MISSOURI BOTANICAL GARDEN

LIGHTING THE WAY
Celebrating Our Achievements and Inspiring Plant Discovery and Conservation for Our Future

2012 Annual Report
To discover and share knowledge about plants and their environment in order to preserve and enrich life.

– Missouri Botanical Garden mission
We referred to 2012 as our Year of China at the Missouri Botanical Garden for some very obvious reasons, starting with a spectacular Chinese-themed Orchid Show, a perennial favorite of our members. Brookings Interpretive Center housed a year-long Plants and People: China exhibit, which introduced children and their families to important and interesting information about China and its biodiversity. But the highlight of 2012 was one of the most talked-about events in St. Louis. Lantern Festival: Art by Day, Magic by Night, presented by Emerson, helped us to attract nearly 360,000 visitors and over 5,000 new members to the Garden last summer.

Our annual Chinese Culture Days and the presence of our beautiful Chinese Garden, the Grigg Nanjing Friendship Garden, might seem like reason enough for the Garden to host the first lantern festival in the country, but its timing was instead a celebration of the Garden’s long history of botanical research and collaboration with China through our Flora of China project, a significant endeavor which is just being completed (see box on page 7). Another notable collaborative effort we were delighted to announce in 2012 was the Memorandum of Understanding detailing plans to work with other world-renowned botanical institutions in the development of a World Flora Online. Thanks to a generous gift from Monsanto Company, and in conjunction with the New York Botanic Garden; the Royal Botanic Garden Edinburgh; the Royal Botanic Gardens, Kew; and many other institutions worldwide, we are able to pursue this immense undertaking, thereby contributing to the documentation of all known plants in fulfillment of Target One of the Global Strategy for Plant Conservation (see page 6). As well, in 2012 we created the Conservation Club membership category to illuminate the Garden’s ongoing efforts to safeguard plants and their habitats worldwide and to build capacity through training and collaborative projects.

Reaching an ever-larger audience with our message about the importance of conserving biodiversity remains one of our most important goals. We do this through our education and outreach efforts; our on-site interpretation; our print, electronic, and social media exposure; conferences we attend; and yes, the events we hold that attract many visitors to the Garden. If the numbers tell the story, 2012 was an extremely successful year in terms of attendance; visitors to the Garden’s website; followers on social media; papers published and species described; and favorable press coverage. All these avenues provide opportunities for us to help spread the story of our work and our mission, to discover and share knowledge about plants and their environment in order to preserve and enrich life.

Dr. Peter Wyse Jackson, President
As you look at this report and see the story of an extraordinary year at the Missouri Botanical Garden, I hope you will also see yourself reflected in its pages. Your ongoing support of the Garden is critical to our success.

Your Garden has performed with financial and strategic discipline in 2012, keeping us on track for a very bright future.

Special events, heightened by the Lantern Festival, helped us raise base-level membership gifts to an all-time high of more than 39,000 households. Those memberships, which comprise the vast majority of our overall 43,354-household base, generate a bottom-line impact of more than $2.9 million. In addition,

• We introduced the Conservation Club, which asks for a $25 gift and invites members to more deeply engage in the Garden’s plant conservation work through a newsletter and special events. Response in this inaugural year was impressive, and participation in the club continues to grow.

• More members contributed to the Garden’s annual appeal in 2012 than the previous year.

• More companies made gifts to the Garden in 2012 than in the previous year.

• And more friends of the Garden made tribute gifts and dedicated bricks in honor of loved ones.

The community of Garden supporters has made possible another strong year. I thank you, my fellow trustees, and the Garden’s volunteers, staff, and friends for making it so.

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A place to enjoy...

When Henry Shaw bequeathed his Garden to a board of trustees upon his death, his will provided that his Garden be accessible to the people of St. Louis to enjoy, but also that it be maintained as a center of research, education, and horticultural display.

Much has changed since Shaw’s time, but we continue to honor these provisions through our work at the Garden and around the world, our community outreach, and always with the generous support of our members, sponsors, and the residents of St. Louis City and County through the Metropolitan Zoological Park and Museum District (ZMD).

The enjoyment of the people was very evident in 2012, and by far the highlight of our Year of China was the spectacular and peerless international exhibition, Lantern Festival: Art by Day, Magic by Night, presented by Emerson. No one who attended this event will soon forget the elaborate, larger-than-life, handcrafted porcelain, silk, and steel “sets,” which during summer evenings became enchanting, glowing works of art. Chinese artisans, cuisine, shopping, and other entertainment accompanied the lantern experience throughout the 13 weeks of the festival. The festival celebrated the Garden’s long history of botanical research and close collaboration with China, most recently through the Flora of China project (see page 7). Visitors from all over the world came to Lantern Festival, and many became first-time members. In fact, over 5,000 new members joined over the course of the festival (see table).

