



**BOTANIC
GARDENS**
CONSERVATION
INTERNATIONAL

2023 Year in Review



LETTER FROM PAUL

Welcome to BGCI's 2023 Year in Review which, as usual, is packed full of news and activities related to the work of botanic gardens and plant conservation.

Image: Botanic Gardens of Sydney (Australia)

Following the launch of the plant material exchange tools, Index Seminum and PlantShare, in 2022, the releases of second generation GardenSearch and PlantSearch were the big data tool events of 2023. Apart from smart new user interfaces, both databases have amazing new functionality. GardenSearch data follows a new, comprehensive data structure, including information on a garden's location, key contacts, leadership, living collections, plant conservation activities, education and outreach, research and sustainability. If the information on your garden is not yet in new GardenSearch, please be sure to upload it – a database is only as good as the data in it. In new PlantSearch, information on plant taxa held in the living collections and seed banks of botanic gardens includes taxonomic status of the name, whether it is conserved *ex situ*, its threat status, whether it is CITES listed etc. Crucially, new PlantSearch allows members of the botanical community to see where material is held *ex situ*, and create a report for the garden of the status of their collections. Again, if your garden's collection data is not up to date on PlantSearch, please upload it. GardenSearch and PlantSearch form the basis for future new tools that will be delivered in 2024, including a pedigree module that enables the recording and exchange of detailed provenance data for plant breeding and conservation, and a propagation module that will link propagation protocols to taxa in PlantSearch.

BGCI is really excited about this suite of new tools, which will support the conservation of rare and threatened plant species *ex situ* and *in situ*.

While on the subject of plant conservation, 2023 saw the launch of the much delayed Global Biodiversity Framework (GBF), which was signed off at COP-15 after many Covid-related delays. Perhaps partly because of these delays, the GBF is a much stronger framework than the Aichi Targets it replaces. Notable new elements include much stronger emphasis on ecological restoration (Target 2) and species recovery (Target 4). These targets speak directly to the skillsets and data held by our community, and give us all the direction we need to start restoring and recovering the plants that we have destroyed and displaced. The new Global Strategy for Plant Conservation (GSPC) comprises a series of plant conservation activities that are entirely nested in the GBF. This means that our activities are both specific to the botanical community but also mainstreamed within broader conservation efforts. The post-2020 GSPC has been agreed at SBSTTA but will need further sign off at COP-16 in Cali, Colombia this coming October. BGCI is thankful to the Global Partnership for Plant Conservation for championing the new GSPC.

On nearly every page of this Annual Review you will find examples of how the botanical community is supporting the delivery of the GSPC and GBF. The Global Tree Assessment – the largest red listing project ever undertaken – has seen an additional 9000 tree assessments submitted to IUCN in 2023 and includes important stand alone publications such as the Red List of Timbers and the Red List of Dipterocarps. The GTA

has enabled country-level planning of tree conservation, and excellent examples of this are presented for Kenya and Ghana in this review. BGCI-led or funded work on species recovery this past year has resulted in 158 plant species being supported with direct conservation action, and our Global Conservation Consortia, which lead on the conservation of specific taxa, now cover 9 plant groups and comprise 358 participating institutions from 50 countries. Of course, threats to plant species continue, and our work in preventing those threats is as important as our species recovery work. BGCI's International Plant Sentinel Network, which identifies and manages emerging plant pests and diseases, now has 97 members around the world and celebrated its 10th anniversary in 2023. Tree planting is another emerging threat to biodiversity, and the development of the Global Biodiversity Standard (GBS) – a site-based assessment of impacts on biodiversity – has continued to go from strength to strength. The GBS has now been tested on >100 sites in six countries, and GBS hubs have been established in Brazil, Peru, India, Madagascar, Kenya and Uganda. Two hundred assessors in at least 10 countries will be trained in 2024.

Plant conservation action cannot take place without financial support, and we are very grateful to the Leon Levy Foundation for their support of organisations and activities in the Caribbean and Central America. In addition, BGCI's Global Botanic Garden Fund catalyses some amazing plant conservation action, and we are grateful to the sponsors of this fund, including the Morton Arboretum, the US Forest Service, the United States Botanic Garden, the US National Arboretum, the Minnesota Landscape Arboretum, The Huntington, The Botanist and many donations that came through our BigGive Appeal.

BGCI-led or funded work on species recovery this past year has resulted in 158 plant species being supported with direct conservation action.

BGCI's International Advisory Council, which now comprises 38 directors of botanic gardens from six continents, continues to provide leadership for our sector. This group met in St Louis in September, and requested that BGCI develop a global public information campaign on combatting the illegal plant trade, and also start work on an online botanic garden leadership course. We are particularly grateful to BGCI's Patron Garden members

for their support, which enables the IAC to exist, and also supports many of the services that we provide. In 2023, BGCI's online training services have continued to grow, and I'm delighted to say that many are now available in multiple languages, with many Spanish resources made available this past year.

Of course, 2023, has not been all good news. Our community has lost some wonderful people over the past year (see page 20). I would like to pay particular tribute to Diane Wyse Jackson, who was one of the founders of BGCI, and contributed a huge part of her life to making BGCI what it is today. Hers was a life well spent and I hope that her family is proud of all she achieved – we are certainly very thankful.

Ending on a more positive note, with your support, BGCI continues to go from strength to strength, with record levels of membership and a growing organisation that is bringing in new skills and knowledge to help deliver our mission – a mission which is more important than ever!



*Sincerely,
Paul Smith*

BGCI's Secretary General

Big Stories of 2023

GardenSearch and PlantSearch

21st Century Tools to Share Botanic Garden Information and Monitor Conservation Capacity

We were very excited to relaunch the new BGCI GardenSearch and PlantSearch in 2023. The only global sources of data on botanic gardens and the living plant, seed, and tissue collections they maintain. These data tools were originally launched in 2002 and have since become critical tools for identifying and prioritising conservation capacity and sharing, building, and backing up ex situ collections.

