

BGCI's Annual Member's Review 2018

Policy & advocacy • Connecting people • Sharing knowledge • Saving plants



BGCI



MESSAGE FROM BGCI'S SECRETARY GENERAL



Dear BGCI member,

It has been another very busy year for the BGCI team as you will see from the contents of this review.

At the **global policy level**, we have put a considerable amount of time and effort working with the Global Partnership for Plant Conservation

(GPPC) to start to draft the next iteration of the Global Strategy for Plant Conservation (GSPC), which aims to fit seamlessly into the broader post-2020 biodiversity framework under the Convention on Biological Diversity (CBD). Representatives of the GPPC and national GSPC Focal Points met with the CBD Secretariat in Cape Town in September as part of this process, and we have worked since then to incorporate the ideas that emerged from this meeting into post-2020 planning (see page 4).

As part of our work as an advocate for botanic gardens, BGCI produced a **Technical Review on the Economic, Social and Environmental Impacts of Botanic Gardens**. This study includes 28 case studies of the impacts of the work of botanic gardens in these areas, and demonstrates excellent return on investment for funders of the institutions concerned (see page 5). We hope that such studies can be replicated by other gardens seeking to demonstrate that they are good value for money.

Launched in 2018, **BGCI's Accreditation Scheme** aims to recognise and maintain professional standards in botanic gardens (see page 16). BGCI Botanic Garden Accreditation was launched in May, and BGCI Conservation Practitioner Accreditation was launched in August. A third accreditation – BGCI Advanced Conservation Practitioner – is currently being tested for launch in early 2019.

Measuring and improving the impact of public engagement by botanic gardens was a strong theme of BGCI's 10th International Congress on Education in Botanic Gardens, which was held in Warsaw in September. **Connecting people** (pages 6-9) is one of BGCI's most important purposes, and nearly 300 delegates from 50 countries attended this conference for a week of stimulating discussions and presentations. We are extremely grateful to the University of Warsaw Botanic Garden for hosting this meeting, and we were honoured to share their 200th birthday with them. Other meetings supported by BGCI this year include the Eighth European Botanic Gardens Congress: "*Botanic Gardens, People and Plants for a Sustainable World*", hosted by the University of Ajuda in Lisbon in May, and; the *2018 Botanical Bridges Conference of the Caribbean and Central American Botanic Gardens Network*, hosted by the National Botanic Gardens Network of Cuba in Havana in April.

BGCI's work **sharing knowledge** within and outside our community of botanic gardens is primarily manifested in our vocational training programmes. In 2018, BGCI training events were attended by 689 people from 220 institutions in 54 countries (see page 13). Work continues, also, on developing and improving BGCI's databases. **ThreatSearch** now includes more than 300,000 conservation assessments covering more than 180,000 taxa, and **PlantSearch** now includes comprehensive collections data from gardens in Mexico and China. An important innovation this year was the launch of BGCI's first comprehensive **Directory of Expertise** for Seed Conservation.

Central to our mission is working with you, our members and other partners to **save plants** (pages 17-20). The **Global Tree Assessment** has rapidly accelerated in 2018 with 5,300 species conservation red list assessments carried out in 2018, which was a five-fold increase from 2017! Additionally, funding was secured to complete the assessment of all unassessed tree species by 2020. Similarly, the **Global Trees Campaign** has grown significantly, with 120 threatened tree species in 21 countries the focus of conservation efforts in 2018. More than 450,000 seedlings were raised by BGCI Global Trees Campaign projects this year. Our work restoring more complex species assemblages also continues to grow with the **Ecological Restoration Alliance of Botanic Gardens**, now numbering 40 institutions on five continents.

Saving plants is also about explaining to the public why plants are important. BGCI's **BigPicnic** project, involving nineteen partner institutions, has explored imaginative ways to do this through the topic of food security (see page 20). This innovative project has been identified as an exemplar project of its kind by its funder, the European Union.

Last but not least, BGCI supports botanic gardens through providing funding for plant conservation, public engagement and other important activities. In 2018, we disbursed USD 2,209,000 to 73 botanic gardens or other institutions in 41 countries (see Table 2), and next year we will expand this work by launching a **Global Botanic Garden Fund** that all BGCI members can apply to for funding (more details on page 25).

I hope that this gives you a sense of what BGCI accomplished this year, and I hope that you feel, as members, that this represents a good return on your investment in BGCI. We cannot do what we do without your support, and we are very appreciative that you continue to support us through your membership fees and through partnership. Please do get in touch!

Dr Paul Smith
BGCI Secretary General

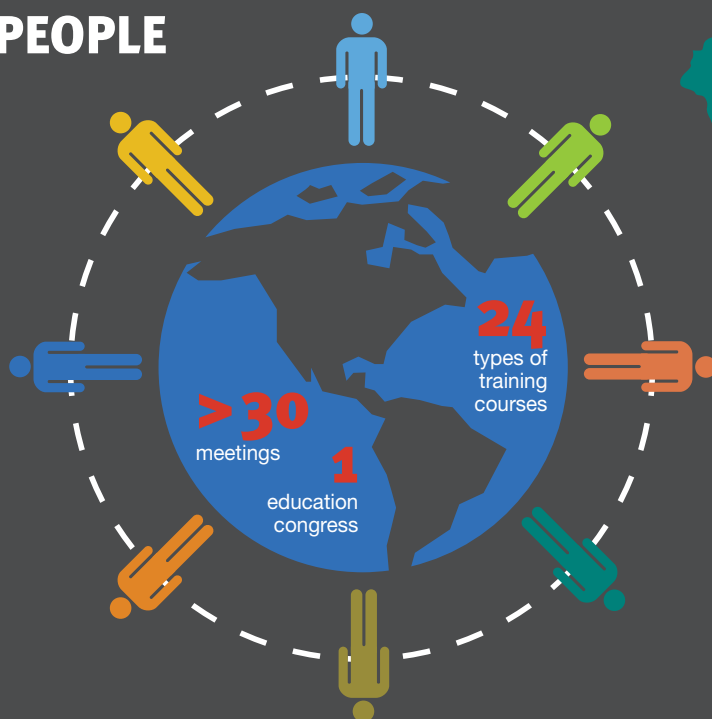
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BGCI disbursed funds totaling US\$ 2,209,000 to botanic gardens and other institutions in 2018, which is many times what we receive in subscriptions from our members.

CONNECTING PEOPLE

Meetings held or supported by BGCI in
North America, Central South America, Asia, Oceania, Africa and Europe



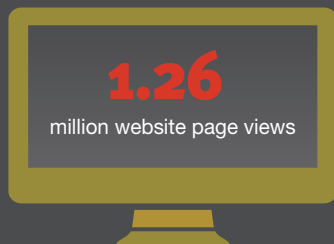
BGCI's 10th Botanic Garden Education Congress in
Warsaw

POLAND

300 delegates from
50 countries and
130 posters or presentations

BGCI trained **689** people
 from **220** institutions
 from **54** countries

SHARING KNOWLEDGE



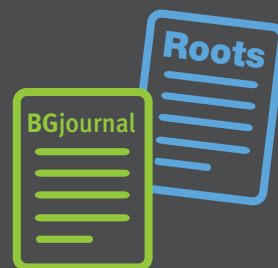
12
 BGC
 Accredited
 Botanic
 Gardens



12
 BGC
 Accredited
 Conservation
 Practitioners



BGCI produced a Technical Review on the Economic, Social and Environmental Impacts of Botanic Gardens



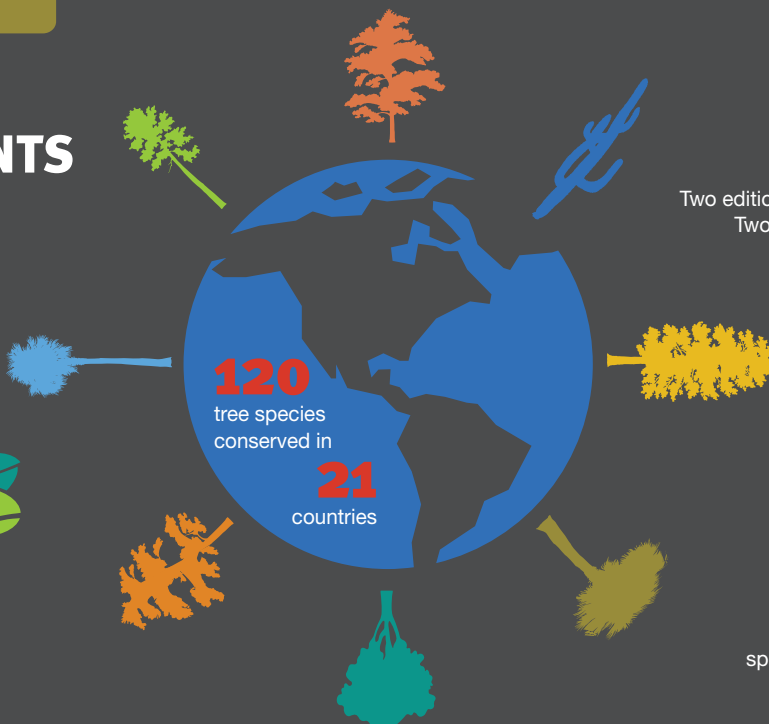
Two editions of **BGjournal** were published
 Two issues of **Roots** were published

SAVING PLANTS



> 450,000

seedlings generated for reintroduction and restoration



5,300

species conservation assessments submitted to the IUCN Red List

BGCI STAFF

BGCI is a small organisation that takes pride in its wonderful members of staff. We are pleased to introduce BGCI Members to the small number of dedicated BGCI staff who contributed to the global work of BGCI in 2018.



Paul Smith -
Secretary
General



Suzanne Sharrock -
Director of Global
Programmes



Joachim Gratzfeld -
Director of Regional
Programmes



Martha Love -
Head of Finance



Meirion Jones -
Head of Information
Management



Malin Rivers -
Head of Conservation
Prioritisation



Kirsty Shaw -
Head of Ecological
Restoration and Tree
Conservation



Brian Lainoff -
Head of Membership
Strategy and Services



Katherine O'Donnell -
Head of Seed
Conservation and
Plant Health



Helen Miller -
Head of Education
and Vocational
Training



Liliana Derewnicka -
Education
Coordinator



Gail Bromley -
Biodiversity
Education Officer



Vivien Isaac -
Accounts
Officer



Liz Smith -
Membership &
Administration



Emily Beech -
Conservation
Officer



Yvette
Harvey-Brown -
Conservation
Assistant



Noelia Alvarez -
Plant Conservation
Project Manager



Megan Barstow -
Red List
Conservation
Assistant



Xiangying Wen -
BGCI China
Executive Director



Abby Meyer -
BGCI U.S.
Executive Director



Nick Barton -
BGCI U.S.
Research Associate



Igor A. Smirnov -
Chairman,
BGCI Russia



Murphy Westwood -
Global Tree
Conservation Officer
at The Morton
Arboretum



Jean Linsky -
South East Asia
Botanic Gardens
(SEABG) Network
Coordinator

BGCI would like to acknowledge the following people for their support in 2018:

Paola Andreoni – Previous Head of Membership

Simon Barber – BGCI Volunteer

Nathan Strout – Mobile App Developer



POLICY & ADVOCACY

GLOBAL PARTNERSHIP FOR PLANT CONSERVATION

BGCI provides the Secretariat for the Global Partnership for Plant Conservation (GPPC), an informal partnership of more than 50 institutions with international plant conservation programmes. A conference of the GPPC was held from 28-30 August in Cape Town, South Africa, hosted by the South African National Biodiversity Institute (SANBI). The conference was organised in association with the Secretariat of the Convention on Biological Diversity (CBD) and BGCI.