The Garden introduced our new mobile website just in time for the opening of the Lantern Festival, and it immediately found its place among the top 10 most-viewed webpages. Visitor information, online ticket sales, and QR code-guided tours of the lanterns were among the features included in the mobile launch.

On Lantern Festival days, and every other day of the year, residents of St. Louis City and County enjoyed reduced-rate admission, with free admission on Wednesdays and Saturdays before noon, and free admission to the Doris I. Schnuck Children’s Garden on those days. This reduced rate is made possible as part of the Garden’s participation in the ZMD, and was enjoyed by over 60% of our nonmember visitors in 2012.
Community educational outreach doesn’t stop with our on-site public and school programs. In 2012, the Garden welcomed our newest neighbor, the City Garden Montessori School, which moved to Tower Grove Avenue in 2012. We also collaborated on outreach programs with Academy of Science–St. Louis, and continued to strengthen our partnership with St. Louis Public Schools through outreach sessions, teacher professional development workshops, after-school programming, and even weekend/evening family science and math events.

(Left) Children of all ages learned how to grow and harvest vegetables in the Children’s Garden edible garden.

(Center left) Magnificent silk lotuses lit up the reflecting pools outside the Linnean House during Lantern Festival.

(Center right) A pompom dahlia (Dahlia ‘Nescio’) in all its splendor.

(Right) The Garden holds interest and excitement for visitors of all ages.

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**Lantern Festival By the Numbers**

<table>
<thead>
<tr>
<th>General</th>
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<tbody>
<tr>
<td>Total Lantern Festival days</td>
<td>87</td>
</tr>
<tr>
<td>Total Lantern Festival nights</td>
<td>60</td>
</tr>
<tr>
<td>Number of volunteers</td>
<td>300</td>
</tr>
<tr>
<td>Number of volunteer hours</td>
<td>1,750</td>
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<table>
<thead>
<tr>
<th>Visitors</th>
<th></th>
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<tbody>
<tr>
<td>Total visitors during festival</td>
<td>358,199</td>
</tr>
<tr>
<td>Opening Weekend visitors</td>
<td>16,665</td>
</tr>
<tr>
<td>Daytime visitors during festival</td>
<td>144,074</td>
</tr>
<tr>
<td>Nighttime visitors during festival</td>
<td>214,125</td>
</tr>
<tr>
<td>New members who joined the Garden during festival</td>
<td>5,271</td>
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</table>

<table>
<thead>
<tr>
<th>Sustainability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of exhibit and exhibit-related waste that was recycled, repurposed, or resused</td>
<td>90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
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<tbody>
<tr>
<td>Corporate events held at the Garden during festival</td>
<td>40</td>
</tr>
<tr>
<td>Total sponsorship</td>
<td>$1,186,813</td>
</tr>
<tr>
<td>Net revenue</td>
<td>$2,600,000</td>
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</table>
The Missouri Botanical Garden is recognized as one of the preeminent botanical gardens in the world, and one of the contributing factors is our important and prolific botanical research and conservation efforts worldwide. The Garden has consistently taken a leading role in what has come to be defined as the Global Strategy for Plant Conservation (GSPC), a set of objectives and targets aimed at halting and reversing the worldwide loss of plant biodiversity. Several significant achievements to this end were realized in 2012. Many of the highlights focused heavily on the first objective, which is to understand, document, and recognize plant diversity, and to make that documentation widely available.

World Flora Online

The United Nations (U.N.) Convention on Biological Diversity is the most widely supported international environmental agreement and involves most of the world’s governments. The GSPC, adopted in 2002 and updated in 2010, aims to halt the loss of plant species worldwide by 2020.

The updated GSPC includes 16 targets to be achieved by the year 2020; Target One of the GSPC states the need for an “online flora of all known plants.” Responding to this target, in 2012, the Garden joined with a wide range of leading botanical institutions worldwide, including The New York Botanical Garden; the Royal Botanic Garden Edinburgh; and the Royal Botanic Gardens, Kew, in a Memorandum of Understanding detailing our intent to work together to develop a World Flora Online.

The Garden received a generous 3-year, $3 million gift from Monsanto Company to support our work on the development of a World Flora Online, which will improve access, analysis, and management of critical botanical information for policy makers and planners, biodiversity conservation practitioners, botanists, ecologists, geneticists, other scientists, and users of plant data worldwide. The support of Monsanto Company will fund the Garden’s contributions to this ambitious endeavor from 2012 to 2015.

