



**BOTANIC  
GARDENS**  
CONSERVATION  
INTERNATIONAL

MEMBERS' REVIEW • JULY 2021

# BGCI's Annual Member's Review 2020

Connecting people, sharing knowledge  
and saving plants





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Planting threatened mangrove species in Tielugang Nature Reserve



Stakeholder workshop about *Lumnitzera littorea* conservation



# 2016-2020 - A Retrospective

Walter Sisulu BG South Africa BGCI (Paul Smith)





# 2016 - 2020 - A Retrospective

## MESSAGE FROM THE SECRETARY GENERAL

Apart from being a most unusual year for obvious reasons, 2020 was the last year of BGCI's 2016-2020 Strategy, and so we have taken some time to look back to assess progress against the targets we set ourselves back in 2015. BGCI has two main purposes. Firstly, to catalyse plant conservation action globally and secondly to support the botanical community by advocacy, promoting high standards and providing technical or financial support. These two aims come together in our mission, which is to *mobilise botanic gardens and engage partners in securing plant diversity for the well-being of people and the planet.*

Taking our first aim of catalysing plant conservation globally, highlights over the last five years include the publication in 2017 of BGCI's [ThreatSearch](#) database the most comprehensive database of threat assessments for plants, and a key tool for both supporting species conservation and tracking progress against the targets of the Global Strategy for Plant Conservation. This was followed closely by the publication of BGCI's [GlobalTreeSearch](#) database, the first georeferenced global checklist of all the world's tree species. This database is now used as the global register of tree species by IUCN, FAO and a wide range of other organisations and policymakers. GlobalTreeSearch is also the basis of the [Global Tree Assessment](#) (GTA). This global effort, led by BGCI and IUCN's Global Tree Specialist Group and funded by the Franklinia Foundation, aims to assess the conservation status of all of the world's tree species by 2023, and between 2018 and 2020 added around 20,000 tree assessments to the IUCN Red List. Of course, conservation assessments are a tool for driving conservation action, and this is the focus of the [Global Trees Campaign](#), which over the past 5 years has increased ex situ collections for more than 150 species, developed 50 species recovery plans, and reinforced populations for more than 60 species. Over the same period, more than 2,800 people in 20 countries have been trained in tree conservation techniques.

Secondly, how have we supported the botanical community professionally? Highlights include the establishment of BGCI's Botanic Garden, Conservation Practitioner and Advanced Conservation Practitioner [Accreditation Schemes](#), which were launched in 2018/19, and recognise and accredit botanic gardens and the work they do in plant conservation. This has proved to be very popular, and we have recently boosted our staff capacity to process applications. Another new benefit to BGCI membership, launched in 2019, is BGCI's [Global Botanic Garden Fund](#).

In 2020, this fund attracted 151 applications, of which we were able to fund 40. We hope to grow this fund over time, and to promote it with third parties as a way of mobilising botanical expertise. The publication of BGCI's [Botanic Garden Manual](#) on planning, developing and managing botanic gardens was another important milestone in the last 5 years. An equally big step forward has been the establishment of BGCI's [International Advisory Council](#), and the [Technical Reviews](#) the Council has commissioned covering the following topics: Defining the botanic garden, and how to measure performance and success; the economic, social and environmental impacts of botanic gardens; the role of botanic gardens in urban greening and conserving urban biodiversity, and; the role of botanic gardens in practicing and promoting environmental sustainability. Last but not least, BGCI's 6th Global Botanic Garden Congress in Geneva (2017) and 10th Education in Botanic Gardens Congress in Warsaw (2018) were both wonderful opportunities to meet face-to-face and learn from one another. Let's hope that the post-COVID world enables us to get together again soon. Between 2015 and 2020, BGCI's membership increased by 73%, and we now have >650 institutional members in nearly every country in the world.

Where our plant conservation and botanic garden activities come together, BGCI's [Global Seed Conservation Challenge](#), the [Ecological Restoration Alliance](#) and the [International Plant Sentinel Network](#) are all communities of practice that bring botanic garden expertise to bear on plant conservation. Similarly, the [BigPicnic project](#) (2016-19) created a botanic garden-centred community of practice related to co-creation, responsible research and innovation and team based inquiry to engage with the public on food issues and communicate findings to policymakers. Key to these communities of practice is vocational training and, between 2016 and 2019, BGCI annually trained an average of 680 people from 247 institutions in 50 countries. Important policy and advocacy work included the [review](#) of progress against the Global Strategy for Plant Conservation (2011-2020) targets, which highlighted the work of the botanic garden community in delivering those targets.

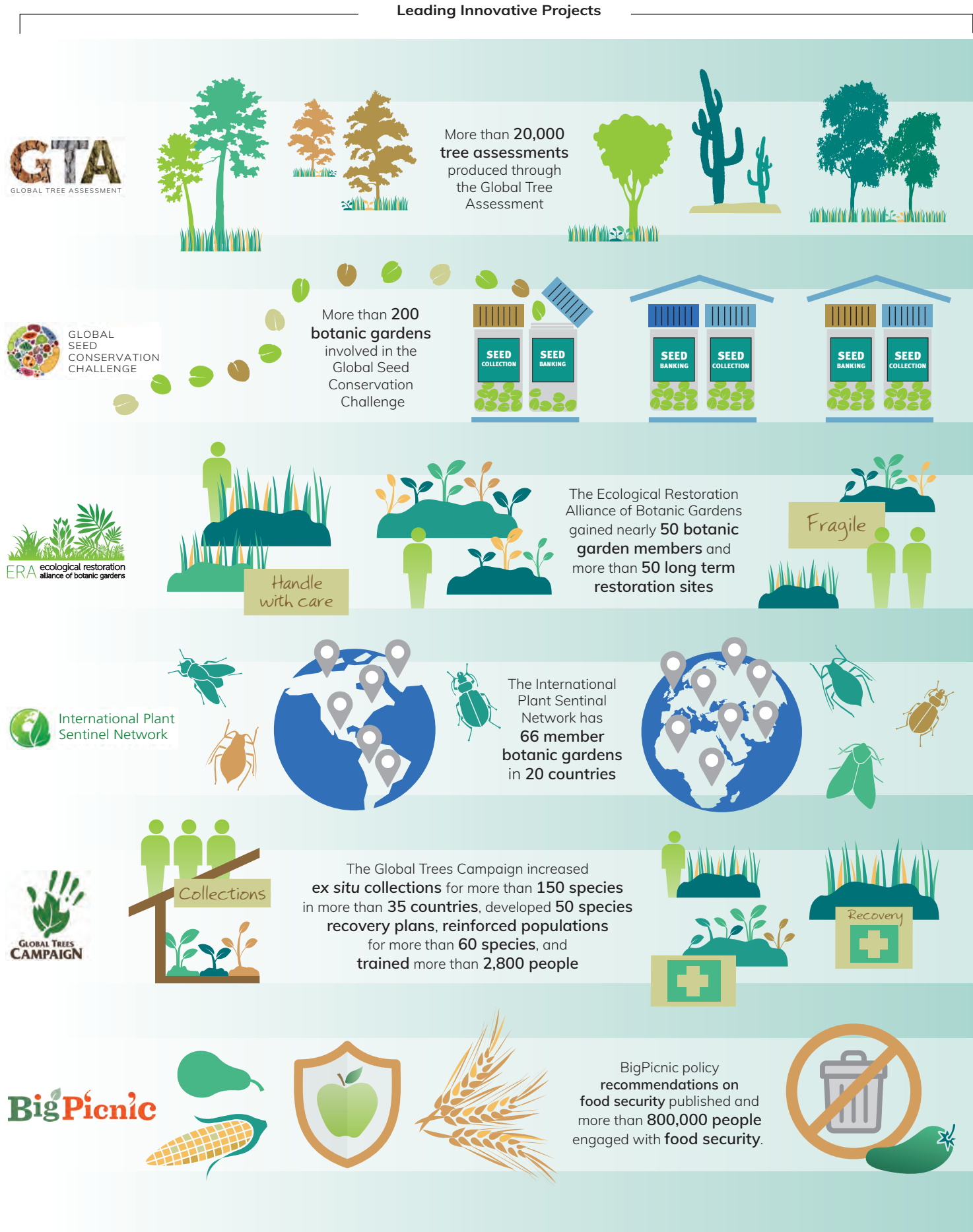
Finally, the last five years have included some essential developments in BGCI's own capacity, including a new website and Customer Relationship Management system, and the establishment of new offices in Africa and Asia. It has been a busy few years, and we are enormously appreciative of the moral and financial support provided by you, our members. Thank you! We will shortly be publishing our Prospectus for the next five years, and we sincerely hope you will continue to work with us for plants, people and planet.



Paul Smith  
Secretary General



FIVE YEAR RETROSPECTIVE





# 2020 Year in Review

*Jardín Botánico de Cartagena Guillermo Piñeres, Colombia*





# 2020 Year in Review

## COVID-19 SPECIAL FEATURE

Looking back at 2020, and reviewing BGCI's and your perspectives, it is of course inescapable that our thinking was almost entirely overtaken by the advent of the COVID-19 pandemic. The constant news of death and disruption fuelled extraordinarily high levels of anxiety, exacerbating impacts on public health, and resulting in behaviour such as panic buying of food, toilet paper and medicines. For botanic gardens, the additional anxiety brought about by plummeting visitor numbers and income resulted in economic impacts that are likely to be more prolonged than the public health crisis.

In March 2020, BGCI set up a moderated discussion forum on our website through which we invited you, our members, to tell us and the broader botanic garden community how you were managing the COVID-19 pandemic. We started this discussion with insights and approaches from members of BGCI's International Advisory Council, including some of our members who were much further along in dealing with the COVID-19 pandemic than others, and from whom there were valuable lessons to be learnt. In reality, like everyone else, we found ourselves subject to whatever measures our individual governments put in place – some (notably in Asia) moving quickly and decisively and others less so.



