventy-Five Years

### 1920s

- Robert Pyle serves as chair of the American Association of Nurserymen committee on botanical gardens and arboreta. He would go on to set a string of events in motion that would eventually lead to the creation of the American Association of Botanic Gardens and Arboreta (AABGA).

### 1940

- AABGA is established to represent public gardens. The organization is an affiliate chapter of the American Institute of Park Executives (AIPE) and run solely by volunteers of member gardens.

- First meeting held in conjunction with AIPE at the Hotel Statler in Cleveland, Ohio, with approximately 40 attendees that included a popular tour of the relatively new Holden Arboretum.

### 1941

- The American Association of Botanical Gardens and Arboreta (AABGA) completes its first year with five officers and close to 50 members.

### 1946

- AABGA assembles a directory of botanic gardens and arboreta in North America.

### 1949

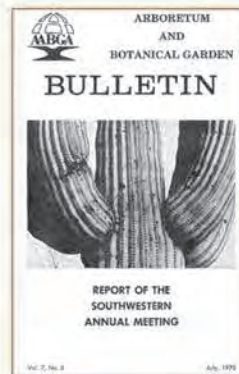
- Membership increases to 72 members.

### 1950

- AABGA cuts ties with AIPE and creates four new committees:  
*Membership* - C. W. Fenninger, chair  
*Education* - E. L. Kammerer, chair  
*Publications* - M. Van Rennselaer, chair  
*Plant Introduction* - R. B. Clark, chair
- AABGA begins publishing a quarterly newsletter, which consists of news submissions from member gardens.

### 1959

- AABGA asked to act as the International Cultivar Registration Authority (ICRA) for unassigned woody plant cultivars by the American Horticultural Council.



**NATIONAL PUBLIC GARDENS DAY**



### 1991

- The North American Plant Collections Consortium (NAPCC) is introduced as a new initiative coordinating continent-wide efforts among public gardens to conserve plant biodiversity and promote high standards in collections management.

### 1995

- AABGA staff increases to eight. Prior to this paid staff was minimal or made up of volunteers.
- The first AABGA website is created to provide electronic membership services.

### 2000

- AABGA celebrates its 60<sup>th</sup> Anniversary, with approximately 435 institutional members and 2,700 individual members.
- Specialized committees are formed and reorganized that would eventually become programs and Professional Sections in existence today.
- AABGA partners with Botanic Gardens Conservation International, Center for Plant Conservation, and The North Carolina Arboretum to co-host the first-ever World Botanic Gardens Congress.

### 2006

- To be more inclusive of its broadening member base, AABGA undergoes a name change and becomes American Public Gardens Association (APGA).

### 2009

- May 8: Inaugural National Public Gardens Day.
- APGA's Monthly Newsletter goes digital.

### 2010

- Agreement signed with the U.S. Forest Service (USFS), giving members easier access to USFS lands for the purposes of plant collection, training, and conservation projects.



## 1970

- AABGA changes its dues structure and begins offering institutional memberships.
- Establishes the Plant Records Center, later the Plant Sciences Data Center, in collaboration with the Longwood Foundation and the American Horticultural Society.

## 1971

- Articles of incorporation signed in Washington, D.C., that qualify AABGA as a 501(c)3 organization (approximately 300 members).
- AABGA President Joseph Witt appoints the Committee of Future Directions to recommend programs and future planning.

## 1973

- AABGA holds its first solo annual meeting in Los Angeles, California, hosted by the Los Angeles State and County Arboretum and attended by 93 members.
- AABGA awards the first of the Association's Student Travel Awards.

## 1977

- AABGA leads the North American Certificate in Horticulture program (NACH), in an effort to distinguish between amateur and professional horticulturists.
- Dr. Mildred Mathias (director of UCLA Botanical Garden) appointed part-time Executive Director, the first-ever paid employee of the association.

## 1982

- Susan H. Lathrop is hired as the first full-time Executive Director.

## 1986

- AABGA publishes the first issue of *The Public Garden* magazine.

## 1989

- Association grows to 1,700 members.

## 1990

- AABGA celebrates its 50<sup>th</sup> Anniversary with more than 1,500 members.



## 2011

- The Sentinel Plant Network is officially launched as an APGA program centered on the detection and diagnosis of high-consequence pests and pathogens.
- Agreement signed with the National Oceanic and Atmospheric Administration (NOAA) that leads to the development of future programs centered around climate education.

## 2012

- Dr. Casey Sclar selected to serve as Executive Director.
- The Association introduces a searchable online directory for members and gardens.

- Membership grows to nearly 4,500 total individual and institutional members.

## 2013

- APGA launches its first program centered around climate change education and communication.

## 2014

- APGA experiences the highest annual conference attendance in its history, with over 800 registrants. It was hosted by Denver Botanic Gardens in partnership with The Gardens on Spring Creek, Cheyenne Botanic Gardens, and Betty Ford Alpine Gardens.

- APGA's 2015-2020 Strategic Plan established and approved.

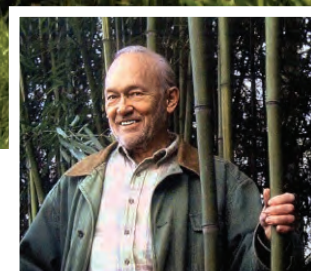
## 2015

- APGA celebrates 75 years with 570+ institutional garden members and more than 8,000 individuals!

A favorite spot at Mount Cuba Center—the Bog Pond

PHOTO CREDIT: RICK J. LEWANDOWSKI

# Making Public Gardens INDISPENSABLE



Richard W. Lighty

*(Editor's note: For our fiftieth anniversary, Richard and eight other AABGA leaders were interviewed. Those interviews can be found at [www.publicgardens.org/content/current-public-garden](http://www.publicgardens.org/content/current-public-garden). While celebrating our seventy-fifth anniversary, we caught up with him in his very active retirement to get his views about our vision—making public gardens indispensable.)*

Inherent in the stated mission of almost every public garden is the wish to bring the public to understand and appreciate the role that plants, horticulture, and gardening can play in making our lives interesting and joyful. This has become more and more difficult as ever greater numbers of people grow up in urban and suburban settings surrounded solely by the works of man. The problem is exacerbated when parents and teachers are themselves strangers to the natural world at a time when support for school programs relating to our place in the biosphere has diminished.

As a person who has spent a half-century working in and with public horticultural institutions, I am convinced that the American Public Gardens Association (APGA) has been a major force in bringing about positive change in

the public programming of individual gardens. I am equally certain that the answers to this problem of estrangement already exist. They are to be found in the successful programs of large and small public gardens, programs identified by the numbers of members of the public coming through the gate, taking courses, volunteering, and returning time and again with families and friends. These successful programs are those that tap the nascent urge in all of us to associate with living things, to work with nature to make something that is uniquely our creation. A tour of the APGA website attests to the many ways our Association is encouraging and facilitating communication among a steadily increasing number of gardens: professional training, symposia, a newsletter, annual meetings, and social media. All of these let members across

the continent know what is happening that is successful.

We have the ideas and the means to communicate them. If we at public gardens continue to refine and upgrade our programs by borrowing and adapting the best from one another, I know that the positive changes that have been made will continue, and public gardens will become ever more valued and, one day, indispensable! In this change, APGA will be the prime mover by emphasizing that the components of success are to be found in the activities of all our institutions.

*Richard W. Lighty was research director at Longwood Gardens from 1960-1966, president of the American Association of Botanical Gardens and Arboreta (AABGA) from 1978-79, and the founding director of Mount Cuba Garden for the Study of Piedmont Flora from 1983-1998.*



# LOOKING *to the* FUTURE

What insights do young public garden professionals have about the greatest challenges and opportunities we face in the years ahead? Read their thought-provoking and sometimes surprising responses here and online at [www.publicgardens.org/content/current-public-garden](http://www.publicgardens.org/content/current-public-garden).



*Stephanie Jutila*

PHOTO CREDIT: GREATER DES MOINES BOTANICAL GARDEN



*Erin Martea*

PHOTO CREDIT: MILES MARTEAL



*Ed Moydell*

PHOTO CREDIT: PAUL SANDERS



*Keith Nevison*

PHOTO CREDIT: LONGWOOD GARDENS



*Melanie Sifton*

PHOTO CREDIT: MATT WELLS



*Daniel Stern*

PHOTO CREDIT: ROBERT E. LYONS



Stephanie Jutila is president and CEO of the Greater Des Moines Botanical Garden in Des Moines, Iowa. She may be reached at [sjutila@dmbotanicalgarden.com](mailto:sjutila@dmbotanicalgarden.com).



