2024 Year in Review

Contents

LETTER FROM THE SECRETARY GENERAL

Welcome to BGCI's 2024 Year in Review

As we look back at 2024, I'd like to start by acknowledging the huge contribution made by Professor Stephen Blackmore to BGCI over the past 10 years as Chair of BGCI's Board of Directors. Steve retired from BGCI's Board at the end of 2024 and will be greatly missed. His leadership, wisdom and sense of humour made an immense difference to me personally and to BGCI. We all hope that, retirement notwithstanding, he will still be a familiar figure at botanic garden meetings and events. Our incoming Chair is equally well-qualified and known to many of you. Peter Wyse Jackson, now President Emeritus of Missouri Botanical Garden, is no stranger to BGCI. He was instrumental in its establishment, and BGCI's first Secretary General from 1994–2004. Peter has also been on the Boards of both BGCI Global and BGCI-US. I hope you will join me in welcoming him to this new position.

2024 has been a momentous year for BGCI. Our membership now exceeds 930 botanical institutions in 126 countries, and this was reflected at the 8th Global Botanic Gardens Congress (p.28), hosted so brilliantly by Singapore Botanic Garden in August, with over 700 in-person delegates and – for the first time – the option for hundreds more to join virtually. We also had a record number of botanic garden directors (42 from six continents) join our International Advisory Committee meeting in Singapore. The main agenda items were focused on responding to a request from South Africa and Mexico to establish a global public awareness campaign on avoiding buying plants collected illegally from the wild (p.30).

Also prominent on the IAC agenda was the new action-oriented Global Strategy for Plant Conservation (GSPC). The adoption of the GSPC at COP-16 in Cali, Colombia in October was another highlight. For the first time, the GSPC is fully embedded in the Global Biodiversity Framework, and constitutes a series of actions and indicators relating to plants that play to our strengths in species recovery, habitat restoration, and the management of plant diversity in transformed landscapes.

COP-16 was the venue for celebrating another botanical milestone – the Global Tree Assessment. In 2024, we achieved 'comprehensive assessment' status for the world's 58,000 tree species, with 82% of those species being assessed (p.11). The largest red list effort ever undertaken, this has been a monumental effort carried out by the botanical community over a 10-year period, and involving over 1000 experts worldwide. Trees now account for over one quarter of species on the IUCN Red List, and the number of threatened trees is more than double the number of all threatened birds, mammals, reptiles and amphibians combined. Of course, the Red List is a means to an end, and with threatened tree species now identified in 192 countries, we now have the serious challenge of ensuring that none of those species becomes extinct.

As I have mentioned before, the irony of the Global Tree Assessment identifying 16,500 threatened tree species is that this is the situation at a time when everyone wants to plant trees. Unfortunately, most want to plant the cheapest and most easily available species, often to the detriment of natural ecosystems and indigenous species.

To combat this trend, expose greenwashing, and recognise best practice in restoration, The Global Biodiversity Standard (TGBS) was launched to much fanfare at COP-16, and 2024 saw 200 TGBS assessors trained in Asia, Africa and South America, and the first sites certified (p.36).

In 2024, we achieved 'comprehensive assessment' status for the world's 58,000 tree species, with 82% of those species being assessed.

Looking forward to 2025, we have much to do, including ramping up our practical plant conservation efforts, working with policymakers to embed the GSPC into National Biodiversity Strategies and Action Plans, and rolling out The Global Biodiversity Standard to more sites and more countries. We also very much look forward to the 11th International Congress on Education in Botanic Gardens, which take place in Seoul in June, hosted by our friends and partners the Korea National Arboretum, the Korea Arboreta and Gardens Institute and the Korean Association of Botanical Gardens and Arboreta. I hope you can join us there!

Sincerely,
Paul Smith

BGCI's Secretary General

Highlights of 2024

More than 80% trees evaluated in the IUCN Red List

In October, the IUCN Red List published its latest update which included over 47,000 Red List assessments of trees from the Global Tree Assessment. The update revealed that 38% of the world's trees are at risk of extinction according to Global Tree Assessment research.

For the first time, over 80% of trees have been evaluated, and therefore trees can now be considered comprehensively assessed.

Read more on page 11

The Global Biodiversity Standard launched

The Global Biodiversity Standard (TGBS) was officially launched in October 2024 at the UN Convention on Biological Diversity COP-16 in Cali, Colombia.

Additionally, BGCI published the official manual and awarded the first site certifications.

Read more on page 36

BGCI accredits 100th botanic garden

BGCI's Accreditation Scheme reached a significant milestone in 2024 by awarding the 100th botanic garden accreditation to the Jardim Botânico Municipal de Bauru in Brazil.

Read more on page 39

Actions for the GSPC adopted

In November, the new Voluntary Complimentary Actions for the Global Strategy for Plant Conservation (GSPC) were adopted at the UN Convention on Biological Diversity COP-16 in Cali, Colombia. This adoption marks the third phase of the GSPC, and provides 21 actions for the global plant conservation community to champion and contribute.

Read more on page 30

The 8th Global Botanic Garden Congress

BGCI's 8th Global Botanic Gardens Congress was hosted by Singapore Botanic Garden from 6-9 August 2024. The Congress comprised four main themes: green and sustainable cities; plant diversity and conservation; gardens for the future, and; engaging communities.

950 delegates joined the conference and participated in seven plenary and panel discussions, 175 talks, and 21 interactive workshops.