Left: A family interacts with a Denver Botanic Gardens instructor during a live virtual program. From 2020 Roots issue on COVID-19. ©Denver Botanic Gardens/Scott Dressel-Martin

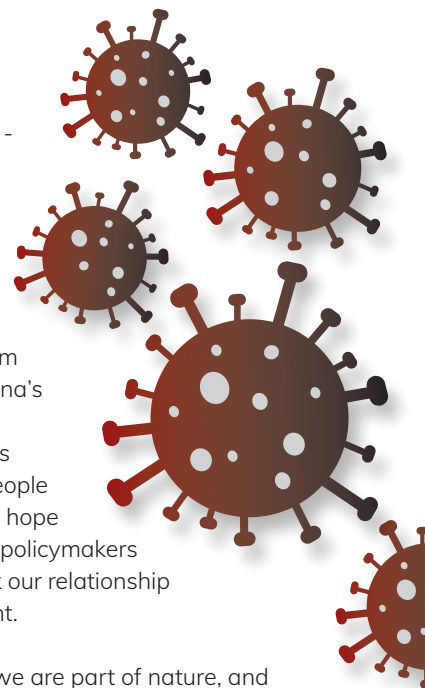
As early as April we at BGCI were looking for some positives - acknowledging that for those directly affected by COVID-19 through the loss of loved ones or livelihoods it might be impossible to believe that anything good could come out of the COVID-19 pandemic. From the biodiversity perspective, China's action to ban the consumption, farming and sale of wild animals looked like a positive for both people and wildlife. There was also the hope that the pandemic might cause policymakers and decision-makers to re-think our relationship with nature and the environment.

Those who had forgotten that we are part of nature, and don't control it, have had a shocking wake up call. Would this result in the realisation that we need to work with nature rather than against it? Perhaps the biggest positive emerging from this crisis, though, is the realisation that we humans are capable of global, collective action. If the stakes are high enough, we can take on these challenges together and, most importantly of all, rapidly abandon business as usual. Of course, only time will tell if we do indeed return to business as usual and forget all that we learnt.

In May, BGCI put out a call for funding proposals through its Global Botanic Garden Fund, including a specific funding stream providing relief to gardens impacted by COVID-19. This was also the focus of our public appeal in December. We have also offered complimentary BGCI membership to gardens who indicated that they couldn't pay their BGCI membership subscriptions due to the financial hardship caused by the pandemic. We are all too aware that these efforts are a drop in the ocean.

By December 2020, many countries were in a second COVID-19 wave worse than the first, and our levels of optimism were wearing down. The light at the end of the tunnel was just appearing, however, with new vaccines becoming available in parts of the world and the most vulnerable in our society starting to receive them. At that point in time, I had no prediction about whether humanity would emerge better, stronger, and wiser from COVID-19. However, there was one thing I was certain of. Botanic gardens, and the gentle, committed people who work in them, have never been more important. We provide safe, welcoming and peaceful places - an opportunity to get closer to nature, exercise bodies and minds, and spend quality time with family and friends. We also represent a better vision of the world in the work that we do in understanding and caring for nature - a glimpse of a more harmonious future perhaps.

Paul Smith





## BGCI STAFF IN 2020



**Paul Smith**  
Secretary General



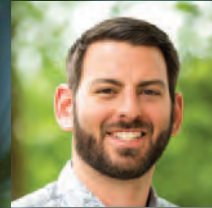
**Suzanne Sharrock**  
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**Emily Beech**  
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**Gail Bromley**  
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**Lynsey Grosfield**  
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**Yvette Harvey-Brown**  
Conservation Officer



**Vivien Isaac**  
Accounts Officer



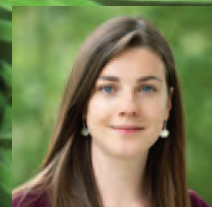
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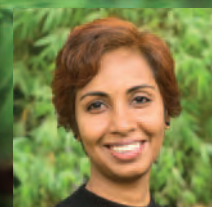
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**Igor A. Smirnov**  
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Chairman



**Murphy Westwood**  
Director of  
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at The Morton Arboretum



**Greetha Arumugam**  
Southeast Asia  
Botanic Gardens (SEABG)  
Network Coordinator

BGCI would like to acknowledge the following people for their support in 2020:  
Martha Love - Head of Finance, Jean Linsky - Southeast Asia Botanic Gardens (SEABG) Network Coordinator



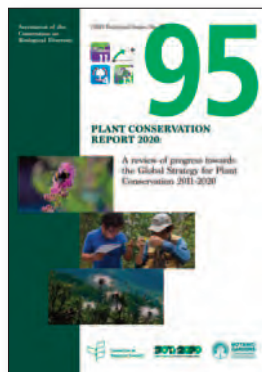
# Policy and Advocacy

South China Botanical Garden, CAS, China





# Policy and Advocacy



## GLOBAL PARTNERSHIP FOR PLANT CONSERVATION

2020 marked the final year of the Global Strategy for Plant Conservation (GSPC) 2011-2020 and on behalf of the Global Partnership for Plant Conservation (GPPC), BGCI led a review of progress towards the 16 GSPC targets. The Plant Conservation Report was

published in September and launched at a virtual event hosted by the Secretariat of the Convention on Biological Diversity (CBD), alongside the 5th Edition of the Global Biodiversity Outlook. The report highlighted the pivotal role the GSPC has played in ensuring significant progress in plant conservation in recent years. Implementation has stimulated collaboration and synergies and provided an entry point for many smaller, non-governmental, and grassroots organisations into plant conservation and the implementation of the CBD. The GSPC has also encouraged the development of target-specific support groups and champions, linked together through the GPPC. The review revealed that only one target (Target 1 - a World Flora Online) was achieved at the global level by 2020. However, progress is being made towards all targets at both national and international levels. For more information, and to download the report, please visit [here](#).

Above: The Plant Conservation Report 2020 was published by the CBD Secretariat in its Technical Series.

## BGCI'S INTERNATIONAL ADVISORY COUNCIL

BGCI's International Advisory Council (IAC) currently comprises 32 botanic garden directors from six continents. In 2020, due to the COVID-19 pandemic, the IAC was unable to convene at the Royal Botanic Garden Edinburgh as originally planned. Instead, papers were shared with the group remotely, and responses were provided using Google docs. The main topics covered were: BGCI's Technical Review on Botanic Gardens Practising and Promoting Sustainability; deploying botanic gardens' data, skills and knowledge to improve biodiversity safeguarding and outcomes in large scale tree planting schemes for carbon sequestration and livelihoods; An analysis of BGCI's membership and relationships with regional and national botanic garden networks; Developing the IAC to represent and speak for the global botanic garden community;

Update on the development of the Global Strategy for Plant Conservation within the post-2020 biodiversity framework; The process for selecting a venue and host for the 8th Global Botanic Gardens Congress 2024, and; Supporting botanic gardens through the COVID-19 pandemic. On the latter point, the IAC asked BGCI to carry out a Technical Review in 2021 on botanic gardens' exposure and responses to disasters, including fires, floods, hurricanes, and the pandemic.



## TECHNICAL REVIEW: SUSTAINABILITY

In April 2020, BGCI published the fourth of its Technical Review series. This Review focuses on the role of botanic gardens in practising and promoting environmental sustainability and provides an overview of sustainability practices carried out by botanic gardens worldwide. The

Review looks at both in-house practices and the way in which gardens motivate and incentivise visitor behaviour change. It includes over 40 case studies encompassing water management, energy consumption, carbon offsetting, waste, recycling, composting, and sustainable food. Download a copy of the review [here](#).

Above: BGCI's new Technical Review on sustainability

## MARSH AWARDS

The Marsh Awards are given annually by the Marsh Christian Trust, in partnership with BGCI, in recognition of excellence in International Plant Conservation and Botanic Garden Education. BGCI was pleased to announce Jeannie Raharimampionona as the winner of the 2020 Marsh Award for International Plant Conservation and Tara Moreau as the winner of the 2020 Marsh Award for Education in Botanic Gardens. Due to COVID-19, a virtual ceremony was held in December 2020. You can watch the ceremony and learn more about the recipients [here](#).



The 2020 Marsh Award Recipients



# Connecting People

Vizcaya Museum Gardens, United States (Robin Hill)





# Connecting People

## MEETINGS AND SYMPOSIA

Despite the impacts of COVID-19, BGCI supported and attended numerous meetings and symposia across the world (even if it was virtually).

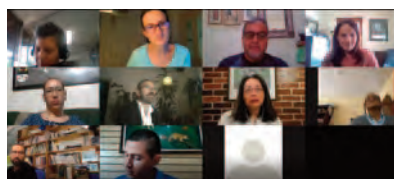


*Acer erianthum* a threatened species of high conservation priority for the GCC for Acer. (Dan Crowley)

Event Title	Event Location	Month
Southeast Partners for Plant Conservation 2020 Conference	Atlanta Botanical Garden, US	March
Philadelphia Flower Show 2020 Biodiversity Symposium	Pennsylvania Horticultural Society, US	March
GCC Oak US region kickoff meetings	The Morton Arboretum, US (virtual)	May
Ex situ Conservation of Chilean Flora symposium	Chile (virtual)	June
American Public Gardens Association 2020 Annual Conference	United States (virtual)	June
PlantNetwork Webinar - Accreditation Schemes	United Kingdom (virtual)	June
European Botanic Gardens Consortium meeting	United Kingdom (virtual)	July
When Trees Meet Technology: Workshop with Google Arts and Culture	United Kingdom / France (virtual)	July
GCC for Magnolia kickoff meetings	Atlanta Botanical Garden, US (virtual)	September
IPSN webinar for Arboricultural Association as part of Tree Health Week	United Kingdom (virtual)	October
Center for Plant Conservation 2020 National Meeting	United States (virtual)	October
IUCN Conservation Planning Specialist Group	United States (virtual)	October
4th APUCEN Summit 2020	Malaysia (virtual)	November
JRC Citizens Festival	Brussels (virtual)	December
Latinamerican Botanic Gardens and COVID conference	Paraguay (virtual)	December
European Botanic Gardens Consortium meeting	United Kingdom (virtual)	December
GCC for Acer kickoff meetings	UBC Botanical Garden, Canada (virtual)	December

## OTHER MEETINGS ATTENDED OR SUPPORTED BY BGCI

### Mesoamerican Botanic Gardens meeting



Group photo of the virtual meeting for the Mesoamerican botanic gardens

In December, BGCI, in collaboration with The Morton Arboretum, organised a two day virtual meeting with the botanic gardens of the Mesoamerican

region. The aim of the meeting was to engage with the Mesoamerican botanic gardens community and promote the Global Trees Campaign initiative. The two day meeting was attended by 11 participants from countries such as Costa Rica, El Salvador, Guatemala, México, Nicaragua and Panamá. During the sessions, there was the opportunity to discuss topics such as the impact that COVID-19 has had in their institutions and the future of conservation for threatened trees in the region.