The conference, entitled *Supporting the worldwide implementation of the Global Strategy for Plant Conservation* was attended by over **120 participants** from **35 countries**. The programme included **42 oral presentations** and **six parallel workshops**, as well as **21 poster presentations**. Oral presentations provided information on GSPC implementation at the national level as well as reports on progress towards individual targets at the global level. The parallel workshops provided opportunities for discussion around specific targets and issues related to the GSPC. A report of the workshop was prepared by BGCI and is available for download at <http://plants2020.net/global-implementation/>.

A meeting of the GSPC Liaison Group was convened by the CBD Secretariat on 31 August in Cape Town, following the GPPC meeting. This group discussed the future of the GSPC post-2020 and made recommendations for the continued inclusion of specific plant conservation targets and milestones in the CBD's post-2020 biodiversity framework.



BGCI'S INTERNATIONAL ADVISORY COUNCIL

BGCI's International Advisory Council, comprising 28 botanic garden directors from six continents, met at Kirstenbosch National Botanical Garden in Cape Town on 27th August 2018. The main topics covered were:

- Progress against BGCI's Strategic Plan 2015-2020.
- BGCI's Technical Review on the Economic, Social and Environmental Impacts of Botanic Gardens.
- BGCI's Accreditation Scheme.
- The BGCI Global Botanic Garden Fund.
- The Global Strategy for Plant Conservation post-2020.

The IAC concluded that:

- Significant progress has been made against BGCI's Strategic Plan and BGCI is on track to deliver nearly all of its targets by 2020.
- BGCI's 2018 Technical Review on the Economic, Social and Environmental Impacts of Botanic Gardens is a very useful addition to botanic garden literature, and the IAC hopes that the methodologies will be replicated by other gardens. The focus of BGCI's 2019 Technical Review should be on botanic gardens supporting urban greening.

- BGCI should work to roll the Accreditation Scheme out in multiple languages and in collaboration with national associations of botanic gardens.
- The Global Botanic Garden Fund received the IAC's endorsement and suggested that it should be open to BGCI members only.
- The GSPC has been an extremely effective and useful framework for botanic gardens, and its plant specific, measurable targets should be continued beyond 2020.



BGCI'S TECHNICAL REVIEW ON THE ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPACTS OF BOTANIC GARDENS

In 2017, at the request of BGCI's International Advisory Council, BGCI produced a Technical Review on defining the botanic garden, and how to measure

performance and success. In carrying out this survey and review, it became clear that too few botanic gardens measure the impacts of their work. Instead, there is a strong tendency to measure areas of activity.

For this reason, the focus of BGCI's 2018 Technical Review was on impacts. For the purposes of this study, BGCI broadly categorised the results of the activities of botanic gardens into **economic, social and environmental impacts**. Wherever possible, this Technical Review highlights case studies where impact evaluation studies were carried out by objective, third parties - usually auditors, consultants or academics. 28 case studies of measurable impacts of the work of botanic gardens are presented in this review, which is available at www.bgci.org/news-and-events/news/1505/.

The results of such studies are useful to policymakers and funders because they enable decision makers to weigh up the **cost: benefit ratio** or **return on investment** associated with particular activities carried out by botanic gardens. Such studies are useful to botanic garden leaders for the same reasons. They can be used to persuade funders and influencers that botanic gardens are institutions that are worth supporting.



THE MARSH AWARDS FOR INTERNATIONAL PLANT CONSERVATION AND EDUCATION IN BOTANIC GARDENS

On Friday September 14th, the winners of the Marsh Awards for International Plant Conservation and Education in Botanic Gardens 2018 were announced at BGCI's 10th International Congress on Education in Botanic Gardens in Warsaw Poland. The winners were:

Christian Torres-Santana from Arboreto Parque Doña Inés was awarded the Marsh Award for International Plant Conservation 2018. He was nominated by Marcos Caraballo for his work in conserving the flora of Puerto Rico.

Clemmie Borgstein from the Kawasan Wisata Pendidikan Lingkungan Hidup (KWPLH) environmental education centre in Indonesia was awarded the Marsh Award for Education in Botanic Gardens 2018. She was nominated by Gabriella Fredriksson for her work in planning and constructing an ethnobotanical garden based on medicinal plant use in East Kalimantan, Borneo.



ICARDA Terbol

CONNECTING PEOPLE

MEETINGS AND SYMPOSIA

EuroGard VIII

BGCI convenes the European Botanic Gardens Consortium, which includes representatives from all countries across Europe. In 2018, the Consortium, in association with the Botanic Garden of Ajuda, University of Lisbon, organised the *Eighth European Botanic Gardens Congress: Botanic Gardens, People and Plants for a Sustainable World*. The congress, which was attended by **302 people** from **39 countries** worldwide, was held in Lisbon, Portugal from 7-11 May. Presentations and workshops at the Congress covered all aspects of the work of botanic gardens and were organised into the following themes:

- Botanic gardens and science
- Botanic gardens and global change
- Biodiversity conservation
- Education and public engagement
- Sustainability
- Heritage, culture and tourism

10th Botanic Garden Education Congress

The 10th International Congress on Education in Botanic Gardens took place at the University of Warsaw Botanic Garden on 9-14th September 2018. The theme of the Congress was 'Bringing nature to the city', and it coincided with the 200th anniversary of the University of Warsaw Botanic Garden. The event was a great success with nearly **300 registered delegates** from **50 countries**. **65 posters** and **65 sessions** were presented focusing on the congress themes:

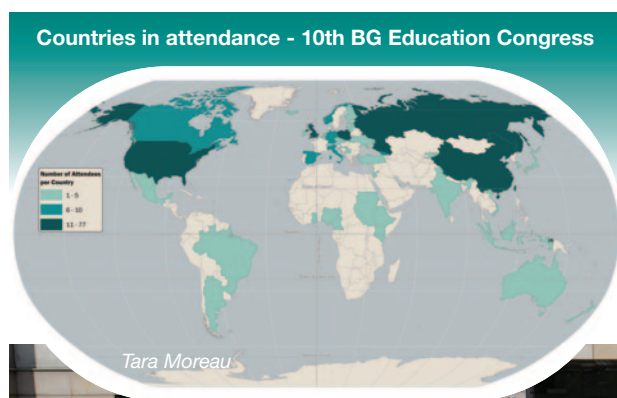


- City Gardens
- New Educational Tools
- Working Together
- Supporting Formal Education
- Reaching New Audiences
- Measuring Impact
- Education in Polish Botanic Gardens.

There were also some inspirational plenary talks representing the seven congress themes. Further information about the congress is available at: www.bgci.org/public-engagement/educationcongress2018/

Side event at the 14th Conference of the Parties to the CBD

In the framework of a project entitled 'Promoting the use of plant resources in research and development', funded by the UK's Darwin initiative, BGCI organised a side event at the CBD COP14 in Egypt in November. The side event, *Data-management to support enhanced access and benefit sharing (ABS) compliance*, included speakers from BGCI, the Ethiopian Biodiversity Institute (BGCI's project partner), the UK's Natural History Museum and the Global Biodiversity Information Facility (GBIF). The event was attended by over 50 participants and explored how we can build better pipelines for sharing non-monetary benefits arising from biodiversity research and data mobilization and access. It also examined the role of measures to guide ABS-compliant data management for the *ex situ* collections that provide information to global portals.





Botanical Bridges Congress 2018, Cuba

The “Botanical Bridges 2018” Congress took place at the National Botanic Garden in Havana, Cuba in April 2018 on the occasion of the 50th anniversary of the garden. Botanical

Bridges is a congress of the Caribbean and Central America Botanic Garden Network aimed at strengthening collaboration among botanical gardens in the region. The congress included lectures, oral presentations, debates and workshops related to the work of botanical gardens of the region. Key topics discussed were *in situ* and *ex situ* conservation, collection management, fundraising, training, education and outreach. The Congress was organized by the National Botanic Garden, Cuba with the support of the National Botanic Gardens Network, The University of Havana, the Cuban Botanical Society, Missouri Botanical Garden, Planta! and BGCI, among others.

The 12th Latin American Botanical Congress, Quito, 2018

The largest botanical conference in Latin America, the 12th Latin American Botanical Congress, took place in La Casa de La Cultura in Quito, Ecuador. More than 800 delegates participated in the congress including ten guest speakers from the United States and Latin America. The programme comprised over 80 parallel events, symposia, workshops and training courses. In addition, the congress delegates were offered the opportunity to take part in a series of botanical expeditions. BGCI participated in the Symposium entitled *Botanical Gardens of Latin America: valuation, education, research and conservation within the framework of the Global Strategy for Plant Conservation 2011-2020*.



Global Tree Specialist Group (GTSG) regional meeting Bogor, Indonesia

The Malesian region is a tropical biodiversity hotspot. It is estimated to contain 10,606 tree species, representing more than one sixth of all tree species worldwide. With current growing threats in the region, there is an increasing demand and need for plant extinction risk assessments using internationally recognized standards. These will be a starting point to develop guidelines for the conservation and sustainable use of plant species and their ecosystems in Malesia. A one-day meeting with GTSG members discussed current/existing conservation assessment projects and ways to achieve the Global Tree Assessment in the region – including who should be involved, limitations/constraints and how to share information and lessons learnt.

Developing a conservation action plan for the Dominican Republic's threatened magnolias

The Dominican Republic's cloud forest magnolias – *Magnolia domingensis* (CR), *M. hamorii* (EN) and *M. pallescens* (EN) are at risk of extinction, primarily as a result of indiscriminate felling for timber exploitation, forest fires, construction of buildings, as well as conversion of native forests to land for agriculture and livestock grazing. To address these threats, BGCI collaborated with Fundación PROGRESSIO, and Jardín Botánico Nacional Dr. Rafael M. Moscoso in Santo Domingo, to develop an integrated conservation plan for the three magnolias. Based on extensive field surveys to establish the species' distribution, the action plan was successfully prepared and launched at a public event at the National Botanic Garden on 11 December 2018. This event was attended by over 40 representatives from the Ministry of Environment, NGOs, botanic gardens and the wider public. Practical *ex* and *in situ* conservation action is already underway and BGCI will continue to support the conservation work in 2019. More information can be found at issuu.com/magikpublicidad/docs/muestra_libro_funadacion_progressio



Other meetings attended or supported by BGCI

In addition to the meetings above, BGCI staff presented BGCI's work at:

- The California Native Plant Society's Conservation Conference (Los Angeles, CA USA, January)
- Who's who in conservation, University of Cambridge (United Kingdom, March)
- Celebrating Women in Science and Conservation, Museum of Zoology, University of Cambridge and Cambridge Conservation Forum (United Kingdom, March)
- The opening ceremony of Dongguan Botanic Garden (China, April)
- The Global Rhododendron Conservation Consortium inaugural meeting (Oak Spring, VA USA, April)
- Famous Garden and Flower Show organised by the Chinese Academy of Sciences Botanical Gardens (Lushan Botanic Garden, May)
- The University of Bonn Botanic Garden's 200th Anniversary (Germany, June)
- American Public Gardens Association Annual Conference (Los Angeles, CA USA, June)
- The 55th Annual Meeting of the Association of Tropical Biology and Conservation (ATBC) (Kuching, July)
- 7th International Legume Conference, (Sendai, Japan, August)
- Food Forever Annual Meeting (Wilmington, DE USA, September)
- Plant Network, Betula Identification and Cultivation (UK, September)
- Plant Conservation Alliance Bi-monthly Meeting (Washington, DC USA, September)
- Collections Management Symposium, American Public Gardens Association (Vancouver, BC Canada, October)
- The 7th Asian Symposium of Ferns and Lycophytes (Taipei, October)
- Annual academic meeting of Fairylake Botanic Garden (Shenzhen Fairylake Botanic Garden, China, October)