New Species

In 2012 botanists at the Garden described 131 new plant species collected while researching in different parts of the world including Ecuador, Madagascar, Bolivia,
and China. Among the newly discovered species is *Passiflora unipetala*, described as having yellowish green flowers, being pollinated by bats, and, curiously, having a single petal (hence its name!). This characteristic had never been seen or recorded in the genus or within the family. Dr. Peter Jørgensen, associate curator at the Garden, and his 2 co-authors described *Passiflora unipetala* from 2 forests in Pichincha, Ecuador.

Anniversaries

Among the Garden’s many research programs, 2 celebrated recent milestones. Although we have been working in both Madagascar and Bolivia for several decades, the Garden’s program in Madidi recently turned 10 years old, and in Madagascar, our permanent research presence reached its 25th anniversary in 2012.

Another Milestone: The Flora of China

The *Flora of China* is an international collaborative project to publish a comprehensive catalog of all Chinese wild plants, with full descriptions of 31,500 species and illustrations of about 20,000 species. The project began in 1988 and is jointly published by the Missouri Botanical Garden Press in St. Louis and Science Press in Beijing. Here are some facts about the flora of China:

1. The 31,500 species of Chinese vascular plants represent about 8 percent of the world’s estimated total species.
2. Approximately 51 percent of the species in the Chinese flora are endemic.
3. It is estimated that more than 5,000 Chinese species are actively traded and used medically.
4. The project includes 22 volumes of text, 22 volumes of illustrations, and a general interest volume entitled *Plants of China*.

(Left) Field botanists at work in Madidi National Park, considered one of the most biodiverse national parks in the world. Garden scientists working there have discovered several new vegetation types previously unknown or unknown to exist in Bolivia.

(Center) This small forest fragment at Ankafobe in central Madagascar is home to most of the world’s remaining population of *Schizolaena tampoketsana*.

(Right) *Passiflora unipetala*, as the name indicates, is a unique single-petal plant described from 2 locations in Ecuador.
...EDUCATION

Helping people of all ages, backgrounds, and abilities cultivate and nurture an interest in the plants that surround us is the work of the Garden’s Education department. From public programs to school-based learning, therapeutic horticulture to interpretive displays, nearly every visitor to the Garden benefits from the efforts of our educational outreach.

**Adults:** The Garden’s Adult Education program added more than 60 new classes in 2012 to keep our curriculum fresh and boasted a total of 195 different classes. Nearly 2,600 adult learners took a Garden class, an increase of 36% from the prior year. Among the most popular classes were ones that invited people to deepen their gardening/landscaping skills, hone their naturalist knowledge, tap their inner artist, and live healthier and more sustainably.

** Teens:** In 2012, the Garden held its first-ever Teen Night, welcoming more than 70 teens from high school science and service clubs for a fun evening of exploration, activities, and social networking. The event also invited teens to learn more about the Garden’s teen programming, including environmental leadership programs, field ecology experiences, and volunteering.

**Scouts:** Scout programs saw double-digit growth in 2012! Both Girl Scout and Boy Scout leaders report that one of the greatest advantages to the Garden’s programs is that they cover most badge requirements.

**Families:** As part of the 2012 Year of China, the Garden’s Brookings Interpretive Center transformed once again with the theme *Plants and People: China*. As an indoor, year-round, family-friendly destination encouraging hands-on discovery, exploration, and learning, Brookings played host to more than 80,000 visitors, many spending several hours in this comfortable space. At Shaw Nature Reserve, *Shaw Family Sundays* focused on “citizen science” and gave families the opportunity to enjoy nature-based experiences together. Programs in 2012 included *Monarch Watch* and *Celebrate Urban Squirrels* as well as activities focusing on predator/prey relationships and animal winter survival.

**Partnerships:** After working with Gateway STEM High and Gateway Elementary in 2011 as part of the St. Louis Public Schools 21st Century
After-School Program, the district was able to expand programming this year. Garden instructors now provide enriching, hands-on science lessons focused on plants and careers related to life sciences at Soldan High and Washington Montessori Elementary in addition to the Gateway schools. Shaw Nature Reserve and Tyson Research Center of Washington University brought together 27 science educators and field biology career scientists from around the country to discuss the successes of the 5-year National Science Foundation (NSF) project, *Making Natural Connections: An Authentic Field Research Collaboration*. During the 3-day workshop, discussions focused on ways to modify the model so that it could be replicated to accommodate other partnerships. This year, the Garden was awarded its third NSF grant to work with the Massachusetts Institute of Technology (MIT) on environmental education programs. Each of these projects link researchers at the Litzsinger Road Ecology Center (LREC) and MIT in the design of handheld “augmented reality” games to be played on smartphones. For the past year, staff and volunteers at the LREC have collaborated with teachers at the Southview School on a weekly community-based work project. Part of the Special School District, Southview students have a variety of developmental challenges. Each Tuesday morning, youth ages 15 to 20 with moderate to severe autism work at LREC on a variety of horticulture tasks. These projects provide essential training they will need to enter the work force.