Read more on page 28

Coming in 2025

New Online Courses

BGCI continues to offer online courses to member institutions. This offering will continue to expand in 2025, with courses available in both English and Spanish.

EUROGARD 10– 10th European Botanic Gardens Congress

Botanic Gardens in the UN Decade of Ecosystem Restoration, 22–26 September - Rome, Italy

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.

Illegal Plant Trade Coalition

BGCI staff will be attending IUCN World Conservation Congress, hosted in Abu Dhabi in September. Here they will be officially launching the work of the Illegal Plant Trade Coalition. This will include a communications tool kit for social media for all gardens to raise awareness about the extinction of plants from illicit trade. The coalition will also deliver outreach materials to be used in gardens to raise visitor awareness and provide guidance documents to garden staff. This builds on the 2024 Technical Review – Tackling the Illegal Plant Trade in Botanic Gardens.

Register your interest in the Coalition.

Global Biodiversity Standard

We will continue to expand the reach and impact of TGBS in 2025 with the opening of new hubs in France, Mexico and the Philippines. By reaching over 200 certified assessors, TGBS will be ready to deliver assessments, verifying the biodiversity impacts of land management and restoration projects globally.

XXIII AETFAT Ghana, 2025

Diversity, conservation, and sustainable use of African and Madagascan plants in a changing natural world.

University of Ghana, Legon Campus (Accra, Ghana)

The XXIII AETFAT Congress will take place in Accra, Ghana from 3-8 August 2025, proudly hosted by the University of Ghana. It is the first time the AETFAT congress is being held in West Africa, also coinciding with its 75th anniversary (1950-2025).

Fondation Franklinia Tree conservation programme

We embark on a new 3-year programme in 14 countries with 21 local botanic institutes to protect 60 of the world's most threatened tree species whilst improving planning for 100 threatened tree species, including co-developing a new national plan for the threatened trees of the Philippines.

11th International Congress on Education in Botanic Gardens

We are pleased to announce that the Korea National Arboretum will be the hosts of the 11th International Congress on Education in Botanic Gardens (ICEBG). The Congress will take place in Seoul, South Korea from 9–13 June 2025.

Under the title ***"Education for Change: Botanic Gardens' Role in Addressing Global Challenges,"*** this Congress will explore how education in botanic gardens can inspire and empower action for a sustainable future. The programme includes an exciting line up of keynotes, plenary speakers, interactive workshops, round tables, panel discussions and world cafes.

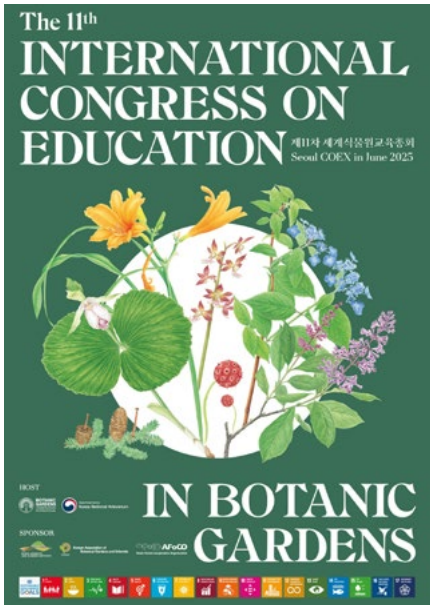
Key themes of the Congress are:

- enhancing health and wellbeing: value of botanic gardens;
- breaking down silos: building interdisciplinary partnerships;
- harnessing the power of technology: learning and engagement for all;
- empowering youth voices: youth as key stakeholders in climate action; and
- leaving no one behind: Promoting equity, inclusion, and community engagement in botanic gardens

The Congress will be a hybrid event, welcoming participants both in person and online, to ensure accessibility,

We can't wait to see you there!

Read more



9th Global Botanic Garden Congress

Botanic Gardens Conservation International is pleased to announce that The Morton Arboretum & Chicago Botanic Garden have been selected to partner with BGCI to host the 9th Global Botanic Garden Congress (GBGC) in Chicago. This congress will focus on the role of botanic gardens in restoring habitats impacted by climate change and will take place in Summer 2027. This will be the first time it will be held in North America in 27 years.

The Congress will bring together botanic garden professionals and other stakeholders from around the world to discuss the many facets of habitat and ecosystem restoration that botanic gardens are engaged in. The Morton Arboretum is a globally recognised leader in tree research, conservation, and education, contributing scientific knowledge and technical experience to secure the future of trees locally, nationally, and worldwide. The Chicago Botanic Garden is a world-renowned living museum that helps build healthier communities through urban agriculture, offers lifelong learning opportunities, leads pioneering plant conservation research, and showcases the beauty of horticulture. The perfect partnership to help BGCI to deliver another successful Global Botanic Garden Congress, which have proven an inspirational event for the whole plant conservation sector since the first was held in 2000.

BGCI's Global Botanic Garden Congress is the only global congress dedicated to botanic gardens and is a key event in the calendar for botanic garden leaders and staff. If is an opportunity for the botanic garden community to come together and share information and experiences. We cannot wait to see what lessons and stories are highlighted in the 9th GBGC and moving forward into the future.

Saving Plants

Saving plants

Introduction

BGCI is the largest plant conservation network in the world, and we coordinate, empower and mobilise our network to carry out plant conservation prioritisation, planning, action and monitoring, preventing plant species extinctions and promoting sustainability. This section of the Year in Review highlights our work to save plants in 2024.