- Plant Biodiversity Conservation in East and Southeast Asia, National Museum of Nature and Science International Symposium 2018 (Tokyo, November)
- L'Orto Botanico per un progetto di restauro e valorizzazione dell'Orto Botanico dell'Università di Parma (Italy, November)
- Annual meeting of Chinese Botanical Gardens (China, November)
- Workshop on the mission and function of Chinese botanical gardens (Ningbo Botanic Garden, November)
- Training course on the conservation of wild plants organized by the Wildlife Conservation Department of National Forestry and Grassland Administration (China, November)
- Annual meeting of Chinese Academy of Science garden committee (Kunming Botanic Garden, December)
- International NGOs meeting (Beijing, December)
- The Royal Botanic Garden, Victoria's Climate Change Summit (Melbourne, Australia, December)

REGIONAL BGCI OFFICES AND NATIONAL BOTANIC GARDEN NETWORKS

The South East Asia Botanic Garden Network (SEABG)

The SEABG Network had an active 2018 including the continuation of support for conservation of 'exceptional' plant species and Red Listing through a meeting and training on Fagaceae Conservation at Pha Tad Ke Botanical Garden in September. Members of the SEABG met up at various international conferences throughout the year including Bogor (GTSG Regional Meeting and Red List Workshop), Kuching (ATBC Annual Meeting) and Tokyo (NMNS International Symposium 2018) to share news. Funding was secured and a new project was launched on *Securing the future of threatened tree giants in Borneo*. SEABG project partners in Indonesia, Malaysia and Brunei will focus on conserving the most threatened Dipterocarpaceae in Borneo. Projects were also ongoing for tree conservation in Laos, Vietnam and Taiwan. The SEABG published six editions of its newsletter, sharing news, events and opportunities in plant conservation in 2018 and more than doubled our followers on social media, helping us to expand the network. The SEABG is looking forward to its next major meeting, the 7th SEABG Network Conference to be held at Queen Sirikit Botanic Garden, Thailand in 2019.

The African Botanic Garden Network



AFRICAN BOTANIC GARDEN NETWORK

BGCI Africa was registered as a limited company in Kenya in 2018. This base provides us with the opportunity to better support our botanic garden partners across the continent and expand our programme of conservation projects. In collaboration with the JBF network (Jardins Botaniques de France et des pays Francophones) and the South African National Biodiversity Institute (SANBI), BGCI is working to revive the African Botanic Garden Network, to connect and increase capacity of botanic gardens across the continent. During 2018, training courses were run for botanic gardens in Tanzania, Zimbabwe, South Africa and Kenya.

North America

An article on the value of U.S. botanic garden collections by Abby Meyer, BGCI-USA, was published in the *Public Garden* magazine.



BGCI was highlighted in the Yale E360 article, *Extreme Botany: the precarious science of saving endangered plants*: <https://e360.yale.edu/features/extreme-botany-the-precarious-science-of-saving-rare-endangered-plants>.

CONSORTIA AND PARTNERSHIPS

Botanic Garden Partnership Programme

The second phase of the BGCI/ArbNet partnership programme was launched in 2018, with interested gardens providing details via an on-line survey. The aim of the programme is to support mutually beneficial, long-term partnerships between gardens/arboreta based on shared interests and capacities. A total of 28 gardens responded to the call, and potential partnerships were identified using an objective analytical tool. Thirteen potential partnerships were identified, and to date, four gardens have signed agreements and received small grants to support initial partnership activities. These are:

- The Botanic Garden at Emerson College, UK and the Balkan Botanic Garden of Kroussia, Greece – a grant for medicinal plant propagation, conservation and education exchange;
- Museo delle Scienze, Italy and Lystigardur Akureyrar, Iceland – a grant for conserving Arctic alpine plants.

Oaks of the Americas Conservation Network

The Oaks of the Americas Conservation Network (OACN) is a regional, cross-sector conservation consortium established and coordinated by The Morton Arboretum, BGCI, and Fauna and Flora International (FFI) under the Global Trees Campaign. Its 100+ members from eight countries work collaboratively to conduct the research needed to understand and reverse the threats facing oak species in the Americas. In 2018, over 20 OACN members attended the *9th International Oak Society Conference* in Davis, California (USA), where conservation was a core theme of the meeting. An IUCN Red List review session was held to finalise the last remaining threat assessments for the oaks of Mexico.



The OACN members are critical to the success of The Morton Arboretum's efforts to complete IUCN Red List assessments for all New World oak species. Another major effort of OACN is clarifying the taxonomy and phylogeny of the oaks of the region, as well as conducting field surveys to document occurrences and threats for rare and threatened oaks and to collect acorns. Through support from BGCI, OACN members completed over 20 field expeditions throughout Mexico targeting 30 rare, threatened, or data deficient oak taxa, greatly expanding our knowledge of this important tree group and providing valuable information to complete IUCN Red List threat assessments. At least five additional oak-focused funding proposals were awarded to OACN members this year, further leveraging the support of BGCI. Key partners in the network conducting research and field expeditions include the Benemerita Universidad Autonoma de Puebla (Mexico), Escuela Nacional de Estudios Superiores de UNAM (Morelia, Mexico), University of Minnesota, and El Instituto de Ecología de Xalapa (Mexico).



Global Conservation Consortium for Rhododendron



In April 2018, BGCI organised an international meeting, held at and sponsored by Oak Spring Garden (Virginia, USA), to

initiate development of an integrated conservation strategy for *Rhododendron*. *Rhododendrons* are ornamental horticultural plants widely cultivated in temperate regions. They are associated with centres of diversity in the Himalayas and in South East Asia, where they form important components of montane ecosystems. *Rhododendrons* underpin livelihoods, food security and health care of local communities in their natural habitats. The updated global analysis for the *ex situ* conservation of *Rhododendrons* L. (MacKay *et al.* 2018) reported that the Red List taxa presently in cultivation do not yet achieve the 75% required to meet Target 8 of the Global Strategy for Plant Conservation (GSPC). The GSPC also calls for 20% of threatened species to be included in restoration and recovery programmes. The main outcome of this meeting was the unanimous agreement by all participants that it would be beneficial to form a global consortium of botanical institutions with expertise on the conservation and cultivation of *Rhododendron* that would ensure that no species of *Rhododendron* becomes extinct. Thus, the **Global Conservation Consortium for *Rhododendron*** was established.



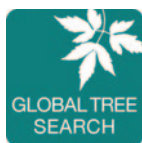
SHARING KNOWLEDGE



THREAT
SEARCH



PLANT
SEARCH



GLOBAL TREE
SEARCH



GARDEN
SEARCH

DATA SERVICES

ThreatSearch (www.bgci.org/threat_search.php) is the most comprehensive database of conservation assessments of plants, including global, regional and national assessments for plants! It has over 300,000 conservation assessments of plants, with about 40,000 species considered globally threatened. It covers assessments carried out at a global as well as on a national scale. It was promoted by the CBD Secretariat to all CBD national focal points as the **authoritative source of information on threatened plants towards achieving Target 2 of the Global Strategy for Plant Conservation.**

PlantSearch (www.bgci.org/plant_search.php) is a globally unique database of the living plant, seed, and tissue collections maintained by botanic gardens. BGCI and botanic gardens continue to build this global dataset for planning and reporting on plant conservation progress. There were **266 new plant lists** contributed to PlantSearch in 2018. To facilitate this, **257 new Garden Editors** were registered in 2018. In elevating the value and use of living collections, PlantSearch anonymously connects researchers, horticulturists, conservationists, and educators to collection managers with species of interest. In 2018, **1,879 requests were sent to collection managers via PlantSearch.** Further, BGCI fielded over **200 bulk data requests** from researchers around the world.

GlobalTreeSearch (www.bgci.org/global_tree_search.php) is a global list of the world's tree species and their country distributions. It was launched in 2017 and now lists 60,039 tree species. In 2018, 678 species were added to the tree list. **Over 10,000 geographic and taxonomic changes were made, reflecting feedback from our partners and taxonomic progress in many groups.**

GardenSearch (www.bgci.org/garden_search.php), BGCI's digital directory of botanic gardens, now contains information on staff, facilities, and expertise at 3,535 botanical institutions worldwide.



Pamela J. Thompson



Daniel Luscombe

PUBLICATIONS

BGCI journals, newsletter and social media

BGjournal

Two issues of *BGjournal* were published during 2018, both of which were themed around the United Nation's Sustainable Development Goals (SDGs).

The January issue highlighted the intersections between plant conservation and sustainable development, looking across the suite of SDGs, while the July issue focused on Sustainable Development Goal 15 (Life on Land). The articles in these issues provide some inspiring examples from around the world, showing how the work of botanic gardens is helping broader society to live more sustainably, while also addressing plant conservation needs. These two issues illustrate how, in one way or another, botanic gardens are addressing almost all of the Sustainable Development Goals. Past issues can be found at www.bgci.org/resources/bgjournal/



Roots

BGCI produced two issues of *Roots* in 2018. The first, published in May, was entitled *Engaging Youth: Putting Theory into Practice.*

The articles in this issue looked at how organisations, including universities and botanic gardens are delivering high-quality public engagement through evidence based practice, and how this way of working can enhance learning. The second, published in November, was a celebration of BigPicnic. This special issue focussed on how informal learning sites can, are and should engage the public with issues related to food security as well as highlighting the achievements of the BigPicnic project. Past issues of *Roots* can be found at www.bgci.org/public-engagement/roots



Cultivate

In 2018, six issues of BGCI's e-newsletter *Cultivate* were published. Each issue contained a summary of recent news, events and publications and was sent to around 7,000 recipients. You can sign up to *Cultivate* or view previous issues at www.bgci.org/news-and-events/ournewsletter/.

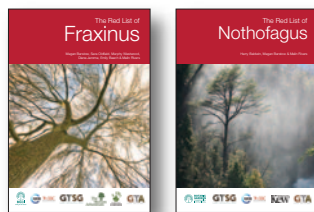
Twitter	BGCI	GlobalTrees	IPSN	Total
Number of tweets	216	198	19	433
Profile Views	14,122	7,887	3,871	25,880
Followers	5,035	3,214	718	8,967
New followers in 2018	645	414	87	1,146

BGCI's website

Web page	Number of page views
Whole site	1,256,114
Home page	58,514
Why plants are important	39,580
Policy/climate change and plants	20,470
PlantSearch database	22,474
Botanic Garden Jobs	20,338
Member's Area	8,060

Red List Assessments

In 2018, BGCI and Global Tree Assessment partners submitted over 5,300 species conservation assessments to the IUCN Red List, and over 820 have already been published online (www.iucnredlist.org). There are several key projects this year including the national endemics of Brazil, Madagascar, Malaysia and Indonesia, but also important taxonomic groups such as Annonaceae, Sapotaceae, *Eucalyptus* and *Nothofagus*.