(Left) During the Year of China, visitors to the Brookings Interpretive Center experienced many hands-on activities related to Chinese culture and plants.

(Center) Teenagers from the St. Louis area who participate in ECO-ACT are trained to teach and guide younger students to learn about ecology as they explore nature.

(Right) One of the other successful events of 2012 was the inaugural *Canopy Climb*, which put youth and adults into the trees both at the Garden and the Reserve for a bird’s-eye view of the surrounding landscape.
...AND HORTICULTURAL DISPLAY.

**Living Collections and their Management**
The Garden is locally renowned for its beautiful floral and landscape displays, but where do all those plants come from? Our living plant collections are the foundation of these displays, and the Garden holds one of the world’s largest with just over 16,000 taxa. Our goal is to increase our living collection to 25,000 taxa by 2020, with 40 percent from documented wild sources. In 2012 we increased our wild-sourced accessions by about 14 percent and nearly doubled our accessions of rare plants (see graph). Wild-source documented plants are important for the Garden because they represent vital genetic diversity that can be used for research, conservation, and restoration projects.

In the spirit of Henry Shaw, who kept meticulous plant records, the Garden has developed an online living collections management system that will help us make informed decisions on collection management, with mobile technology that allows records to be updated from almost anywhere. Targeted data can also be shared with the public in a user-friendly way.

**Increased Capacity for Plant Propagation**
We increased space for seed sowing and rooting cuttings by 50 percent by improving the use of space in the nursery. Improved ability to manage collections records and strengthened capacity in plant propagation will increase our ability to add important plants to our collections.

**Other Horticultural Highlights from 2012**
Extensive renovations to the Swift Vista included an expanded herbaceous border featuring perennial plants from Altai, the Caucasus, and China, which will help illustrate how the Garden uses its living collections for conservation and research.

A new carnivorous plant display in the Shoenberg Temperate House highlights our collective responsibility to the bog habitats of the southern states, which are threatened by development and environmental change.

A pin cushion garden in the Doris Waters Harris Lichtenstein Victorian District made up of 33,000 individual succulents was planted in intricate geometric designs and installed using the Victorian techniques of rooting cuttings directly in the display.
Installation of a weather station at the William T. Kemper Center for Home Gardening will play a key role in testing plants that can grow in the St. Louis climate and inform research associated with climate change, including long-term planning of our living collections.

(Left) Perennial plants from several of our worldwide conservation areas were planted in the newly renovated Swift Vista.

(Center left) White trumpet pitcher plants (*Sarracenia leucophylla*) were part of the carnivorous plant display added to the bog garden in the Temperate House.

(Center right) Our Living Collections Database is now available to staff for wireless collection management.

(Right) Victorians loved pincushion gardens, so it is fitting that we installed a new one in the Victorian District using traditional plants and designs.

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**Accessions (Alive and Seed)**

- Total accessions
- Wild accessions
- Rare accessions

<table>
<thead>
<tr>
<th>Year</th>
<th>Total accessions</th>
<th>Wild accessions</th>
<th>Rare accessions</th>
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<tr>
<td>2007</td>
<td>3,000</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
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<td>4,000</td>
<td>3,000</td>
<td>1,000</td>
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<tr>
<td>2009</td>
<td>5,000</td>
<td>4,000</td>
<td>1,000</td>
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<tr>
<td>2010</td>
<td>6,000</td>
<td>5,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2011</td>
<td>7,000</td>
<td>6,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2012</td>
<td>8,000</td>
<td>7,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

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**Seed Accessions**

- Seed accessioned
- Wild seed accessioned
- Rare seed* accessioned

*The definition of “rare seed” was changed between 2011 and 2012.

<table>
<thead>
<tr>
<th>Year</th>
<th>Seed accessioned</th>
<th>Wild seed accessioned</th>
<th>Rare seed* accessioned</th>
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<tbody>
<tr>
<td>2007</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>70</td>
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<td>110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>150</td>
<td></td>
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An example of sustainability...