Erin Marteel is the executive director of the Ithaca Children's Garden. She may be reached at [enm6@cornell.edu](mailto:enm6@cornell.edu).



Ed Moydell is the executive director of The Bloedel Reserve. He may be reached at [emoydell@bloedelreserve.org](mailto:emoydell@bloedelreserve.org).

## Looking ahead to the next twenty-five years, what are the greatest challenges and opportunities that public gardens will face?

**Jutila:** To maintain relevance, public gardens must become key economic drivers in their communities, which will only be possible if they attract and retain the talent needed to advance themselves as institutions.

**Marteel:** As a shameless optimist, like 99 percent of the non-profit and public garden leaders I've ever met, I believe that opportunity and challenge are two sides of the same coin, with opportunity being the shinier side. Moving into the next twenty-five years, one of the biggest challenges for public gardens will be finding ways to engage the youngest generations.

We are facing a future where tomorrow's leaders are growing up spending less time outdoors than ever before in human history. When you look at great leaders in the environmental and public garden fields, you see that the majority grew up intimately connected to the natural world through childhood experience. That species of childhood is increasingly rare. Today's generations are growing up with global climate change and viewing nature through a technological lens. It remains to be seen whether this perspective will inspire the same genre of reverence and awe of the natural world that has inspired environmental and garden leaders up to this point.

The flip side of the same coin, Opportunity, represents how we, as public garden leaders, can reinvest in the childhood magic of the nature

connection. The mantras of conservation, education, research, and sustainability are only parts of the whole picture. Now that children are not experiencing the awe and wonder of plants, animals, and the intricate ecosystems in their own backyards, public gardens have a more serious charge: To empower the youngest generation to really know, and love, the natural world.

**Moydell:** As in times past, the greatest challenges of the future also present the greatest opportunities. Continued effects of climate change allow the opportunity to promote public gardens as places where people can learn about the role of humans as stewards of the environment. Because an increased proportion of the population will be further disconnected from nature, public gardens can become leaders in promoting physical and psychological health and well-being through interactions with nature. With the number of university horticulture departments continuing to decline, public gardens have the opportunity to educate youth and redirect perceptions about professional careers in horticulture.

**Nevison:** The biggest challenge for public gardens is to stay relevant in the digital age, which involves competing with technologies to attract new audiences, particularly young people. On the flip side, a huge opportunity

exists for gardens to continue to serve as vital places of respite from the overburdening load of information entering our lives daily.

**Sifton:** A big opportunity, but also a challenge, is to build awareness of the importance and relevance of plants and healthy landscapes to everyone in our diverse communities. Beauty will always be an essential way public gardens capture hearts, but the era when plants and gardens can be relegated to merely an aesthetic role is over. So, we are now challenged with communicating that plants are essential and functional within sustainable communities, as we continue to create stunning garden experiences for visitors of all demographics and abilities. And this is all while facing increasing competition for people's attention from outside the garden. How we create broad, yet focused, appeal and maintain the garden collections and sense of place at our high standards will continue to require a delicate balance.

Thriving in the Northwest climate, Bloedel Reserve's Moss Garden features more than fifty different types of mosses and lichens.

PHOTO CREDIT: KEITH BROFSKY



Keith Nevison is a student in the Longwood Graduate Program in Public Horticulture. He may be reached at keithnevison@gmail.com.



Melanie Sifron is the vice president of horticulture and facilities at Brooklyn Botanic Garden. She may be reached at MelanieSifron@bbg.org.



Daniel Stern is the manager of APGA's Sentinel Plant Network. He may be reached at dstern@publicgardens.org.

**Stern:** Over the next quarter century, public gardens have a tremendous opportunity to make a meaningful connection between people and the environment and engage them as stewards of our natural resources through plant conservation, habitat protection, and the mitigation of climate change. Maintaining relevancy in a rapidly changing world is the greatest challenge that we face in achieving these aspirations.

### What can gardens do to overcome these challenges and take advantage of these opportunities?

**Jutila:** Public gardens need to be at the table with local and state business leaders, in addition to existing stakeholders, in order to harness the opportunities within these challenges. By doing so, public garden leaders have the opportunity to identify ways that public gardens can help attract and retain desired talent in their

business communities. At the same time, public garden leaders will be able to identify ways that their institutions can partner with business leaders to create solutions that magnify the impact they can have on their local economies.

To be effective in these partnerships with local and state business leaders, public gardens need to be competitive in the marketplace in order to retain and attract talent at their institutions. Rather than thinking of nonprofits as places of scarcities, public gardens need to look at the abundance and opportunities that the nonprofit business environment provides. Public gardens need to stay on the pulse of competitive compensation for their workforce and provide attractive work environments that support a creative and business savvy workforce.

**Martea:** The way we address this gap may look quite different from what many gardens and children's gardens have done

until now. An essential element to the childhood experience, especially as it relates to building a relationship with a natural place, is allowing the child to be master of his or her own experience. When we program too much, we lose the child.

The gleaming opportunity for public gardens here is to create spaces that allow children to design their own experiences, and then provide resources to facilitate that magical nature connection. While public gardens are capable of many great feats in isolation, communities will be best served when public gardens form alliances with synergistic youth and environmental entities, as well as schools and daycare centers, to strengthen not just the individual garden's mission, but the entire next generation's environmental ethic, and deep knowing of and regard for the natural world.

**Moydell:** Many public gardens are already addressing some of these challenges, but approaches will need to be adapted as threats and audiences change. Most notably, APGA is helping the public garden field do an excellent job of educating the public about climate change, arguably our biggest challenge. Moving ahead, gardens can help develop and promote environmental management models for humans to live responsibly amidst beauty. Less explored and understood is the connection between people and landscapes and the benefits to health and well-being associated with experiences in the outdoors. Meaningful research could be undertaken at public gardens to more deeply explore this topic. To redirect perceptions in horticulture, public gardens must better market to and educate students and parents and expand youth volunteer programs and student internships.





The Brooklyn Botanic Garden's new Visitor Center is immersed into the garden landscape and combines a sustainable design approach with improved capacity for accessibility, interpretation, and visitor services.

PHOTO CREDIT: ALBERT VECERKA

**Nevison:** By thinking of new ways to connect disciplines of study, gardens can pull in new audiences who are eager to engage in meaningful public horticultural experiences. For instance, gardens could look at presenting new engineered technologies such as living walls, green roofs, and floating islands to educate the public about conservation and ecological restoration while maintaining these displays in an artful, inspiring manner.

**Sifton:** Gardens have to be smart and sophisticated about how they spread their messages. We can borrow from other fields like art, public relations, advertising, communications, and environmental psychology to help seed themes into our living landscapes and displays. While we all know how important it is to keep up with plant records and to label plants appropriately in a curated collection, moving beyond signage toward other forms of interpretation is vital. Eco-revelatory design, which is when a design element imparts a message and provides a learning moment without the need for signs or other more overt interpretation, can be used with thoughtful planning. Also, modeling sustainability at all levels of our organizations is another way to get a positive and motivating message across to our visitors and supporters.

**Stern:** Gardens need to make a concerted effort to ensure that their internal staffing and programmatic content are reflective of the communities in which they are located. Gardens also need to forge tactical alliances with other cultural institutions and leverage cross-promotional opportunities to engage new audiences. Lastly, gardens need to make more strategic use of technology to make themselves and their assets more dynamic, bridge the gap between our digital lives and the physical world, and engage the next generation of public garden professionals and supporters.

**What role could APGA play in assisting gardens to overcome these challenges and take advantage of these opportunities?**

**Jutila:** APGA could take the lead in measuring and documenting the economic impact public gardens have at the local, national, and international levels. APGA's commitment needs to extend beyond a snapshot, to a sustained commitment to measure the economic impact over time and the changing influences of the impact. Only by having this conclusive evidence of our industry's achievements will public gardens be able to take a strong foothold as a sector. The evidence will help magnify the activities of public gardens, and reveal them to be essential components of successful communities rather than just nice



*Gaia*, Ithaca Children's Garden's larger-than-life land sculpture, represents the natural and cultural heritage of the region while providing a wonderful play experience for children.