“These new tools provide more accurate and accessible information for botanic gardens and conservation practitioners and catapult our collective ability to coordinate plant conservation efforts at global, regional, and local scales,” said Paul Smith of BGCI.

Rebuilding BGCI’s GardenSearch and PlantSearch involved the migration of information from gardens around the world from the old system to the new one. This included final vetted datasets of 3,421 institution profiles, 2,470 registered users, and 964 taxa lists (562,900 total records representing 148,067 unique taxa). There was a lengthy process of data cleaning and migration, along with building a new user interface and login system that is connected with BGCI’s CMR, and a major overhaul of how plant names are handled and validated within PlantSearch.

“We are very happy with the advancements in the new GardenSearch and PlantSearch, as a first of hopefully many positive steps toward dynamic data sharing among botanical institutions,” said Abby Meyer of BGCI-US.

These new tools offer improved foundational data on the world’s botanic gardens and plants, and an enhanced user interface for contributing and accessing data. BGCI is grateful for the grants and partner organisations that made these improvements possible and to the thousands of botanic garden staff that make data contributions each year.



GSPC Complementary Actions accepted by Governments

The GSPC set of complementary actions in plant conservation, in support of the Kunming–Montreal Global Biodiversity Framework were accepted at the 25th meeting of CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) in Nairobi. Here it was recommended to be adopted at the next CBD Conference of the Parties in Colombia 2024.

Over the last two decades the GSPC has been well-supported by a Global Partnership for Plant Conservation (GPPC). The GPPC is provided with a Secretariat by BGCI and today the Partnership includes over 70 institutions and organisations worldwide, supporting Parties in the achievement of the GSPC. Our team in Kenya were there to support the GPPC Co-Chair Maité Delmas in presenting the GSPC at SBSTTA25. The GSPC has been an invaluable catalyst for mobilising and guiding the botanical and plant conservation communities worldwide stimulating many new actions at global, regional and national levels. It has provided a clear, coherent and flexible framework allowing the development of national responses to the GSPC in a range of countries, including some of the most mega diverse countries.

In supporting the new GSPC, the CBD Parties recognised the critical role of plants in supporting ecosystem resilience, provision of ecosystem services, adapting to and mitigating environmental challenges, including climate change, and for supporting human well-being. There are 35 plant conservation actions aligned to the GBF targets for reducing threats; meeting people’s needs and providing tools and solutions. Each one of the actions will be implemented taking into account CBD provisions for fair and equitable access and benefit sharing, and gender equality.

“The set of actions are derived from experiences / priorities identified / lessons learnt during the implementation of the previous phases of the GSPC.”

BGCI Patron Members

In 2023 we saw 5 gardens join as BGCI Patron Members: Naples Botanical Garden, Longwood Gardens, Leon Levy Nature Preserve, The New York Botanical Garden and Wuhan Botanical Garden.

Patron Members allow BGCI to provide increased support to the global community both financially and with in-kind donations. They include some of the largest, most influential gardens in the world. As Patron Members they hold a seat on BGCI's International Advisory Council which collectively advise on BGCI's programmes for the implementation of the International Agenda for Botanic Gardens in Conservation, contributing towards the achievement of the Global Strategy for Plant Conservation.



[Click to learn more about BGCI's 28 Patron Members](#)

“BGCI is an important international network of like-minded organisations working toward effective plant conservation, and we appreciate the opportunity NYBG has to serve as both a Patron and an involved member of the IAC. The collaboration, knowledge-sharing, and resources provided by BGCI and our fellow Patrons help NYBG in pursuing its strategic goal of investigating, elevating, and amplifying the role of plants in solving the challenges facing our shared planet. We believe we can provide in kind.”

Jennifer Bernstein, CEO & The William C. Steere Sr. President, The New York Botanical Garden

“The BGCI Patron member and IAC committee provided an opportunity to exchange experiences and learn about the latest developments in botanical gardens with internationally renowned botanical garden directors in person.”

Hai Ren, South China Botanical Garden, Chinese Academy of Sciences



Image: Nursery assistant holding *Pleodendron costaricense* seedlings. Osa Conservation.

“As the impacts of the climate and biodiversity crises hit harder there has never been a more important time to raise the importance of plants and the work botanic gardens do to mitigate and combat these issues. By working together collectively across the globe we can make a lasting contribution to solving these problems and creating a better future for future generations.”

Brett Summerell, Acting Chief Executive, Botanic Gardens of Sydney

Empowering botanic gardens in the Caribbean and Central American region

With generous support from the Leon Levy Foundation in 2023, the partnership between BGCI, Naples Botanical Garden and Leon Levy Native Plant Preserve is scaling up the development of capacity, resources, project work and coordination for the Caribbean and Central American Botanic Gardens (CCABG) network. This initiative is providing the much-needed consolidation for the network through different activities: focusing on connecting with botanic gardens and plant conservation institutions in the region, increasing capacity and the development of resources, supporting plant conservation and educational projects, and increasing the regional representativeness at the 2024 Botanical Bridges Congress.

BGCI received co-funding by Naples Botanical Garden to support these activities and we are grateful for the support provided by the Leon Levy Foundation.



[Watch the video](#)

Saving plants

Red List Publications

In 2023, Global Tree Assessment published two Red List Publications; the Red List of Dipterocarpaceae and the Red List of Timber Trees. The former details the conservation assessments for all 535 species in the family Dipterocarpaceae. It identified that 67% of dipterocarp trees are threatened in the wild, making them one of the most threatened tree groups globally. The report was prepared by 31 authors from across the Southeast Asian Diversity centre for the family and is unique in the provision of both global level and country level analysis for the family. Authors have contributed information on uses, conservation in-place and conservation needs for Dipterocarp trees nationally.