In January, The Red List of *Fraxinus* was published including assessments for all 53 species of ash. Encouragingly, this report found that 79% of *Fraxinus* species were not threatened with extinction in the wild. However, due to threats from habitat conversion, logging and invasive species such as the Emerald Ash Borer (EAB) and *Hymenoschyphus fraxineus* (the ash dieback fungus), eleven species were identified as threatened. The majority of threatened species (six species) were present in North America and experiencing rapid population declines due to EAB infection.

The Red List of *Nothofagus* contains IUCN Red List Assessments for all 37 species of Nothofagaceae, including eleven species (30%), threatened with extinction. The family Nothofagaceae is native to the southern Hemisphere, often forming the major component of forests in parts of Chile, Argentina, New Zealand, New Caledonia, Australia, Papua New Guinea and Indonesia. The Red List of *Nothofagus* identifies those *Nothofagus* species most at risk of extinction in the wild, highlighting the need to target conservation action at some eleven threatened species. A diverse array of conservation actions will be required to protect the species from the threats affecting the group.

Ex situ surveys

The Red List of *Fraxinus* included an *ex situ* survey, finding 1,980 records in PlantSearch for *Fraxinus* species in botanic garden and arboreta collections, held across 394 institutions. Eighty-five percent (45 species) of *Fraxinus* species are found in *ex situ* collections. Of the eleven threatened species, one species is not found in collections: *Fraxinus hubeiensis* (Endangered). Seven species of *Fraxinus* are found in five or fewer *ex situ* collections.

The Red List of *Nothofagus* also includes an *ex situ* survey of the genus. Currently 20 species of *Nothofagus* are held in *ex situ* collections. However, none of the most threatened Critically Endangered species are reported from botanical collections. The species most frequently found in *ex situ* collections are those that are at lower risk of extinction. It is essential that collections of threatened *Nothofagus* are made and that these collections are as diverse and genetically representative of the species in the wild as possible.

An *ex situ* collections assessment of Crop Wild Relative (CWR) taxa was completed in 2018 by BGCI-US in partnership with the United States Botanic Garden. The foundation of the assessment relied on a global list of 2,888 priority CWR species, and a list of 232 priority North American CWR species. Using BGCI's PlantSearch database, 1,008 (35%) CWR global priority and 172 (74%) threatened North American CWR species were located in living plant and seed collections, however the majority of global priority and threatened North American CWR taxa are reported in five or fewer collections. An accessions-level survey of ten North American threatened CWR species was carried out to further characterize the genetic diversity of CWR taxa maintained in botanic garden collections.

We received information on 552 total accessions from 21 *ex situ* sites. Eight of the ten target taxa are represented *ex situ* by at least one accession, and we were able to calculate wild-origin latitude and longitude coordinators for a total of 523 (94.7%) accessions. The presence of this wild origin material demonstrates the value of botanic garden collections for CWR preservation, and will help in establishing a full *ex situ* representation of each species' remaining wild populations.

Additionally, BGCI-USA is supporting the following *ex situ* surveys:

- *Amorphophallus titanum* global *ex situ* survey and molecular analysis by Jeremie Fant, Chicago Botanic Garden
- *Hamamelidaceae* global *ex situ* survey by Cat Meholic, University of Delaware
- *Coffea* spp. global *ex situ* survey by BGCI-US, in partnership with the United States Botanic Garden





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TRAINING COURSES

In 2018, BGCI trained **689 people** from **220 institutions** from **54 countries** (see Table 1). Our courses covered a wide range of topics in plant conservation policy, practice and education. Some of the highlights are included below.

Access and Benefit Sharing (ABS)

In the framework of the Darwin Initiative-funded project in Ethiopia, *Promoting the use of plant resources in research and development*, a stakeholder consultation / training course was held for Ethiopian agricultural and forestry researchers. During this training course, researchers were presented with a series of practical 'scenarios' looking at ABS compliance measures relevant to their work. Analysis of these scenarios was considered a valuable training exercise by the researchers. A total of fifteen individuals from nine research programmes participated in the training.

Red List Assessment training

During 2018, several Red List Assessment training courses were held, most with a focus on increasing the capacity, engagement and output for the Global Tree Assessment. In February, BGCI ran a four-day Red List course at Bogor Botanical Garden, with over 50 participants from the Malesian region (including Indonesia, Peninsular Malaysia, Sabah, Sarawak, Philippines, Singapore and Papua New Guinea).

In Madagascar, over 30 people were trained in the IUCN Red List Assessment process, for a project to assess all 3,000 endemic trees of Madagascar. BGCI also ran a full four-day IUCN Red List course at the National Botanical Garden of Georgia.

In collaboration with Pha Tad Ke Botanical Garden in Laos in September 2018, BGCI and The Morton Arboretum held a two-day Red List training and workshop. It was attended by 20 participants from ten institutions, and participants assessed both threatened and non-threatened Fagaceae species from Asia.

In November, a week-long training and assessment course took place in Nassau at the Bahamas National Trust. This course was run by BGCI and the Leon Levy Native Plant Preserve. There were over 20 participants from across the Caribbean region and training included the IUCN Red List Categories and Criteria, GIS mapping and discussions on the next steps to achieve the Global Tree Assessment in the region.



Seed conservation

Building capacity and implementing tree conservation in Mexico

In Mexico, a seed conservation training course was run in collaboration with the Jardín Botánico Universitario BUAP in Puebla. Ten Mexican botanic gardens and seed banks were represented along with several participants from institutions in Latin America (Ecuador, Bolivia and the Dominican Republic). Trainers included those from BGCI the National Forestry Commission (CONAFOR) and the National Center for Genetic Resources (CNRG). As a conclusion to the workshop, an action plan between BGCI and BUAP was created in order to identify future partnership opportunities. BUAP was provided with funding to collect seed of threatened tree species in the State.

Seed Conservation Training at the University of Jammu, India

In collaboration with BGCI, the Department of Botany, University of Jammu ran a workshop entitled 'Conserving India's Threatened Flora'. Twenty participants from several organisations within the Jammu and Kashmir state attended. The workshop focused on seed conservation training utilising GSCC training modules created by BGCI. After the workshop, participants put their newly acquired skills into practice and were involved in seed collection trips.

Tree conservation, nursery training & forest restoration



Forest restoration training course in Kenya

In January 2018, a four-day training course on forest restoration and plant identification took place at Brackenhurst Botanic Garden, a member of the Ecological Restoration Alliance of Botanic Gardens (ERA). Trainers from Brackenhurst Botanic Garden, Tooro Botanical Gardens in Uganda and BGCI taught participants how to plan forest restoration, select appropriate native species for restoration, propagate trees from seeds and cuttings and the basics of plant identification. The training course provided a platform for participants to discuss the challenges associated with restoring landscapes in East Africa and suggest ideas for overcoming challenges.

Dry Forest Restoration in Fiji

In February, a training course on Dry Forest Restoration was held in Vanua Levu, Fiji. This week-long course, led in partnership with Auroville Botanical Gardens, India was organised by BGCI and NatureFiji-MareqetiViti. The training is part of a larger GTC project to 'Save the threatened trees of Fiji' and was attended by 23 participants from the Forestry Department of Fiji, local conservation NGOs and community members of the island. Sessions focused on six major topics on forest restoration: planning forest restoration, species selection, threat management, site management, nursery management and monitoring restoration. Case studies of projects in Fiji, as well as India, were used to highlight examples of reforestation and restoration and a field trip allowed for practical discussion and hands-on planning for a future restoration site. Discussion on each topic was facilitated to share lessons learnt and address challenges frequently faced during restoration projects. During the training, the group also developed draft restoration plans for the case study site and discussed potential methods and challenges for future work. The training outcomes will contribute to practical implementation of the restoration plan in 2019.



Conservation horticulture

Conservation of Fagaceae in Indochina

A training workshop focusing on the integrated conservation of rare Fagaceae species was held at Pha Tad Ke Botanical Garden (PTK) in Laos in September. The workshop, co-organised by BGCI, The Morton Arboretum, FFI and PTK was attended by 15 participants from botanic gardens and research institutions from five Southeast Asian Countries (Cambodia, Laos, Myanmar, Thailand and Vietnam). The training focused on Fagaceae taxonomy and identification, the IUCN Red List process and biodiversity monitoring, and was led by Fagaceae experts from Guangxi University (Dr. Joeri Strijk and Dr. Damien Hinsinger), BGCI and FFI. During the workshop, participants gained valuable knowledge in key characteristics for identification of Fagaceae specimens to genus level and names were confirmed or added to over 100 specimens from the region. Participants received training in the IUCN Red List Process and completed or reviewed over 90 assessments for Fagaceae and other tree species, making a valuable regional contribution to the Global Tree Assessment. The participants also discussed challenges to and strategies for monitoring threatened tree species.



Aroid Collections and Conservation Workshop

BGCI-US, in partnership with the United States Botanic Garden, brought together staff members from 30 major botanic gardens in the U.S. for a two-day workshop, hosted at The Huntington Botanical Gardens in San Marino, California. The focus of the workshop was *ex situ* plant conservation status and strategies for the Araceae family. Many U.S. gardens and conservatories maintain globally unique collections of aroids not found in any other collections worldwide and that are threatened with extinction in the wild. This meeting was a starting point for exchanging information and ideas, and volunteers were identified to lead broader coordination to ensure collections are conserving as much aroid diversity as possible.

Arborticulture training in South Africa

In November 2018, the Royal Botanic Gardens Edinburgh led a training course on arboricultural techniques for staff from South African botanic gardens, hosted at Pretoria National Botanical Garden. This course aimed to improve management of living tree collections within South African botanic gardens, including of threatened species. Increased capacity of South African botanic gardens as a result will lead to more secure conservation collections of native and threatened South African trees. South African botanic gardens are now well placed to provide training and support to other botanic gardens across the continent.

PUBLIC ENGAGEMENT AND EDUCATION

Working with Diverse Audiences and Science Communication

A twelve-week blended learning module on the subject of 'Working with diverse audiences' was developed and delivered by BGCI and our LearnToEngage partners between January and April 2018. Ten students from the UK, five from Portugal and five from Italy took part in this module, representing 20 botanic garden or museum institutions. The students studied online for eleven weeks and were provided with a series of videos, presentations, reading and assignments. They also attended an on-site week in Edinburgh, UK hosted by Royal Botanic Garden Edinburgh on 5-9th February 2018.

In addition, a twelve-week module on 'Science Communication' was developed and delivered between September and December 2018. For this module, eleven students from Italy, five from the UK and four from Portugal, representing twenty different organisations were selected. The on-site week took place in Trento, Italy on 15-19th October 2018, hosted by MUSE Science Museum.



LearnToEngage is a suite of professional development modules for botanic garden staff and museum educators in the UK, Portugal and Italy. In addition to the modules run in 2018 a module on 'Interpretation' was developed and run in 2017 and, in 2019, a further module will be developed for 'Evaluation and Research'. As part of the outputs of the project, participant and tutor handbooks are being developed to support other organisations to deliver similar training. Currently handbooks related to the Interpretation and Working with Diverse Audiences modules can be found at www.learnstoengage.eu/en/more/intellectual-outputs. Several multiplier events were held to further disseminate the modules. These short training sessions gave participants an idea of what is covered in the modules, some quick hands-on training and guidance on where to access more information. Events were held at Eurogard VIII and the Botanic Gardens Education Network (bgen) annual conference hosted by Cambridge University Botanic Garden and the Sainsbury Laboratory from 7th – 9th November. The Multiplier events were attended by a total of 51 participants from botanic gardens and museums across Europe.