By the Numbers

GTA

82% of trees
published on the IUCN Red List

IPSN

112 members
of the International Plant Sentinel Network

GCC

489 affiliates
from 283 institutions in 57 countries

BGCI GlobalTree Portal

Conservation Action Tracker now includes
1,122 Critically Endangered species

521 plant species
with targeted conservation action in 2024

In 2024, BGCI completed a three-year project funded by Fondation Franklinia focused on Scaling up conservation action for the world's threatened trees. During this project, 46 partners were supported with funding, training, mentoring, and monitoring and evaluation support from BGCI and our partners.

The small-scale grants issued to partners enabled them to deliver emergency recovery actions for 106 tree species on the brink of extinction. A total of 218,167 seedlings of threatened species were protected *in situ* and 278,343 mature individuals were protected *in situ*. *Ex situ* living and / or seed bank collections were established or expanded to represent genetic diversity for 69 threatened species. 16,366 seedlings of threatened species were planted *in situ*.

Publications

BGCI and our staff contributed to numerous scientific publications in 2024.

Bartholomew, D., Mosyaftiani, A., Morgan, B., Shah. T., **Shaw, K.**, Stillman, C., Baldwin. K., Baqueiro, L. H. R., Birkinshaw, C., Breman, E., Diniz Jr, G., Fereira, M. P., Flowers, C., Gichira, A., Jenkins, J., Kindt, R., Molin, P. G., Mungai, T., Musa, M. A. S., Ramahefamanana, N., **Smith. P.**, and Gann, G. D., 2024. The Global Biodiversity Standard: Manual for assessment and best practices. BGCI, Richmond, UK & SER, Washington, D.C. USA. Available from: https://www.biodiversitystandard.org/our-method/

Beech, E., **Fowler, K., Hills, R., Rivers, M.C**. and **Svensson, M.S.,** 2025. Prioritising action to save trees from extinction. Open Access Government, Jan 2025, 398-399.

Couvreur, T.L., Jijon, N., Montúfar, R., Morales-Morales, P.A., Sanín, M.J., Copete, J.C., Lozinguez, A., Pérez, Á.J. and **Beech, E.**, 2024. Diversity and conservation status of palms (Arecaceae) in two hotspots of biodiversity in Colombia and Ecuador. Plants, People, Planet.

Davies, K., Starnes, T. and **Rivers, M.**, 2024. Methodology for identifying the potential Alliance for Zero Extinction (AZE) tree species on a global scale. Conservation Science and Practice, 6(8), p.e13198.

Hordijk, I. **et al.** 2024. Dominance and rarity in tree communities across the globe: Patterns, predictors and threats. Global Ecology and Biogeography https://doi.org/10.1111/geb.13889/

Maděra, P., Vahalík, P., Hamdiah, S., Hušková, K., Sekava, J., Attorre, F., La Montagna, D., De Sanctis, M., Netek, R., Bongers, F. and **Rivers, M**., 2024. Distribution, ecology, and threats assessment of 11 endemic frankincense tree taxa (Boswellia) in the Socotra Archipelago (Yemen). Plants, People, Planet, 6(6), pp.1552-1571.

Meyer, A., Bruns, E., Foster, J., Mims, R., and Toppila, R. 2024 Conservation Horticulture Expertise at Botanic Gardens. BGCI-US, San Marino USA.

National Red List Working Group of the IUCN Red List Scientific Committee. 2024. Guidelines for Establishing a National Red List Programme. Version 1.0. Gland, Switzerland: IUCN SSC. (PDF) Guidelines for Establishing a National Red List Programme. Available from: https://www.researchgate.net/publication/381479531_Guidelines_for_Establishing_a_National_Red_List_Programme [accessed Feb 03 2025].

Steed-Mundin, O., Crowley, D., **Quintana, I**., & Wenham, J. 2024. Conservation Gap Analysis of Nothofagus. Wakehurst, UK: Royal Botanic Gardens, Kew.

Quintana, I., Rivers, M. and Davies, K., 2024. Conservation Action Tracker: A tool to identify and monitor conservation actions for tree species. Applications in Plant Sciences, https://doi.org/10.1002/aps3.11579.

2024 Technical Review – The importance of botanic gardens in tackling the illegal plant trade

Plant poaching is on the rise. Plants are being plundered from the wild and even plucked from our very own botanic garden collections. This is resulting in the loss of many species; both in the form of functional extinction in the wild to complete extinction from our planet. Tackling this issue has spurred both this 2024 Technical Review and also a new collaborative campaign which utilises the international reach of botanic gardens to work with a range of strategic partners that can facilitate a multi-pronged effort.

Read more

Planting Harpalyce macrocarpa seedlings (photo credit: Planta!)

More than 80% of Trees Assessed in IUCN Update

At CBD COP-16 in Colombia in October in 2024, the IUCN Red List published its latest update which included over 47,000 Red List assessments of trees from the Global Tree Assessment. The update revealed that 38% of the world's trees are at risk of extinction according to Global Tree Assessment research.

Read the official press release

For the first time, over 80% of trees have been evaluated, and therefore trees can now be considered comprehensively assessed, along with previous well known animal groups, such as birds, mammals, amphibians, sharks, and reptiles. The Global Tree Assessment is the largest global assessment project carried out to date, with trees now accounting for over a quarter of species on the IUCN Red List, and at least 16,425 of the tree species assessed are at risk of extinction.