PHOTO CREDIT: ITHACA CHILDREN'S GARDEN

community amenities. The evidence should detail how public gardens are advancing their local economies, members of their communities, and their communities' livability.

In a similar effort, APGA can support public gardens by making an ongoing commitment to benchmarking public garden compensation, benefit packages, and strategies for staying competitive in the workforce.

**Martez:** To support public gardens' leadership role in rehabilitating the childhood experience of magic in nature, APGA can do what it does best: link gardens together to facilitate bigger thinking and innovation in current practices. And, APGA could go a step further by facilitating networks beyond public gardens to related fields.

**Moydell:** APGA can be a central force to galvanize efforts on important topics. Moving ahead, APGA can advocate for "big picture" priorities like climate change; advance knowledge through collaboration with other professional and academic organizations on topics like health and wellness; and provide tools, best practices, and research to better educate practitioners in the field. Further,

the APGA can help reposition public horticulture as a vibrant, professional career option by exposing the public to what we do, measuring the impacts of gardens on their communities, and tapping into existing professionals as mentors and resources.

**Nevison:** APGA should seek to partner with organizations that are leading the charge to merge horticulture with landscape art, architecture, and ecological restoration. One example is the Sustainable SITES Initiative administered by the US Botanic Garden, Lady Bird Johnson Wildflower Center, and the American Society of Landscape Architects. This collaboration is helping to educate developers and the public about the benefits of healthy, functioning, designed landscapes.

APGA should provide information and guidance to public garden institutions that want to develop initiatives but lack resources. By leveraging connections within APGA, smaller gardens can align themselves with larger peers to broaden their outreach and help share their story with a wider audience. By representing all of its member gardens and helping them market compelling horticultural ideas to

the public, APGA can ensure that public gardens remain relevant and exciting places in the future.

**Sifton:** APGA can continue to foster collaboration and a supportive network for public gardens, but it can also cross-pollinate the garden community with best practices from other related fields, so we can continue to make our sites and programs stronger and more resilient. Of course, with the world being threatened by species loss and other important conservation issues, APGA can also continue to support plant and environmental conservation initiatives in public gardens. The general public expects gardens to take a role in modeling sustainability and supporting plant conservation, so we must all help each other on this journey.

**Stern:** To help gardens remain relevant, APGA needs to intensify its efforts to articulate their value, celebrate their achievements, and advocate for their support. APGA also needs to blaze the trail for new methods of community engagement and continue to provide professional development opportunities to nurture the next generation of public garden leaders.



# STRATEGIC PLAN 2015-2020

Dwight Eisenhower famously said that “...plans are useless, but planning is indispensable.” (This resonates particularly well with APGA since our Vision Statement is “A world where public gardens are indispensable!”) But the General’s point is clear—good planning requires rigorous thought and preparation which leads to resiliency and adaptability once implementation of the plan begins. Circumstances will change and the actual plan will also necessarily change, but the process of planning ahead is critical, for individuals and for organizations. The “Plan” is less a specific road map from point A to point B than a series of guidelines and recommendations to make sure an organization is heading where it needs to go and making good progress in that direction.



The development of American Public Gardens Association’s 2015-2020 Strategic Plan represents a significant evolution for the association. In 2009 the board of directors recognized the need to evolve the organization in order to suit a burgeoning professional membership association. That recognition set the stage for a new executive director, a person with both the passion and the ability to take the association to the next level. As the newly appointed executive director, Dr. Casey Sclar, shaped the staff into the engaged and passionate team we have today. With the critical components of leadership and team in place it was easier to think about future, and thus the stage was set for the creation of a five-year strategic plan that would guide the organization. Similar to the words Casey used in his Director’s Note earlier in the magazine, the plan is evolutionary, not revolutionary, not departing from our core principles, but instead acting as a guide for providing a deeper and more fulfilling connection to our members through strategic thought and action.

I’d like to thank everyone who helped with the effort. The input from our membership was key to developing a relevant plan. Annie Gallagher of Gallagher Consulting Group, an Ohio-based firm which works with businesses and non-profit organizations around the country, ably led the process, and her experience and insights were invaluable. Casey and his staff spent a lot of time with Gallagher, but more important, they will carry the additional work of successfully implementing the plan. And finally I’d like to thank my fellow board members for their full and active engagement in the process.

APGA is excited to share with you, our valuable members, the 2015-2020 Strategic Plan.

Paul Kuenstner  
APGA Director at Large  
Chair, Board of Directors Strategic Planning Committee  
Vice President, Fidelity Foundation

*APGA’s 2015-2020 Strategic Plan has five goals that represent the next step in the evolution of the American Public Gardens Association. The plan enables APGA to deliver member value, promote the awareness and importance of public gardens, demonstrate and champion their leadership on critical issues, and support public horticulture with high-quality, comprehensive professional development options that directly serve our diverse membership.*



PHOTO CREDIT:  
MERCER BOTANIC GARDENS



Windmill Island Gardens  
PHOTO CREDIT: SARA SIMMONS

**VISION:**  
A world where public gardens are indispensable.

**MISSION:**  
APGA serves public gardens and advances them as leaders, advocates, and innovators.



# APGA 2015-2020 STRATEGIC PLAN

## **GOAL 1: Member Value and Engagement**

Drive member value and engagement by boosting communication and outreach efforts and offering quality products, technology, and services that meet, anticipate, and exceed members' needs.

### *PRIMARY GOAL OBJECTIVES:*

1. Develop a coordinated member communications campaign to articulate the value of APGA.
2. Improve technology to increase member use and access to APGA's offerings.
3. Improve the quality of the user interface to enhance member experience.
4. Develop a customized institutional "member value stewardship report" which displays all the products, services, and personal contacts each APGA member uses per year.
5. Review member dues structure.
6. Continue to support and leverage the North American Plant Collections Consortium (NAPCC) program and align it more closely with the APGA brand.
7. Increase public awareness of serious plant pests and diseases and demonstrate leadership in early detection through Sentinel Plant Network (SPN) Garden activity in all 50 states, while also having SPN align as closely as possible with APGA's brand.

## **GOAL 2: Professional Development**

Provide a roadmap to leadership at all levels by offering professional development opportunities and resources to members.

### *PRIMARY GOAL OBJECTIVES:*

1. Review current educational offerings and adapt curricula to meet changing and varying needs of APGA members.
2. Create targeted curricula to meet the budget and needs of all sizes and types of member gardens.
3. Create mechanisms to encourage and enable members to access programs, share data and resources, and make connections with each other.
4. Review and analyze APGA's professional sections to ensure that they are efficiently meeting the needs of the various segments of the association's membership.

## **GOAL 3: Advocacy and Leadership**

Elevate and advance the unified voice of APGA on behalf of the industry and its members by communicating the vital role of public gardens to policy makers and public officials.

### *PRIMARY GOAL OBJECTIVES:*

1. Position APGA as an industry thought leadership facilitator and develop a compelling case for the value of public gardens using benchmarking research and creative marketing techniques.
2. Empower members to advocate on behalf of their individual gardens and the collective membership of APGA by providing relevant information, thought leadership pieces, grassroots training, and other tools.
3. Increase education and cultivation efforts with key policy influencers and public officials about the value of public gardens to help encourage government and other funding sources for APGA's members.
4. Provide members the resources and platform to pursue sound public policy on critical issues such as plant conservation, biodiversity, and the science of climate change.

## **GOAL 4: Awareness**

Dramatically increase awareness of APGA and its members by strengthening the brand and articulating the value of public gardens.

### *PRIMARY GOAL OBJECTIVES:*

1. Implement a refresh of the APGA brand to refocus its image.
2. Develop a comprehensive annual communications plan with key messages and tactics.
3. Increase the number of quality, favorable media hits.
4. Integrate and expand the use of digital communication and technology (i.e., Internet, social media, and mobile marketing) to increase awareness of public gardens and APGA.

## **GOAL 5: Organizational Excellence**

Maintain a commitment to organizational excellence and increase sources of diverse funding.

