

Smithsonian Gardens

FY 2018 ANNUAL REPORT

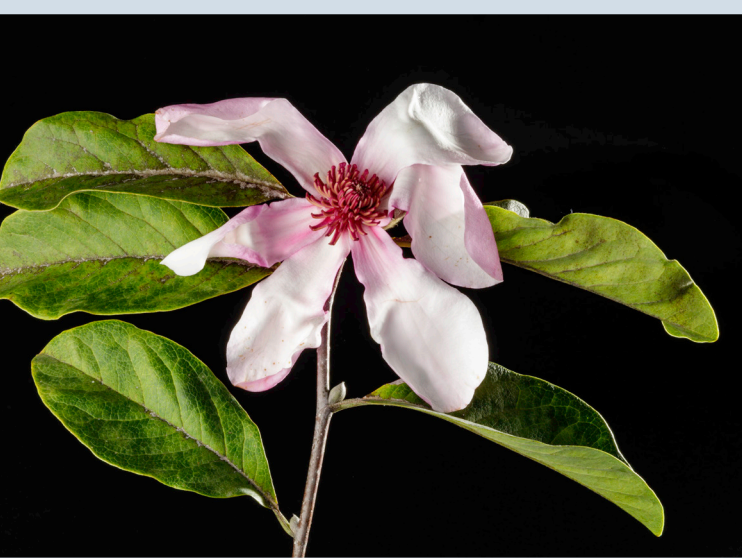


Smithsonian Gardens



**Smithsonian Gardens
extends the Smithsonian's
museum experience in
a public garden setting,
inspiring visitors with
exceptional displays and
educating them about
horticulture, plants, natural
and built environments,
and artistic design.**

Highlighting Our Achievements

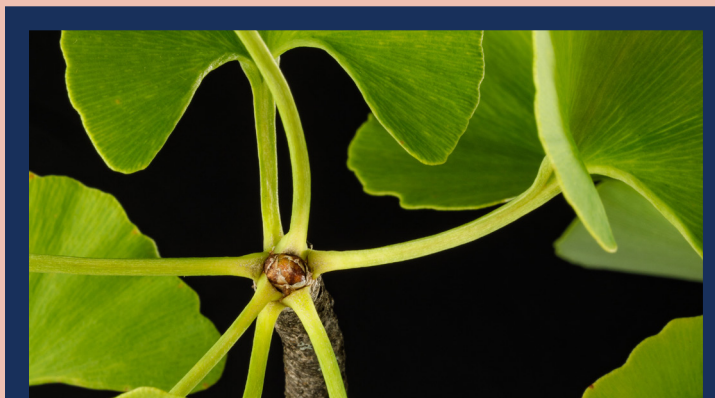


CAPTURING A COLLECTION

To enhance the digital records that document Smithsonian Garden's (SG) living collections, SG received \$144,900 from the Smithsonian Institution's (SI) Collection Information System IRM Pool. The funds have been used to hire contract professionals to collect and catalog vital information including habitat-related content and to create digital images of the SG Tree Collection through three seasons capturing horticultural details including flower, fruit, bark, leaf, stem, bud, leaf and seasonal color.

DIGITIZING SG'S ORCHID COLLECTION

As part of the Smithsonian Institution's Digitization Program Office's four-year initiative to digitize the collections of eight Smithsonian history, art, and cultural museums, SG received \$81,200 from SI's Collections Care Initiative to cover indirect collections management costs associated with the digitization of nearly 6,000 plants in SG's Orchid Collection. The funds supported the purchase of supplies and the hiring of contract museum and horticulture professionals who provided registrarial and specimen-handling services during the Living Collections Mass Digitization Production Project.



Images clockwise, from the top:

Magnolia x soulangeana 2011-1108*A, NASM.

Photo by Hannele Labti. | Orchid Collection Mass Digi team, March 2018. Photo by Eugene Cross.