The Global Tree Assessment provides information on the threats to trees, but more importantly it provides the data needed to take effective conservation action. Vital plant conservation work continues around the world, and we would like to thank Fondation Franklinia for supporting the ambitious Global Tree Assessment project throughout, all the assessors, reviewers, and contributors, and also the experts of the IUCN SSC Global Tree Specialist Group for their continued work.

Read more about The Global Tree Assessment

"This comprehensive assessment presents a global picture of the conservation status of trees, which enables us to make better informed conservation decisions and take action to protect trees where it is urgently needed. The Global Tree Assessment is a global effort, with over 1,000 tree experts involved. We need to continue to work together to scale up local, national, and international tree conservation action to support people and the planet."

Malin Rivers, Head of Conservation Prioritisation at BGCI

Propagation Protocols

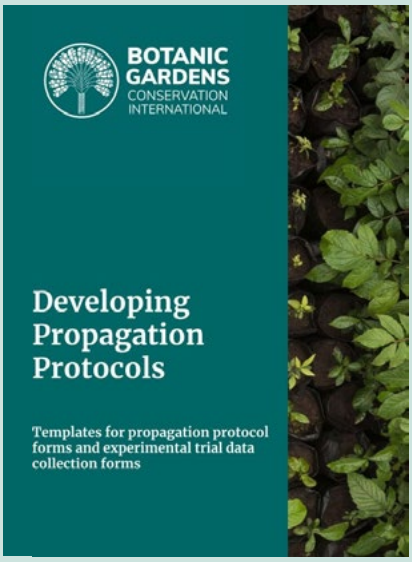
Developing propagation protocols is essential for the conservation and sustainable management of plant species. By establishing standardised propagation protocols, we can improve the success rates of plant propagation, support restoration efforts, and ensure the survival of threatened species.

Published propagation protocols serve as valuable resources for researchers, conservationists, and horticulturists by facilitating the exchange of knowledge and best practices. They help avoid duplication of effort, saving time and resources while enabling others to build upon existing research.

In 2024, BGCI developed a Propagation Protocol Manual to assist with the development of propagation protocols. This manual offers practical guidance and structured templates for documenting propagation methods, making it easier to record observations and refine techniques. Additionally, it includes forms for designing experimental trials, helping with the recording of data of different propagation techniques.

By using this manual and sharing their propagation protocols, practitioners can contribute to the knowledge that enhances plant conservation efforts worldwide. Together, we can ensure that vital propagation techniques are accessible and effective for the preservation of plant diversity.

Read more



Global Conservation Consortia Successes

2024 was another exciting year for the Global Conservation Consortia (GCC) with the launch of two new consortia. The Global Conservation Consortium for Conifers (GCCC) launched in May, leading to a vital Conservation Gap Analysis. The Global Conservation Consortium for Whitebeams, Rowans, and Service Trees launched in September.

These new consortia enable the expansion of the important work happening around the world by our 11 consortia. The GCC continue to mobilise a coordinated network of institutions and experts to collaboratively develop and implement comprehensive conservation strategies for priority threatened plant groups. This was demonstrated during the successful Collaborative Tree Conservation Planning Meeting in Vietnam in September. Attended by 20 participants from a range of stakeholders, this meeting was the first step in initiating partnerships to collaborate on future conservation action planning for trees in the region.

Learn more about the exciting work of the GCC & how to get involved

GCC
Global Conservation Consortia

IPSN Hits 100 Members & Unveils Exciting New Resources

In 2024, the International Plant Sentinel Network (IPSN) reached an exciting milestone surpassing 100 members. With 109 botanic gardens and arboreta across 39 countries, we welcomed our first representatives from the Caribbean and Southeast Asia.

This milestone highlights the growing recognition and the importance of biosecurity and pest and pathogen monitoring in supporting global plant health. As IPSN expands, collaboration and knowledge-sharing will remain central to its mission, inspiring more gardens to actively engage in global plant health efforts.