### *PRIMARY GOAL OBJECTIVES:*

1. Create and implement a five-year organizational fundraising and development plan.
2. Cultivate strategic partnerships and other relationships to diversify and broaden the base of future members, stakeholders, and supporters.
3. Foster a dynamic workplace dedicated to developing staff so that they can reach their potential and advance the mission of APGA.
4. Maintain excellence by ensuring regular operations and procedures comply with those of a reputable accrediting organization and position the association as a leading nonprofit organization.
5. Upgrade and increase the efficient use of technology in all operations.
6. Create a metric dashboard with key performance indicators (KPIs) to track organizational progress and provide standard reports to the Board of Directors.
7. Recruit, develop, and maintain a highly qualified and diverse Board of Directors and keep alumni Board members engaged.





---

*Louteridium* is becoming more prevalent in landscape containers that use tropical plants. Revered for its elegantly graceful, closed buds, its open flowers may pale in comparison when it comes to the best aesthetics. Such delicate features make a welcome contrast to a complement of large, bold leaves and a somewhat random growth habit.

---

PHOTO CREDIT: ROBERT E. LYONS

# GROWING TOGETHER

*Toledo Botanical Garden and Crosby Festival of the Arts*



TBG works diligently to give artists a fantastic experience. From providing them with everything from a friendly and accommodating staff to delicious meals and an air-conditioned Artist's Lounge, we treat them as guests.

PHOTO CREDIT: TOLEDO BOTANICAL GARDEN ARCHIVES

KAREN RANNEY WOLKINS

For a three-day stretch in late June at Toledo Botanical Garden (TBG) in Toledo, Ohio, it is easy to become disoriented amid the sea of small white tents pitched on what is now known as the Festival Lawn. But it's a delightful disorientation. For beneath each tent is the creative expression of artists from as far away as Arizona, California, and Canada, and from as close as down the street. Over 220 artists gather each year for Crosby Festival of the Arts—the longest running, juried arts festival in the region. More than ten thousand people from all over the area flock in to browse, buy, or merely wander through.

The arts, an integral part of the Garden's operation since its founding

fifty years ago, are woven directly into the mission statement: "Toledo Botanical Garden inspires and nurtures the joy of growing through stewardship of horticulture, the arts and nature." In addition to the festival, TBG features a vibrant Artist's Village that is home to seven artist guilds. The gift shop showcases the work of local artists, and the Garden also has the largest installation of Toledo Arts Commission public art. TBG gives its visitors the unique experience of the arts in the context of nature each and every day.

Art festivals are often hosted on the streets of cities or villages, with artists setting up displays on hot pavement or unforgiving cement. In a botanical garden, the environment becomes a

beautiful and comfortable backdrop for a fascinating collection of art in many media: glass, sculpture, photography, ceramics, fiber, jewelry, painting... "As artists, my husband and I do shows throughout the United States," shares Tina Willis-Lorenz, from Bella Vista, Arizona. "We place Crosby Festival of the Arts among our favorites. Not only is it a delight to exhibit at this wonderful show, but it is also nestled in such beautiful surroundings. As an artist, it is the perfect setting for a top-class art show, and, as a writer, it is a wonderful place to escape to and get lost in the beauty and tranquility of it all. TBG should be among the top destinations to visit in the USA."

Events of this magnitude aren't established, nor do they survive, on a



TBG's commitment to showcasing the arts is evident at its Elmer Drive entrance. Instead of a more traditional entrance sign, the Garden commissioned Harry Wheeler of Akron, Ohio, to create a work that uniquely identifies TBG as an extraordinary place. Nine shafts of wood were carved into rhythmic geometric shapes that represent "the spirit of art, life and the yearning of the earth to spring forth with multitudinous forms of delight," according to the artist.

PHOTO CREDIT: JONATHAN MILBRODT

Coming up with an effective layout for 220 booths is an art in and of itself. Festival-goers need a logical flow, and it's critical that placements of artists are balanced and rational.

PHOTO CREDIT: TOLEDO BOTANICAL GARDEN ARCHIVES



The setting is spectacular. Festival visitors and artists often explore beyond the sea of tents to enjoy Garden features.

This advertisement ran in *The Toledo Blade* in 1976 and shows how comprehensively the Festival embraced all the arts. That tradition continues today.

PHOTO CREDITS:  
 TOLEDO BOTANICAL GARDEN ARCHIVES

whim. "It's a year-long endeavor," shares TBG Marketing Director Matt Killam. "As soon as we load out the last artist, we begin critiquing our process, searching for ways to improve the experience for next year. Hundreds of hard-working community volunteers, dozens of generous sponsors, and a lean little team of dedicated staff members collaborate to bring this delightful weekend to life." With fifty years of success, Toledo Botanical Garden must be doing something right.

Crosby Festival of the Arts has become a critical part of the TBG

budget. Like any non-profit organization, TBG is constantly finding creative ways to generate revenue. Arts-based events currently make up more than 25 percent of the Garden's income, with Crosby Festival of the Arts making up more than half of that. Finding the balance between the focus on events and maintaining the integrity of the Garden will continue, but there is no arguing that events draw a diverse audience.

"The logistics of getting two-hundred-plus artists and their art into a garden without damaging the collection is challenging," points out Horticulture

Director Doug Conley. "However, the artists are very respectful and appreciate the beautiful setting. The garden and the festival have essentially 'grown up together,' so the sidewalks are wide and can support vehicles; the Festival Lawns are accessible from service roads; and display beds are to the perimeter of the lawns."

Overall the festival is a magnificent opportunity to weave the art of nature with the artistic expression of people. It's a marriage that continues to stand the test of time, and it's a delightful way for us to engage with our community.

*Karen Ranney Wolkins is the executive director of Toledo Botanical Garden. She may be reached at [karen.ranneywolkins@toledogarden.org](mailto:karen.ranneywolkins@toledogarden.org).*





## Dramm Fertilizer Cart

A handy, portable fertilizer injector cart that can apply hundreds of gallons of liquid fertilizer over large areas. With no electric parts, this cart can be used in tight spaces with a standard hose hookup. At Pinecrest Gardens in Miami, Florida, we use it with custom-made liquid fertilizers to fertilize plants with special fertilizer needs.

For product information, please see [www.dramm.com](http://www.dramm.com).

*Craig Morell is a horticulturist at Pinecrest Gardens. He may be reached at [CMorell@pinecrest-FL.gov](mailto:CMorell@pinecrest-FL.gov).*

PHOTO CREDIT: KRISTY ALBUR

## Braiding Sweetgrass

Poetic in its writing style, the book uses Native American culture and storytelling to draw the reader into the world of nature's gifts. The language is easily approachable, regardless of one's scientific knowledge of plants. Author Robin Kimmerer holds a PhD in botany and serves as Distinguished Teaching Professor at State University of New York College of Environmental Science and Forestry. She is a member of the Citizen Potawatomi Nation. *Braiding Sweetgrass* is the featured title for the 2015 Longwood Gardens Community Read.

To order a copy, please see [milkweed.org/shop/product/351/](http://milkweed.org/shop/product/351/).

*Submitted by David Sleasman, library and information services coordinator, Longwood Gardens.*

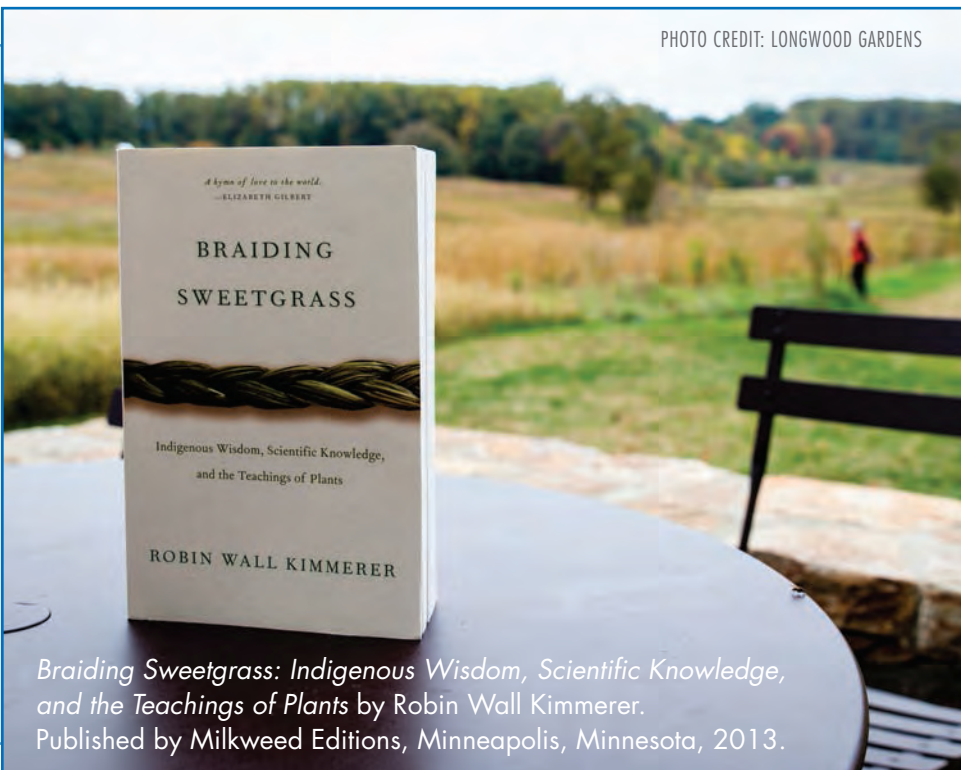


PHOTO CREDIT: LONGWOOD GARDENS

*Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* by Robin Wall Kimmerer. Published by Milkweed Editions, Minneapolis, Minnesota, 2013.