Psychopsis Mariposa 'Mountain' 2012-0494*A. Photo by Rick Coulby. | Ginkgo biloba 2011-0954*A, NMNH. Photo by Hannele Labti.

Guarianthe aurantiaca 'Orange Spots' 2012-1087A.

SG TESTING FOR ORCHID HEALTH

Smithsonian Gardens is working to identify and permanently remove any infected plants in the Orchid Collection so that they cannot contaminate other specimens and endanger the overall health of the collection. As part of this, SG received \$105,200 from SI's Collections Care and Preservation Fund to administer a comprehensive health assessment through virus testing. The funds support the hiring of contract professionals and the purchase of virus testing and labeling supplies.

SG TREERADAR UNIT

During FY2018, Smithsonian Gardens employed ground-penetrating radar using the TRU™ System (TreeRadar Unit) to assess the trunks and roots of twelve of the Smithsonian Gardens Tree Collection's high-value trees at National Museum of Natural History, National Museum of American History, and National Museum of the American Indian. This system creates a high-resolution, non-invasive image of the internal structure of a tree and its root mass. This novel application of technology improved SG's already robust tree care program by providing increased information and certainty about a tree's condition and an ability to conduct enhanced assessments of tree-related risk issues.



Images clockwise, from the top:
Collecting tissue from orchid plant for virus testing. *Photo by Eugene Cross.* | Tree Radar Unit scanning an American elm trunk at NMNH. *Photo by Jake Hendee.* | Test indicating signs of virus. *Photo by Eugene Cross.*

RAINWATER HARVESTING SYSTEM

Smithsonian Gardens received \$146,200 in funding from SI's Collections Care and Preservation Fund to construct a Rainwater Harvesting System at the SG Greenhouse Facility in Suitland, Md. to be used to irrigate the Smithsonian Gardens Orchid Collection.

Rainwater harvesting is a method of collecting rainwater from the roof of buildings or other catchment surfaces and storing it for future use. The quality of water used for irrigation is of critical importance when it comes to successful orchid cultivation and maintenance. Orchids exposed to municipal water show detrimental physical manifestations caused by accumulated salts building up

in the soil. These adverse effects include leaf tip burn, decreased plant vigor, reduced blooming, discoloration, and even death.

Captured rainwater, the same as what is being used with the new Rainwater Harvesting System, is free of the salts, minerals, and chemicals like chlorine found in municipally-treated water. Rainwater is also slightly acidic which is ideal for orchid cultivation since orchids grow best within a pH range of 6.0–6.5.

Images from top to bottom:

Control panel for rainwater harvesting system.

Photo by Sarah Hedeon. | Rainwater tank delivery to site. *Photo by Vickie Dibella.*



Creating a Master Plan

Smithsonian Gardens (SG) began the process of creating an Interpretive Master Plan (IMP) during the planning process for a two-year exhibition series entitled Habitat. After hammering out Habitat's exhibition theme and subthemes and engaging with Smithsonian Exhibits (SIE) to discuss exhibit construction, it became apparent that SG needed a strong road map to guide the process. That road map became SG's Interpretive Master Plan.

An IMP is a tool organizations use to reach a specific goal. IMPs are in the same family as strategic plans. If a strategic plan is an interviewer asking you "where do you see yourself in five years?" an IMP is your coworker inquiring "how are we going to get this project done?"

While a strategic plan is for long-term planning within an organization, identifying goals, and detailing a plan for the organization, an IMP, on the other hand, is a preliminary study that helps an organization reach one very big, very specific goal. Eric Christiansen,

Smithsonian Exhibits' Chief of Design, likened an IMP to the North Star: "Interpretive Master Plans create a fixed reference point that all things can be measured against to make sure you stay on track."