The Missouri Botanical Garden was honored to receive the 2012 Greatest Gain Award from the Regional Chamber’s Green Business Challenge. This award was given in recognition of the impressive number of sustainability features and initiatives implemented throughout our operations. Among the highlights, we installed 4 electric vehicle charging stations with power offset by renewable energy credits. Visitors— and staff—with electric cars can pull into one of the stations and recharge their cars while visiting the Garden.

The summer of 2012 was decidedly hot and dry, but visitors to the Garden were able to take advantage of 3 additional hydration stations installed throughout grounds to encourage the use of refillable water bottles. Well marked and accessibly located, these hydration stations saved the equivalent of around 500,000 plastic water bottles from entering landfills.

Nearly 90 percent of all waste associated with the Garden’s signature events (including Lantern Festival, see table) was diverted from the landfill because of our expanded food waste composting and recycling collection. In addition, “green criteria” for all disposable serviceware were implemented at public events, meaning food waste was sorted into recycling, composting, and true landfill trash. Thanks to the cooperation of Garden vendors, the Best of Missouri Market® was Styrofoam-free in 2012, with the goal of transitioning all our signature events in this direction.

The west parking lot was completed with beautifully planted rain gardens, recycled asphalt, and porous pavement systems, which retain approximately 50 percent of an average rainfall on-site. This system, which was previously completed on the east parking lot, allows for water to be naturally purified and reduces the burden on our city’s storm water system.

Visitors to Sassafras café may not have noticed the renovation of the kitchen to improve energy efficiency, but the result was a healthier menu which eliminated all deep-fried foods. New menu items included flatbread pizzas with local ingredients, as well as a revamped— and healthier—children’s menu. This change contributed to the 3-Star certification awarded by the St. Louis Green Dining Alliance.
Just up the street from the main campus, the Commerce Bank Center for Science Education (CBEC) earned Silver certification under the LEED for Existing Buildings: Operations & Maintenance program, marking another year in which the Garden has been recognized for its sustainable practices. In all the Garden has received LEED certification for 4 buildings: CBEC and the Monsanto Center for existing buildings, and Spink Pavilion and the Anderson Center at Shaw Nature Reserve for new construction.

### Lantern Festival Sustainability

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>Destination</th>
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<tbody>
<tr>
<td>Displays</td>
<td>approx. 30%</td>
<td>Sold</td>
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<tr>
<td>Electrical Wiring</td>
<td>2,740 lbs</td>
<td>Recycled</td>
</tr>
<tr>
<td>Light Fixtures</td>
<td>1,236 lbs</td>
<td>Repurposed</td>
</tr>
<tr>
<td>Light Bulbs</td>
<td>197 lbs</td>
<td>Repurposed</td>
</tr>
<tr>
<td>Scrap metal (pipe anchors, cables)</td>
<td>43,860 lbs</td>
<td>Recycled</td>
</tr>
<tr>
<td>Silk</td>
<td>37 bags</td>
<td>Recycled</td>
</tr>
<tr>
<td>Silk</td>
<td>12 bags</td>
<td>Repurposed</td>
</tr>
<tr>
<td>Concrete bases</td>
<td>24</td>
<td>Repurposed</td>
</tr>
<tr>
<td>Wood frames</td>
<td>20 yd</td>
<td>Recycled</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td>7,000</td>
<td>Repurposed</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td>2,000</td>
<td>Recycled</td>
</tr>
</tbody>
</table>

(Left) In 2012 the Garden’s west parking lot reconstruction was completed using permeable pavement and rain gardens to help keep rain water runoff from flooding the storm sewers by filtering it into the ground.

(Center) One of the area’s few EV (Electric Vehicle) charging stations was installed at the Garden. It has space for 4 EVs, with optional hybrid parking provided.

(Right) The Garden’s signature restaurant, Sassafras, was significantly overhauled with new energy-efficient equipment and a healthier menu.
Sophia M. Sachs Butterfly House

Each March, the Butterfly House is home to the largest exhibition of Blue Morpho butterflies in the country during March Morpho Mania®. The conservatory usually houses a few hundred Common Blue Morphos, but during March that number grows tenfold, with butterflies supplied by El Bosque Nuevo, a sustainable butterfly breeding operation in Costa Rica. This annual event has become a perennial favorite, and in 2012 the Butterfly House attracted a record-setting 22,000 visitors to see these beautiful butterflies.

Fall brought the third annual October Owls and Orchids event, adding Owl butterflies which are generally not seen outside their native Costa Rica. Expanded evening hours allowed visitors to see the creatures at twilight—their most active time of day. More than 1,000 “Owls” made their home in the Butterfly House conservatory.