# The Race for PLANT SURVIVAL

JANET MARINELLI

Trees are the largest, longest-lived, and most charismatic of plants. They also make life difficult for those trying to preserve them. But it's not impossible—every arboretum has a specialist who can make a difference. *(See story online.)*

PHOTO CREDIT: WIKIMEDIA COMMONS



A cage protects a native lady slipper orchid from deer at the small remnant of native pineland being restored at the Sister Mary Grace Burns Arboretum in New Jersey. *(See story online.)*

PHOTO CREDIT: MICHAEL GROSS

## What do an Ice Age safari, test tube plants, and gene hunts have to do with your garden?

Imagine we're in a Land Rover, cruising around south central Utah ten thousand to twenty thousand years ago, on the lookout for local wildlife. Bison and bighorn sheep graze among herds of mastodons and mammoths. Giant ground sloths the size of modern-day elephants stand on powerful hind legs looking for something to eat. Prehistoric camels weighing close to two tons are pursued by dire wolves and saber-toothed cats. Muskoxen keep an eye out for the giant short-faced bear, one of the Pleistocene epoch's most formidable predators.

What's wrong with this picture? Ice Age megafauna are certainly impressive, but we're chlorophyll addicts, and what we really want to see are plants. We hop out of the vehicle to admire a meadow full of bright yellow wildflowers about two feet tall.

Fast forward to the twenty-first century, and this plant has been named the autumn buttercup, *Ranunculus aestivalis*. A relict of the wetter Pleistocene, it is the showiest and most graceful buttercup in the West. The critically imperiled species now survives in one distinct habitat in the world, spring-fed meadows on the western slope of Utah's Sevier River outside the town of Panguich—a rare microhabitat in otherwise dry, open country. In this place where mastodons may once have roamed now stand fourteen motels, four restaurants, three fast food joints, five gas stations, three gas and convenience stores, a fabric shop, two grocery stores, two hardware stores, a hospital and clinic, real estate offices, two places to buy Indian crafts, and a Daughters of Utah Pioneers Museum all surrounded by a sea of ranches.

Once considered as dead as the mastodon, the autumn buttercup was



rediscovered in a pasture in 1982. Yet like so many species, it is threatened by the loss and degradation of its habitat. And, like so many plants at risk as climate change intensifies, it may not be able to adapt to the prolonged arid conditions to come. What follows is the story of the autumn buttercup, and how its fate, like that of countless other plants, is increasingly in the capable hands of horticulturists and scientists at public gardens.

### Horticulture to the Rescue

In hopes of saving the buttercup, in 1991 The Nature Conservancy purchased the pasture land, calling it the Sevier Valley Preserve. But six years later, the population had still plummeted from over four hundred plants to fewer than twenty. The species was put on the federal List of Endangered and Threatened species, and two public gardens, the Center for Conservation and Research of Endangered Wildlife (CREW) at the Cincinnati Zoo & Botanical Garden and The Arboretum at Flagstaff; the US Fish & Wildlife Service; and Weber State University teamed up with The Nature Conservancy to restore the buttercup in its native habitat.

A small number of seeds from the few remaining plants were collected and sent to CREW where state-of-the-art micro-propagation techniques were used to germinate them in test tubes. In the words of Valerie Pence, CREW's director of plant research and the maestro of micro-propagation, "Each seed produced a genetically unique clone that was multiplied by tissue culture—a technique in which the tissues are grown on an artificial sterile medium." The resulting shoot-producing cultures can be propagated indefinitely, she says, and when plants are needed, they're transferred to another medium and encouraged to form roots.

Once the tissues developed leaves and a simple root system, they were moved to The Arboretum at Flagstaff. There they were potted and grown in a greenhouse

until each filled a six-inch pot. After hardening off in a lathe house, the buttercups were finally returned to the Sevier River valley in 2007, ready to take on the dry winds and heat of their ancestral home.

Reintroduction can be a nail-biter, and there is no easy ending to this story. So far, buttercups reared *in vitro* have been planted out three times, and continued reintroductions will be necessary until there is a self-sustaining population at the Sevier Valley site. A few years ago, another population was discovered on a nearby ranch, providing new seeds for additional *in vitro* lines and greater genetic diversity, giving the species more of a fighting chance.

*(Editor's note: Expanded coverage—including conservation efforts by gardens large and small, as well as governmental agencies here and abroad, and a basic conservation toolkit pdf for download—can be found at [www.publicgardens.org/content/current-public-garden](http://www.publicgardens.org/content/current-public-garden).)*

*Janet Marinelli is principal of Blue Crocus Publishing + Interpretation and a member of the Public Garden magazine Editorial Advisory Group. She may be reached at [jmarinelli@earthlink.net](mailto:jmarinelli@earthlink.net).*



Autumn buttercups are ready to take on the heat and dry winds of their ancestral home along Utah's Sevier River.

PHOTO CREDIT: SHEILA MURRAY



A relict of the Pleistocene epoch, the autumn buttercup is one of a growing number of plants whose fate is in the capable hands of horticulturists and scientists at public gardens. A plant propagated *in vitro* is ready to be potted in soil.

PHOTO CREDIT: SHEILA MURRAY



*P. vialli* was introduced in 1906 by Forrest from the damp, alpine meadows of Yunnan and Sichuan, China. One of its common names, poker primrose, comes from the flower spikes' similarities to *Kniphofia*.

# *Primula*

AT JENSEN-OLSON ARBORETUM

MERRILL JENSEN



Native to the mountain ranges of north-central China, *P. macimowiczii* catches the eye with its scarlet flowers and reflexed petals.



*P. alpicola* var. *alpicola* is a sweetly scented, easy-to-grow species hailing from the damp meadows of the Tsangpo basin of southeast Tibet.



*P. wilsonii* is another fine plant from the mountains of Yunnan and Sichuan.

ALL PHOTO CREDITS: MERRILL JENSEN

Each spring, racks of Skittles®-colored flowers arrive at the assorted box and grocery stores around the country and provide a welcome splash of color after the gray days of winter. This kaleidoscope of color is many gardeners' first and only experience with *Primula*. The widespread genus lends its name to the family *Primulaceae*—its name taken from *primavera*, Italian for spring, as the majority of species bloom at that time. It's unfortunate that many gardeners characterize this incredibly diverse genus as a disposable annual and reserve bed space for more interesting plants. For the longest time, I also viewed *Primula* as too pedestrian to bother with. That all changed when I moved farther north in 2007 to Juneau, Alaska, to become the first arboretum manager of the Jensen-Olson Arboretum. Our founder and benefactor, Caroline Jensen (no relation, just good plant karma) was very fond of the genus and planted accordingly.

Juneau's cool, maritime climate proves to be absolutely perfect for most *Primula* cultivation. The accompanying

chart illustrates Juneau's copious precipitation, a condition necessary for the successful cultivation of many species. Even in "wet" Seattle, some of the Sinohimalayan species will languish. My first spring on this job found me in beds awash in the colors of plants I knew little to nothing about. I enthusiastically embraced this situation (and the rain), found a copy of John Richards' *Primula*—the definitive reference for the genus, and rolled up my sleeves to see what had so captivated Caroline.