*Quercus acerifolia* - GCC for Oak US region kickoff meetings (Deb Brown)





Planting threatened mangrove species in Tielugang Nature Reserve

### Stakeholder workshop about *Lumnitzera littorea* conservation

A stakeholder workshop about *Lumnitzera littorea* conservation was held in Sanya, Hainan province. About 110 participants, including leaders from Sanya government, China Wetland Conservation Association, Sanya Forestry Bureau, specialists, scholars, students from Sanya Academy of Forestry, Hainan Normal University, Lingnan Normal University, Hainan Tropical Ocean University, volunteers, and local people attended the meeting. Presentations and discussions focused on how to protect this target species and other threatened Mangrove plant species. After the meeting, all participants attended the planting of about 1,000 seedlings of this target species and other threatened mangrove plant species in the reinforcement site of Tielugang Nature Reserve.

### Training workshop on reintroduction of threatened plants in the Badagongshan National Nature Reserve

The training of reintroduction techniques of threatened plants in Hunan province was organised at Badagongshan National Nature Reserve with about 40 participants from botanic gardens, nature reserves, the local forest department and local people. Professor Weibang Sun, Director of Kunming Botanical Garden, was invited to give theory and on-site practical training. Prof. Sun introduced the concepts of rare and endangered plants, and Plant Species with Extremely Small Populations (PSESP), reintroduction, the selection of reintroduction sites, and the monitoring and management of outplanted saplings. About 50 *Changiosyrax dolichocarpus* and 50 *Magnolia patungensis* were planted at Badagongshan National Nature Reserve.



## REGIONAL BGCI OFFICES, NATIONAL BOTANIC GARDEN NETWORKS, AND CONSORTIA

### BGCI China

In 2020, BGCI China published the book *Integrated Conservation of Rare and Threatened Woody Plants: Practice of and Perspectives from BGCI Programmes in China (2010-2020)*. It summarises the work of BGCI and its many Chinese member gardens and partners over the past 10 years. The book covers the policy instruments necessary



for effective plant conservation – in particular China's Strategy for Plant Conservation (CSPC), an excellent framework based on the Global Strategy for Plant Conservation (GSPC) but modified specifically to meet China's needs.

Working with its Chinese botanical gardens members and partners to save endangered Chinese plants is the core mission

of BGCI China. In 2020, BGCI funded 11 practical conservation projects and secured 14 threatened tree species with more than 41,000 seedlings raised, through working with botanic gardens, forest departments, plant conservation organisations, and local communities.

Training courses organised by BGCI China were attended by about 1,300 technicians and local people from 40 institutions and local communities. This was accompanied by the distribution of about 1,500 training materials. To raise awareness of plant conservation for local authorities, local people, and students, BGCI China and project partners organised several educational activities in local primary schools for about 1,700 students, accompanied by the distribution of about 2,000 outreach materials. Environmental awareness and conservation skills of project stakeholders and students have increased as a result of these activities, whilst some local community representatives benefited from diversifying their livelihood options.

Above: BGCI China published *Integrated Conservation of Rare and Threatened Woody Plants: Practice of and Perspectives from BGCI Programs in China (2010-2020)*.

Left: On-site training on the reintroduction of *Magnolia patungensis* with Weibang Sun.



## BGCI Russia

Despite the restrictions imposed by the pandemic, BGCI Russia continued to operate. The Council of Botanical Gardens of the Commonwealth of Independent States (CIS) in collaboration with BGCI published two informational bulletins that summarise the work of botanic gardens in Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Ukraine and Russia in 2019-2020. The Council of Botanical Gardens of Russia developed the Programme of Fundamental Scientific Research 2020-2025, approved by all Regional Councils of botanic gardens in Russia. The Programme encompasses three major future directions: (1) study and conservation of plant diversity in culture and nature, (2) fundamental principles of study and rational use of plant resources in Russia, (3) creation of an environment for education and rehabilitation.

## BGCI-US

In 2020, BGCI-US launched a major overhaul of BGCI's GardenSearch and PlantSearch databases, and continued to lead plant conservation action, and provide important support to botanic gardens, even while many of them have been closed to the public.

- BGCI-US is leading a major update to BGCI's PlantSearch and GardenSearch databases, in partnership with the Chicago Botanic Garden, The Morton Arboretum, and the United States Botanic Garden. The new tools will fundamentally change how botanic gardens collaboratively build and manage conservation collections of threatened plant species.
- BGCI-US supported over 800 conservation assessments of US trees, in partnership with NatureServe, The Morton Arboretum, and the United States Botanic Garden.
- In partnership with The Morton Arboretum and the USDA Forest Service, BGCI-US supported the launch of a number of Global Conservation Consortia (including for Acer, Magnolia, and Oak) being led by gardens across the world to prioritise and coordinate conservation action in regions of high species diversity.
- BGCI-US contributed to a number of articles published in 2020 that call for more support for botanic gardens and native plants, including one entitled *Botanic garden solutions to the plant extinction crisis* found at: [doi.org/10.1002/ppp3.10134](https://doi.org/10.1002/ppp3.10134)
- BGCI-US disbursed over USD 65,000 to botanic gardens to fund threatened species conservation projects and genome material sampling in partnership with GGI-Gardens and the United States Botanic Garden.

## European Botanic Gardens Consortium

The European Botanic Gardens Consortium held three on-line meetings during 2020. These meetings allowed participants to exchange experiences in coping with COVID-19 lockdowns as well as discussing more strategic issues facing botanic gardens across the region. Such topics included the EU's new phytosanitary regulations and its impact on seed exchange and linkages with the Consortium of European Taxonomic Facilities (CETAF). On behalf of the Consortium, BGCI has joined the European Commission's global coalition "United for #Biodiversity", an initiative aimed to link national parks, aquariums, botanic gardens, zoos, science and natural history museums and research centres and to raise their voices about the nature crisis.

## African Botanic Garden Network



The African Botanic Garden Network (ABGN) aims to build the capacity of and share resources between African botanic gardens. ABGN is a joint initiative led by BGCI and Jardins Botaniques de France et des pays Francophones (JBF). Unfortunately, due to the postponement of the 22nd

AETFAT conference on "Diversity and conservation of African plants: Challenges and opportunities", in March 2020 in Zambia, an ABGN meeting scheduled to take place during this event was not able to go ahead. If you would like to be added to the ABGN mailing list, please email [africa@bgci.org](mailto:africa@bgci.org).

## South American Botanic Gardens Network (Red Sudamericana de Jardines Botánicos)



2020 has been an important year for the consolidation of the South American Botanic Gardens Network

(RSJB). Despite having to change the plans for a face-to-face meeting due to the pandemic, the BGCI coordinator for the network met virtually with the South American botanic gardens' national representatives in July 2020. The two-day meeting brought together 18 people from 11 different countries. On the first day, talks were presented by the participants on the impact that COVID-19 is having on the botanic gardens in the region. On the second day, there were working group discussions on implementation of the action plan for the network. A Facebook page was created to promote the South American Botanic Gardens Network. Monthly technical talks are streamed via the Facebook page on different botanic garden topics by our members. The engagement and sharing of information of the South American botanic garden community keeps growing and we are very much looking forward to working together in 2021.



## The Southeast Asia Botanic Gardens (SEABG) Network



The Southeast Asia Botanic Gardens (SEABG) Network had an eventful 2020. Following three years of running the SEABG Network secretariat from the Dr. Cecilia Koo Botanic Conservation Center (KBCC), Taiwan

R.O.C., for which we are indebted to Professor Chia-Wei Li, we are delighted that Singapore Botanic Gardens – National Parks Board will provide the new home for the secretariat from 2020. We were equally pleased to announce in the latter part of the year the appointment of BGCI's new SEABG Network Coordinator, Dr. Greetha Arumugam.

Together with our partners in the region, we continued to implement our conservation programmes despite the challenges posed by the pandemic which regretfully led to the deferral of the much-anticipated 8th SEABG Network Conference at Makiling Botanic Gardens, Philippines, to 2022. Conservation of threatened tree giants belonging to Dipterocarpaceae in Borneo, was accomplished with partners from Malaysia (Tropical Rainforest Conservation & Research Centre), Indonesia (Orangutan Foundation International and Bogor Botanic Gardens) and Brunei (Universiti Brunei Darussalam) with financial support from the National Geographic Society. Global Trees Campaign (GTC) projects funded by Fondation Franklinia on *Camellia* in Vietnam (Southern Institute of Ecology), *Rhododendron* in Malaysia (Sabah Forestry Department and Sabah Parks), *Lithocarpus* in Taiwan R.O.C. (KBCC and National Chiayi University), were continued into the second and third year. New GTC projects were also initiated for *Magnolia* in Thailand (Queen Sirikit Botanic Garden) and *Diospyros* in Taiwan R.O.C. (KBCC). Furthermore, conservation work on threatened *Hibiscus* is on-going in the wider Asia-Pacific region, supported by the Keidanren Nature Conservation Fund in Japan.

Under the UK government's Darwin Initiative, a new 3-year project was launched on *Boosting Biodiversity and Livelihoods in Northern Cambodia* in partnership with National Authority of Preah Vihear (NAPV), Cambodia and ICRAF (World Agroforestry), Viet Nam. This project aims to build capacity of Sra-aem Commune members in diversifying farm-forestry practices and developing new market value chains.

### Global Conservation Consortia

The suite of Global Conservation Consortia (GCC) has expanded and GCC for Cycads and Dipterocarps are forming, with lead institutions confirmed in 2020. The GCC Cycads is led by Montgomery Botanical Center (US), while the GCC Dipterocarps is led by Xishuangbanna Tropical Botanical Garden (China).