The Red List of Timber Trees documents the conservation status of the world's almost 5,000 tree species. BGCI originally began working on assessments for timber trees in 2017 and this report is the culmination of this work and includes case studies of work carried out by botanical institutions towards timber conservation. It finds that 1,664 timber trees are threatened with extinction, with logging and wood harvesting being the greatest threat. Unfortunately 64% of threatened timber trees are not in ex situ collections. This is an important conservation need for the group, along with further research and data collection on timber trees in the wild and how to manage their use sustainably.



Click for more information

By the Numbers



384 plant species

with targeted conservation action in 2023



41,444 tree species

on the IUCN Red List



325 data sources

383,096 assessments listed



57,922 tree species

including

17,525 threatened species

of which more than

3,075 are Critically Endangered



Conservation action tracked for 4,126 tree sources
2,161 threatened and 719 Critically Endangered



9 Global Conservation Consortia

with 358 affiliates from 50 countries

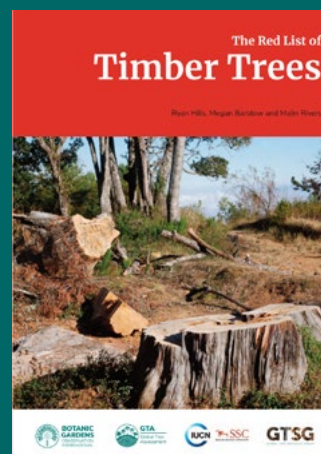


97 members



IPSN

International Plant
Sentinel Network



Global Conservation Consortia Successes

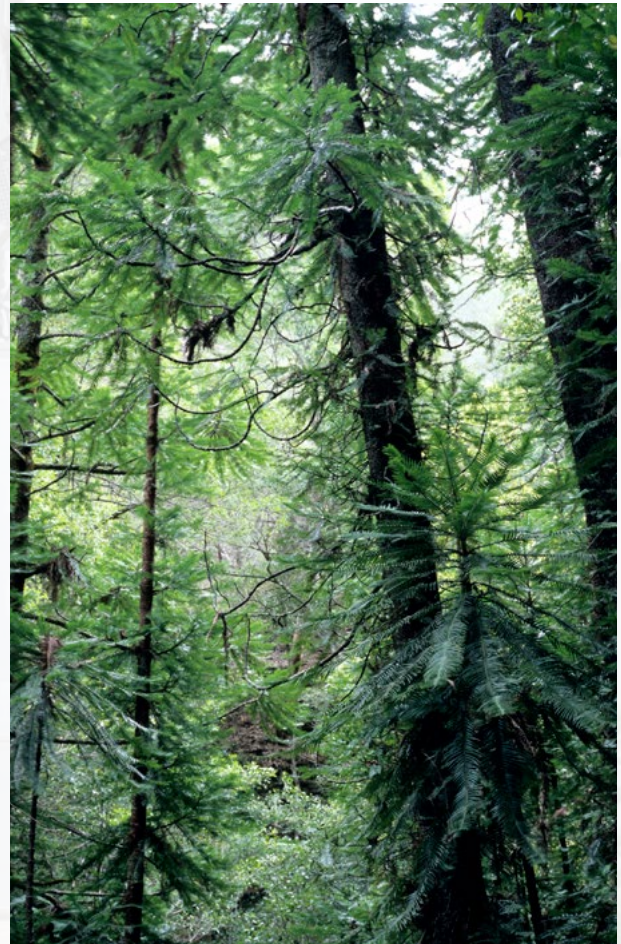
2023 was a significant year for the [Global Conservation Consortia](#). With the introduction of a brand-new consortium for Ebenaceae, bringing together experts, conservationists, and the botanic garden community to ensure no wild ebony species becomes extinct.

Alongside this, we saw the success of the global [Wollemi Pine metacollection](#) project. Which, a collaboration with partners, culminated in an event at Bedgebury Pinetum. Our Communications Officer wrote [a blog about the experience of working on this project](#). And as the world celebrated this conservation achievement, His Majesty [King Charles even got involved with a bit of tree planting!](#)

We were delighted that this project received global attention and you can [watch an entertaining teaser trailer](#) made for the project based on Jurassic Park and [a beautiful video made about the impact of the project](#) to learn more about this exciting moment in conservation.



Watch the video



Ten years of the International Plant Sentinel Network (IPSN)

2 **The Plant Health Checker**
Standardised plant health surveys for non-specialists

3 **Surveying Native Host Plants Abroad**
Engaging Botanic Gardens in pest & disease monitoring for early warning

4 **The Spittlebug Hunt**
A citizen science survey of a potential *Xylella* vector

5 **Emerald Ash Borer in Eastern Europe**
Tracking a quarantine organism across the continent

6 **Surveys Gone Digital with the ePHC**
Testing new technologies for data collection

7 **Spreading Information & Good Practice**
Providing up-to-date resources as they're needed

8 **IPSN Small Grants**
Funding new knowledge & understanding through Botanic Gardens staff

9 **Connecting Gardens with NPPOs**
Strengthening response networks

10 **Growing & Growing**
Expanding our international reach through our members

IPSN 10th ANNIVERSARY

Learn more about the International Plant Sentinel Network

IPSN
International Plant Sentinel Network
www.bgci.org



Action for Plants

Conservation Action Planning – Kenya and Ghana

With so many tree species at risk of extinction, there is a desperate need to scale up conservation action, whilst also ensuring that actions are still tailored as much as possible to the requirements of individual species. To avoid the duplication of effort and to maximise impact, approaches that coordinate and mobilise multi-species conservation at the taxonomic, national, regional and global levels are needed. A national-level approach has been used to plan and deliver action for the threatened trees of Kenya and Ghana.

Conservation Action in Ghana

In collaboration with the IUCN SSC Conservation Planning Specialist Group (CPSG) and CSIR-Forestry Research Institute of Ghana, BGCI hosted a four-day workshop to effectively plan conservation action for Ghana's threatened tree species, with a particular focus on thirty-eight endemic and near-endemic species. Following the publication of the conservation action plan in 2023, Fondation Franklinia opened a call for proposals, specifically targeting Ghana to support the implementation of the plan.