The genus *Primula* is quite large with more than four hundred species distributed around the Northern Hemisphere and one disjunct species native to the southern tip of South America. Being such a large genus, it has been further divided by botanists into thirty-seven Sections. The vast majority can be found growing in the high, damp meadows of the Sinohimalaya where 334 species are native. They are also familiar spring wildflowers of the European countryside where they have been appreciated for generations. As many species are native to woodlands and cool mountain conditions, they dislike

extremes in temperature and do poorly in hot, dry summer climates. Their broad, fleshy leaves have many stomata and will rapidly wilt if grown in areas with harsh, afternoon sun. It is also necessary to provide the majority of them with a rich, organic soil that stays constantly moist. The exceptions, of course, are the alpine species which require a rapidly draining, gritty soil that mimics the conditions of their high-mountain, scree habitats.

The fifteen-acre Jensen-Olson Arboretum opened as a public garden in 2007 as a City and Borough of Juneau facility under the direct oversight of the Southeast Alaska Land Trust (SEAL Trust). Starting in 1992, Caroline had partnered with SEAL Trust to establish a conservation easement on her property which stipulated that, upon her passing, it would become the Arboretum. In 1961, she and her husband inherited this quintessential bush Alaskan homestead where previously, a German immigrant family mined for gold; fished commercially for salmon, herring, and halibut; and raised mink for pelts. Caroline was an accomplished gardener and immediately began to transform the

utilitarian property into one of Juneau's most admired gardens. Among her early successes were plants grown from a pack of 'Pacific Giants' *Primula* seed (some of which still survive in the collection). From this humble beginning, she began branching out and acquired plants and seed of other *Primula* species. She soon had drifts of thousands of *Primula* that graced her garden beds each spring. I arrived on the scene just as these beds started to show their full color in the spring of 2007. Soon after, I began to realize that this gift provided an opportunity and the foundation for designation as a national collection through APGA's North American Plant Collections Consortium (NAPCC). But with the opportunity came questions; would a new institution with limited resources (small staff and small operations budget) be able to support a national collection? While attending the 2010 plant collections symposium at Quarryhill Botanical Garden in Glen Ellen, California, I spoke with NAPCC Manager Pam Allenstein, who answered our questions and enthusiastically suggested we move forward with our application. And so began the two-year process to complete all the steps required for national collection status which included completing the comprehensive application form, drafting and ratifying a collections policy, providing a letter of institutional commitment, submitting a current acquisitions list of the collection, hosting an on-site evaluation, and paying an application fee. The Arboretum is governed not only by SEAL Trust, but also by an advisory board which approved each of these steps along the way.

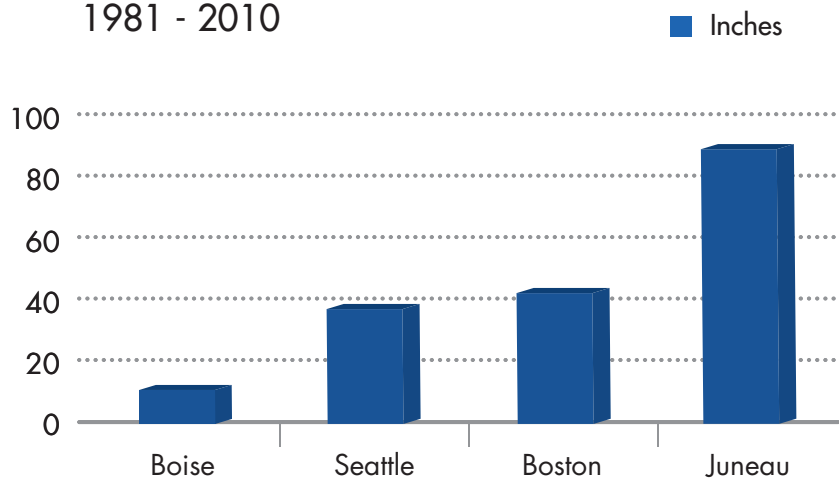
When the Arboretum opened its doors to the public in 2007, Caroline's *Primula* collection consisted of thirty-three species and cultivars. Being a compulsive plant collector and having discovered a new and worthy genus, I began sourcing new taxa from local growers, nurseries farther afield, and

from seed exchanges including the American Primrose Society and the North American Rock Garden Society. At the time of our on-site evaluation in 2012, we had grown the collection to sixty-five taxa and were beginning to source seed internationally. To further expand the collection, I needed to look overseas for new sources which offered seed not commercially available in North America. As with many endeavors in our community, networking has proved invaluable in finding new connections for further expanding the collection. Introductions to collectors actively working in the Himalaya have allowed us to purchase shares in expeditions of wild-collected material. In working with plant societies, I occasionally come across seed that has been misidentified; this adds an additional complication to proper curation. In a genus that can sometimes be demanding to identify, I am thankful to Pam Eveleigh, webmaster of *Primula* World—an invaluable resource for *Primula* identification—and to growers near and far, all of whom have added to the growing body of knowledge regarding identification. In keeping with curatorial standards and as a benefit to

garden visitors, the majority of the collection has been labeled with laser-etched, anodized aluminum labels purchased with grants from the Juneau Garden Club (Caroline was a longtime member) and from the Stanley Smith Horticultural Trust. The collection is also labeled with zinc accession labels to assist with identification when plants are not in bloom and for ease of inventory.

The underpinning of a national collection is its database. Our original database was built in Microsoft Access, an acceptable software program for basic recordkeeping, but one with limitations. Desiring a more sophisticated and robust solution, we submitted a grant application to the Rasmuson Foundation requesting a technology upgrade. The grant was awarded in December 2014 and will be implemented with several components. These include a stand-alone laptop computer to run IrisBG and other software and hardware to support our mission. We selected IrisBG after learning how satisfied other gardens are with its capabilities and level of customer support. IrisBG also allows mapping (our 2015 collections project) through one of its modules.

## Average Annual Precipitation 1981 - 2010



(Data source: National Climatic Data Center, NOAA)



*Primula* bloom reaches its peak in mid-May. *P. elatior* – yellow, *P. denticulata* – lavender and magenta, *P. x pruhoniciana* ‘Dorothy’ – white, *P. juliae*, *P. x juliana*, *P. x pubescens* cv. and *P. x polyantha* cvs. – shades of dark pink

ALL PHOTO CREDITS: MERRILL JENSEN

With nearly two hundred taxa currently in the collection, what does the future hold? With a finite amount of space and a mission to balance aesthetics and diversity, I look forward to expanding the collection by sourcing seed via other gardens and collectors around the globe. We are planning a study trip to the Royal Botanic Garden Edinburgh, Scotland, where they have been working with the genus for more than one hundred years. Their collections archives read like a *Who’s Who* of the great collectors—Forrest, Ludlow, Rock, Sherriff, and Ward among others. Hands-on experience with the numerous species of type specimens housed in their herbarium will be invaluable as we create voucher herbarium specimens for future reference. That project is planned for 2016. Many of the European and North American species grow in a drier climate with more alkaline soils than what Juneau’s climate provides. With an eye toward a multi-site designation, partnering with other gardens that already have *Primula* as part of their collection would be a natural affiliation. We currently supply seed to various domestic exchanges and hope to start

sending seed abroad with the 2015 harvest. I’m pleased to report that we are the largest seed donor to the American Primrose Society’s annual exchange in both volume of seed and diversity of species. Being able to offer seed at this level is only possible because of a variety of factors that all come together in this unique location—weather that is conducive to the majority of the genus, dedicated seasonal gardeners who tend the plants, and a network of people willing to share their knowledge for a common goal.

In searching for an answer to my original question about whether or not we could develop and steward a national collection, I have found human relationships to be essential. Through building partnerships among passionate plant people, this remote, small garden has achieved national collection designation and is poised to share the resources that have been entrusted to its care.

*Merrill Jensen is the arboretum director and horticulturist at the Jensen-Olson Arboretum and can be contacted at [merrill.jensen@juneau.org](mailto:merrill.jensen@juneau.org).*



The cowslip, *P. veris* subsp. *veris*, is one of the most widespread and familiar primroses. It can be found from the meadows and woodlands of Ireland and Norway eastward to the Pacific coasts of Siberia.



The black and silver-striped calyx of *P. secundiflora* adds visual interest to the drooping hoop-shaped, magenta corollas of this stunning species.