In December, visitors escaped the Missouri cold for a visit to the tropics during the first Winter Jewels celebration. The event featured more than 1,000 jewel-toned butterflies and a conservatory full of white, red, and green tropical foliage. In addition, the Butterfly House hosted the first Supper with Santa. These sold-out suppers featured a buffet dinner, night walks through the conservatory, snacks and activities, and of course Santa himself. The event was an overwhelming success—additional seatings were added to accommodate the overflow—and is expected to become an annual event.

All in all, the Butterfly House ended 2012 on a high note. In addition to the success of its events, a record number of Garden memberships were sold on site, and the Butterfly House homepage continued to be one of the top 10 most-visited pages on the Garden’s website.

Shaw Nature Reserve

Although it was not part of Henry Shaw’s original land holdings, the Shaw Nature Reserve is guided by the same principles outlined in Shaw’s will: to be a place of public enjoyment, research, education, and horticultural display. The Reserve offers a 2,400-acre living landscape of preserved and restored Missouri ecosystems with 14 miles of trails, which could keep the heartiest of hikers busy! But the Reserve is so
Among the achievements of the Sophia M. Sachs Butterfly House was Winter Jewels, a successful new holiday event, which contributed to the record number of on-site membership sales.

Visitors to Shaw Nature Reserve during its biennial Prairie Days were treated to a guided walk through the tall-grass prairie.

The annual wildflower sale has become one of the most anticipated events at the Reserve and offered visitors expert horticultural advice and a wide array of native plants to purchase for their home gardens.

The strength of the Reserve is its focus on Missouri native plants and ecosystems, and frequent visitors love the peace that comes from being surrounded by nature. But sometimes the only thing that will do is a country party. Prairie Days—a biennial festival full of music, food, crafts, and demonstrations—returned in 2012 with support from the Missouri Department of Conservation and featured experts from the Wild Canid Center, the Missouri Heritage Foundation, and the Missouri Prairie Foundation. Kids and adults alike enjoyed cavorting in the Reserve's 250-acre tall grass prairie, which provided an authentic backdrop for the day's living history festivies. Home gardeners chose from a huge variety of native wildflowers, ferns, trees, and shrubs at the Reserve's Spring Wildflower Sale. This highly anticipated seasonal sale offers the widest array of native plants available in the metro St. Louis area, selected by the Reserve's horticulture staff and several local nurseries, and in 2012 brought in $17,700. Members of the Reserve's horticulture staff were on hand to answer questions and offer advice.
2012 OPERATING SUPPORT AND REVENUE

**Public Support**
- Botanical Garden Subdistrict*: $10,300,000
- Contributions and memberships: $8,697,817
- Bequests: $796,802
- Total Public Support: $19,794,619

**Revenue**
- Grants and contracts: $9,316,036
- Admissions: $4,978,837
- Investment income, net: $3,239,056
- Retail shops: $2,926,520
- Other: $2,637,878
- Education: $2,426,531
- Contract services: $1,790,991
- EarthWays Center/Sustainability: $1,337,129
- Shaw Nature Reserve: $1,011,415
- Butterfly House: $842,252
- Bioinformatics: $746,490
- Visitor Services: $467,856
- Total Operating Services: $26,730,500

**Supporting Services**
- Management and general: $2,682,726
- Public events: $2,637,878
- Retail shops: $1,059,629
- Education: $416,697
- Property rentals: $337,472
- Total Supporting Services: $13,079,032

**Total Operating Support and Revenue**: $42,068,866

2012 OPERATING EXPENSES

**Operating Services**
- Science and conservation: $9,663,788
- Horticulture: $3,123,444
- Public events: $2,682,726
- Retail shops: $2,637,878
- Education: $2,426,531
- Contract services: $1,790,991
- EarthWays Center/Sustainability: $1,337,129
- Shaw Nature Reserve: $1,011,415
- Butterfly House: $842,252
- Bioinformatics: $746,490
- Visitor Services: $467,856
- Total Operating Services: $26,730,500

**Supporting Services**
- Management and general: $6,526,437
- Maintenance and improvements: $2,910,738
- Institutional Advancement: $1,222,852
- Utilities: $925,410
- Membership Department: $851,762
- Security: $641,833
- Total Supporting Services: $13,079,032

**Total Operating Expenses**: $39,809,532
2012 Operating Expenses

2012 Fund Balances

<table>
<thead>
<tr>
<th>Fund</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Fund</td>
<td>$42,068,866</td>
</tr>
<tr>
<td>Total Operating Support and Revenue</td>
<td>$35,259,334</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>$(39,809,532)</td>
</tr>
<tr>
<td>Total Operating Transfers</td>
<td>$(304,428)</td>
</tr>
<tr>
<td>2012 Operating Fund excess/(deficit)</td>
<td>1,954,906</td>
</tr>
<tr>
<td>1/1/2012 Operating Fund balance</td>
<td>3,186,318</td>
</tr>
<tr>
<td>12/31/2012 Operating Fund</td>
<td>4,182,756</td>
</tr>
</tbody>
</table>