Team-Based Inquiry (TBI)

As part of the BigPicnic project, training was provided to fifteen botanic garden partners in data gathering and evaluation techniques (Team-Based Inquiry). Training took place at a project partner meeting in Bergamo, Italy (July 2018) as well as individual training sessions for each garden partner at their sites



led by the project's TBI lead – University College London. The project partners are working with local audiences, some of which are considered hard-to-reach, on the subject of food security. This training allowed partners to understand how to gather data during events they are running as part of the project (co-creation sessions, exhibitions and science cafés), and more specifically how to collate and analyse these data. The project will use the data collected by partners to provide recommendations for ethically acceptable, sustainable and societal research and innovation, helping to shape the future of our food.

Other Public Engagement Training

BGCI also provided public engagement training in collaboration with bgen and London Environmental Education Forum (LEEF) at their annual networking day held on 15th August at the WWT London Wetland Centre. The event was attended by 37 participants representing outdoor learning organisations from across the UK. This year, the day focused on the theme of change and the programme included a range of training sessions on changing delivery methods, especially through the use of technology, as well as encouraging and measuring attitude change.

RESOURCES

Access and Benefit Sharing (ABS) Case Studies

To promote the exchange of experiences and share knowledge on ABS, BGCI is gathering practical examples on the measures that *ex situ* collections, research institutions and their networks are taking to ensure that they acquire, use and transfer plant genetic resources and share benefits in compliance with national and international laws, respecting the rights of provider communities and in accordance with mutually agreed terms. These examples are available at www.bgci.org/policy/abscasestudies/

Care for the Rare

The Care for the Rare Mobile Application was piloted in ten U.S. gardens in 2018 and plans to launch globally in 2019. The 'Care for the Rare Tours' application can be downloaded from the Google Play or App Stores at <https://itunes.apple.com/us/app/care-for-the-rare-tours/id1044968168?mt=8> or <https://play.google.com/store/apps/details?id=org.bgci.c4r>



Directories of Expertise

In 2018, BGCI worked with IUCN Species Survival Commission Specialist Group partners Harold L. Lyon Arboretum, the National Tropical Botanic Garden (NTBG) in Hawai'i and Guangxi University in China to create an online, interactive Seed Conservation Directory of Expertise (www.bgci.org/plant-conservation/seedexpertise/). This resource contains information on individuals, facilities and expertise related to seed conservation. This tool will benefit the global plant conservation community through expanding seed conservation networks, facilitating exchange of information and ideas, and enabling better seed conservation stewardship by facilitating connections, collaborations and exchange. The NTBG has put together a great video on how to use the directory: www.bgci.org/plant-conservation/seedinstructions/. BGCI is grateful to the US Forest Service for funding work on this directory.

Plant Conservation and Biodiversity Benchmarking Tool

The Plant Conservation and Biodiversity Benchmarking tool was launched in 2018 through a partnership between BGCI-US, the United States Botanic Garden, and the American Public Gardens Association. The Benchmarking Tool is designed to ask a series of questions within five major areas: Leadership & Governance, *Ex situ* Conservation, *In situ* Conservation, Research & Expertise, and Education & Communication. The results characterize conservation capacity of individual institutions and of all participating institutions in North America on an annual basis, and for the first time directly connect activities at gardens with international conservation strategies including the GSPC. The Benchmarking Tool can be found at www.publicgardens.org/communicating-climate-conservation.

CBD E-Learning Resources

In 2018, BGCI launched a suite of e-learning resources funded by the Convention on Biological Diversity and The Japan Biodiversity Fund. Four e-learning modules in forest restoration are available in English, French, Spanish and Swahili, four red listing modules are available in English, French, Spanish and Chinese and six seed conservation modules available in English, French, Spanish and Chinese. Additionally, a series of advanced seed conservation modules were produced in 2018.

BGCI Accreditation Scheme

In 2018, the BGCI Accreditation Scheme was launched. BGCI's accreditation scheme distinguishes botanic gardens from non-botanic gardens and recognises achievements in plant conservation. The scheme aims to raise awareness and recognition of the activities that botanic gardens do exceptionally well to policymakers and funders. Accreditation can result in tangible benefits for participating gardens – such as recognition, peer review, creating standards for excellence, and funding – and will act as a motivator for botanic garden leadership. BGCI launched two different accreditations in 2018:

- BGCI Botanic Garden Accreditation
- BGCI Conservation Practitioner Accreditation

Additionally, BGCI tested the application process for BGCI Advanced Conservation Practitioner Accreditation, which will be launched in early 2019. Finally, BGCI published Accreditation Standards for the BGCI Accreditation Scheme to help applicants determine the requirements for accreditation (www.bgci.org/accreditation/about/accreditation-standards/).



To learn more about the BGCI Accreditation Scheme or to apply for BGCI Botanic Garden, Conservation Practitioner, or Advanced Conservation Practitioner, please visit www.bgci.org/accreditation.

The following botanic gardens achieved BGCI Botanic Garden Accreditation in 2018:

Botanic Garden of the Natural History Museum of Denmark, Denmark
Ghent University Botanic Garden, Belgium
Gullele Botanic Garden, Ethiopia
Huntington Library, Art Collections and Botanical Gardens, USA
Jardín Botánico Carlos Thays, Argentina
Jardín Botánico Universitario – BUAP, Puebla, Mexico
National Botanic Garden of Wales, United Kingdom
Oklahoma City Zoo and Botanical Garden, USA
Pha Tad Ke Botanical Garden, Laos
Stellenbosch University Botanical Gardens, South Africa
University Botanic Gardens Ljubljana, Slovenia
Wollongong Botanic Garden, Australia



The following botanic gardens achieved BGCI Conservation Practitioner Accreditation in 2018:

Denver Botanic Gardens, United States
The Eden Project, United Kingdom
Ghent University Botanic Garden, Belgium
Hortus botanicus Leiden, Netherlands
Huntington Library, Art Collections and Botanical Gardens, United States
Jardin Botanico de la Universidad Autonoma de Puebla, Mexico
Montgomery Botanical Center, United States
National Botanic Garden of Wales, United Kingdom
North Carolina Botanical Garden, United States
University Botanic Gardens Ljubljana, Slovenia
Stellenbosch University Botanical Garden, South Africa
Wollongong Botanic Garden, Australia



SAVING PLANTS - LEADING INNOVATIVE PROJECTS IN PLANT CONSERVATION POLICY, PRACTICE AND EDUCATION

Cristian Echeverría

Global Tree Assessment



Building on last year's progress, the Global Tree Assessment now has partnership agreements with a range of megadiverse countries to assess

their endemic tree floras, including Brazil, Madagascar, Colombia, Indonesia, and Malaysia. In parallel, taxonomic partnerships were developed assessing taxonomic groups of high tree diversity (Annonaceae, Sapotaceae, *Eucalyptus*, Lauraceae). In addition, assessments from the **Least Concern methodology, developed by the IUCN Global Tree Specialist Group for tree species not at risk of extinction** are being produced and passing rigorous checks from the IUCN Red List and expert review.

The Global Seed Conservation Challenge



The Global Seed Conservation Challenge now comprises **198** Botanic Gardens. BGCI continues to provide training

and support to gardens that are involved in seed banking. Throughout 2018, BGCI built resources including videos (www.bgci.org/plant-conservation/seedlibrary/) from our members showcasing their work and how-to-videos on seed collection. Carlos Thays Botanic Garden, Argentina won the prize for the best video and received free registration to BGCI's Education Congress. BGCI also worked on a set of advanced seed conservation modules (www.bgci.org/plant-conservation/seed_advlarning).

GTA Project example: Red list of *Nothofagus* – the southern beeches

In 2018, BGCI's Global Tree Assessment team assessed all of the 37 southern beeches, and found that 30% are threatened with extinction. The family Nothofagaceae is native to the southern Hemisphere, often forming the major component of forests in parts of Chile, Argentina, New Zealand, New Caledonia, Australia, Papua New Guinea and Indonesia. The Red List of *Nothofagus* highlight the threats impacting this genus, including fire, climate change, habitat loss, pests and diseases. There is an urgent need to target conservation action *ex situ* and *in situ* to the most threatened species in this group.



Cristian Echeverría



Global Trees Campaign



Through the Global Trees Campaign (GTC), which BGCI manages in partnership with FFI, BGCI has supported the conservation of **120 tree species in 21 countries** in 2018, raising more than 450,000 seedlings, and employing an integrated (*ex situ* and *in situ*) conservation approach, working

closely with local communities. BGCI-led GTC projects are active in **Armenia, Bhutan, Bolivia, Chile, China, Cuba, Dominican Republic, Fiji, Georgia, Japan, Kenya, Madagascar, Malawi, Mexico, Nepal, Taiwan, Tanzania, Uganda, USA and Zimbabwe**. GTC funding was provided by Fondation Franklinia, the Mohamed Bin Zayed Species Conservation Fund, the Darwin Initiative, the Ashden Trust, Keidanren Foundation, the Critical Ecosystem Partnership Fund and the Rufford Foundation.

GTC Project example: The Pepper-bark tree

The Pepper-bark tree (*Warburgia salutaris*) is a highly valued medicinal tree that is now thought to be extinct in the wild in Zimbabwe, primarily due to over-collection for its much sought-after bark. In November 2018, saplings were distributed to community members in the Tanganda Halt (the historical range of the species in Zimbabwe). During a community workshop, the harvesting of Pepper-bark tree leaves was promoted as they contain the same active chemicals as the bark and can be harvested sustainably. We hope that increasing the supply of cultivated Pepper-bark trees and products will provide an alternative to harvesting wild individuals and will enable future reintroduction of this threatened tree back into the wild.



GTC Project example: Integrated conservation of *Juglans jamaicensis*, a threatened Caribbean species of walnut

Cuba is blessed with a magnificent botanical wealth – over half of the island’s 7,500 plant species are endemics, one of the highest plant endemism rates in islands in the world. Likewise, with over ten botanic gardens, Cuba has a strong, dedicated national network working for plant conservation. Since 2016, Jardín Botánico de Cienfuegos (JBC) and BGCI joined forces to enhance environmental awareness and practical plant conservation. Over the past three years, hundreds of seedlings of the native and endangered West Indian Walnut, *Juglans jamaicensis* were raised in *ex situ* collections at JBC and shared with other botanic gardens in Cuba. Working with nearly 20 local farmers, walnut saplings were planted out *in situ* to diversify coffee plantations. This is raising awareness amongst coffee producers that it possible to increase plant diversity in plantations without incurring a loss in productivity, whilst growing a further natural resource bearing future development potential.



The Global Oak Conservation Partnership



GLOBAL
CONSERVATION
CONSORTIUM
OAK

Established in 2016 by The Morton Arboretum, BGCI and FFI, the Global Oak Conservation Partnership integrates targeted *in situ*

conservation efforts with strategically coordinated *ex situ* preservation of priority threatened oak species. 2018 saw significant expansion of *in situ* research and conservation efforts for two priority threatened taxa in Mexico: *Quercus brandegeei* (EN) and *Q. insignis* (EN).