SG and SIE conducted brainstorming sessions and built on work SG had already done to identify exhibition topics and educational programming opportunities. The SG team met frequently with SIE to discuss everything from intended audiences to what critical questions the Habitat exhibition should address. Notes were taken, circulated, and reviewed. Once everyone was satisfied with the direction, SIE wrote and designed a guiding document that SG is currently using and will continue to use for future exhibition development. As people join the project, they are able to review the plan and easily see not only the end goal, but also the path to get there.

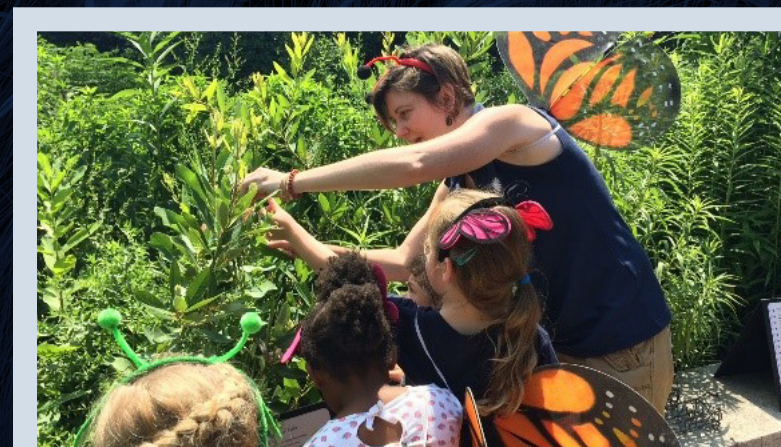
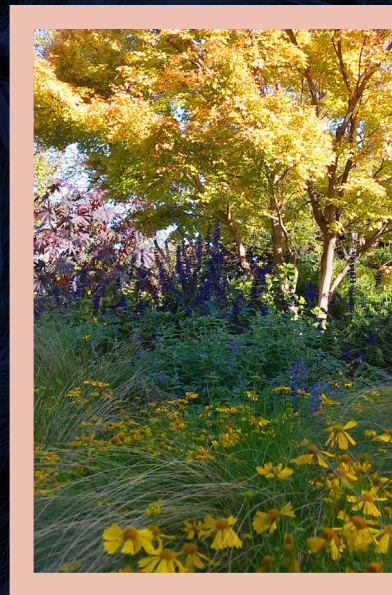
In addition to establishing key goals and objectives, the SG IMP identifies stakeholders

and audiences, establishes interpretive strategies, develops themes and take-away messages, and pinpoints programming opportunities. For example, in the Habitat exhibit, SG included exhibition concepts, in-gallery learning experiences, educational outreach, and digital outreach.

Now that SG's IMP is finished, it is being used to introduce Smithsonian museums, units, potential donors, and support staff to SG's exhibition series. It is a compelling tool that encourages potential collaborators to take a fresh look at Smithsonian Gardens and see a unique museum asset with a diverse and talented staff.

Images from top to bottom:

The Interpretive Master plan set the stage for the Habitat exhibition concepts, in-gallery learning experiences, educational outreach like the Pollinator Party (pictured above), and digital outreach. | A view of the Mary Livingston Ripley Garden.



Our Performance

EDUCATION AND OUTREACH

Smithsonian Gardens' (SG) collections and horticulture staff kept the education and outreach group hopping in FY2018. SG repeated its tried and true programs, but added several new ones to the mix. The popular Let's Talk Gardens summer program attracted staff and volunteers from SI, surrounding Federal agencies, and even some international visitors. Last year SG expanded the series and took it on the road to the Penny campus. The collaborations didn't stop there; SG co-hosted a dozen family festivals with the National Museum of the American Indian, National Postal Museum, National Museum of African American History and Culture, United

States Botanic Garden, and National Building Museum. SG joined the Discovery Theater in producing Happy Habitats which introduced almost 1,000 schoolchildren to the importance of protecting habitats. Families visiting the National Museum of American History participated in two new SG storytime series, and teachers discovered how to implement lessons from SG's digital archive, Community of Gardens, at a training hosted by the National Postal Museum. SG even squeezed in a few garden parties: insects ruled at the Pollinator Party, and it was all about Victory Gardens at SG's annual Garden Party. FY2018 was grand, but the outreach forecast for FY2019 is even grander!