Endowment Funds

- 105,893,383

- 83,870,020

- 5,488,930

- 12,465

- 12,465

Total All Funds $199,447,554

2012 Operating Transfers

<table>
<thead>
<tr>
<th>Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating funds used for capital purchases $(669,294)</td>
</tr>
<tr>
<td>Other transfers</td>
</tr>
<tr>
<td>Total Operating Transfers $(304,428)</td>
</tr>
</tbody>
</table>

*Botanical Garden Subdistrict*

Since 1972, residents of St. Louis City and County have generously supported the Metropolitan Zoological Park and Museum District (ZMD). The ZMD is a property tax-supported district that distributes funds through five cultural subdistricts, which includes the Botanical Garden Subdistrict. The Botanical Garden Subdistrict has provided support for the Missouri Botanical Garden since 1983. The Garden is grateful for the continued support of the Botanical Garden Subdistrict.

Financial information used in this report was obtained from the 2012 Missouri Botanical Garden audited financial statements. These financial statements can be obtained by visiting www.mobot.org

www.mobot.org
Our Staff

The Garden is grateful to our 452 staff members who contributed daily to our success in 2012.

President’s Office
Peter Wyse Jackson, President
Peter Raven, President Emeritus
Robert Herleth, Executive Vice President
Kathleen Farris
Sandra Michael
Donna Rodgers
JoAnn Rivinus Vorih
Teresa West
Beverly Wilcox

Butterfly House
Vickie Campbell, Director
Laura Chisholm
Eileen Gillespie
Christopher Hartley
Mavis Hollis
Bruno Manoj
Jennifer Mullix
Jason Perry
James Powers
Steven Siebe

Publications
Nickpreet Singh
Drenda Underwood
Lisa Williams
Tad Yankoski

Madame Butterfly Gift Shop
Katherine Allen
Judith Hansen
Lauren Miller
Angela Reitzell
Patti Salley
Jennifer Wright

Communications
Peggy Lents, Senior Vice President
Holly Berthold
Lindsay Brooks
Kathleen O’Sullivan
Gene Peimann

Public Events
Chelsea Harris
Adam Jaschek
Lynn Kerkemeyer
Deborah Springer

Controller’s Office
Richard Angevine, Vice President, Finance and Controller
Elizabeth Barker
Sharon Harnes
Viktoria Krahling
Nancy Lissant
Timothy Matthews
Cheryl Mill
Dianne Schmitt
Linda Settles

Education
Sheila Voss, Vice President
Aileen Abbott
Betty Barnes-Mays
Carol Baumann

Stephen Bean
Jennifer Boeyink
Lynn Braun
LaTonya Brown
Karen Bryan
Robert Coulter
Deanna English
Donald Frisch
Suzanne Gregory
Danelle Haake
Margaret Hoester
Allison Hoffman
Lewis Jones Jr.
Jennifer Krause
Jennifer Laquet
Tom Lawler
Leslie Memula
Tyler Nowell
Tamara Palmier
Kimberly Reiss
Stacey Schamberger
Michelle Scherer
Martha Schermann
Pansy Smith
Trent Smith
Jennifer Smith
Eric Swanson

Lydia Toth
Mary Voges
Kelsey Vollmer
Anne Wamser
Kelly Wehrheim
Jennifer Wolff

General Services
Paul Broekmann, Senior Vice President
Facility Support
Devin Andrews
Edith Ball
Patrick Cannady
Rodney Evans
William Guy
John Harris
Draylen Jett
Carla Johnson
Bradford Lewis
Judy McClure
Travane McNeil
Excell Potts
Tara Rai
Patricia Scott-Jones
Keith Warfield

Linda Williams
Bryan Wilson
April Wilson

Maintenance
Michael Callier
Susan Ciluffo
Michael Cotton
Douglas Deen
Guy Dopmeyer
Keith Edwards
Mark Hoag
Drew Hogan
John Hunter
Jacklyn Maciekowicz
Kevin Mattingly
Roger McFarland
Michael Messner
Patrick Nolan
Cedric Paine
Ralph Stamm
Gregory Tolle
Charles Zidar

Security
Nickolas Bellamy
Cameron Cleveland
Our Volunteers

The Garden is grateful to our 1,829 volunteers (the equivalent of 73 full-time staff) who donated over 141,537 person-hours in 2012.
### By The Numbers