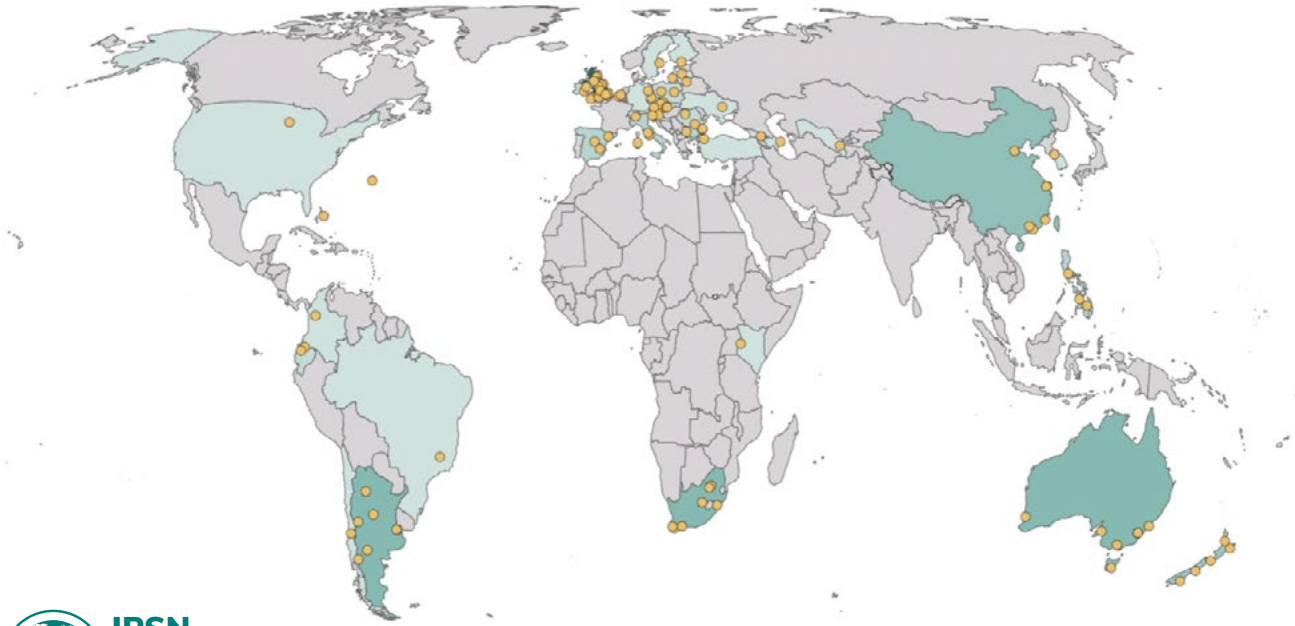
For more information

Working with our diagnostic experts, we expanded plant health resources by creating new pest and disease posters, factsheets, and organism alerts to highlight emerging threats. We also developed protocols for monitoring, sampling, and reporting organisms of interest, enhancing biosecurity and early detection efforts. Additionally, we refined our quarterly newsletter, produced a special Plant Health Week issue, and, thanks to our members' contributions, launched a blog series and a BGjournal issue featuring 16 articles on biosecurity and plant health.

Find all the resources here

IPSN UK Members on a tour at the Royal Botanic Garden Edinburgh during the group's annual in-person meeting

Map of IPSN members world-wide as of February 2025



IPSN
International Plant Sentinel Network

Explore the map

Conservation Planning: Chile and Malaysia

With so many tree species at risk of extinction, there is a vital need to scale up conservation action, whilst also ensuring that conservation actions are still tailored as much as possible to the requirements of individual species. Multi-species conservation planning can be used as a method to achieve this. In 2024, BGCI led two multi-species planning workshops in Chile and Malaysia, generously funded by Fondation Franklina.

In Chile, the workshop focused on 40 endemic species to the country, including many species found in Juan Fernández Archipelago. It was organised with the Landscape Ecology Laboratory of the University of Concepción and facilitated by the IUCN SSC Conservation Planning Specialist Group.

In Malaysia, the conservation planning workshop brought together conservation practitioners and stakeholders from across Malaysia (including Sabah, Sarawak, and Peninsular Malaysia). The Sabah Forestry Department co-organised the event, with support from the Ministry of Natural Resources and Environmental Sustainability of Malaysia.

Read more about Chile

Read more about Malaysia

Participatory discussions to pave a brighter future for Malaysia threatened tree species

Participants of the Chile conservation planning workshop during field trip to native forest

A Think Tank for Tree Conservation in Central America

In July 2024, the Costa Rican non-profit Osa Conservation with the support of Fondation Franklinia, BGCI, and The Morton Arboretum, gathered experts and organisations from Central America and other parts of the world to work together in benefit of the endangered trees, in a Tree Conservation Think Tank. Through talks, field activities, and discussion sessions, the 24 participants, from 11 countries, developed new alliances to conserve rare and endangered trees in the immensely biodiverse region.

By discussing the different themes of the meeting, including conservation prioritisation, action and restoration, the valuable expertise present in the Central America countries was made clear, but also the variability in resources and capacity across the region. It demonstrated the need to develop an exchange of knowledge and experiences through a Central America Tree Conservation Technical Network.

Learn more about the Think Tank

The participants met in the Osa Conservation Campus in the Osa Peninsula. While discussing the challenges and opportunities for tree conservation in the region, they were able to explore the trails and the Osa Verde tree nursery.

Stories on Saving Plants

Diversifying Native Tree Species portfolio in sub-Saharan African countries

Countries across Africa have made huge pledges to restore degraded land under the Bonn Challenge. However, well-intentioned solutions can inadvertently cause harm to our world's ecosystems. Reforestation and tree planting schemes all too often focus on planting large numbers of fast-growing species, mostly exotic, for swift carbon capture outcomes, whilst biodiversity and livelihood concerns and opportunities remain unaddressed.

Despite having a wide number of native tree species (NTS), in many African countries, the progress to integrate them into planting has been generally slow due to lack of the knowledge and capacity related to NTS restoration.

In 2024, BGCI started the implementation of two projects to address the main bottlenecks and deficiencies in the NTS seed and seedling supply sector with a view to support planting of more diverse, high-quality seedlings of NTS in large-scale forest landscape restoration programmes in Africa.

The Right Tree in The Right Place for The Right Purpose: Supplying High-Quality Tree Planting Material of Native Tree Species for Landscape Restoration in Sub Saharan Africa (RTRP-Seed) is a project funded by the Germany Government's International Climate Initiative (IKI) and implemented by a Consortium led by CIFOR-ICRAF, along with BGCI and Unique land Use GmbH, in support of landscape restoration targets in Kenya, Uganda, Ethiopia, Rwanda and to a lesser degree in Burkina Faso.

Running between 2024 and 2029, the project will support the development of an enabling policy and institutional environment for the tree seed sector; build capacity in native tree species seed and seedling supply, including in high-quality seed sources and in decision-support tools; and engage in knowledge exchange to support scaling to other African nations, building platforms for learning and partnerships.