Over 4,000 acorns of *Q. brandegeei* have now been collected and distributed to partner institutions for germination and drought tolerance studies, propagation for eventual reintroduction, and to strengthen *ex situ* collections throughout Mexico.



The Morton Arboretum is partnering with Centro de Investigaciones Biológicas del Noroeste (CIBNOR) in Baja California Sur, Mexico, for a multi-faceted research and conservation project targeting this threatened endemic species, which includes working with local farmers and communities to plant and monitor seedlings and to understand the societal value and impact of this species.

In partnership with the El Instituto de Ecología (Xalapa, Mexico) and Escuela Nacional de Estudios Superiores de UNAM (Morelia, Mexico), the Global Oak Conservation Partnership has reintroduced over 300 seedlings of the threatened *Q. insignis* in Xalapa, Mexico as part of a cloud forest enrichment initiative. Our partners are also conducting various restoration experiments to identify the best reforestation practices for this system, especially those adapting to a changing climate which may push the species to higher altitudes.

We are also working with Dr. Hernando Rodriguez Correa of the Escuela Nacional de Estudios Superiores in Morelia, Mexico. Dr. Rodriguez Correa spent the summer of 2018 collecting acorns and genetic material from *Quercus insignis* populations across Mexico. His field work will help establish a genetically-representative *ex situ* collection of the species in botanic gardens across Mexico, and additionally, his research will help us understand the habitat, germination ecology, and genetic diversity of the species in order to best conserve it in the future.

The International Plant Sentinel Network



The International Plant Sentinel Network has **45** partners involved and is

funded by the UK's Department of Environment, Food and Rural Affairs (Defra) and supported by Fera Science Ltd. Through the Euphresco network fifteen partners in Europe, Australia, New Zealand and the US are involved in research activities on future pest threats. The final conference of the COST Action Global Warning conference in 2018 provided an opportunity for IPSN and Euphresco partners to meet and discuss current and future work. Plant Health Australia worked with the IPSN and Australian botanic gardens to set up an Australian Plant Sentinel Network.

Securing a botanical treasure – Action to save Argentina's medicinal plants



Argentina is home to a wealth of medicinal plants – including at least 1,500 native species – yet, beyond the country's borders, little is known about this national botanical treasure and its utilisation, but also about the threats this botanical diversity is facing. To boost conservation and public awareness of Argentina's remarkable, native medicinal flora, an innovative partnership formed

in 2015: Jardín Botánico Carlos Thays (JBCT) of the municipality of Buenos Aires, Klorane Botanical Foundation, Pierre Fabre Dermo-Cosmétique, Argentina and BGCI joined forces to develop and implement an integrated conservation programme for selected native medicinal plants.



KLORANE
BOTANICAL
FOUNDATION



Jardín Botánico
CARLOS THAYS



Pierre Fabre
Dermo-Cosmétique



BOTANIC
GARDENS
CONSERVATION
INTERNATIONAL

During the three-year period, propagation protocols for fifteen species were developed, *ex situ* collections established at JBCT, seedlings shared with other botanic gardens as well as planted *in situ* to reinforce wild populations. These efforts were accompanied throughout the project by a series of outreach activities targeting school children and the wider public to raise awareness of Argentina's botanical treasures. This collaboration is a model example of a partnership between botanical institutions and the private sector working jointly for plant conservation.



The Ecological Restoration Alliance of Botanic Gardens



The Ecological Restoration Alliance of Botanic Gardens (ERA) now comprises 40 botanic gardens across six continents.

Workshops on forest restoration were held in Kenya (January 2018) and Fiji (February 2018). BGCI and the International Association of Botanic Gardens (IABG) published a new manual to guide species recovery projects. The manual includes chapters and case studies from ERA members. E-learning modules on forest restoration were produced and are available in English, Spanish, French and Swahili.

A public symposium entitled Restoration in Urban Areas was hosted at Royal Botanical Gardens, Ontario, Canada (an ERA member garden) in October 2018. Talks were given by ERA members and local restoration practitioners from the Ontario region. The symposium was co-hosted with the local chapter of the Society for Ecological Restoration (SER) and was attended by 100 people. This was followed by an ERA tour of local restoration sites and the annual meeting of the ERA.

ERA Project example: Supply and Demand: Restoration in Uganda for people and biodiversity

In 2018, BGCI secured funding from the Darwin Initiative for a project that supports the training and employment of more than 100 people to ensure Uganda's Bonn Challenge pledge is delivered in a way that benefits biodiversity and improves livelihoods. In December 2018, 30 people were trained by Tooro Botanical Gardens, the National Forestry Authority (NFA) and BGCI staff as seed monitors and collectors. The training included planning, develop seed collecting calendars, seed collection, data recording and post collection techniques. Trained personnel will collect and supply seed to four indigenous tree nurseries that are being established close to high priority areas for restoration. This project is delivered in collaboration with the International Union for Conservation of Nature (IUCN) and aims to establish a model project that draws on botanic garden expertise to deliver species diverse forest restoration and meet government restoration pledges.



BigPicnic Big Questions – engaging the public with Responsible Research and Innovation on Food Security



The BigPicnic project, an EU Horizon2020 funded project, with a consortium of 19

institutions., successfully completed its second year. BigPicnic aims to bring together the public, scientists, policy-makers and industry to help tackle the global challenge of food security. Botanic garden partners, with training and support, are co-creating a range of exhibitions and participatory events with people from all walks of life, to generate dialogue and build greater understanding of food security.

In 2018, partners further developed their exhibitions and ran science cafes on a variety of food security related projects including sustainability, food preparation, production, agriculture, food shortages and food diversity. In addition, we have started to analyse the data collected at these events – one of the most important findings that has already come out of the project is the role of heritage and culture in people's association with food. This has led the project to change its definition of food security, to illustrate this new finding. More information is available at www.bigpicnic.net.

LearnToEngage – a modular course for botanic gardens



LearnToEngage is a three-year project funded by the European Commission's Erasmus + programme. It involves the

development of a suite of professional development modules for botanic garden staff and museum educators in the UK, Portugal and Italy. The modules are being developed in partnership between BGCI, the Royal Botanic Gardens Edinburgh, Nottingham Trent University, National Museum of Natural History and Science, Lisbon and Muse Science Museum, Italy.

The aim of the project is to pilot a blended learning approach to professional development in order to enhance public engagement across Europe and beyond. The project will result in four modules focussed on different areas of public engagement at botanic gardens: Interpretation, Working with Diverse Audiences, Science Communication and Research and Evaluation. In 2018, modules on Working with Diverse Audiences and Science Communication were developed and successfully delivered to 40 students from institutions in Italy, Portugal and the UK. In addition, intellectual outputs (trainer and student handbooks and accompanying resources) were produced. These resources are open access allowing anyone to use the manuals to deliver their own versions of the modules. The final module and remaining manuals will be developed in 2019.



CAPACITY BUILDING AND FUNDS DISBURSED

In 2018, BGCI trained 689 people from 220 institutions from 54 countries (see Table 1). BGCI disbursed funds totalling USD 2,209,000 to botanic gardens and other institutions in 2018 (see Table 2). This figure is many times what we receive in membership fees.

Table 1: Participants in BGCI training courses, 2018

Institution	Number of individuals from institution	Country	Topic
Botanical Garden of the University of Vienna	3	Austria	Team-based Inquiry; LearnToEngage Multiplier event (Eurogard)
University of Innsbruck	1	Austria	Team-based Inquiry
Bahamas National Trust	8	Bahamas	IUCN Red List Assessments for Trees (GTA)
BEST Commission	1	Bahamas	IUCN Red List Assessments for Trees (GTA)
Department of Marine Resources	2	Bahamas	IUCN Red List Assessments for Trees (GTA)
Forestry Unit	2	Bahamas	IUCN Red List Assessments for Trees (GTA)
Island Conservation	1	Bahamas	IUCN Red List Assessments for Trees (GTA)
The University of the West Indies, Cave Hill	1	Barbados	IUCN Red List Assessments for Trees (GTA)
Botanic Garden Meise	2	Belgium	Team-based Inquiry
Bolivia Herbario Nacional de Bolivia	1	Bolivia	Seed Conservation Training
University Botanic Gardens of Sofia	2	Bulgaria	Team-based Inquiry
Fauna and Flora International - Royal University of Phnom Penh	1	Cambodia	Fagaceae Conservation in Indochina
Agriculture and Forestry University of Zhejiang	5	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Baili Azale National Nature Reserve	4	China	Propagation technique of Rhododendron Species
Baishanzu National Nature Reserve	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Dapanshan National Nature Reserve	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Fengyangshan National Nature Reserve	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Guilin Botanical Garden	20	China	Cultivation, management, and harvest techniques of medicinal plants in the Karst region
Guizhou Botanical Garden	4	China	Propagation technique of Rhododendron Species
Guizhou Forestry Bureau	4	China	Propagation technique of Rhododendron Species
Guizhou University	6	China	Propagation technique of Rhododendron Species
Hangzhou Botanical Garden	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Hangzhou Normal University	5	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Jiande Forest Station	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Kunming Botanical Garden	4	China	Propagation technique of Rhododendron Species
Local nurseries and people	76	China	Propagation technique of Rhododendron Species, cultivation, management, and harvest techniques of medicinal plants in the Karst region; Propagation technique of threatened <i>Sinojackia dolichocarpa</i> ; Propagation, reintroduction, and monitoring technique of threatened <i>Magnolia omeiensis</i>
Maolan National Nature Reserve	4	China	Propagation technique of Rhododendron Species
Taizhou College	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Tianmushan National Nature Reserve	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Zhejiang Forestry Institute	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Zhejiang Natural History Museum	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Zhejiang University	4	China	Reintroduction technique of threatened <i>Carpinus tiantaiensis</i>
Planta!	1	Cuba	IUCN Red List Assessments for Trees (GTA)
Fundación Progreso	1	Dominican Republic	Seed Conservation Training
Jardín Botánico Nacional de Santo Domingo	1	Dominican Republic	IUCN Red List Assessments for Trees (GTA)
Facultad Ciencias Químicas Universidad Central de Ecuador	1	Ecuador	Seed Conservation Training
Debre Zed Agricultural Research Center - Tef Research Program	1	Ethiopia	Access and benefit sharing
Ethiopian Environment & Forest Research Institute	7	Ethiopia	Access and benefit sharing
Ethiopian Institute of Agricultural Research - Oilseeds, vegetable, wheat research, and medicinal and aromatic plants programmes	4	Ethiopia	Access and benefit sharing
Forage Research Institute, Holata	1	Ethiopia	Access and benefit sharing
Jimma Coffee Research Programme	1	Ethiopia	Access and benefit sharing
Jimma Spices Research Programme	1	Ethiopia	Access and benefit sharing
Conservation International	1	Fiji	Dry Forest Restoration
Mamanuca Environment Society	1	Fiji	Dry Forest Restoration
Matasavalevu Cooperative	2	Fiji	Dry Forest Restoration
Ministry of Fisheries and Forests	9	Fiji	Dry Forest Restoration
Nabutautau Village	1	Fiji	Dry Forest Restoration
Nakanacagi Village	1	Fiji	Dry Forest Restoration
National Trust of Fiji	2	Fiji	Dry Forest Restoration
NatureFiji-MareqetiViti	4	Fiji	Dry Forest Restoration
The Pacific Community (SPC)	2	Fiji	Dry Forest Restoration
University of Helsinki	1	Finland	LearnToEngage Multiplier event (Eurogard)
National Botanical Garden of Georgia	8	Georgia	IUCN Red List Training
Botanic Garden and Botanical Museum, Freie Universität Berlin	2	Germany	Team-based Inquiry
School Biology Centre Hannover	2	Germany	Team-based Inquiry