# FLORA OF NORTH AMERICA CHRIS WOODS

## North of Mexico

Almost two centuries ago, a *Flora of North America* was proposed by Asa Gray and John Torrey, who published two volumes before being pulled away to other projects. In the past half century, work on the project resumed. Beginning in 1964, it was led by Mildred E. Mathias, director of University of California, Los Angeles Botanical Garden and the first executive director of the American Association of Botanical Gardens and Arboreta (today's APGA). Peter Raven, chair of the editorial committee, became program director three years later. Good progress was made, but in the end funding was not available and the project was suspended in 1973.

In 1982, botanists from the United States and Canada met at the Missouri Botanical Garden (MBG) to discuss resuming collaborative preparation of a *Flora of North America* that would focus on geographical areas north of Mexico. That meeting was the basis for the formation of the current *Flora of North America* (FNA) project.

FNA is coordinated by the *Flora of North America Association*. Many public gardens have contributed time, expertise, staff, and money to the project. MBG and Peter Raven, Heidi Schmidt, James Zarrucchi, and Nancy Morin have been at the forefront of the effort. Nancy

Morin, former assistant director at MBG and executive director of the APGA (1996-2000), has been one of the major editors for *Flora of North America* for more than twenty-five years.

Lead editors and editorial centers are also located at Harvard University Herbaria, Hunt Institute for Botanical Documentation, Illinois Natural History Survey, Canadian Museum of Nature, Marie-Victorin Herbarium at the University of Montreal, University of Michigan Herbarium, and the R. L. McGregor Herbarium at the University of Kansas.

Over nine hundred botanists are providing authoritative information on the names, characteristics, and geographical and ecological distributions of twenty thousand species of plants native or naturalized in North America, north of Mexico. Professional botanical artists work closely with authors and editors, and over six thousand illustrations have been produced to date. The United States Botanic Garden, the Huntington Botanical Gardens, and Naples Botanical Garden have supported preparation of some of the most recent illustrations.

Funding is always an issue, but recent successes and renewed vigor give cause for great optimism. Generous support from the Chanticleer Foundation in

2000-2008 was critically important and has driven much of the work in recent years. An anonymous public garden has provided additional support.

*Flora of North America North of Mexico* Volume 28, the second volume on bryophytes (mosses), was published in August 2014. Coordinated from the editorial center at the University of Montreal and published early this year, Volume 9, *Magnoliophyta: Picramniaceae to Rosaceae*, is the eighteenth volume to be published thus far. For the remaining twelve volumes, all genera in ninety-four families of vascular plants have been submitted, and treatments of 867 genera and 5,800 species are either nearly ready for publication or submitted and in various stages of editing, review, and revision.

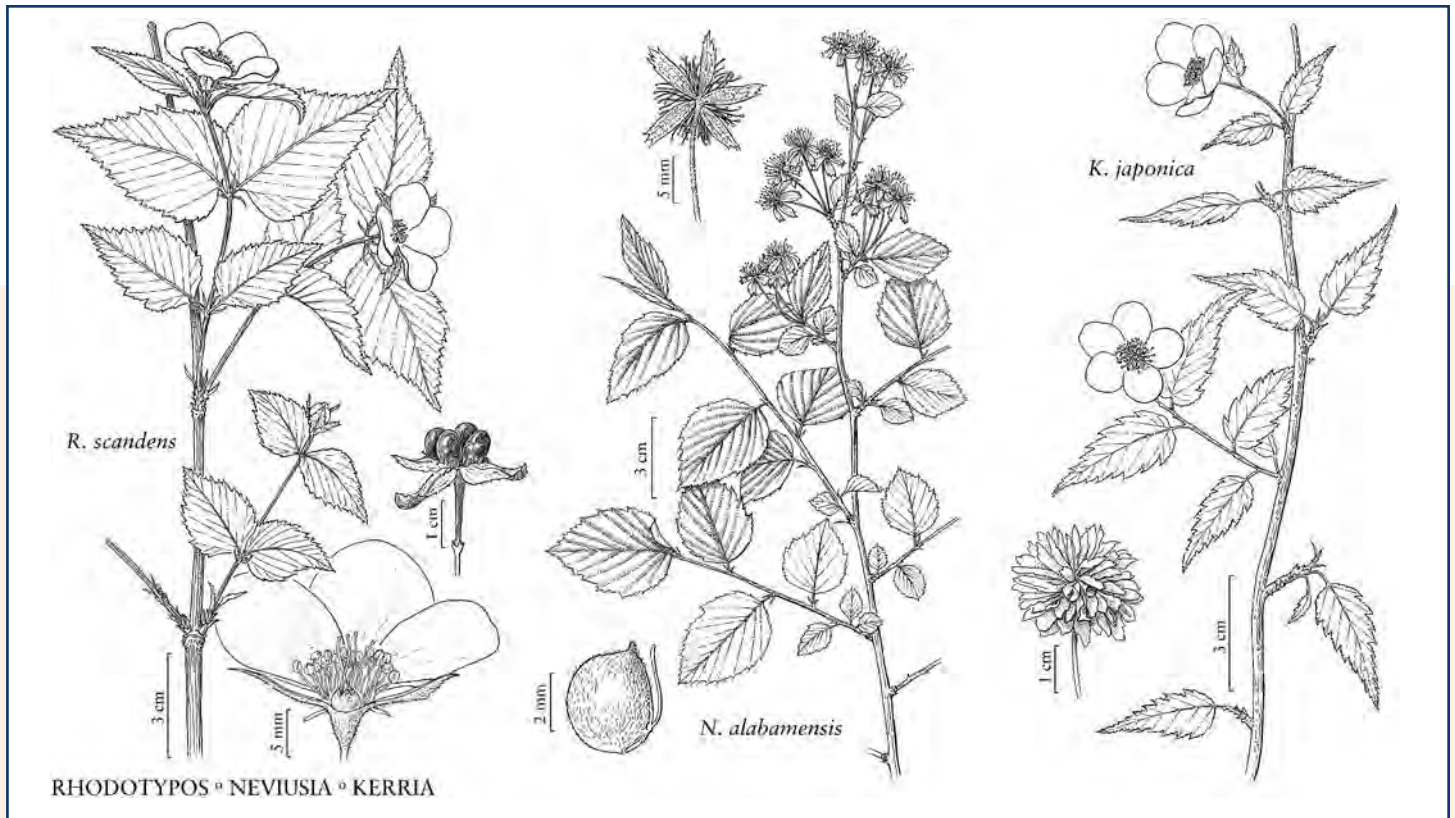
*(Editor's note: Due to space concerns, this article was edited. To read the complete article, please go to [www.publicgardens.org/content/current-public-garden](http://www.publicgardens.org/content/current-public-garden).)*

*Flora of North America North of Mexico volumes can be purchased from Oxford University Press. Content is available online on the FNA website [www.floranorthamerica.org](http://www.floranorthamerica.org) and through JSTOR. Constant comment is available on the *Flora of North America* Facebook page.*

*Chris Woods, a botanical entrepreneur, is advancement advisor for the *Flora of North America Association*. He can be reached at [chriswoods@earthlink.net](mailto:chriswoods@earthlink.net).*



Over nine hundred botanists are providing authoritative information on the names, characteristics, and geographical and ecological distributions of twenty thousand species of plants native or naturalized in North America, north of Mexico.