A GCC for *Nothofagus* is in development, and Wakehurst (RBG Kew), have been confirmed as lead institution for this. A GCC for *Erica* has been initiated and will begin activities in 2021. All consortia are recruiting participants and welcome BGCI member interest.

### Global Conservation Consortia



The GCC Acer, led by the University of British Columbia Botanical Garden (Canada) held virtual meetings following the release of *The Red List of Acer: revised and extended*, attended by members of the Acer community from 11 countries where Acer species occur. The GCC Acer has partnered with the Maple Society to form a taxonomic working group, with this group forming the Taxonomic Expert Network for Acer for the World Flora Online. Practical projects to conserve threatened Acer species in southwest China will be initiated in 2021.

The GCC Magnolia, led by Atlanta Botanical Garden (US), held two virtual meetings in September attended by >60 people in 15 countries. Consortium activities have been divided into six geographical regions, covering the distributional range of the genus. Steering Committee members have been appointed, representing the diversity centres for Magnolia.

The GCC Rhododendron, led by the Royal Botanic Garden Edinburgh (UK), are providing the Taxonomic Expert Network for Rhododendron for the World Flora Online. Integrated conservation projects are in development, while existing consortium projects in Malaysia and Papua New Guinea are ongoing. In 2021, the consortium will work to update conservation assessments for the IUCN Red List.

The GCC Oak, led by The Morton Arboretum (US), has continued to gain momentum and held virtual kick-off meetings over two days for the US region in May, attended by >60 people. Subsequent quarterly sub-regional meetings are now held and conservation actions have been assigned to all 28 US oak species of conservation concern (Beckman et al. 2019). The GCC for Oak is expanding its work into other oak diversity centres and Steering Committee members have been appointed for China, southeast Asia and Mexico. International working groups have been established, focusing on areas of collection and propagation, cryopreservation, and curatorial activities.

Ref: Beckman, E., Meyer, A., Denvir, A., Gill, D., Man, G., Pivorunas, D., Shaw, K., & Westwood, M. (2019). *Conservation Gap Analysis of Native U.S. Oaks*. Lisle, IL: The Morton Arboretum.



# Sharing Knowledge

Royal Botanic Garden, Jordan





# Sharing Knowledge

## DATA SERVICES

### PlantSearch



[PlantSearch](#) is the only global database of living plant, seed, and tissue collections composed of over 1.5 million records representing over 600,000 taxa maintained at over 1,100 botanic gardens.

In 2020, approximately 90 institutions updated their taxa lists in PlantSearch, over 2,100 requests for information and material were sent through PlantSearch, and 30 bulk data requests were provided for research and conservation projects around the world. BGCI-US, in partnership with BGCI, the Chicago Botanic Garden, The Morton Arboretum, the United States Botanic Garden, and the USDA Forest Service, launched an effort in 2020 to rebuild PlantSearch, align a taxonomic backbone, and develop an accessions-level module to guide pedigree management of species of conservation concern (IMLS #MG-60-19-0064-19 and IMLS #MG-245575-OMS-20).

### GardenSearch



[GardenSearch](#) is the only source of information on botanic garden features, facilities, and programmes, and provides nearly 3,700 botanical institutions worldwide with a visible web presence, even when

they might not have a website. Over 200 new Garden Editors were registered, and over 450 GardenSearch profiles were updated by Garden Editors in 2020. BGCI-US launched an effort in 2020 to enhance the GardenSearch database and online interface, in partnership with BGCI and the United States Botanic Garden, with plans to make it widely available in 2021.

### GlobalTreeSearch



[GlobalTreeSearch](#) is a global list of the world's tree species and their country distributions. It was launched in 2017 and now lists approximately 58,500 tree species. In 2020, 900 species were

added to the tree list and over 9,000 geographic and taxonomic changes were made, reflecting feedback from our partners and taxonomic progress in many groups.

### ThreatSearch



[ThreatSearch](#) is the most comprehensive plant assessment database and is regularly updated, to include plant assessments from the IUCN Red List and also from other national and taxonomic

red listing sources. It contains 360,000 plants conservation assessments representing over 139,000 species (accepted names) of plants, including assessments for 40,285 tree species, making it an essential tool for the Global Tree Assessment.

## PUBLICATIONS

### BGjournal



Two issues of BGjournal were published during the year. The January issue celebrated 2020 as the International Year of Plant Health, and focused on how botanic gardens are addressing biosecurity issues. Activities taking place within the framework of the International Plant Sentinel Network were a feature of this issue. The July issue highlighted the wide range of botanic garden activities that are contributing towards the achievement of the 2020 targets of the GSPC. It also included a review of the impact of COVID-19 on botanic gardens globally. All issues of BGjournal can be downloaded from the website [here](#).

Above: BGjournal 17.1 - issue on the International Year of Plant Health and BGjournal 17.2 - issue on working towards the achievements of the GSPC targets

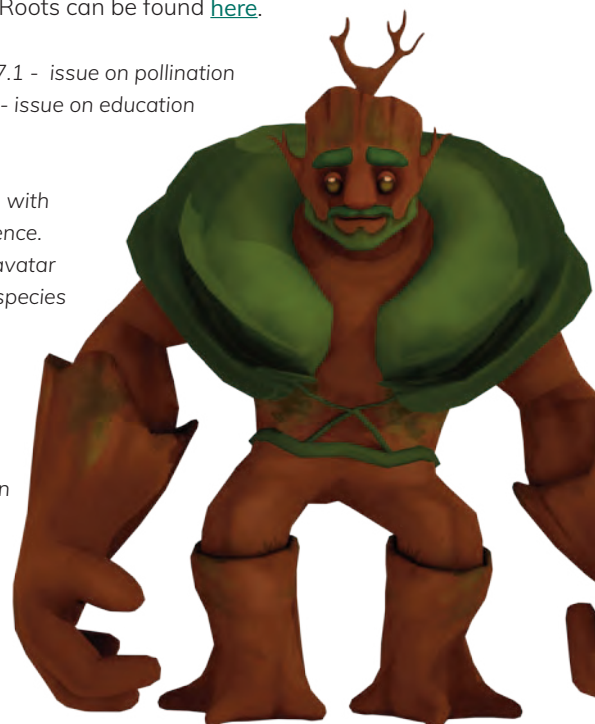
### Roots



Two issues of BGCI's education publication Roots were published in 2020. The first, published in May, focused on the topic of pollination. This issue featured articles on the varied ways in which botanic gardens are engaging their visitors with the subject of pollination and included pollinator games, festivals, online content, and interpretation. The second, published in November, focused on education and technology and more specifically on how botanic gardens have continued to engage with their visitors during the global pandemic when face-to-face access to gardens was not possible. Past issues of Roots can be found [here](#).

Above: Roots 17.1 - issue on pollination and Roots 17.2 - issue on education and technology

Right: Engaging with a younger audience. Isidodendron's avatar inspired by the species *Isidodendron tripterocarpum*, showcased in Roots 17.2. ©Medellin Botanical Garden





## Red List Assessments

All 822 species of eucalypt tree were assessed (species in *Eucalyptus*, *Corymbia* and *Angophora*). 193 species (23%) of eucalypt trees were identified as threatened. The major cause of decline in eucalypt populations has been the past conversion of habitat to cropland and pasture. In Western Australia, high species diversity and land use conversion to intensive agriculture overlap so that 54% of all threatened eucalypts are found there. Results were published in a BGCI co-authored paper in *Biological Conservation*.



The Red List of Dry Forest Trees of Madagascar was published in Spring 2020. Of the 982 dry forest tree species, 578 (59%) are threatened with extinction, including 90% of species (884 species) experiencing a decreasing population trend. The major threats to Malagasy dry forest trees are logging, wood harvesting, fire, and the development of agriculture all of which lead to the conversion of dry forest habitat.



The Red List of Acer: revised and extended, published in September 2020, provides the conservation status of 158 maple or Acer species. This report reveals that 20% of maple species (36 species) are threatened with extinction, with 75% of these threatened species geographically restricted in their native ranges and experiencing continuing decline in habitat area. Globally, 14 species of Acer are currently entirely absent from ex situ collections, including four species that are Critically Endangered.



In December 2020, The Red List of Oaks 2020 was published and found an estimated 31% of the world's oak species are threatened with extinction. It details the distributions, population trends and threats facing the world's 430 oak species. It will serve as a roadmap for conservation action for these important flagship species. The report was led and published by The Morton Arboretum.

*Acer pycnanthum* (Michael S. Dosmann)





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Dry spiny forest, Madagascar (Malin Rivers)



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(Ian Harvey-Brown)



## RESOURCES

### BGCI's Accreditation Scheme



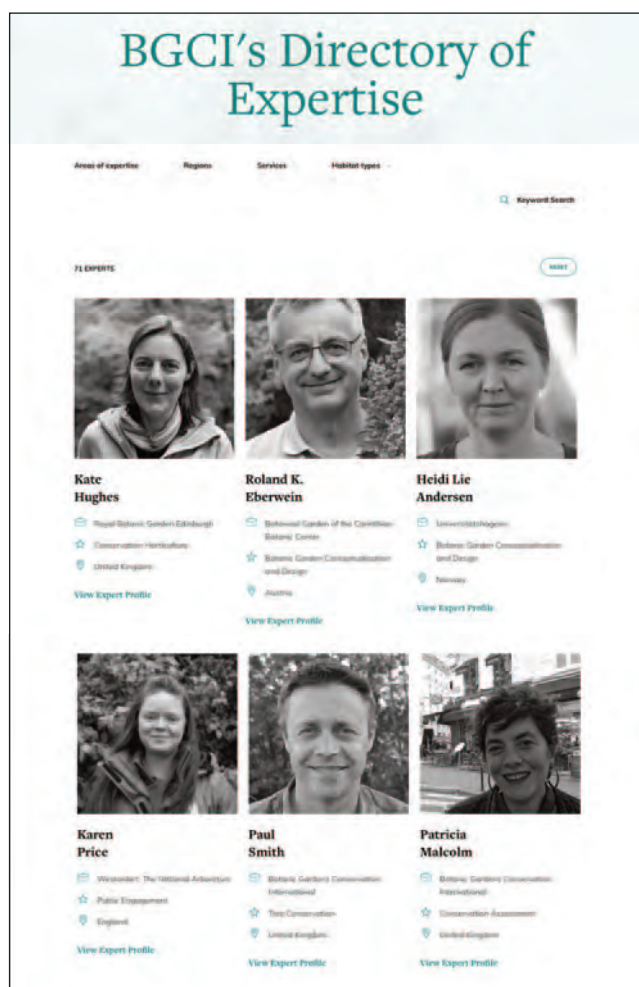
BGCI's Accreditation Scheme distinguishes botanic gardens from non-botanic gardens and recognises achievements in plant conservation. The BGCI Botanic Garden Accreditation is aimed at botanical institutions wishing to establish their credentials as botanic gardens. Organisations applying for accreditation will be assessed on criteria encompassing leadership, collections management, horticulture, public education, community/cultural activities, conservation actions, scientific research, staff, networking and sustainability.