Institution	Number of individuals from institution	Country	Topic
Balkan Botanic Garden of Kroussia	4	Greece	LearnToEngage Multiplier event (Eurogard); Team-based Inquiry
Jardin Botanique des Cayes	1	Haiti	IUCN Red List Assessments for Trees (GTA)
College of Horticulture, Mudigere	1	India	LearnToEngage Multiplier event (Eurogard)
Department of Agriculture	2	India	Conserving India's Threatened Flora (GSCC)
Gandhi Memorial Science College	1	India	Conserving India's Threatened Flora (GSCC)
Govt. Degree College	3	India	Conserving India's Threatened Flora (GSCC)
Govt. HSS, Majajta	1	India	Conserving India's Threatened Flora (GSCC)
Govt. P.G. College	1	India	Conserving India's Threatened Flora (GSCC)
University of Jammu	11	India	Conserving India's Threatened Flora (GSCC)
State Forest Research Institute	3	India	Conserving India's Threatened Flora (GSCC)
Environment and Forestry Republic of Indonesia	1	Indonesia	IUCN Red List Assessments for Trees (GTA)
Fauna and Flora International – Indonesia office	3	Indonesia	IUCN Red List Assessments for Trees (GTA)
Forest Research and Development Center Research Development and Innovation Agency, Ministry of Environment and Forestry Republic of Indonesia	4	Indonesia	IUCN Red List Assessments for Trees (GTA)
Indonesian Forum for Threatened Trees	3	Indonesia	IUCN Red List Assessments for Trees (GTA)
LIPI (Indonesian Institute of Sciences)	7	Indonesia	IUCN Red List Assessments for Trees (GTA)
Dublin Botanic Gardens	2	Ireland	LearnToEngage Multiplier event (bgen conference)
Abetone Botanic Garden	1	Italy	Science communication
AmbienteParco - Science center	1	Italy	Science communication
Aquilegia Cultural Association - Alpi Apuane Botanic Garden	1	Italy	Working with Diverse Audiences
Association Myosotis - Zoological Museum	1	Italy	Science communication
Bergamo Botanic Garden "Lorenzo Rota"	4	Italy	Team-based Inquiry; Working with Diverse Audiences
Botanic Garden - University of Bari	1	Italy	Science communication
Botanic Garden - University of Pavia	1	Italy	Science communication
Botanic Garden - University of Siena	1	Italy	Science communication
Città Studi Milano Botanic Garden	1	Italy	Working with Diverse Audiences
Cooperativa Ossigeno - Scientific Association	1	Italy	Science communication
Esperia Alpine Botanic Garden	1	Italy	Science communication
Fartalle nella Testa - Zoo	1	Italy	Science communication
Oropa Botanic Garden	1	Italy	Working with Diverse Audiences
Parco Paneveggio Pale di San Martino - Natural park	1	Italy	Science communication
PraCatinat - Centre for Environment Education	1	Italy	Science communication
Università di Parma	30	Italy	BGCI Accreditation Scheme
Villa Carlotta Botanic Garden	1	Italy	Working with Diverse Audiences
Natural History Museum of Jamaica, Institute of Jamaica	1	Jamaica	IUCN Red List Assessments for Trees (GTA)
National Herbarium of Laos	1	Laos	Fagaceae Conservation in Indochina
National University of Laos	1	Laos	Fagaceae Conservation in Indochina
Pha Tad Ke Botanical Garden	4	Laos	Fagaceae Conservation in Indochina
The Agro-Biodiversity Initiative (TABI)	1	Laos	Fagaceae Conservation in Indochina
National Botanic Garden of Latvia	1	Latvia	LearnToEngage Multiplier event (Eurogard)
HB of Vilnius University	1	Lithuania	LearnToEngage Multiplier event (Eurogard)
Kew Madagascar Conservation Centre	8	Madagascar	IUCN Red List Assessments for Trees (GTA)
Madagascar Plant Specialist Group	5	Madagascar	IUCN Red List Assessments for Trees (GTA)
Madagasikara Voakajy	3	Madagascar	IUCN Red List Assessments for Trees (GTA)
University of Antananarivo	7	Madagascar	IUCN Red List Assessments for Trees (GTA)
Missouri Botanic Garden	9	Madagascar and United States of America	IUCN Red List Assessments for Trees (GTA); Aroid Collections and Conservation Workshop
Forest Research Institute Malaysia	1	Malaysia	IUCN Red List Assessments for Trees (GTA)
Forest Research Centre, Sabah Forestry Department	2	Malaysia (Sabah)	IUCN Red List Assessments for Trees (GTA)
Sarawak Forestry Department	2	Malaysia (Sarawak)	IUCN Red List Assessments for Trees (GTA)
Banco de Semillas FESI-UNAM	2	Mexico	Seed Conservation Training
Fundacion Xochitla, A.C.	1	Mexico	Seed Conservation Training
Jardín Botánico Cuicacán	1	Mexico	Seed Conservation Training
Jardín Botánico de Acapulco	2	Mexico	Seed Conservation Training
Jardín Botánico Francisco Javier Clavijero	1	Mexico	Seed Conservation Training
Jardín Botánico Regional "El Soconusco"	1	Mexico	Seed Conservation Training
Jardín Botánico UNAM	1	Mexico	Seed Conservation Training
Jardín Botánico Universitario, BUAP	5	Mexico	Seed Conservation Training
Jardín Etnobotánico "Francisco Peláez R." A.C.	3	Mexico	Seed Conservation Training
Environmental Care and Community Security Institute	2	Myanmar	Fagaceae Conservation in Indochina
Forest Research Institute, Forest Department	1	Myanmar	Fagaceae Conservation in Indochina
Hortus Botanicus Leiden	3	Netherlands	LearnToEngage Multiplier event (Eurogard); Team-based Inquiry
Natural History Museum, University of Oslo	2	Norway	Team-based Inquiry
Norwegian University of Science and Technology University Museum	1	Norway	LearnToEngage Multiplier event (Eurogard)
Stavanger Botanic Garden	1	Norway	LearnToEngage Multiplier event (Eurogard)
University of Bergen	1	Norway	LearnToEngage Multiplier event (Eurogard)
Papua New Guinea Forest Research Institute	1	Papua New Guinea	IUCN Red List Assessments for Trees (GTA)
De La Salle University Herbarium	1	Philippines	IUCN Red List Assessments for Trees (GTA)
Museum of Natural History, University of the Philippines	2	Philippines	IUCN Red List Assessments for Trees (GTA)
Adam Mickiewicz University	1	Poland	LearnToEngage Multiplier event (Eurogard)
University of Warsaw Botanic Garden	4	Poland	Team-based Inquiry
Agência Ciência Viva - Pavilhão do Conhecimento	1	Portugal	Working with Diverse Audiences
Botanic Garden of Ajuda - University of Lisbon	1	Portugal	Science communication



Institution	Number of individuals from institution	Country	Topic
Botanic Garden of the University of Coimbra	2	Portugal	Science communication; Working with Diverse Audiences
Caminhos do Ocidente	1	Portugal	LearnToEngage Multiplier event (Eurogard)
Exploratório - Centro Ciência Viva de Coimbra	1	Portugal	Science communication
Health Museum	1	Portugal	Working with Diverse Audiences
Jardim Botânico da Ajuda	1	Portugal	LearnToEngage Multiplier event (Eurogard)
Museum of Natural History and Science at the University of Porto and Porto Botanic Garden	4	Portugal	LearnToEngage Multiplier event (Eurogard); Science communication; LearnToEngage Multiplier event (Eurogard); Working with Diverse Audiences
National Museum of Natural History and Science, University of Lisbon	2	Portugal	Team-based Inquiry
Arboretum Parque Doña Inés at Fundación Luis Muñoz Marín	1	Puerto Rico	IUCN Red List Assessments for Trees (GTA)
University of Bucharest, Botanic Garden "D. Brandza"	1	Romania	LearnToEngage Multiplier event (Eurogard)
Singapore Botanic Gardens	1	Singapore	IUCN Red List Assessments for Trees (GTA)
Pretoria National Botanical Garden	28	South Africa	Arboriculture techniques
Juan Carlos I Royal Botanic Gardens, Alcalá de Henares University	3	Spain	LearnToEngage Multiplier event (Eurogard); Team-based Inquiry
The Royal Botanic Garden of Madrid – CSIC	3	Spain	LearnToEngage Multiplier event (Eurogard); Team-based Inquiry
Nelson Mandela African Institute for Science and Technology	17	Tanzania	Botanic garden management
Queen Sirikit Botanic Garden	2	Thailand	Fagaceae Conservation in Indochina
Malva Permaculture Farm Istanbul	1	Turkey	LearnToEngage Multiplier event (Eurogard)
Department of Environment and Coastal Resources	1	Turks and Caicos Islands	IUCN Red List Assessments for Trees (GTA)
Kagadi Central Forest Reserve	15	Uganda	Monitoring and Seed Collection for Tree Restoration
Kirimire Central Forest Reserve	15	Uganda	Monitoring and Seed Collection for Tree Restoration
Tooro Botanical Gardens	32	Uganda	Team-based Inquiry; Seed collecting
Botanical Garden of National University of Lviv	1	Ukraine	LearnToEngage Multiplier event (Eurogard)
M.M. Gryshko National Botanical Garden	1	Ukraine	LearnToEngage Multiplier event (Eurogard)
O.V. Fomin Botanical Garden	1	Ukraine	LearnToEngage Multiplier event (Eurogard)
Bath Spa University	1	United Kingdom	LearnToEngage Multiplier event (Eurogard)
Beddington Forestry Commission	3	United Kingdom	LearnToEngage Multiplier event (bgen conference)
Blue Dome Synergies	1	United Kingdom	Change (networking)
British Society for Plant Pathology	1	United Kingdom	LearnToEngage Multiplier event (bgen conference)
Cambridge University Plant Sciences	1	United Kingdom	LearnToEngage Multiplier event (bgen conference)
Chatsworth	1	United Kingdom	Working with Diverse Audiences
Chelsea Physic Garden	2	United Kingdom	LearnToEngage Multiplier event (bgen conference); Working with Diverse Audiences
City of London Open Spaces	1	United Kingdom	Change (networking)
Clifton Suspension Bridge Trust	1	United Kingdom	Science communication
Dalrymple	1	United Kingdom	LearnToEngage Multiplier event (Eurogard)
Department for Environment, Food & Rural Affairs	1	United Kingdom	IPSN Annual UK Workshop
Durham University Botanic Garden	3	United Kingdom	Science communication; Working with Diverse Audiences; LearnToEngage Multiplier event (bgen conference)
ecoACTIVE	1	United Kingdom	Change (networking)
English Heritage	1	United Kingdom	Change (networking)
FERA Science LTD	2	United Kingdom	IPSN Annual UK Workshop
Forest School	1	United Kingdom	Change (networking)
Freelance educator	2	United Kingdom	Change (networking)
Friends of Mayow Park	2	United Kingdom	Change (networking)
Hammersmith Community Gardens	1	United Kingdom	Change (networking)
Hillsborough Castle	1	United Kingdom	Working with Diverse Audiences
Holland Park Ecology Centre	1	United Kingdom	Change (networking)
Horniman Museum	1	United Kingdom	Change (networking)
Hyde Park	1	United Kingdom	Working with Diverse Audiences
Inverness Botanic Gardens	1	United Kingdom	LearnToEngage Multiplier event (bgen conference)
Kelvingrove Museum, Glasgow Museums	1	United Kingdom	Working with Diverse Audiences
LEARN CitSci	1	United Kingdom	Change (networking)
Lee Valley Regional Park	1	United Kingdom	Change (networking)
Museum of London Archaeology	2	United Kingdom	Change (networking)
National Botanic Garden of Wales	1	United Kingdom	Science communication
Natural History Museum	1	United Kingdom	Change (networking)
North London Waste Authority	1	United Kingdom	Change (networking)
Paignton zoo	1	United Kingdom	LearnToEngage Multiplier event (bgen conference)
Plantlife	1	United Kingdom	LearnToEngage Multiplier event (bgen conference)
Royal Botanic Garden Edinburgh	3	United Kingdom	Team-based Inquiry; IPSN Annual UK Workshop
Royal Botanic Garden, Kew and Wakehurst	7	United Kingdom	LearnToEngage Multiplier event (Eurogard); LearnToEngage Multiplier event (bgen conference); Change (networking); IPSN Annual UK Workshop
Royal Holloway, University of London	1	United Kingdom	Change (networking)
Royal Horticultural Society (Campaign for School Gardening, Hyde Hall and Wisley)	11	United Kingdom	Change (networking); LearnToEngage Multiplier event (Eurogard); LearnToEngage Multiplier event (bgen conference); IPSN Annual UK Workshop
Sefton Park	1	United Kingdom	Working with Diverse Audiences
Sir Harold Hillier Gardens	1	United Kingdom	LearnToEngage Multiplier event (Eurogard)
South East Rivers Trust	1	United Kingdom	Change (networking)
South London Botanic Institute	4	United Kingdom	LearnToEngage Multiplier event (bgen conference); Change (networking); Working with Diverse Audiences
Stoke-on-Trent Museum Service - Gladstone Pottery Museum	1	United Kingdom	Science communication
Thames Water	1	United Kingdom	Change (networking)
The Eden Project	1	United Kingdom	LearnToEngage Multiplier event (Eurogard)