As a result, seven institutions have received funding to conserve at least 38 threatened tree species. A particularly exciting result is the launch of a nine-day practical training course entitled "Restoring threatened trees through a forest-based approach" to take place in April 2024. A lack of ecological knowledge (e.g. unable to identify threatened species) was highlighted as a key barrier to the effective restoration of Ghana's forest at the planning workshop.

Another key element highlighted by the report, was the importance of educating young people on the importance of their native and threatened tree species. BGCI has been working with Kwame Nkrumah University of Science and Technology to develop lesson plans, activities and resources which integrate native and threatened tree species into the junior school Ghanaian curriculum. A novel approach has been developed that integrates traditional knowledge (e.g. singing traditional Ghanaian folk songs which include native trees) and elders being invited to be co-instructors in classroom and field activities.



[Click for more information](#)

Conservation Action in Kenya

The Kenya Threatened Trees Consortium, a group of individuals and organisations actively engaged in planning and implementing conservation actions for Kenya's threatened trees, was formed as a direct result of the 2020 conservation planning workshop led by BGCI, CPSG and the Kenya Forest Service. In May, a two-day Kenya Threatened Tree Consortium workshop took place to review progress towards the conservation action plan and to develop additional actions. Some key progress highlighted at the workshop included the development of phenological calendars and propagation protocols for threatened species, restoration of coastal forest (a hotspot for threatened tree species in the country) and the establishment of a seed bank for banking threatened orthodox species.

In collaboration with 12 conservation partners, we are implementing a landscape restoration and biodiversity conservation project. **Kaya Connect: Restoring the Eastern Africa Coastal Forest Biodiversity Hotspot**, funded by the Darwin Initiative. The project is aimed at reconnecting forest fragments in coastal Kenya, benefitting people and threatened trees by mapping forest fragments, improving seed supply, protecting and restoring sites for connectivity, providing training and jobs and securing long-term political and public support. By the end of 2023, the project has >150,000 seedlings of native trees of 145

species growing in 10 nurseries; planted >20,000 trees in restoration sites, small holder farmlands, and schools and provided employment to 136 people as nursery workers, seed collectors, seed technician, education officers, and restoration workers.

The Kenya Trees project (Mainstreaming Threatened Species into Tree Planting Projects in Kenya) funded by Fondation Franklinia, was also wrapped up in 2023, having achieved significant milestones for Kenya's threatened trees conservation over the 2-year period of implementation. In collaboration with our partners (International Tree Foundation, National Museums of Kenya, Pwani University, and the LEAF Charity), we trained and built the capacity of 284 people in nursery management, phenology monitoring of threatened trees and seed collection and handling techniques; strengthened *in situ* conservation for 47 globally threatened species; planed 42,553 seedlings of 24 threatened and 6 neat threatened species planted alongside >200,000 seedlings of native trees across 6 counties in Kenya. 35 species of globally threatened tree species benefiting from ex situ conservation action. 40ha of production landscapes with strengthened management of threatened trees diversity and 1420ha of protected areas.



[Click for more information](#)

Kaya Connect:
145 species
grown - planted
>20,000 trees
- employed 136
people





Cinchona anderssonii – Bolivia

Cinchona anderssonii is a recently described Bolivian endemic tree species known from only two small populations and threatened with extinction due to its restricted distribution and challenging natural regeneration. Since 2021 BGCI is collaborating with our local partner, Herbario Nacional de Bolivia in La Paz with the aims of protecting, recovering, and ensuring the participation of the local communities to prevent its disappearance.

To achieve this, the project has carried out field surveys, studies on the tree's reproductive biology, and the publication of an assessment on the IUCN Red List. Seeds have been collected, and a protocol for in vitro propagation has been developed. Plants have been grown, and local community nurseries have been established. The project has organised events

for planting engagement with local communities, schools, and authorities.

This project has a strong focus on awareness for the protection of this emblematic Bolivian species. To do this, educational and promotional materials, such as a comic and a video for school children, as well as a video for the general public, have been developed. The overall aim is to ensure the survival of *Cinchona anderssonii* through integrated conservation efforts and community involvement. This project has been possible thanks to the Franklinia Foundation.



[Watch the video](#)

Monitoring emerald ash borer in Eastern Europe

The Emerald Ash Borer (EAB), a beetle native to the Far East, have been shown to pose a significant threat to Ash trees outside its native region. With losses in the USA and Canada amounting to approximately 100 million tree deaths since its introduction in the early 90's, the IPSN (funded by Defra) launched an initiative to address concerns for ash species and biodiversity in Europe. Over the past three years, the IPSN has established a botanic garden network in Eastern Europe to monitor EAB spread from its current distribution in Russia and Ukraine. Engaging more than 30 gardens in 12 countries, activities include visual surveys for signs of EAB and the associated Ash Dieback and trap installations

to confirm EAB presence. Up to date, 20 *Fraxinus* species and over 400 tree specimens are being monitored and yearly reports shared to understand the dynamics of these organisms. The ongoing phase also involves training garden staff, collaboration with experts, and involvement with the European Plant Protection Organisation to strengthen monitoring efforts, aiming to prevent EAB spread into Europe and protect *Fraxinus* species populations and diversity in the region.



[Click for more information](#)

Farms and Forests: Boosting biodiversity and livelihoods in Northern Cambodia

During 2023, this Darwin Initiative-funded project was successfully completed after nearly three years of implementation.

Located in Preah Vihear Province, the Preah Vihear World Heritage Site is an area of exceptional natural and cultural significance. The site includes deciduous and semi-evergreen dry forest unique to northern Cambodia, hosting more than 400 native plant species. Degradation of dry forest in Cambodia has intensified over the last decade due to expanding population, wild species collection and agriculture. As a result, various dry forest flagship tree taxa have become rare and are threatened including rosewoods, legumes and dipterocarps. To address forest degradation, biodiversity loss and food insecurity, this project engaged communities with diversification of home garden, agroforestry farming and forest restoration practices, plus a series of training activities to enhance knowledge and technical capacity and showcasing mechanisms for linking forest recovery and care with employment opportunities.