Through the African Botanic Garden Network (ABGN), BGCI has access to comprehensive NTS data that is not yet widely available in the public domain in project countries. This data includes natural species distribution maps; bioclimatic data based on natural distributions and cultivated collections; and seed germination and seedling propagation protocols. All this information, and the collaboration with national partners, will support RTRP-Seed activities.

In 2024, BGCI also initiated a Darwin Innovation Initiative project, Diversifying Tanzania's Native Tree Species Portfolio for People and Biodiversity. The project will:

1. prioritise over-exploited (i.e. useful) threatened NTS;
2. assess capacity and constraints affecting NTS seed/seedlings availability for restoration; and
3. address policy and practical barriers to NTS availability for restoration in Tanzania.

Learn more

Agroforestry with native edible plants in Uganda

This BGCI led project funded by the Darwin Initiative in Uganda, in collaboration with Tooro Botanical Gardens (TBG), Makerere University, National Agriculture Research Organisation – Entebbe Botanic Gardens (EBG), and GrassRoots Ltd concluded in 2024.

Degradation in Uganda causes biodiversity loss and food security challenges with agriculture expansion a driver, often aiming for high-calorie production rather than nutrient diversity. Population increases, market pressures, and policies contribute to land conversion for monoculture cash crops as well as a lack of awareness of the benefits of more diverse food systems to people's health and the environment.

Agroforestry can improve degradation on agricultural land, however exotic species are often recommended, some with invasive potential. This project aimed to build and promote evidence for the use of native plants in agroforestry to provide biodiversity and livelihoods benefits.

The goal was to develop novel food products from native species that could address nutritional gaps in Ugandan diets, improving their value and marketability.

34 food species were selected as targets for the project. Consultations were held with farmers, and in markets that sell food produce in Kampala and other towns and cities in Southern Uganda to understand which plants are most valued by people and traded already. 31 community collectors (19 women) were also employed to collect samples of the plants for nutritional analysis at Makerere University.

The team decided four nutrients are most important as often lacking in diets (Vitamin A, Iron, Calcium, and Selenium) and scored the target list based on survey and laboratory results, and knowledge on their abundance and propagation, to select 13 that would be most suited to sustainable development.

From these, seven new products were developed (three juices and four powdered leaf products) with assessment of their nutritional profiles showing high levels of Vitamin A (*Phoenix reclinata* juice; and *Solanum nigrum* and *Cleome gynandra* leaf powder), Iron (*P. reclinata* and *Annona senegalensis juice*; and *S. nigrum*, *Amaranthus thunbergia* and *Corchorus olitorius* leaf powder), and calcium (*P. reclinata* and *A. senegalensis* juice).

Agroforestry trials were co-designed with farmers (species and planting selection) and the National Forestry Research Institute (site selection, data collection, and management framework). 183 tree saplings were then planted in five plots (one at each of TBG and EBG and three in communities Kagadi, Lwamunda and Mbale) with 26 smallholders trained to manage and monitor these. A comparison with control plots, after two growing seasons, showed the productivity of crops (e.g. maize, beans, etc.) was not detrimentally impacted by growing the native plants in these early years of plant establishment.

For promoting agroforestry and native plants, communities were engaged to co-design education messages to make them more impactful with the target audiences. Materials were then produced in the form of radio programmes, interpretation panels for botanic gardens, online videos, information leaflets, and open days in communities and at botanic gardens. Over 400 farmers (171 women) and 300 urban people (175 women) were reached in the project with materials at the two botanic gardens to educate visitors into the future.

Learn more

Co-creation trained group with educator, Ane Zabeleta – BGCI – Credit Alex Hudson BGCI

Sebastian Wailata – Tooro Botanical Gardens – demonstrating good tree planting and management practices for use in agroforestry in Lwamunda - Credit Kakaire Rajab TBG

Securing the future of Baohua Yulan, an endemic Chinese Magnolia

Conservation collaboration with botanic gardens and other institutions in China and BGCI have a long history. Over the last two decades, no less than 80 Chinese tree species have formed part of the joint efforts to safeguard China's native plant diversity.

Magnolia zenii, Baohua Yulan in Chinese, is a Critically Endangered tree species endemic to Baohuashan National Forest Park (BNFP), Jiangsu province. Limited natural regeneration – low seed production and germination rates – as well as illegal logging pose a major threat to the survival of the species. With the financial support provided by Fondation Franklinia, Shanghai Botanical Garden, Chinese forestry authorities, and BGCI have been collaborating over the past three years to secure the survival of *M. zenii* through practical population reinforcement action and public outreach efforts.

Propagation trials of seeds collected during field surveys have proven promising with a germination rate of over 60%, resulting in nearly 10,000 seedlings raised to date. Major success was also achieved with vegetative propagation via cuttings and grafting. 113 seedlings were planted in the BNFP near-situ conservation base and some 1,000 at Jurong Forest Farm, Jiangsu province. The Jinshan ex *situ* conservation base of Shanghai Botanical Garden now holds 300 individuals as an insurance policy for the future and further metacollections will be established in the years to come. 40 specimens were also planted in the urban surroundings of Shanghai city to promote native tree species in amenity horticulture. Growth rates are monitored regularly in all locations.

Public outreach has been an integral component of the conservation work, for instance through awareness raising activities conducted in kindergartens, primary schools, Shanghai Botanical Garden, as well as via social media, Shanghai People's Radio, videos, community-driven science classrooms, and botanic garden exhibitions. These efforts have not only generated enhanced conservation awareness of the public, but also attracted attention from the local government in Shanghai, providing further funding to scale up conservation action for this unique tree species.