#### Visitors

<table>
<thead>
<tr>
<th>Attendance at all locations</th>
<th>1,134,671</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest daily attendance: Saturday, October 6 (Best of Missouri Market)</td>
<td>10,344</td>
</tr>
<tr>
<td>Highest Lantern Festival Attendance (day and night): Saturday, August 18 (Last festival weekend)</td>
<td>9,837</td>
</tr>
<tr>
<td>Highest non-event attendance: Saturday, March 31 (Eggstravaganza, Children’s Garden Opening)</td>
<td>7,852</td>
</tr>
<tr>
<td>Lowest non-event attendance: Tuesday, January 17</td>
<td>19</td>
</tr>
</tbody>
</table>

#### Members

<table>
<thead>
<tr>
<th>Members</th>
<th>44,465</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of member visits</td>
<td>345,677</td>
</tr>
</tbody>
</table>

#### Personnel

| Number of staff | 452 |
| Number of volunteers | 1,829 |
| Number of volunteer hours worked | 141,537 |
| Number of equivalent full-time staff with volunteers | 73 |

#### Communications

| Total visits to Garden website | 4.4 million |
| Total unique online visitors | 2.6 million |
| Total visits via mobile device | 660,000 |
| Total email subscriber base | 54,000 |

#### Education

<table>
<thead>
<tr>
<th>Education Program Participation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students and teachers in education programs</td>
<td>102,414</td>
</tr>
<tr>
<td>Teachers using workshops and instructional material</td>
<td>2,229</td>
</tr>
<tr>
<td>Scouts and Leaders in education programs</td>
<td>5,998</td>
</tr>
<tr>
<td>Adults in adult education programs</td>
<td>14,582</td>
</tr>
<tr>
<td>Seniors, special-needs, others in hort. therapy programs</td>
<td>2,890</td>
</tr>
<tr>
<td>Youth and families in education programs</td>
<td>5,028</td>
</tr>
<tr>
<td>Visitors experiencing drop-in education opportunities</td>
<td>167,431</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Venue Attendance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitors to the Doris I. Schnuck Children’s Garden</td>
<td>95,631</td>
</tr>
<tr>
<td>Visitors to the Brookings Interpretative Center</td>
<td>83,783</td>
</tr>
<tr>
<td>Visitors to the Tower Grove House</td>
<td>53,212</td>
</tr>
<tr>
<td>Visitors to the Dana Brown Overnight Center (SNR)</td>
<td>3,681</td>
</tr>
<tr>
<td>Visitors to the U.S. Green Building Council MO Gateway Chapter offices</td>
<td>1,920</td>
</tr>
</tbody>
</table>

#### Home Gardening

| Visitors to Kemper Center for Home Gardening | 153,868 |
| Master Gardeners (active) | 326 |
| Hours of community service by Master Gardeners | 31,185 |
| Plant Doctor Service clients | 7,483 |
| Horticulture Answer Service questions answered | 15,199 |
| Visits to Gardening Help’s webpages | 2.8 million |
| Online email gardening questions answered | 1,815 |

#### Horticulture

| Total taxa | 16,224 |
| Rare taxa | 219 |
| Plantings | 48,847 |
| Accessions (see page 11) | 28,954 |
| Accessions added in 2012 | 1,227 |
| Living tree taxa (unique kinds of trees) | 1,159 |
| Trees measured for height, canopy spread, and diameter of trunk | 3,813 |

#### Science & Conservation

| PhD researchers at the Garden | 50 |
| Staff publications in 2012 | 156 |
| Staff presentations in 2012 | 31 |
| New plant names described in 2012 | 131 |
| Countries where fieldwork is done | 35 |
| Graduate students at the Garden | 15 students from 5 different countries |
| Degrees awarded | 3 PhD / 3 Master’s |
| Specimens in Herbarium | 6,373,010 |
| Tropicos® online herbarium records | 4,142,083 |
| Books in the Library | 200,000+ |
| New books added in 2012 | 1,495 |
| New items added to Library catalog | 3,240 |
| Journal subscriptions in the Library | 800+ print journals |
| Reference queries answered | 512 |
| Interlibrary loans | 554 supplied to 11 countries |
| Rare books (printed before 1830) | 6,550 approx. |
| Rare books digitized and placed online | over 700 |
| Total volumes of rare books digitized and placed online | 5,023 |
| Electronic journals that can be accessed | 2,500+ |
| Books published by MBG Press in 2012 | 7 |
| Quarterly journals by MBG Press | 2 |
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