## Flora of North America from Oxford University Press

### Volume 9

Magnoliophyta: Picramniaceae to Rosaceae  
January 2015 | 735 pp.  
9780195340297 | Hardcover | \$95.00

### Volume 28

Bryophytes: Mosses, Part 2  
September 2014 | 736 pp.  
9780190202750 | Hardcover | \$95.00

### Volume 7

Magnoliophyta: Salicaceae to Brassicaceae  
2010 | 832 pp.  
9780195318227 | Hardcover | \$95.00

### Volume 8

Magnoliophyta: Paeoniaceae to Ericaceae  
2009 | 642 pp.  
9780195340266 | Hardcover | \$95.00

### Volume 27

Bryophytes: Mosses, Part 1  
2007 | 734 pp.  
9780195318234 | Hardcover | \$95.00

### Volume 24

Magnoliophyta: Commelinidae (in part): Poaceae, Part 1  
2007 | 944 pp.  
9780195310719 | Hardcover | \$95.00

### Volume 19

Magnoliophyta: Asteridae (in part): Asteraceae, Part 1  
2006 | 610 pp.  
9780195305630 | Hardcover | \$95.00

### Volume 20

Magnoliophyta: Asteridae (in part): Asteraceae, Part 2  
2006 | 690 pp.  
9780195305647 | Hardcover | \$95.00

### Volume 21

Magnoliophyta: Asteridae (in part): Asteraceae, Part 3  
2006 | 642 pp.  
9780195305654 | Hardcover | \$95.00

### Volume 5

Magnoliophyta: Caryophyllidae, Part 2  
2005 | 690 pp.  
9780195222111 | Hardcover | \$95.00

### Volume 4

Magnoliophyta: Caryophyllidae, Part 1  
2004 | 584 pp.  
9780195173895 | Hardcover | \$95.00

### Volume 25

Magnoliophyta: Commelinidae (in part): Poaceae, Part 2  
2003 | 814 pp.  
9780195167481 | Hardcover | \$95.00

### Volume 23

Magnoliophyta: Commelinidae (in part): Cyperaceae  
2003 | 640 pp.  
9780195152074 | Hardcover | \$95.00

### Volume 26

Magnoliophyta: Liliidae: Liliales and Orchidales  
2003 | 752 pp.  
9780195152081 | Hardcover | \$95.00

### Volume 22

Magnoliophyta: Alismatidae, Arecidae, Commelinidae (in part), and Zingiberidae  
2000 | 384 pp.  
9780195137293 | Hardcover | \$95.00

### Volume 3

Magnoliophyta: Magnoliidae and Hamamelidae  
1997 | 616 pp.  
9780195112467 | Hardcover | \$95.00

### Volume 2

Pteridophytes and Gymnosperms  
1993 | 496 pp.  
9780195082425 | Hardcover | \$95.00

### Volume 1

Introduction  
1993 | 400 pp.  
9780195057133 | Hardcover | \$95.00



To be published in 30 volumes, *Flora of North America* represents the first and only comprehensive taxonomic guide to the extraordinary diversity of plant life blanketing our continent north of Mexico.

OXFORD  
UNIVERSITY PRESS

EXCLUSIVE DESIGN | SOLID TEAK CONSTRUCTION | LASTING QUALITY

# Experience the Quality First Hand.



T1045A0005

**VISIT OUR SHOWROOM**  
*See hours and directions at [www.CountryCasual.com](http://www.CountryCasual.com)*

301.926.9195 | 800.289.8325

**COUNTRY CASUAL®**  
TEAK OUTDOOR FURNITURE | SINCE 1977



# ORIGAMI IN THE GARDEN



[origamiinthegarden.com](http://origamiinthegarden.com)  
505.471.4688

APGA Professional  
Development Symposia

## NATIVE PLANTS

Cultivating the  
Future of Native  
Plants: Conservation  
& Design

March 18-20, 2015 | Austin, TX

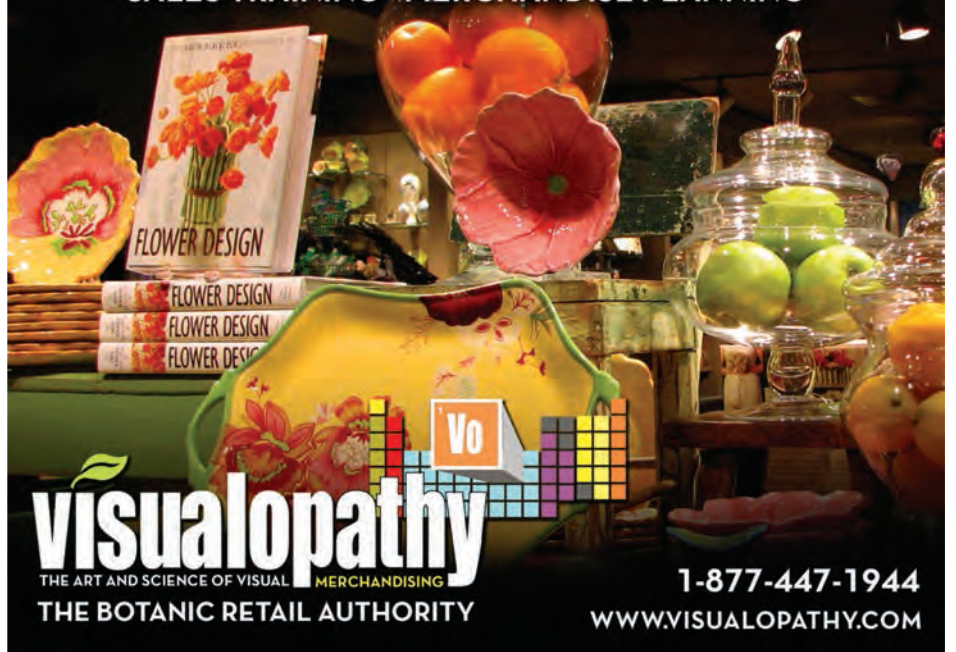


hosted by

For information or to register:  
[publicgardens.org](http://publicgardens.org)

## YOU KNOW BOTANICAL. WE KNOW RETAIL. LET'S TALK.

PRODUCT SOURCING • VISUAL MERCHANDISING  
SALES TRAINING • MERCHANDISE PLANNING



**visualopathy**  
THE ART AND SCIENCE OF VISUAL MERCHANDISING  
THE BOTANIC RETAIL AUTHORITY

1-877-447-1944

[WWW.VISUALOPATHY.COM](http://WWW.VISUALOPATHY.COM)

## Plant Cobb's Frogs In Your Garden And You'll Grow Visitors Like Magic



As directors of gardens that have hosted our exhibit will happily tell you, ours is an amazing exhibit costing about half as much as exhibits you may be considering.

And yet it has increased visitors to gardens by as much as *sixty* percent.

Our exhibit is easy to install, too. No need for cranes. Or forklifts. Or bulldozers.

All you need do is simply invite us to plant our exhibit in your garden and you'll grow visitors like magic.

It's that easy.

*Ribbit The Exhibit*

(910) 617-2195

[www.ribbitexhibit.com](http://www.ribbitexhibit.com)



The Children's Garden  
Ft. Worth Botanic Garden

Cindy Tyler, Principal  
[www.terradesignstudios.com](http://www.terradesignstudios.com)



Creating landscapes that inspire, teach and succeed.

**Illuminating.  
Inspiring.  
Insured.**



The safeguarding of your institution is nothing to be taken lightly.

BHS offers the specialized expertise needed to assist your Public Garden with insurance and risk management choices.

**Sharon Van Loon, CPCU**  
[svanloon@bhsins.com](mailto:svanloon@bhsins.com)

**Kim Slager CRM, CIC**  
[kslager@bhsins.com](mailto:kslager@bhsins.com)



**Berends | Hendricks | Stuit**

1.800.350.7676 • [bhsins.com](http://bhsins.com)

Image of: Atlanta Botanical Gardens - Garden Lights Exhibit



# CALL FOR ENTRIES

American Society of Landscape Architects 2015 Awards

**Professionals:** Entry payments and submissions are due by March 27, 2015.

**Students:** Entry payments and submissions are due by May 22, 2015.

[www.asla.org/2015CFE](http://www.asla.org/2015CFE)



**LANDSCAPE ARCHITECTURE MAGAZINE**

THE MAGAZINE OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

Sponsored by

VICTOR  STANLEY™

*Create a timeless moment.™*

## CATEGORIES:

General Design

Residential Design

Analysis & Planning

Research

*in partnership with the Council of Educators in Landscape Architecture*



Communications

Landmark Award

Student Collaboration

Student Community Service

## AWARDS PRESENTED:

November 6-9, 2015  
at the ASLA Annual Meeting and EXPO  
in Chicago.

2014 LANDMARK AWARD

Norman B. Leventhal Park at Post Office Square by Halvorson Design Partnership, Inc.

Photo: Ed Wonsek



**NEXT ISSUE**

Impromptu Garden Exhibits  
Waterlilies  
Retail Services



10% total recovered fiber/all post-consumer fiber

American Public Gardens Association

**NATIONAL PUBLIC GARDENS DAY**

MAY 8, 2015

[www.NationalPublicGardensDay.org](http://www.NationalPublicGardensDay.org)



**A P G A**

American  
Public  
Gardens  
Association