Magnolia zenii propagation at Shanghai Botanical Garden

Magnolia zenii seed collection

Magnolia zenii field surveys

Magnolia zenii vegetative propagation trials

Working together to boost conservation of Samoa's threatened, endemic flora

Located in the South Pacific Ocean, the Independent State of Samoa is graced with an extraordinary plant diversity. The archipelago's flora consists of some 550 species of native flowering plants including 210 tree species and 220 species of ferns, making it one of the most diverse floras in Polynesia. Overall, a third of the plant species found in the archipelago is endemic to Samoa. Many species are threatened by habitat conversion, over-exploitation, introduction of alien invasive species and other pests and diseases as well as natural hazards and climate change (Whistler 2011).

Over the past five years, with financial assistance provided by the Keidanren Nature Conservation Fund and Fondation Franklinia, BGCI has been collaborating with Samoan partner institutions including the Ministry of Natural Resources and Environment and the Samoa Conservation Society, to implement integrated conservation for some of the most endangered native tree species. Examples include the threatened palms *Clinostigma samoense* (EN) and *C. savaiiense* (CR) (Arecaceae) endemic to Upolu and Savai'i respectively, *Manilkara samoensis* (CR) (Sapotaceae,) and *Alectryon samoensis* (NE) (Sapindaceae). Comprehensive field surveys to locate remaining individuals and populations were undertaken and propagules collected for propagation trials at Vailima Botanical Garden (VBG), both for long-term *ex situ* conservation in living collections as well as to source plants for *in situ* recovery action.

The further development of nursery infrastructure and visitor facilities including a rare plant garden, medicinal plant garden, and butterfly garden along with interpretive panels has greatly enhanced VBG's role as a training centre for conservation practitioners interested in integrated conservation techniques. Additionally, the botanic garden is steadily increasing its prominence as an attractive and popular venue for raising the public's awareness of Samoa's threatened and unique botanical heritage.

Community-led restoration in the Budongo-Bugoma Wildlife Corridor with the Jane Goodall Institute certified by The Global Biodiversity Standard

In 2024, BGCI officially launched The Global Biodiversity Standard (TGBS) at COP-16 in Colombia. TGBS provides assurance that tree planting, habitat restoration and agroforestry practices are protecting, enhancing, and restoring biodiversity. The Standard applies the tried and tested expertise of the global biodiversity community, to assess tree planting and other restoration sites across the world.

One of the first assessments under TGBS took place in Uganda by assessors from Tooro Botanical Garden. They assessed the restoration work of Jane Goodall Institute (JGI) Uganda who has been working to conserve private and communal forests in the Budongo-Bugoma Corridor of Western Uganda for over a decade. These forests face severe threats from deforestation due to agricultural expansion, driven by a growing population and rising demand for crops like sugarcane, as well as demand for firewood. Climate change exacerbates these challenges, with hotter, drier conditions, more frequent wildfires, and unpredictable rainfall threatening both biodiversity and local livelihoods. This corridor is a critical habitat for chimpanzees and other wildlife, and faces significant deforestation threats, agricultural expansion, and climate change.

Since 2017, a partnership between Ecosia, a search engine that dedicates its ad-revenue to funding environmental initiatives, and JGI has planted over 2.4 million trees along the corridor. Of this total, 36,690 have been planted between 2021 and 2023 in collaboration with the Tengele Community Land Association (CLA). The Tengele CLA is a communal land management entity located in Tengele village within the Budongo-Bugoma corridor.

The Tengele CLA's efforts have led to significant social, economic, and ecological benefits, including biodiversity restoration and livelihood improvements. Local community members actively participate in restoration activities, such as tree planting and sustainable land management practices, contributing to the project's success and sustainability. However, challenges such as human-wildlife conflicts and the effective management of invasive plant species persist, requiring ongoing attention to ensure the long-term success of conservation efforts. TGBS provided an important opportunity for Ecosia to understand the biodiversity impact of their investments and to gain access to local biodiversity experts who can advise on how to further enhance their impact.

In 2024, sites within the Tengele Community Land Association (CLA) under restoration were some of **the first to be certified and receive advanced certification under TGBS.**

While the project brought significant ecological and socio-economic benefits, challenges persist. Managing invasive species requires a strategic, long-term approach to ensure site integrity. Human-wildlife conflicts, such as chimpanzees damaging crops, necessitate sustainable mitigation strategies like buffer zones and alternative livelihoods. The Tengele CLA's commitment, coupled with targeted interventions, holds promise for achieving long-term conservation and community well-being goals.

"It brings me great pride to know that our work along the Budongo and Bugoma corridor in Uganda in collaboration with JGI Uganda, JGI Austria and Ecosia, is among the first in the world to receive advanced certification under the Global Biodiversity Standard. This recognition honours our commitment to preserving life's diversity and restoring vital habitats. Guided by the scientific rigor of the Standard, the leadership of local hub partners in assessment, and the communities on the ground striving to protect their environment. The Global Biodiversity Standard reminds us of our responsibility to protect our ecosystems, not just for our own survival, but for the future of every living creature with whom we share this planet. My hope is that many more organisations will adopt the measures laid out by the Standard and ensure we regenerate the planet for future generations."