Images clockwise, from the top:
 Swing Into Victory: Rosie the Riveters (SG staff) preparing for 'Swing Into Victory' 2018 Garden Party in the Arts and Industry Building. SG's Interiors staff designed and installed the large floral centerpiece in the foreground. *Photo by Elizabeth Miller.* | Smithsonian Gardens staff engaging visitors at the 2018 Pollinator Party in the Pollinator Garden. *Photo by Elizabeth Miller.* | Smithsonian Gardens staff engaging visitors at the 2018 Orchid Family Day co-hosted by the U.S. Botanic Garden. *Photo by Ray Mims, USBG.*



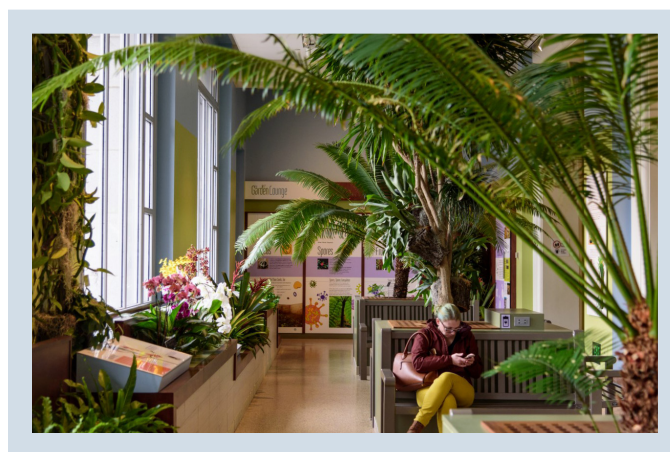


EXHIBITS

Cultivating America’s Gardens, May 4, 2017 – September 4, 2018, at the National Museum of American History, gave visitors a snapshot of the history and culture of the American garden from its earliest beginnings to the present day. This exhibit was a collaboration between Smithsonian Gardens and Smithsonian Libraries.

In another part of the Institution, Smithsonian Exhibits collaborated with

botanists, Smithsonian Gardens experts, designers, science writers, visitor services, and project managers to imagine the transformation of Hall 24 (the former Korea Gallery) at the National Museum of Natural History. The goal was to transform the space into a welcoming garden for visitors to rest and recharge with live plants, bright sunlight, and educational information. At the same time, the museum also wanted to take the opportunity to introduce new and important botany themes, a currently underrepresented content area in the museum. The planning team ultimately landed on “seed dispersal” as the exhibit’s central theme. Smithsonian Gardens supplies and maintains all of the plant material and signage.



Images clockwise, from the top:

Cultivating America’s Gardens exhibit at the Dibner Library of the History of Science and Technology at the National Museum of American History. *Photo by Smithsonian Libraries.* | Garden lounge at NMNH. *Photo by Elizabeth Miller.* | Colorful trade card from Rice Seeds featured in the Cultivating America’s Gardens exhibit.

SG COLLECTION DIGITIZATION AND REFURBISHMENT

In 2018, digitization of images from the Archives of American Gardens (AAG) continued with support from SI's Digitization Program Office (DPO) and National Collections Program (NCP). DPO and NCP funded a multi-phase project that will result in thousands of high resolution images being made publicly available through the Smithsonian's online Collections Search Center. SG's Garden Furnishings and Horticultural Artifacts Collection was part of this mass digitization project; almost 1,000 objects were digitized in situ at SG's storage building on the Garber campus. Hundreds of bouquet holders — exquisite pieces of Victorian jewelry — were included in this digitization. The timing of the project prompted the rehabilitation of the bouquet holder exhibition in the Ripley Center. While the bouquet holders were taken off display for digitization, their exhibit cases were sent to SI's Pennsy

facility to be refurbished and redesigned by Smithsonian Exhibits.