[Click for more information](#)



Recovering the wild: conservation of imperiled oak woodlands in Kurdistan, Iraq

Over the last three years, funded by the National Geographic Society, BGCI collaborated with Kurdistan Botanical Foundation and the American University of Iraq, Sulaimani, to implement integrated conservation action for locally threatened oak species and habitats.

Oak woodlands are the main forest type in Iraq's Kurdistan region and include distinct oak tree species. These are at the heart of services and products vital for regulating natural processes and supporting local livelihoods, but are under immense pressure from indiscriminate cutting, fire, overgrazing, agriculture, construction and global warming. To address these threats, this initiative has advanced knowledge of the distribution and propagation techniques for remaining populations and boosted practical conservation through reinforcement planting in the wild and developing nursery seedling supplies. The project has engaged Kurdish society through technical training and public outreach to support local biodiversity conservation and contributed to changing horticultural practices in urban areas.



[Click for more information](#)



[View Saving Plants Map](#)

Inspiring and Leading People

8th SEABG Network Conference & Meeting

In June 2023, the 8th Southeast Asia Botanic Gardens (SEABG) Network Conference was held in Los Baños, The Philippines at the Makiling Botanic Gardens. The theme of the meeting was 'Conservation of Threatened Species in Southeast Asia's Botanic Gardens' and it was held in two major parts: the technical sessions, at the SEARCA Umali Auditorium in the UPLB campus, and a field tour of the Mount Makiling Forest Reserve ASEAN Heritage Park. The conference showcased more than 20 presentations (both oral and poster presentations) and a total of 83 participants from seven ASEAN countries attended the conference. A great success!

Côte d'Ivoire

In Côte d'Ivoire, 7 botanic gardens and botanical institutes met for the first time, facilitated by BGCI in November 2023. A Darwin Initiative project is going to support them to become members and to start to access BGCI benefits in 2024. 23 staff also received training on seed collection and propagation techniques and propagation protocol investigation and publication, with trainers from Tooro Botanical Gardens, Uganda, and BGCI.

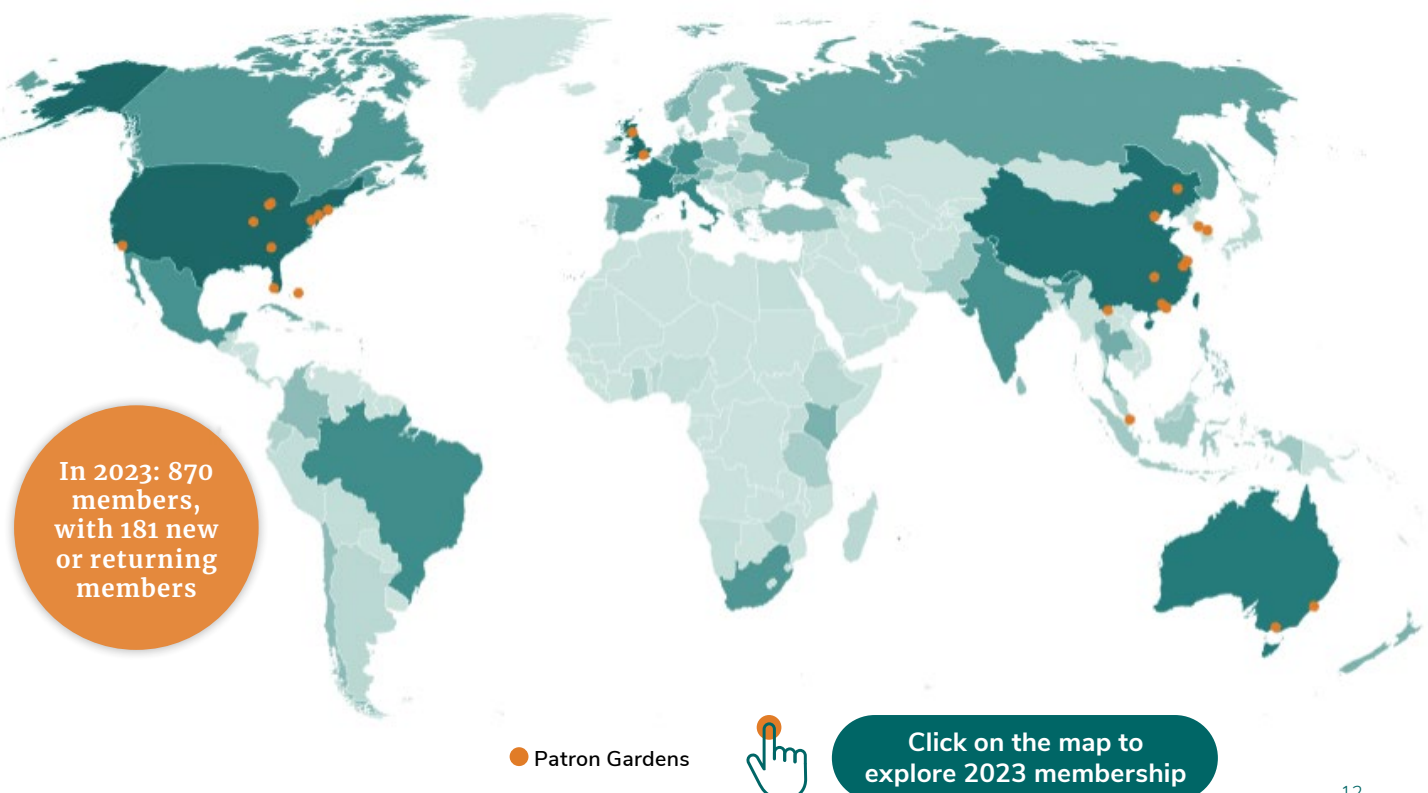


[Click for the full story](#)

IPSN meeting in Argentina

Within the scope of IPSN activities, we actively monitor the health of specific host plant species to detect emerging pests and diseases under such settings. As part of these initiatives, in September 2023 a kick-off workshop was held at the Jardín Botánico Carlos Thays in Buenos Aires. The workshop aimed to enhance capacity and knowledge sharing with our Argentine partner gardens participating in the United States Forest Service (USFS)-funded general surveillance of key host tree species native to America. The workshop covered various topics, including host species, key pests and diseases, monitoring techniques, and other essential resources. We anticipate that these activities will facilitate enhanced plant health monitoring efforts between IPSN and North/South America.