Institution	Number of individuals from institution	Country	Topic
The Royal Parks	2	United Kingdom	Change (networking)
The Woodland Trust	1	United Kingdom	Change (networking)
The Yorkshire Arboretum	1	United Kingdom	Science communication
Think Outside	2	United Kingdom	Change (networking)
University of East London	1	United Kingdom	Change (networking)
Westonbirt National Arboretum	4	United Kingdom	LearnToEngage Multiplier event (Eurogard); LearnToEngage Multiplier event (bgen conference); Working with Diverse Audiences
Amazon Spheres	1	United States of America	Aroid Collections and Conservation Workshop
Atlanta Botanical Garden	1	United States of America	Aroid Collections and Conservation Workshop
California State University, Fullerton Arboretum	1	United States of America	Aroid Collections and Conservation Workshop
California State University, Fullerton Biology Greenhouses	1	United States of America	Aroid Collections and Conservation Workshop
Chicago Botanic Garden	3	United States of America	Aroid Collections and Conservation Workshop
Conservatory of Flowers	1	United States of America	Aroid Collections and Conservation Workshop
Denver Botanic Gardens	1	United States of America	Aroid Collections and Conservation Workshop
EEB Biodiversity Education and Research Greenhouses	1	United States of America	Aroid Collections and Conservation Workshop
Fairchild Tropical Botanic Garden	1	United States of America	Aroid Collections and Conservation Workshop
Huntington Botanical Gardens	9	United States of America	Aroid Collections and Conservation Workshop
Marie Selby Botanical Gardens	1	United States of America	Aroid Collections and Conservation Workshop
Mildred E. Mathias Botanical Garden	1	United States of America	Aroid Collections and Conservation Workshop
Naples Botanical Garden	2	United States of America	Aroid Collections and Conservation Workshop; IUCN Red List Assessments for Trees (GTA)
New York Botanical Garden	1	United States of America	Aroid Collections and Conservation Workshop
San Diego Botanic Garden	3	United States of America	Aroid Collections and Conservation Workshop
San Francisco Botanical Garden	1	United States of America	Aroid Collections and Conservation Workshop
United States Botanic Garden	1	United States of America	Aroid Collections and Conservation Workshop
University of California Botanical Garden at Berkeley	1	United States of America	Aroid Collections and Conservation Workshop
Waimea Valley Arboretum and Botanical Garden	1	United States of America	Aroid Collections and Conservation Workshop
Da Lat University	1	Vietnam	Fagaceae Conservation in Indochina
Silviculture Research Institute, Vietnamese Academy of Forest Sciences	1	Vietnam	Fagaceae Conservation in Indochina

Table 2: Institutions supported by BGCI with funding in 2018

Institution	Country	Institution	Country
Institute of Botany of the Armenian National Academy of Sciences	Armenia	Brackenhurst Botanic Garden	Kenya
Botanic Gardens Australia and New Zealand, and the Australian National Botanic Gardens	Australia	East African Herbarium	Kenya
Universität Innsbruck	Austria	Pha Tad Ke Botanical Garden	Laos
Agentschap Plantentuin Meise	Belgium	IUCN SSC Madagascar Plant Specialist Group	Madagascar
Tsenden Steering Committee	Bhutan	Kew Madagascar Conservation Centre	Madagascar
Herbário Nacional de Bolivia	Bolivia	Missouri Botanic Garden	Madagascar
Fundacao Flora de Apolo a Botanica	Brazil	University of Antananarivo	Madagascar
Sofiiski Universitet Sveti Kliment Ohridski	Bulgaria	Forest Research Institute of Malawi	Malawi
Instituto de Investigaciones Agropecuarias	Chile	Mulanje Mountain Conservation Trust	Malawi
Guangxi Institute of Botany	China	Forest Research Centre, Sabah Forestry Department	Malaysia
College of Humanities and Science, Guizhou Minzu	China	Tropical Rainforest Conservation & Research Centre	Malaysia
Hunan Forest Botanical Garden	China	Cadereyta Regional Botanic Garden	Mexico
Shenyang Arboretum, CAS	China	Jardín Botánico Universitario	Mexico
Sichuan Provincial Academy of Natural Resource Sciences, Chengdu	China	Maastricht University	Netherlands
South China Botanic Garden	China	Stichting Waag Society	Netherlands
Wuhan Botanical Garden	China	Universiteit Leiden	Netherlands
Zhejiang Forestry Academy	China	Universitetet I Oslo	Norway
Asociación Columbiana de Herbario	Columbia	Uniwersytet Warszawski	Poland
Jardín Botánico de Cienfuegos	Cuba	Universidade De Lisboa	Portugal
Fundación Progressio	Dominican Republic	Arboretum Parque Doña Inés	Puerto Rico
Addis Ababa University Herbarium	Ethiopia	University of Fort Hare	South Africa
Ethiopian Biodiversity Institute	Ethiopia	Agencia Estatal Consejo Superior De Investigaciones Cientificas	Spain
Gullele Botanic Garden	Ethiopia	Universidad de Alcalá	Spain
NatureFiji-MareqetiViti	Fiji	Dr Cecilia Koo Botanic Conservation Center	Taiwan
Institute of Botany Ilija State University	Georgia	Tanzanian Tree Seed Agency	Tanzania
National Botanic Garden of Georgia	Georgia	Tooro Botanical Gardens	Uganda
Freie Universität Berlin,	Germany	Nottingham Trent University	United Kingdom
Leiterin Schulbiologiezentrum	Germany	Royal Botanic Garden Edinburgh	United Kingdom
Wissenschaftsladen Bonn EV	Germany	Royal Botanic Gardens, Kew	United Kingdom
Hellenic Agricultural Organization-Demeter	Greece	Stone Lane Gardens	United Kingdom
Jardin Botanique des Cayes	Haiti	The Yorkshire Arboretum	United Kingdom
Orangutan Foundation International	Indonesia	Traffic International	United Kingdom
The Forum Pohon Langka	Indonesia	University College London	United Kingdom
Comune Di Bergamo	Italy	Chicago Botanic Garden	USA
Museo Delle Scienze di Trento	Italy	National Tropical Botanical Garden	USA
African Forest	Kenya	Bidoup-Nuiba National Park	Vietnam
		Vumba Botanical Gardens	Zimbabwe

BENEFITS OF BGCI MEMBERSHIP

Established in 1987, BGCI currently links more than 500 botanic gardens and conservation organizations in over 100 countries, working together to secure plant diversity for the well-being of people and the planet.

MEMBERSHIP BENEFITS INCLUDE

By joining BGCI you will be part of the largest network of botanic gardens in conservation, and have access to a range of dedicated services:

- Grants through the Global Botanic Garden Fund
- The Botanic Garden Accreditation Scheme: www.bgci.org/accreditation
- Botanic Garden technical support and advisory services
- Subsidized training courses
- Prizes and awards
- Discounted Congress attendance (BGCI Global and Education Congresses)
- BGCI's electronic publications, including BGjournal (conservation) and Roots (education)
- Members' Area Website and extra features to our global database resources: PlantSearch, ThreatSearch and GlobalTreeSearch.
- BGCI's upcoming redesigned website
 - Use of the new BGCI website to promote your events, news, and job listings
- Permission to use BGCI's logo and name
- A membership pack and Certificate of Membership



THE GLOBAL BOTANIC GARDEN FUND LAUNCHES IN 2019

The Global Botanic Garden Fund aims at driving plant conservation, especially in smaller gardens. The fund will initially aim to disburse 15-20 small grants of USD 1,000 to 2,500. Grants will be framed within the Global Strategy for Plant Conservation, and will include plant conservation practices, plant conservation policy and education, infrastructure development, training for plant conservation, international partnerships, and mentoring botanic gardens in efforts to achieve success through BGCI's Botanic Garden Accreditation Scheme.

Botanic Gardens will apply for grants from the BGCI Global Botanic Garden Fund through a one-page application form on the BGCI Website. Applicants will be required to provide information on the proposed rationale, activities, outcomes, timeline and budget. BGCI will issue a call for applications once annually to ensure a consistent review and reporting process.

The Global Botanic Garden Fund is open to BGCI Member Institutions only!

2019 Membership Categories

Category		GBP	USD	EUR
F	Institution Member (budget below USD 100,000)	£ 125	\$ 150	€ 135
E	Institution Member (budget USD 100,000 - 750,000)	£ 270	\$ 350	€ 325
D	Institution Member (budget USD 750,000 - 1,500,000)	£ 500	\$ 650	€ 575
C	Institution Member (budget USD 1,500,000 - 2,250,000)	£ 675	\$ 900	€ 800
B	Institution Member (budget more than USD 2,250,000)	£ 1,250	\$ 1,500	€ 1,375

Patron Members offer BGCI extra support, and have additional benefits:

- Membership of BGCI's International Advisory Council
- Speaking opportunities at BGCI Congresses
- BGCI special event invitations
- BGCI website articles and features
- Office space and office support when visiting London

If you are interested in becoming a Patron Member, please contact:

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Front and back cover images: Paul Smith
Design: John Morgan www.seascapedesign.co.uk



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