The BGCI Conservation Practitioner Accreditation recognises botanic gardens with a conservation-oriented approach. Advanced Conservation Practitioner Accreditation recognises botanic gardens with a focus on conservation actions that support local, national or global conservation goals. Institutions may apply for more than one accreditation. Accreditation lasts for five years.

In 2020, BGCI reviewed and approved 20 applications for accreditation. Due to the high number of applications received, BGCI is investing in additional staff and a new platform that will allow both applicants and BGCI to track accreditation applications. This new platform will launch in 2021.

Name of Botanic gardens accredited in 2020	BGCI Accredited Botanic Garden	BGCI Accredited Conservation Practitioner	BGCI Accredited Advanced Conservation Practitioner
Atlanta Botanical Garden			Yes
Auckland Botanic Gardens	Yes		
Barnes Arboretum at Saint Joseph's University	Yes		Yes
Botanic Garden, Lund University	Yes		
Botanical Garden of Klaipėda University	Yes		
Botanical Garden of Vilnius University	Yes		
Botanical Garden, Natural History Museum - University of Oslo	Yes		
Botanischer Garten der Universität Bern BOGA	Yes		Yes
Cambridge University Botanic Garden	Yes		Yes
Chicago Botanic Garden			
Conservatoire et Jardin Botaniques de la Ville de Genève			
Denver Botanic Gardens		Yes	
Eden Project	Yes	Yes	
FossilPlants	Yes		
Gothenburg Botanical Garden	Yes		
Gullele Botanic Garden	Yes		
Hortus Botanicus Leiden		Yes	
Institute of Botany, Czech Academy of Sciences	Yes		
Jardín Botánico de Cartagena 'Guillermo Piñeres'	Yes		
Jardín Botánico de la ciudad de Buenos Aires 'Carlos Thays'	Yes		
Jardín Botánico de la Universidad Autónoma de Puebla	Yes	Yes	
Jardín Botánico Regional de Cadereyta 'Ing. Manuel González de Cosío'	Yes		
Jardin Botanique de l'Université de Fribourg	Yes		
Jardin Botanique de Montréal	Yes		
Leon Levy Native Plant Preserve	Yes	Yes	
Ljubljana University Botanic Garden	Yes	Yes	
Meise Botanic Gardens			
Missouri Botanical Garden			
Montgomery Botanical Center		Yes	
National Botanic Garden of Wales	Yes	Yes	
National Tropical Botanical Garden	Yes	Yes	
Native Plant Trust			
Natural History Museum of Denmark	Yes		
North Carolina Botanical Garden		Yes	
Oklahoma City Zoo and Botanical Gardens	Yes		
Pha Tad Ke Garden	Yes		
Plantentuin Universiteit Gent	Yes	Yes	
Rotterdam Zoo and Botanical Garden	Yes		
Royal Botanic Garden Edinburgh			Yes
Royal Botanic Gardens & Domain Trust Sydney			Yes
San Diego Zoo Global	Yes		Yes
Stellenbosch University Botanical Garden	Yes	Yes	Yes
The Huntington Library, Art Museum and Botanical Gardens	Yes	Yes	Yes
The Morton Arboretum			Yes
The State Botanical Garden of Georgia			Yes
United States Botanic Garden	Yes		Yes
Universitetshagene	Yes		Yes
Wollongong Botanic Gardens	Yes	Yes	Yes





Apply for inclusion in BGCI's Directory of Expertise today

## BGCI's Directory of Expertise

In 2020, BGCI's Directory of Expertise launched to recognise the unique set of skills and expertise found in botanic gardens. As a membership benefit exclusively for BGCI Institutional Members, staff associated with these institutions can apply to be listed in the Directory.

The Directory currently includes 11 areas of expertise: Botanic Garden Conceptualisation and Design, Conservation Assessment, Conservation Horticulture, Ecological Restoration, Exceptional Species, Plant Health and Biosecurity, Policy, Public Engagement, Seed Conservation, Sustainability, and Tree Conservation. These have all been selected because our experience at BGCI suggests that there is a strong demand for such expertise both within the botanic garden community and in other sectors. Further disciplines will be added in the future.

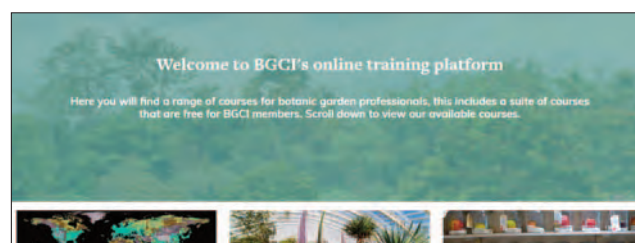
BGCI's purpose in creating this Directory is twofold: firstly, to share the knowledge and skills in the botanic garden community with broader society to solve problems or save plant species, and secondly to give staff of BGCI Institutional Members opportunities to broaden their experience and make a contribution that might not come their way in day to day work. Learn more about the directory and apply for inclusion [here](#).

## BGCI's Online Forum

Open to the whole botanic garden community, BGCI launched an online forum with the aim to support botanic gardens, arboreta, and other botanical institutions through the COVID-19 pandemic. Initially, the forum focused on the impacts of COVID-19 and acted as a safe space for individuals in the botanic garden community to share their experiences and ask questions. The forum has now been expanded to include additional topics covering plant conservation, education, sustainability, BGCI's Accreditation Scheme, and more. For 2020, eleven conversation topics were posted, with 4369 views and 54 individual replies.

## BGCI's Online Training Platform

During 2020, BGCI has been developing a new online training platform on which we aim to provide online and blended learning training courses to BGCI members and other interested individuals. The platform, which is Moodle based, allows the creation of a range of interactive content and will be designed to complement BGCI's existing face-to-face training courses, projects and publications. In late 2020, an online course specifically for GTC partners called Vegetative Propagation of Threatened Tree Species was created and used to soft-launch the platform. A wider launch will take place in 2021, with new courses released in stages over the course of the next few years. This includes a Botanic Garden Basics series to provide practical training to complement the publication 'From Ideas to Realisation - BGCI's Manual on Planning, Developing and Managing Botanic Gardens' (2016).



BGCI's Online Training Platform

## TRAINING COURSES

2020 was a challenging one for BGCI's training activities, many face-to-face training courses that were planned had to be postponed or cancelled due to the global pandemic and the restrictions it placed on travel and gatherings. Some of these courses were however able to go ahead in an online format and in parts of the world where restrictions were eased in the latter half of the year (such as China). 14 courses were delivered in 2020, covering topics such as propagation, red listing, reintroduction and biodiversity conservation. BGCI trained 1,583 people, from 59 organisations that included botanical gardens, universities, botanical and forestry institutes, and local communities. Going forward BGCI's intention is to reduce our sustainability footprint and run more of our courses online (where relevant), as well as investing in our Online Training Platform to provide training support to our members.



# Saving Plants

Gardens at Wakehurst Place, Royal Botanic Gardens, Kew. UK (Barney Wilczak)





# Saving Plants

## GLOBAL TREE ASSESSMENT



2020 was the biggest year yet for the Global Tree Assessment, with partners creating over 12,000 assessments for tree species.

Of these assessments, 9,065 were published on the IUCN Red List of Threatened Species in 2020, bringing the total number of tree assessments on the IUCN Red List to 28,676 (49% of global tree diversity). Including data from ThreatSearch, there are published assessments for 40,319 tree species (69% of all tree species), and currently 26% are globally threatened in the wild.

GTA has continued to work with its global network of partners and established new relationships in 2020 to complete assessments for trees in the Guianas, Peru, Ecuador and India, and trees in the families of Euphorbiaceae and Sapindaceae.



Western Dry Forest, Madagascar (Malin Rivers)

Assessments for all trees endemic to Madagascar, Papua New Guinea, and Brazil were also completed in the year and will be published online in 2021. Globally, over 50% of countries have now assessed over 80% of their tree flora including 62 countries which have assessed their complete tree floras.

## GTA Project Example

Since 2019, BGCI has been working with Tiberius Jimbo at Papua New Guinea (PNG) Forest Research Institute to assess the nation's native tree species. There are around 2,800 tree species native to PNG and in the last two years, Tiberius and his team have assessed 1,114 of these species. Prior to this project only 88 trees native to PNG had a conservation assessment. Of species assessed for the project, roughly 1/3 of were assessed as threatened (Critically Endangered, Endangered or Vulnerable) with extinction in the wild, around 40% are not threatened (Near Threatened or Least Concern) and the remainder are Data Deficient.



Above: Herbarium specimen of *Quintinia ledermannii* PNG endemic tree assessed as Least Concern (PNG Trees Key)



## GLOBAL TREES CAMPAIGN



During 2020, BGCI worked with partners in more than 20 countries to deliver targeted tree conservation actions for more than 80 threatened tree species.