One of Smithsonian Gardens' most visible garden furnishings was also taken off display in order to be refurbished. The Victorian-era fountain in the Mary Livingston Ripley Garden was lifted off its base, loaded onto a flatbed truck and transported to a foundry in Alabama for a much needed face-lift. The fountain and bouquet holder cases are expected to return in late 2019 for public display.



Images clockwise from the top:

Victorian bouquet holder. *Photo from the Horticultural Artifacts Collection.* | Dismantled bouquet holder case ready for move to Smithsonian Exhibit's headquarters at Pennsy. *Photo by Paula Healy.* | Historic garden furnishing readied for digitization at Garber Building 34. *Photo by Paula Healy.*

Mary Livingston Ripley Garden fountain being transported for repairs and refinishing. *Photo by Paula Healy.*



Smithsonian Gardens Team Spotlight

STRUCTURAL ENTOMOLOGIST TEAM

Smithsonian Gardens' (SG) three-person Structural Entomologist team of Ed Kunickis, Allison Dineen, and Kevin Ulrich, primarily deals with pests found in a typical urban environment; cockroaches, ants, flies and rodents. But because of Smithsonian's purpose and environment, they also encounter a completely unique group of pests that provide their own challenges.

Wood-infesting insects and pests attracted to stored products, fabric, and paper can destroy museum objects in a relatively short amount of time. As part of keeping our collections, buildings, staff, and visitors safe, the team responds in person to all staff requests to evaluate pest sightings and concerns. They provide practical recommendations and solutions to help educate SI staff in understanding their role in both Integrated Pest Management (IPM) and eliminating unwelcome critters.

The SG entomologists also assist collections and conservation staff with identifying pests that can potentially damage objects.

The work of the Entomology team isn't strictly inside. The team also continually assesses exterior rodent activity through monthly inspections of rodent bait stations and monitors for rodent burrows in landscaping. Additionally, they treat building exteriors for seasonal pests such as ants and mosquitoes. SG entomologists coordinate with building managers about structural, storage, and sanitation issues as they relate to preventing museum pests.

By evaluating and recommending innovative IPM strategies, SG's Structural Entomologists reduce dependence on the use of conventional pesticides for Smithsonian facilities and food service areas. Their work ensures a rodent and pest-free environment for staff and visitors alike.



Images from the top:

Using beneficial insects, like these ladybird beetles are preferred over chemical insecticides. | Allison Dineen is part of the three-person Structural Entomologist Team. Not pictured are Ed Kunickis and Kevin Ulrich. *Photo by Cristobella Durrette.*



Funding

DONATIONS, ENDOWMENTS, GRANTS, AND ROYALTIES

Smithsonian Gardens' (SG) fundraising activities in FY2018 continued to grow. SG Horticulturist Melanie Pyle, graduate of the Smithsonian Emerging Leaders Development Program's (EDLP) class of 2017, planned for a "friendraising" event. After completing her EDLP rotational assignment with the Smithsonian's Office of Advancement (OA) and gaining new knowledge of building donor relations and making important connections with OA staff, Pyle wanted to put her new skills in action for SG. She volunteered to plan an event at the Smithsonian Gardens Greenhouse at the Museum Support Center and received assistance from her OA connections to execute this event.