BGCI Membership 2023





International Meetings

“Fostering the relationship between NGOs and botanical gardens is essential. It’s all about human networking. This is where true impact can happen by developing those relationships”
HRH Princess Basma bint Ali of Jordan.

IAC Meeting

In September the world’s botanical garden leaders met in St. Louis (United States), Missouri Botanical Garden, to collectively commit to efforts to prevent the extinction of tens of thousands of plant species.

With 30 representatives from 13 different countries, [BGCI’s International Advisory Council](#) annual meeting focused on defining the specific role botanical gardens worldwide will play in achieving the goals of the [Global Strategy for Plant Conservation](#) (GSPC). The group shared their objectives, and pledged a commitment from botanical gardens to conservation, at a press conference.

“What a pleasure to be part of such a wonderful collaborative group under the excellent leadership of HRH Princess Basma and contribute to developing ideas and strategies for conserving the world’s plant diversity.” Maïté Delmas

BGCI sends especial thanks to HRH Princess Basma for exemplary chairing and to Peter Wyse Jackson and his team at Missouri Botanical Garden for being absolutely wonderful hosts.



[View the press conference](#)

2023 Annual meeting of Chinese botanical gardens

In December 2023 the annual meeting of Chinese botanical gardens was held in Shenzhen FairyLake Botanical Garden, with about 500 participants from more than 150 botanical gardens, institutes and universities. BGCI has been invited as one of the organizers. This meeting is an important platform for the communication among botanical gardens, discussing plant conservation and the management of botanical gardens. Xiangying Wen, Executive Director of BGCI China office, was specially invited not only to give advice for participants but also promoted BGCI. During this meeting, three BGCI China conservation projects partners gave oral and poster presentations on their progress, which attracted many participants.

An Education Workshop in Poland

After the successful Ukraine Appeal that helped 10 Botanic Gardens, additional donations were received and Council of Ukrainian Botanical Gardens and Arboretums together with Partnerships for Nature organised an in person workshop in October 2023 in Poland bringing 20 participants from 8 botanic gardens in Ukraine. It was an enriching experience and the first time they saw in other in person since 2020.



[Click for more information](#)

Sharing Knowledge and Resources

In 2023 we published two Roots issues exploring the theme of Accessibility, and the indispensable role these gardens play in fostering a profound connection between visitors and the natural world. Our BGjournal issue of 2023 focussed on the impact of BGCi Global Botanic Garden Fund, and the technical review on the Purpose and trends in exchange of plant material between botanic gardens.



Read Roots



BGCi Reach and Training by the Numbers



Over 13,000 people received our newsletter, Cultivate, every month



2,799 people engaged through



69 training events including

23 online training courses

which engaged

1,107 people

Follow us!



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Read Technical Review



Click for staff publications



Online Training Platform

In 2023 we extended the educational impact of our online training platform to a wider audience by translating three key modules into Spanish: 'Defining a Botanic Garden' ([Cómo definir un Jardín Botánico](#)), 'Plant Collection Policy' ([Política de Colección de Plantas](#)) and 'Managing Collections Data' ([Gestión de Datos de las Colecciones](#)). Furthermore, we released an 'Introduction to Science Communication'. This expansion of our educational offerings reflects our dedication to breaking down linguistic barriers and providing diverse learning opportunities for enthusiasts and professionals alike.



Visit the training platform

BGCI Webinars

In 2023, BGCI actively engaged with 1,107 people in a series of impactful webinars, reflecting our commitment to various causes. We hosted the Marsh Awards ceremony, sponsored by The Marsh Charitable Trust; collaborated with SER, on the most attended webinar for the Global Biodiversity Standard, we introduced the Conservation Action Tracker and celebrated 10 Years of IPSN. We also hosted 5 technical talks across our regions in different languages.



View the webinars

BGCI Accreditation Scheme

The accreditation of the [Jardín Botánico Padre Julio Marrero](#) marked the 100th accreditation since the BGCI Accreditation Scheme was first launched in 2018, and also marked the first accreditation for Ecuador. In 2023 the first garden for Peru was also accredited, [Jardín Botánico - Parque de Las Leyendas](#) and we opened the re-accreditation process for gardens that first took up the scheme back in 2018. The accreditation process can bring many benefits to the gardens, including an increase in visitor numbers as seen by Sculpture by the Lakes (UK), whilst also demonstrating that the garden adheres to global best practice policies and procedures. Learn more through this Accreditation video on the impact of the accreditation on botanic gardens.



Watch the video



In 2023, BGCI distributed 67 grants worth \$254,514 to 61 institutions across 32 countries.

“Your assistance is invaluable in helping us achieve our goals and make a positive impact on conservation efforts in regions that may face financial constraints. Thank you for recognizing the importance of our work and contributing to the success of our initiatives.”

Northwestern University
Ecotourism Park
& Botanic Gardens
(NUEBG)

BGCI's Global Botanic Garden Fund

The Global Botanic Garden Fund (GBGF) awards small grants to drive plant conservation and support botanic gardens. This is made possible with the support from BGCI/ArbNet Partnership Programme Grants, BGCI/Minnesota Landscape Arboretum Grants and GGI-Gardens Awards Program. In addition to this, in 2023 we were delighted to add three new grants to the GBGF suite of offerings: Leon Levy Native Plant Preserve Grant, Global Conservation Consortia Grant and US Forest Service Rare Plant Partnership. GBGF also had three new funding sources: US National Arboretum, The Huntington and Leon Levy Native Plant Preserve.