Fieldwork provides valuable information to produce and supplement conservation assessments, including on population

status, threats and distribution. Highlights from fieldwork in 2020 include, the discovery of more than 22 individuals of *Pradosia argentea*, a tree species previously thought to be extinct, by our GTC partners in Peru, and the discovery of new individuals of Critically Endangered *Aubreginia taiensis* in Côte D'Ivoire and Ghana, bringing the total population count for this species up to 17 mature individuals, compared to 11 at the end of 2019.

During 2020, GTC partners carried out practical work to remove or mitigate threats for target species, including raising and planting seedlings in recovery programmes and protecting mature individuals and seedlings *in situ*. Highlights include planting more than 500 seedlings of four threatened tree species (Vulnerable *Cedrela fissilis*, Critically Endangered *Chloroleucon tortum*, Endangered *Paubrasilia echinata* and Vulnerable *Zeyheria tuberculosa*) in seven sites in Brazil, where our commercial nursery partner is also supplying plants of these species to customers for planting in their local area.

An online training course focused on vegetative propagation techniques for threatened tree species was produced for GTC partners, with content provided by Westonbirt, The National Arboretum (UK), the Royal Botanic Gardens, Edinburgh (UK), Oxford Botanic Garden & Arboretum (UK), and San Francisco Botanical Garden (US).

In 2020, BGCI also launched the Tree Conservation Fund, to direct funding to tree species on the brink of extinction.



Some of the participants of the online workshops on Planning Conservation Action for Kenya's Threatened Trees



### GTC Project Example

During 2020, BGCI, the IUCN/SSC Conservation Planning Specialist Group, and the Kenya Forest Service led a series of online workshops focused on Planning Conservation Action for Kenya's Threatened Trees. Representatives from more than 30 institutions including government, NGO and botanic garden partners participated in the workshops to develop a joint vision statement and goals and to identify priority actions at national and regional levels to deliver conservation for Kenya's 120 threatened tree species. A website has been set up for this initiative to help track activities and progress, and a Kenya Threatened Tree Consortium has been formed. This national planning approach is something that we will replicate in other countries, using the results of the Global Tree Assessment.

Above: Critically Endangered *Vangueriopsis shimbaensis*, one of Kenya's most threatened tree species with fewer than 50 known individuals



## GLOBAL SEED CONSERVATION CHALLENGE



GLOBAL  
SEED  
CONSERVATION  
CHALLENGE

In 2020, a five-year retrospective highlighted the main outcomes of the Global Seed Conservation Challenge (GSCC).

- The GSCC has 212 members as part of the network.
- Seed conservation modules were created and used to train 130 individuals from 80 institutions.
- Doubled the number of taxa as seed collections in PlantSearch.
- Funding provided to nine botanic gardens to collect seed of threatened species as part of the GSCC fieldwork fund.
- Seed of 120 species collected including 45 threatened species.
- Seed conservation directory launched with experts from over 400 institutions.

This year, as Secretariat to the IUCN SSC Specialist Group on Seed Conservation, the GSCC coordinator along with other group leaders developed targets for the next quadrennium (2021-2024).

### ERA Project Example: Restoring Colombia's Caribbean Tropical Dry Forests



Engaging local communities with restoration activities

Tropical dry forest is one of Colombia's most endangered ecosystems; only 8% of its original extent remains. ERA member, Jardín Botánico de Cartagena "Guillermo Piñeres" (JBGP), is working with local communities to restore this important ecosystem. A tree nursery has been built, and training provided on nursery management and forest restoration. Restoration agreements were signed with local landowners, and restoration activities have been implemented, improving biological connectivity in the region. JBGP will replicate this model in other locations in Colombia. Approximately 10,000 tree seedlings have been planted to date and 250 community members have been engaged with restoration activities.

## ECOLOGICAL RESTORATION ALLIANCE OF BOTANIC GARDENS



In 2020, the Ecological Restoration Alliance of Botanic Gardens (ERA) membership has grown to 45 botanic gardens, leading biodiverse restoration

projects around the world in a variety of different societal contexts. As we move into the UN Decade on Ecosystem Restoration (2021-2030), the ERA is working to maximize the opportunities to promote these projects and to raise awareness of the value of involving botanic gardens and botanical expertise in restoration to achieve strong biodiversity and livelihood outcomes. To highlight that well-planned forest restoration projects can achieve multiple benefits, not just carbon capture, BGCI, ERA members from the Royal Botanic Gardens, Kew, and Tooro Botanical Gardens, co-authored a paper entitled *Ten golden rules for reforestation to optimize carbon sequestration, biodiversity recovery and livelihood benefits*, which was published in *Global Change Biology* in January 2021 (Di Sacco et al. 2021).

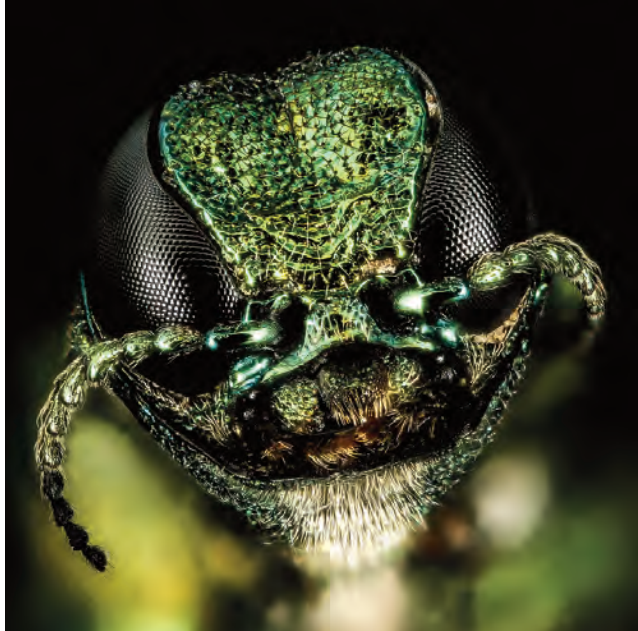


Ecological restoration of the Matute Basin with native species



Children involved in restoration activities





*Agrilus planipennis* (emerald ash borer)  
(Public Domain - Released by the United States Geological Survey (USGS)/USGS Bee Inventory and Monitoring Lab., Beltsville, Maryland, USA/via flickr)

## INTERNATIONAL PLANT SENTINEL NETWORK



2020 was the International Year of Plant Health. The International Plant Sentinel

Network (IPSN) completed the three year Euphresco project and was funded by Defra to coordinate several activities related to surveillance, research, and awareness raising. The IPSN has established a network of 45 botanic gardens in Eastern Europe as part of activities related to monitoring the spread of Emerald Ash Borer. A general surveillance project on horizon scanning of new pest and disease issues to UK host species of interest (including *Quercus robur* and *Pinus sylvestris*) has been initiated as a pilot study in collaboration with botanic gardens in Australia and New Zealand. Several pest and disease related surveys are ongoing and membership has grown to 66 botanic gardens.

## TREE CONSERVATION FUND

In 2020, BGCI launched the Tree Conservation Fund. [BGCI's Tree Conservation Fund](#) is an initiative to enable businesses, philanthropic organisations, and governments around the world to contribute to the essential effort to save the world's threatened tree species.

Humans have transformed the planet, but our progress has placed unprecedented pressure on nature. We stand at a critical juncture where the combined threats of climate change and species extinction will determine the future of life on our planet.

The actions we take in the next ten years will have a profound impact for generations to come. We must protect the world's tree species to ensure their future. Simply planting trees is not enough. We must ensure the survival of tree species and secure the right species of tree in the right place. This is why the world's botanic gardens have rallied together to take action – but we need your help.

Currently, vast areas of fast-growing exotic trees are being planted to capture carbon or to provide short rotation wood crops, displacing natural habitats and indigenous tree species. In many countries ten times as many exotic trees are being planted as indigenous trees. This is a short-term fix and not the right approach. BGCI's approach is to focus on the right trees in the right place – encouraging the preservation of indigenous species in their natural habitats, rather than replacing them with exotic (non-native) species.

To drive this ambitious effort, BGCI is seeking leaders who wish to put their resources to work on behalf of nature. We are inviting philanthropists, foundations, corporations, social impact funds, and other investors to join us. Donors to the fund will be our partners and will contribute to tangible results delivered through an internationally connected conservation network.



Mafinga mountains, Zambia



# Funding and Capacity Building

Gardens by the Bay, Singapore (Paul Smith)





# Funding and Capacity Building

BGCI disbursed funds totalling USD 1,246,053 to botanic gardens and other institutions in 2020. This figure is three times more than what we receive in membership fees.

## BGCI X THE BOTANIST

In 2020, BGCI announced an [incredible partnership with The Botanist](#) to further the conservation of endangered and rare plant species, through BGCI's Global Botanic Garden Fund. The Botanist is a dry gin conceived, distilled and handcrafted on Islay (Scotland) using 22 foraged island botanicals at Bruichladdich Distillery. Over the years, The Botanist Foundation has invested in non-profit, environmental, educational and social initiatives on Islay and beyond. It is a charitable foundation that funds projects which further work in biodiversity and plant conservation. Now, in addition to its existing projects, The Foundation will sponsor BGCI's Global Botanic Garden Fund, through specific initiatives set out within the partnership between BGCI and The Botanist.



In 2020, BGCI launched a partnership with The Botanist

## ANTHONY HITCHCOCK SPECIES RECOVERY FUND

The Anthony Hitchcock Species Recovery Fund was launched by BGCI in 2020 in memory and honour of Anthony Hitchcock who committed his life to the conservation of endangered plants in Southern Africa. Anthony sadly passed away from COVID-19 in July 2020. He was a passionate and experienced horticulturist who pioneered the restoration of threatened fynbos and associated vegetation types in and around Cape Town, South Africa. He spent his entire professional life at Kirstenbosch National Botanical Garden as an active botanical horticulturist, prolific plant gatherer, compulsive seed collector, accomplished gardener, and unstinting mentor to so many. With support from his family, the South African National Biodiversity Institute (SANBI), the Royal Botanic Gardens, Kew, and the many individuals inspired by his work,



Anthony Hitchcock (left) with the Threatened *Erica verticillata*. Credit: Kirstenbosch and MSB - South Africa

BGCI has established the Fund to support institutions carrying out threatened plant species reintroductions and recovery for their long-term survival in the wild. We feel sure that Anthony would have approved. To support the fund please make a donation [here](#).