Smithsonian Gardens received 22 individual donations in FY2018 totaling \$69,700 and one planned giving pledge in the

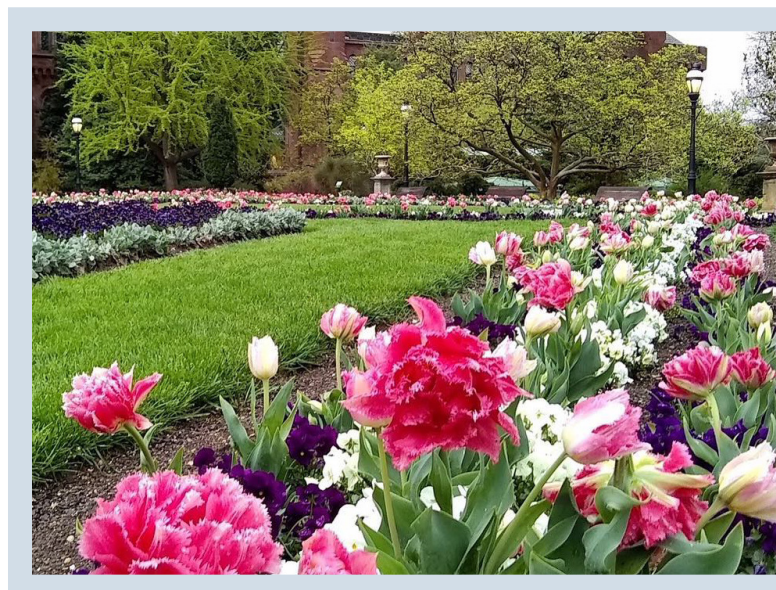
amount of \$300,000. Through estate plans or life income gifts, donors have invested in a strong future for Smithsonian Gardens.

Smithsonian Gardens' two endowment funds generated payouts amounting to \$309,549 during FY2018. These funds provided vital support for the maintenance of the Enid A. Haupt Garden and the Mary Livingston Ripley Garden.

Greatly adding to the care and conservation of its collections, SG secured grants for collections management initiatives in the amount of \$553,682 during FY2018. Awards included:

\$144,900 from the Smithsonian's Collections Information System IRM Pool for habitat-related data enhancement and digitization and data management of the Smithsonian Gardens Tree Collection.

\$165,200 from the Smithsonian's Collections Care and Preservation Fund to aid in the preservation and processing



The maintenance for the Enid A. Haupt Garden (*top*) and the Mary Livingston Ripley Garden (*right*) is supported by Smithsonian Gardens' two endowment funds.



of the Archives of American Gardens W. Atlee Burpee & Company Collection and to conduct a comprehensive virus risk assessment of the health of the Smithsonian Gardens Orchid Collection.

The Smithsonian Digitization Program Office (DPO) and National Collections Program (NCP) supported direct digitization costs associated with the mass digitization of Smithsonian Gardens' Orchid Collection, Garden Furnishings and Horticultural Artifacts Collection, and Archives of American Gardens. \$243,582 was spent by DPO and NCP in support of this massive project.

To support Smithsonian Gardens' Habitat exhibition series, \$33,000 was awarded in grant funds from the Smithsonian Women's Committee for the commission of a sculpture by the artist Foon Sham.

Royalties from collaborations with Smithsonian Enterprises resulted in revenues of \$3,690. Revenue was derived from projects as varied as books, drinkware, and fine garden accent reproductions.

| DONATIONS / ENDOWMENTS / GRANTS / ROYALTIES | AMOUNT |
|------------------------------------------------------------|---------------------|
| Donations and honorariums | \$69,700.00 |
| Funding from the Garden Club of America to host one intern | \$ 4,000.00 |
| Endowment Payout for Programs and Operations | \$309,549.72 |
| Collections Care and Preservation Fund | \$165,200.00 |
| Digitization Program Office | \$201,557.00 |
| National Collections Program | \$42,025.00 |
| CIS IRM Pool Grant | \$144,900.00 |
| Smithsonian Women's Committee Grant | \$33,000.00 |
| Receipts from License Royalties | \$3,690.45 |
| TOTAL | \$973,622.17 |