Restoring 5 threatened plant species in the Dnipropetrovsk region

During a difficult time in Ukraine, Oles Honchar Dnipro National University Botanical Garden restored 5 local threatened plant species (*Stipa capillata*, *Iris halophila*, *Iris pumila*, *Betonica officinalis*, *Asarum europaeum*), rebuilding species diversity and abundance in the natural ecosystems of the Dnipropetrovsk region. This project was the first step in reinstating populations of these indigenous plants and these sites will serve as a source of seed and planting stock to expand the localities of these species in the future.



[Read the full story](#)

Ex situ conservation of Armenian and Tajikistan endangered species

Through collaboration and the exchange of plant material between Yerevan Botanic Garden (Armenia) and Kulob Botanic Garden (Tajikistan), successful ex situ conservation is made possible for locally endemic and endangered fruit and ornamental trees of both countries. Knowledge was exchanged through scientific travels and seminars which resulted in the strengthening of direct collaboration on conservation actions between the countries.



[Read the full story](#)



[Watch the GBGF Video](#)

Addressing Global Challenges through Public Engagement and Education

Behaviour change in BGCI projects

Behaviour change stands at the core of addressing societal and environmental challenges, and the Behaviour-centred Design (BCD) framework has proven to be a potent methodology for fostering intentional change. In our Darwin Initiative-funded project in Malawi, we've strategically employed the power of BCD, a people-centric approach developed by Rare, an organisation specialised in behaviour change within the conservation sector.

The project aims to cultivate sustainable livelihood options from native plants and fungi in Mount Mulanje Biosphere Reserve, offering alternatives to current practices that harm mountain ecosystems and diminish biodiversity and livelihood opportunities. Project partners will collaborate with businesses and local communities to access local, national, and international markets, emphasising certified sustainable products. The establishment and support of community cooperatives and a social enterprise will facilitate the management of market opportunities, while simultaneously restoring degraded, co-managed land by replenishing over-exploited economic species. The project's public awareness program is projected to reach an estimated 75,000 people.

The BCD approach unfolds systematically, addressing the nuances of behaviour change without reliance on assumptions. Prioritising the motivations and barriers specific to the local population, BCD ensures a tailored strategy through comprehensive research into the experiences, motivations, and barriers of individuals involved in the desired behaviour. Based on behavioural science principles, hypotheses are formulated, solutions are ideated, and prototypes are tested and refined through continuous feedback cycles. The non-linear nature of BCD allows for flexibility, enabling returns to previous steps for further refinement.

In conclusion, our initiative in Malawi exemplifies the transformative power of BCD, emphasising the significance of understanding local nuances and utilising a diverse toolkit for comprehensive and sustainable change. Through the BCD approach, we have devised two public awareness actions—launching a radio program and training village heads to conduct community meetings with our partners, raising awareness about the project and the benefits of preserving the natural resources of Mount Mulanje.

The Behavior-Centered Design Journey





Image: Global Biodiversity Standard - Tooro Botanical Garden (2023)

Global Biodiversity Standard (GBS) in its second year

The [Global Biodiversity Standard](#) (GBS) project has made considerable progress in its second year, enhancing its site-based certification and mentoring programme to support improved biodiversity outcomes in restoration endeavours. Backed by the Darwin Initiative Extra programme with a five-year grant, the GBS aims to be instrumental in setting new benchmarks for improved biodiversity outcomes in restoration and rehabilitation projects.

The year commenced with a significant workshop in Limuru, Kenya, organised by the Centre for Ecosystem Restoration - Kenya, a key hub partner of the GBS project. Attended by GBS Hub partners from Brazil, India, Kenya, Madagascar, Peru, and Uganda, this event was pivotal in refining the GBS assessment methodology, resulting in improved assessment criteria and frameworks that strengthened the foundation of the evaluation process.

Subsequent to the workshop, the BGCI website featured a preliminary release of the methodology, incorporating a draft application form and a scoring mechanism. This version was subjected to ongoing refinements, leading to the development of a detailed manual that elucidates the methodology's full specifications. This manual is scheduled for release in early 2024 and is expected to be an invaluable resource for assessors and project stakeholders.

Throughout the year, the revised methodology was rigorously tested and refined across diverse ecosystems and restoration projects in six countries: Brazil, India, Kenya, Madagascar, Peru, and Uganda. This phase was enriched by the cooperation of Ecosia and Plan Vivo, which allowed for the inclusion of their sites in the testing framework.

A notable enhancement this year was the publication of two key databases: the Global Useful Native Trees database (GlobUNT) and the TreeGOER database. Developed under the leadership of GBS partners at CIFOR-ICRAF, these open-access databases offer invaluable insights into the distribution of tree species beneficial to humans and the environmental ranges of tree species, respectively. These resources

represent a significant contribution to the global understanding of tree species and their potential for use in restoration projects.

The methodology's evolution was bolstered by both technical and public consultations, ensuring its robustness and accessibility. The GBS project's milestones were showcased at several global events, including a joint SER-BGCI webinar, and conferences in Darwin, Montreal, Nairobi, Cusco, and UNFCCC COP-28 in Dubai. These platforms served as vital opportunities to present the GBS methodology to the international restoration and conservation community.

The GBS project welcomed new partners this year, including the Acorn programme by Rabobank, Bioflore, and JS Global Advisory, which have contributed significantly to the project's methodologies and business model. New hub partners like the TRCRC in Malaysia, the Royal Botanic Gardens in Jordan, and the Kadoorie Farm and Botanic Gardens in Hong Kong have also joined, broadening the project's scope, expertise and geographic reach.

A new promotional video has been launched to articulate the goals and ambitions of the GBS project, offering viewers a concise overview of the initiative's mission and impact.



[Watch the video](#)

As the GBS project advances into its third year, it builds on the solid foundation laid in 2023, poised to further influence global biodiversity restoration efforts with its refined methodology, expanding partner network, and the invaluable resources provided by GBS partner organisations. 2024 is set to be a momentous year for the GBS as it is officially launched and open for applications.