## GGI-GARDENS AWARDS PROGRAM

The Global Genome Initiative for Gardens (GGI-Gardens), BGCI-US, BGCI, and the United States Botanic Garden (USBG) announced the GGI-Gardens Awards Program in 2020. The GGI-Gardens Awards Program supports activities to preserve Earth's genomic biodiversity of plants through sampling of living collections maintained at botanic gardens around the world. The awards were made possible by GGI-Gardens and the USBG, and administered through BGCI's Global Botanic Garden Fund. Recipients for the GGI-Gardens Awards will be announced in 2021.



Young and aspiring scientists assist career scientists in sampling plants at the United States Botanic Garden for the Global Genome Initiative (United States Botanic Garden)



## GLOBAL BOTANIC GARDEN FUND

BGCI's Global Botanic Garden Fund aims to drive plant conservation in botanic gardens. The Global Botanic Garden Fund is open to BGCI Member Institutions only. Preference is given to small botanic gardens in developing countries and biodiversity hotspots. The Global Botanic Garden Fund supports projects that work to achieve the targets of the Global Strategy for Plant Conservation along with a number of other objectives.

### 2020 Global Botanic Garden Fund Recipients

In 2020, BGCI received 151 applications from more than 50 countries and 60 institutions. BGCI's Global Botanic Garden Fund distributed 40 grants worth more than USD 82,000.

Funding for the Global Botanic Garden Fund was made possible in 2020 by contributions from The Botanist Foundation, the Gibson Charitable Trust, crowd-sourced funding through the BigGive Christmas Challenge, and the BGCI/PlantSnap COVID-19 Appeal.

In addition, BGCI administers restricted grant funding through support from the BGCI/ArbNet Partnership Programme, the BGCI/Minnesota Landscape Arboretum Grants, and the BGCI/GGI-Gardens Awards Program. In 2020, BGCI launched the Anthony Hitchcock Species Recovery Fund in honour of the late Anthony Hitchcock, who committed his life to the conservation of endangered plants in Southern Africa.

Recipients of the 2020 Global Botanic Garden Fund Grants can be found below.

Organisation	Country	Funding
Jardín Botánico Horco Molle	Argentina	BGCI/Minnesota Landscape Arboretum Grants
Jardín Botánico Gaspar Suarez sj	Argentina	Global Botanic Garden Fund
JBPE-CCT CONICET-CENPAT	Argentina	Global Botanic Garden Fund
Jardín Botánico de Córdoba	Argentina	Global Botanic Garden Fund
Jardín Botánico Oro Verde	Argentina	Global Botanic Garden Fund
Institute of Botany after A. L. Takhtajyan NAS RA & The Arnold Arboretum of Harvard University	Armenia / United States	BGCI/ArbNet Partnership Programme
Jardim Botânico Araribá	Brazil	BGCI/Minnesota Landscape Arboretum Grants
Innisfree Farm	Canada	Global Botanic Garden Fund
Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences	China	The Anthony Hitchcock Species Recovery Fund
Jardín Botánico de Cartagena "Guillermo Piñeres"	Colombia	BGCI Sustainability Grants
Balkan Botanic Garden of Kroussia	Greece	Global Botanic Garden Fund
M. S. Swaminathan Research Foundation	India	BGCI Sustainability Grants
Jawaharlal Nehru Tropical Botanic Garden and Research Institute	India	Global Botanic Garden Fund
Bergamo Botanic Garden 'Lorenzo Rota'	Italy	BGCI Sustainability Grants
MUSE Botanic Gardens & Plants for life International at Brackenhurst Botanic Garden	Italy / Kenya	BGCI/ArbNet Partnership Programme
Brackenhurst Botanic Garden & Forest	Kenya	BGCI Sustainability Grants
Conservatoire Botanique Sainte-Marie	Madagascar	The Anthony Hitchcock Species Recovery Fund
Jardín Botánico Universitario BUAP	Mexico	Covid-19 Support Grants
Jardín Etnobotánico Francisco Peláez R.	Mexico	Covid-19 Support Grants
Jardín Botánico Regional de Cadereyta	Mexico	Global Botanic Garden Fund
Centro de Investigación Científica de Yucatán, A.C.	Mexico	Global Botanic Garden Fund
National Botanical Garden of Namibia	Namibia	Global Botanic Garden Fund
DRcongo à la carte , DRCC foundation	Netherlands	Covid-19 Support Grants
Otari Native Botanic Garden and Wilton's Bush Reserve	New Zealand	Global Botanic Garden Fund
Palestine Institute for Biodiversity and Sustainability at Bethlehem University	Palestine, State of	Global Botanic Garden Fund
De La Salle Philippines	Philippines	BGCI Sustainability Grants
Botanical Garden-Institute of Far Eastern Branch of Russian Academy of Science	Russia	Global Botanic Garden Fund
Botanical Garden of Biological Faculty of M.V. Lomonosov Moscow State University	Russia	Global Botanic Garden Fund
Institute of Botany and Botanical Garden "Jevremovac"	Serbia	BGCI/Minnesota Landscape Arboretum Grants
Hermanus Botanical Society	South Africa	BGCI Sustainability Grants
Kirstenbosch National Botanical Garden & Missouri Botanical Garden	South Africa / United States	BGCI/ArbNet Partnership Programme
Royal Botanic Gardens, Department of National Botanic Gardens	Sri Lanka	Global Botanic Garden Fund
Natural History Museum Arusha	Tanzania	BGCI Sustainability Grants
Tooro Botanical Gardens	Uganda	BGCI Sustainability Grants, BGCI/Minnesota Landscape Arboretum Grants
The Friends of Lakewold	United States	BGCI Sustainability Grants
San Francisco Botanical Garden	United States	Global Botanic Garden Fund
Montgomery Botanical Center	United States	Global Botanic Garden Fund
City of Columbia, Stephens Lake Park Arboretum & Grigadale Arboretum	United States / Argentina	BGCI/ArbNet Partnership Programme
Forest Science Institute of Central Highlands and South of Central Vietnam (FSIH)	Vietnam	Global Botanic Garden Fund



## INSTITUTIONS SUPPORTED BY BGCI WITH FUNDING IN 2020

Institution	Country
Jardín Botánico de Buenos Aires "Carlos Thays"	Argentina
Jardín Botánico de Córdoba	Argentina
Jardín Botánico Gaspar Xuarez sj	Argentina
Jardín Botánico Horco Molle	Argentina
Jardín Botánico Oro Verde	Argentina
JBPE-CCT CONICET-CENPAT	Argentina
Council of Heads of Australian Botanic Gardens	Australia
Royal Botanic Gardens & Domain Trust, Sydney	Australia
Royal Botanic Gardens Victoria	Australia
Kings Park and Botanic Garden Perth	Australia
Universitat Wien	Austria
Herbario Nacional de Bolivia	Bolivia
Fundacao Flora de Apolo A Botanica & Rio BG Res Inst	Brazil
Jardim Botânico Araribá	Brazil
National Authority for Preah Vihear Cambodia	Cambodia
Innisfree Farm Botanical Garden	Canada
Jardín Botánico Universidad de Talca	Chile
Guizhou Minzu University	China
Hangzhou BG- Academy of Landscape Science	China
Hunan Forest Botanical Garden	China
Qinling National Botanical Garden	China
Sanya Academy of Forest	China
Shenyang Arboretum	China
Sichuan Provincial Academy of Natural Resource Sciences	China
South China BG / Chinese Academy of Sciences	China
Southwest Forestry University	China
Wuhan BG Chinese Academy of Sciences	China
Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences	China
Zhejiang Forestry Academy	China
Zhoushan Academy of Forestry	China
Asociacion Colombiana de Herbarios	Colombia
Jardín Botánico de Cartagena	Colombia
Centre Suisse de Recherches Scientifiques en Côte D'Ivoire	Côte D'Ivoire
Fundacion Progressio Dominican Republic	Dominican Republic
Tallinna Botaanikaäed	Estonia
Addis Ababa University Herbarium	Ethiopia
Fiji Nature Conservation Trust/MarqetiViti (NFMV)	Fiji
CSIR Forestry Research Institute of Ghana	Ghana
Balkan Botanic Garden of Kroussia	Greece
Jardin Botanique des Cayes Haiti	Haiti
Hungarian Association of Arboreta and Botanic Gardens	Hungary
Auroville Botanical Garden	India
Greens Biodiversity Sanctuary	India
Jawaharlal Nehru Tropical Botanic Garden and Research Institute	India
M. S. Swaminathan Research Foundation	India
Bogor Botanic Gardens	Indonesia
Orangutan Foundation International Indonesia	Indonesia
Kurdistan Botanical Foundation	Iraq
Bergamo Botanic Garden 'Lorenzo Rota'	Italy
African Forest Ltd	Kenya
Brackenhurst Botanic Garden & Forest	Kenya