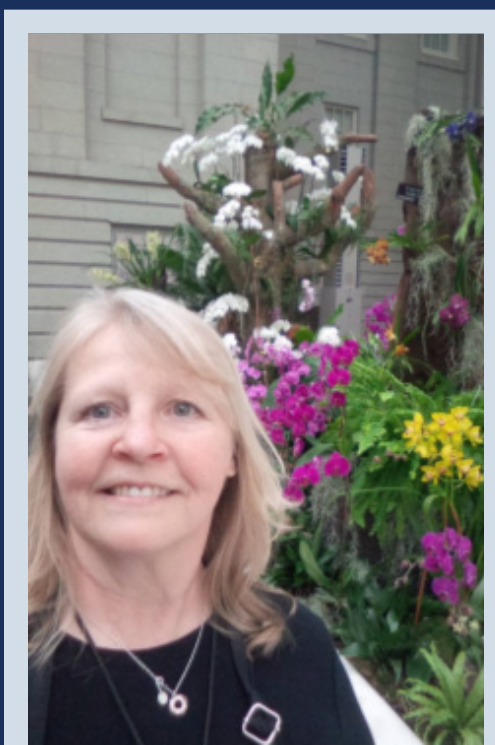
Thanks to Our Volunteers

Special thanks to each and every one of Smithsonian Gardens' volunteers for the valuable work they accomplished in 2018. 61 volunteers contributed a total of 5,047 hours, the equivalent of almost three full-time employees. They supported SG staff in the gardens, greenhouses, archives, and exhibits, and shared their special talents in photography, research, writing, customer service, plant production, and conducting garden tours. In addition, they supported special events such as ladybug releases at the National Museum of the American Indian, a Pollinator Party at the National Museum of Natural History, and special tours of the Cultivating America's Gardens exhibit—a collaboration with SG and Smithsonian Libraries—at the National Museum of American History.

Smithsonian Gardens staff showed their appreciation to the volunteers by planning special Continuing Education programs and tours, hosting a special volunteer luncheon at

SG's Greenhouse Facility and facilitating a chance to meet fellow garden volunteers at the 24th Horticultural Consortium Volunteer Appreciation Day at the United States Botanic Garden.

We greatly appreciate the support of our dedicated volunteers!



SMITHSONIAN GARDENS VOLUNTEERS

Haripriya Aluru
Terry A. Anderson
Ann Balch
Claire Block
Paulina Donna Brandes
Emma Brennan
Lauren M. Bridenbaugh
Deborah S. Brown
Margaret Brown
Susan R. Bruns
Shahla Butler
Rebecca Lara Callaghan
Cristin Castro
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Toby Christensen
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Sheryl L. Cooper
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Shyama Haniffa
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Suzanne G. Huff
Charlene Tate Huggins
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Donna Kolis
Alison Kootstra
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Judith Lesser
Steven Lonker
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Ian Anthony Mcgowan
Elizabeth R. Miller
Patricia A. Mink
Yumiko Miura
Audrey Morris
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Viveka Neveln
Yvonne Marie Orkin
Tonda Phalen
Nina A. Pitkin
Jeff Pixley
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Linda Rosenfeld
Renee S. Ross
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Our Staff

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Kelly Crawford

Joseph Curley

Alexander Dencker

Victoria Marie Dibella

Sarah Dickert

Allison Dineen

Kurt Donaldson

William Donnelly

Janet Draper

Randy Dudley

Kevin Duncan

Matthew Fleming

James Gagliardi

Vanessa Garner

Shelley Gaskins

Jill Gonzalez

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Daniel Russell

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Sylvia Schmeichel

Ava Schwarz

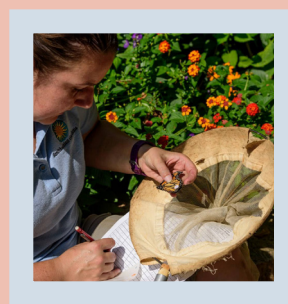
Elias Shilling

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