[Learn more](#)



Image: Tropicario, Jardín Botánico de Bogotá (Colombia)

New collaboration agreement between the Jardín Botánico de Bogotá (JBB) and BGCI

We are delighted about our new partnership with the Jardín Botánico de Bogotá (JBB), Colombia, approved in 2023. This collaboration greatly facilitates enhancing the implementation of BGCI's mission in South America and consolidating the exchanges of the Red Sudamericana de Jardines Botánicos (RSAJB).



RSAJB



Regional and national botanic gardens networks

2023 was also a year with numerous interactions, exchanges and activities of regional and national networks. BGCI directly facilitated or supported face-to-face and e-gatherings including;

- Caribbean and Central America Botanic Gardens (CCABG) Network
- Red Sudamericana de Jardines Botánicos (RSAJB)
- Southeast Asia Botanic Gardens (SEABG) Network
- European Botanic Gardens Consortium (EBGC)
- Chinese Association of Botanic Gardens (CABG)
- American Public Gardens Association (APGA).

These exchanges have contributed to enhancing knowledge and building capacity in a diverse range of botanic garden subjects such as the social role of botanic gardens, the therapeutic potential of reconnecting with nature, phenology informing conservation, ex situ conservation methods, pest and disease mitigation, cultivation of edible native plants, plus restoration and management of natural areas.

Discussions on future directions and areas of needed support continued with national networks established or in development in Colombia, Côte d'Ivoire, Cuba, Guatemala, India, Italy and Mexico.



[Learn more](#)

BGCI Staff

Remembering

We were deeply saddened to say goodbye to three outstanding individuals who were our dear friends and colleagues at BGCI.



Gail Bromley

Gail Bromley was BGCI's Biodiversity Education Officer for almost ten years and was a key member of our education team. Gail was awarded an MBE in the 2003 New Year Honours. She was also elected a Fellow of the Linnean Society in 1987. She was joyful, adventurous and compassionate, always happy to help out in any way she could, and she will be sorely missed by all those that knew her.



In memoriam



Kathy McKinnon

Kathy McKinnon BGCI's longest serving board members and Chair of IUCN's World Commission on Protected Areas (2015–2021). Kathy brought strong knowledge of in situ conservation and habitat protection to BGCI. We will miss Kathy for her wisdom, kindness and thoughtfulness. She was always there if needed, ready to provide support and advice.



In memoriam



Diane Wyse Jackson

Diane Wyse Jackson created two of BGCI's online databases, GardenSearch, and PlantSearch, and was the lead author of Botanic Garden Recorder. She always preferred to shine the light on others, but the Missouri Botanical Garden surprised her by naming a rare tree species from Madagascar after her, *Melanophylla dianeae*.



In memoriam

Staff changes

In 2023 we saw the retirement of two long serving BGCI staff members – Suzanne who was with BGCI for 20 years and Vivien who was with BGCI for 34 years. And we welcomed two new Directors, Carly and Jake.



Suzanne Sharrock (Retired)



Vivien Isaac (Retired)



Carly Cowell (Director of Conservation)



Jake Clifford (Director of Operations)

An Effective and Resilient BGCI



[Learn more](#)



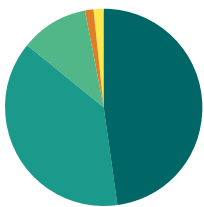
By the Numbers



44 Staff members

14 Board members

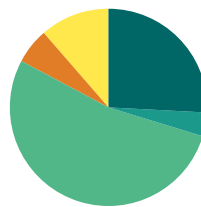
Income (£)



- Grants (govt): 1.52 million
- Grants (other): 1.20 million
- Membership fees: 354,000
- Donations: 47,000
- Other: 47,000

Total income: Almost 3.2 million

Expenditure (£)



- Staff costs (projects): 950,000
- Staff costs (other): 146,000
- Partner grants: 1.93 million
- Consultants & workshops: 221,000
- Other: 407,000*

Total expenditure: 3.65 million

*incl: IT, rent, accounting, communications and other project expenditure

The excess of expenditure over income reflects short-term timing differences on income receipt from project funders vs expenditure on these projects.

8th Global Botanic Gardens Congress

Botanic Gardens – People and Plants for a Sustainable Future



8th Global Botanic Gardens Congress

BGCI is delighted to invite you to the 8th GBGC, taking place in Singapore in August 2024. This exciting event brings together leading experts to share knowledge in botanical garden management, conservation, and research.



Coming in 2024

New Online Courses

BGCI continues to offer online courses to member institutions. This offering will continue to expand in 2024, with courses available in both English and Spanish.



Global Botanic Garden Fund

BGCI's popular fund for under resourced botanic gardens from high biodiversity areas will reopen for applications in both May & September.



Education Consortium

BGCI are pleased to see the expansion of the Education Consortium in 2024.

Watch this space!



Get Involved - Send Your Data

BGCI has a number of ways that you can get involved in conservation by sharing your data; notably through our PlantSearch, GardenSearch, and Conservation Action Tracker databases.



Global Biodiversity Standard

2024 sees exciting developments for the GBS, from Train-the-trainer workshops, to the publication of the manual, there is plenty on the horizon for BGCI and the partners that are working hard on this global standard.



Take Action

Join BGCI

Our members represent a diverse network of organisations, from botanic gardens and arboreta to universities and NGOs, who work in plant conservation and restoration. Be part of the largest network of botanic gardens and plant conservation experts in the world by joining BGCI today!



Become a member

Donate

Plants are essential for all life on earth, yet at least one-fifth of all plant species are threatened with extinction! In 2023, BGCI found that at least one-third of tree species are threatened with extinction.

No matter what size donation, every contribution makes a real difference to us.



Donate today!

Sign up to our newsletter

Get updates about BGCI's work and more in our monthly newsletter.



Sign up today!

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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).



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