Institution	Country
Kivukoni Indigenous Tree Nursery	Kenya
Kilifi Tree Nursery	Kenya
Pha Tad Ke Botanic Garden	Laos
Botanical Garden of Klaipeda University	Lithuania
Conservatoire Botanique Sainte-Marie	Madagascar
IUCN SSC Madagascar Plant Specialist Group	Madagascar
Kew Madagascar Conservation Centre	Madagascar
Missouri Botanical Gardens Madagascar	Madagascar
University of Antananarivo Department of Plant Biology & Ecology	Madagascar
Groupes des Specialistes des Plantes de Madagascar	Madagascar
Mulanje Mountain Conservation Trust	Malawi
Sabah Forestry Department Malaysia	Malaysia
Sabah Parks Malaysia	Malaysia
Tropical Rainforest Conservation & Research Centre Bhd	Malaysia
Mauritian Wildlife Foundation	Mauritius
Jardin Botanico Regional de Cadereyta	Mexico
Centro de Investigación Científica de Yucatán, A.C.	Mexico
Jardín Etnobotánico Francisco Peláez R.	Mexico
Jardin Botanico Universitario BUAP	Mexico
National Botanical Garden of Namibia	Namibia
Maastricht University	Netherlands
Auckland Botanic Garden	New Zealand
Dunedin Botanic Garden	New Zealand
Lincoln University	New Zealand
Otari Native Botanic Garden and Wilton's Bush Reserve	New Zealand
Pukekura Park (New Plymouth District Council)	New Zealand
Palestine Institute for Biodiversity and Sustainability at Bethlehem University	Palestine, State of
Asociación para la Niñez y su Ambiente (ANIA) & Conservamos ICA (CONICA)	Peru
De La Salle Philippines	Philippines
Lopez Group Foundation Philippines	Philippines
Pro-Seeds Development Association Incorporated Philippines	Philippines
Papua New Guinea Forest Research Institute	Papua New Guinea
Polska Akademia Nauk Ogród Botaniczny CZRB w Powsinie	Poland
Gradina Botanica Al Borza	Romania
Botanical Garden of Biological Faculty of M.V. Lomonosov Moscow State University	Russia
Botanical Garden-Institute of Far Eastern Branch of Russian Academy of Science	Russia
Samoa Conservation Society	Samoa
University of Belgrade	Serbia
First Forest Ecology SAS	Slovakia
Univerza v Mariboru	Slovenia
Hermanus Botanical Society	South Africa
Royal Botanic Gardens, Department of National Botanic Gardens	Sri Lanka
Dr Cecilia Koo Botanic Conservation & Environmental Protection Foundation	Taiwan R.O.C.
National Chiayi University Taiwan	Taiwan R.O.C.
Natural History Museum Arusha	Tanzania



**INSTITUTIONS SUPPORTED BY BGCI WITH FUNDING IN 2020 cont'd**

Institution	Country	Institution	Country
Tanzania Forest Service Agency	Tanzania	San Francisco Botanical Garden	United States
Queen Sirikit Botanical Garden	Thailand	The Friends of Lakewood	United States
Makarere University	Uganda	The Morton Arboretum	United States
Tooro Botanical Gardens	Uganda	The University of North Carolina Asheville	United States
Oles Honchar Dnipro National University	Ukraine	Provita	Venezuela
Traffic International Cambridge	United Kingdom	Forest Science Institute of Central Highlands and South of Central Vietnam (FSIH)	Vietnam
Chicago Botanic Garden	United States	Southern Institute of Ecology Vietnam	Vietnam
Montgomery Botanical Center	United States		

**PARTICIPANTS IN BGCI TRAINING COURSES IN 2020**

Total number of organisations trained	<b>59</b>
Total number of people trained	<b>1583</b>

Course	Institution	Country
Propagation of endangered species	Mauritian Wildlife Foundation	Mauritius
Red List Assessments Training	University of Dhaka	Bangladesh
	Jahangirnagar University	Bangladesh
	University of Chittagong	Bangladesh
	Rajshahi University	Bangladesh
	Bangladesh National Herbarium	Bangladesh
	Bangladesh Forest Department	Bangladesh
	Bangladesh National Museum	Bangladesh
	Diploid Laboratories Limited	Bangladesh
	Mohammadpur Govt. College, Dhaka	Bangladesh
	Cox's Bazar Govt. College	Bangladesh
	Radiant School & College	Bangladesh
	Khulna University	Bangladesh
Vegetative propagation	African Forest	Kenya
	Brackenhurst Botanic Garden	Kenya
	Kivukoni Indigenous Tree Nursery	Kenya
Conservation Assessment Training Workshop (SePPCon)	The Morton Arboretum and NatureServe	United States
	Georgia Department of Natural Resources	United States
	Atlanta Botanical Garden	United States
	American Public Gardens Association	United States
	Southeastern Grasslands Initiative	United States
	Jacksonville Zoo and Gardens	United States
	United States Department of Agriculture	United States
	Naples Botanical Garden	United States
Reintroduction	Hunan Forest Botanical Garden	China
	Wuhan Botanical Garden	China
	Badagongshan National Nature Reserve	China
	Emeishan Botanical Garden	China
Propagation, cultivation, pruning, harvesting and marketing	Guangxi Institute of Botany	China
Biodiversity conservation	Hangzhou Botanical Garden	China
	Tianmushan National Nature Reserve	China
	Fengyangshan National Nature Reserve	China



**PARTICIPANTS IN BGCI TRAINING COURSES IN 2020 cont'd**

Course	Institution	Country
Propagation conservation	Southwest Forestry University	China
	Kunming Botanical Garden	China
	Hekou Forestry Administration	China
	Daweishan National Nature Reserve	China
	Qinling National Botanical Garden	China
	Xian Botanical Garden	China
	Northwest University	China
	Huyi District Forestry Bureau	China
	Zhouzhi County Forestry Bureau	China
	Louguantai Forest Station	China
	Nature Reserve and wildlife protection department of Shaanxi Forestry Bureau	China
	Jiulongshan National Nature Reserve	China
	Lishui Medicinal Plants Garden	China
	Baishanzu National Nature Reserve	China
	Caoyutang Forest Station in Jingning	China
	Sanya Forestry Academy	China
	Lingnan Normal University	China
	Hainan Normal University	China
	Hainan Institute of Tropical Oceanography	China
	Tielugang Mangrove Nature Reserve	China
	Sanya Blue Ribbon Volunteer Association	China
	Zhoushan Forestry Academy	China
Biodiversity conservation, Propagation introduction, Propagation conservation	Zhejiang Academy of Forestry	China
	Zhejiang University	China
	Hangzhou Normal University	China
	Zhejiang A & F university	China
Reintroduction, propagation, cultivation, pruning, harvesting and marketing	South China Botanical Garden (CAS)	China



# BGCI Membership

NBG Pretoria (Paul Smith)





# BGCI Membership

Established in 1987, BGCI currently links more than 650 botanic gardens and conservation organisations in over 100 countries, working together to secure plant diversity for the well-being of people and the planet. 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](#)
- Staff inclusion in [BGCI's Directory of Expertise](#) (where applicable)
- Botanic Garden technical support and advisory services
- Subsidised training courses through BGCI's soon to be launched Online Training Platform
- Discounted [Congress](#) attendance
- BGCI's electronic publications, including [BGjournal](#) (conservation) and [Roots](#) (education)
- [Exclusive access](#) to our global database resources: PlantSearch, ThreatSearch and GlobalTreeSearch.
- Use of the BGCI website to [promote your events, news, and job listings](#)
- Permission to use BGCI's logo and name
- Access to additional prizes and awards
- Certificate of Membership

## BGCI'S PATRON MEMBERS

BGCI's Patron Gardens support our work both financially and with in-kind donations. They include some of the largest, most influential gardens in the world, and are entitled to the following additional benefits:

- A seat on BGCI's prestigious International Advisory Council
- Office space and office support when visiting London
- Preferential fundraising and project development activities
- The opportunity to speak at BGCI Congresses
- Invitations to BGCI special events
- A feature on BGCI's website



Huntington Botanical Gardens, California (US).

BGCI Patron Gardens in 2020:

- Atlanta Botanical Garden
- Beijing (Northern) Botanical Garden
- Chicago Botanic Garden
- Conservatoire et Jardin botaniques de la Ville de Genève
- Fairylake Botanical Garden, Shenzhen & Chinese Academy of Sciences
- Hunan Forest Botanical Garden
- Huntington Botanical Gardens
- Kadoorie Farm and Botanic Garden
- Korea Institute of Arboretum Management
- Korea National Arboretum
- Missouri Botanical Garden
- The Morton Arboretum
- The Royal Botanic Gardens, Kew
- The Royal Botanic Gardens & Domain Trust, Sydney
- Royal Botanic Garden Edinburgh
- Royal Botanic Gardens Victoria
- Shanghai Botanical Garden
- Shanghai Chenshan Botanical Garden
- Singapore Botanic Gardens
- South China Botanical Garden, Chinese Academy of Sciences
- United States Botanic Garden
- Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences

## 2021 Institutional Membership Categories and Fees

Budget Size (in USD)	Annual Fee (GBP)	Annual Fee (USD)	Annual Fee (EUR)	Category
Greater than \$2.25 million	£1,250	\$1,500	€1,375	Category B
\$1.5 to \$2.25 million	£675	\$900	€800	Category C
\$750,000 to \$1.5 million	£500	\$650	€575	Category D
\$100,000 to \$750,000	£270	\$350	€325	Category E
Less than \$100,000	£125	\$150	€135	Category F



## SHEEPCRM



In 2020, BGCI launched a new membership system, SheepCRM. Built and managed in the UK, SheepCRM is a cloud-based membership management system and CRM.

SheepCRM prides itself on developing and managing a clear and easy to use CRM with numerous integrations. BGCI uses SheepCRM to manage its contacts, members, and memberships. BGCI's members use the SheepApp to monitor, renew, and manage their membership and gain access to a host of membership benefits.

Our objective is to provide access to all of BGCI's online membership benefits through a person's SheepApp account. This will ensure that access to membership benefits are linked directly to an active institutional membership, further permeation of BGCI information and support throughout member institutions, and an easy/clear way for a member to determine their membership status and incentivise renewals through SheepApp. This will include access to:

- Participate in BGCI's Online Forum (Available now)
- Enhanced BGCI Databases (Available now)
- Apply for inclusion in BGCI's Directory of Expertise (Available now)
- BGCI's Online Learning Platform (Launching in 2021)
- Apply for Global Botanic Garden Fund Grants (Launching in 2021)
- Apply for BGCI Accreditation (Launching in 2021)

All staff of member institutions are encouraged to create a SheepApp account by following the instructions found [here](#).



Fairy Lake Botanical Garden, Shenzhen & Chinese Academy of Sciences, a patron member of BGCI.





**BOTANIC  
GARDENS**  
CONSERVATION  
INTERNATIONAL

BGCI is an independent organisation registered in the United Kingdom as a charity (Charity Reg. No. 1098834) and a company limited by guarantee (No. 4673175). BGCI-US is a tax exempt 501(c)(3) non-profit organisation in the US.



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Photos: front - Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences  
back - Desert Botanical Garden

Design: John Morgan. [www.seascapedesign.co.uk](http://www.seascapedesign.co.uk)