Jane Goodall

© Chase Pickering

Saving Indonesian Castanopsis

From 18-19 September 2024, the Ethnobiological Society of Indonesia (Perhimpunan Masyarakat Etnobiologi Indonesia/PMEI) conducted a two-day workshop as part of their Fondation Franklinia-funded project entitled "Conserving threatened Castanopsis of Mount Halimun-Salak, West Java, Indonesia".

The workshop served as a culmination of three years' worth of intensive research into the project's two target species, the endemic trees *Castanopsis argentea* (locally known as saninten) and *Castanopsis tungurrut* (simply called tungurut). These species are members of the oak and chestnut family, Fagaceae; their timber has historically been valued by locals for construction purposes while their characteristics nuts have been collected and consumed as snacks. For these reasons, among others, both species have been classified in the IUCN Red List of Threatened Species as Endangered.

The project ran from 2022–2024 as part of BGCI's Global Tree Conservation suite, funded by Fondation Franklinia. In previous years, the project team carried out fieldwork within the Mount Halimun-Salak National Park to map the trees' remaining populations, as well as community surveys to learn about local attitudes and knowledge regarding the species. They also experimented with propagation of cuttings and seeds in local nurseries, including one run by the women farmers' group Kelompok Wanita Tani Sugeuma in the Ciomas district of Bogor. The results of this work were presented at the workshop, which included a number of PMEI's partners, including Indonesia's National Research and Innovation Agency (BRIN), the non-profit organisation Botanika, the university Institut Pertanian Bogor (IPB), TP Sungkai, and national park staff.

Today, PMEI and its nurseries stand poised to supply hundreds of *C. argentea* and *C. tungurrut* seedlings to upcoming *in situ* restoration planting projects within the Mount Halimun-Salak National Park. They have also compiled their findings into a bilingual manual (in Indonesian and English) containing information on the species' ecology, propagation, and conservation, which is expected to be published in 2025.

Aside from reducing extraction of the species and its fruit from the wild, the team hopes that their efforts and advocacy will also lead to sustainable enjoyment of the species for generations to come.

BGCI, PMEI, and Botanika through Peniwidiyanti.

Growing threatened trees' restoration capacity in Côte d'Ivoire's cocoa landscapes

The Darwin Initiative funded project, "Growing threatened trees' restoration capacity in Côte d'Ivoire's cocoa landscapes", implemented by a Consortium led by CIFOR-ICRAF, with support of BGCI and Centre National de Floristique.

The project aimed to build capacity of local institutes and community members to incorporate threatened trees into future conservation and restoration efforts in the area. The reserve has been heavily degraded by Cacao (*Theobroma cacao*) farming for the global chocolate industry. The EU deforestation legislation, which entered into force in June 2023, requires businesses to demonstrate that their supply chains are not causing deforestation. Kicking in at the end of 2025, it will have a big impact on the cocoa farming.

BGCI had a coordinating role on this project, bringing our experience in ecological restoration, threatened tree conservation and conservation planning, and members institutions' expertise. BGCI engaged experts from Tooro Botanical Gardens (TBG) in Uganda, members of the Ecological Restoration Alliance, to provide training and share best practices on tree conservation and species recovery.

In November 2023, a Training of Trainers programme on best practices in seed collection and propagation of native trees, and nursery management was delivered by TBG and BGCI in Divo with 23 participants from 12 institutions. The objective was to disseminate awareness of threatened species and to create seed collection and propagation capacity to increase availability of high-quality material of native species for restoration. This included the importance of documentation.

BGCI also organised and managed a conservation planning workshop in May 2024. A handbook was developed and shared prior to the meeting. Over 40 attendees from 18 institutes, including the Ministere des Eaux et Forets, and chiefs of villages around Divo Botanical Reserve took part. In working groups, attendees defined success for the reserve and discussed the goals and objectives needed to reach that outcome with a visioning statement agreed of "By 2023 Divo Botanic Reserve is restored and valued as a treasure of the Lôh-Djiboua region and is managed sustainably by a local partnership of actors for the benefit of the people and biodiversity." A Restoration plan for Divo Botanic Reserve was produced with four major goals and 17 objectives and conservation actions.

In September 2024, TBG experts travelled to teach six seed collectors from three institutes on best practices for tree climbing and tree seed collection, to remain safer for the collectors and cause reduced damage to the trees.

Through the project, BGCI welcomed seven botanic organisations from Côte d'Ivoire as BGCI members, through which they were supported to upload data onto the BGCI databases and access BGCI's benefits. In addition, three of these organisations received grants from BGCI's Global Botanic Garden Fund.

Learn more

Community members, NGO and government staff working together at planning workshop for Divo Botanical Reserve

Tree climbing trainer, Sabastian Wailata - Tooro Botanical Gardens - with the 6 trained tree climbers from 3 institutes

Inspiring and Leading People

Inspiring and Leading People

Introduction

The botanic garden community is stronger together, and greater than the sum of its parts in areas such as policy, advocacy, maintaining professional standards and cost-effectiveness, provided that it is effectively led, and its actions are co-ordinated. BGCI has a pivotal role to play in ensuring that this happens through our policy work, leadership, co-ordinating role with regional networks, membership, and convening power.

By the Numbers

64 new members
joined BGCI in 2024, with the total number of members now at
934 across 126 countries

8GBGC

950 delegates
joined the 8th Global Botanic Garden Congress in 2024 in Singapore

BGCI's 2024 International Advisory Council meeting was attended by a record number
42 botanic garden directors

BGCI hosted or organised
10 events
globally with more than
1,500 attendees

BGCI Membership 2024

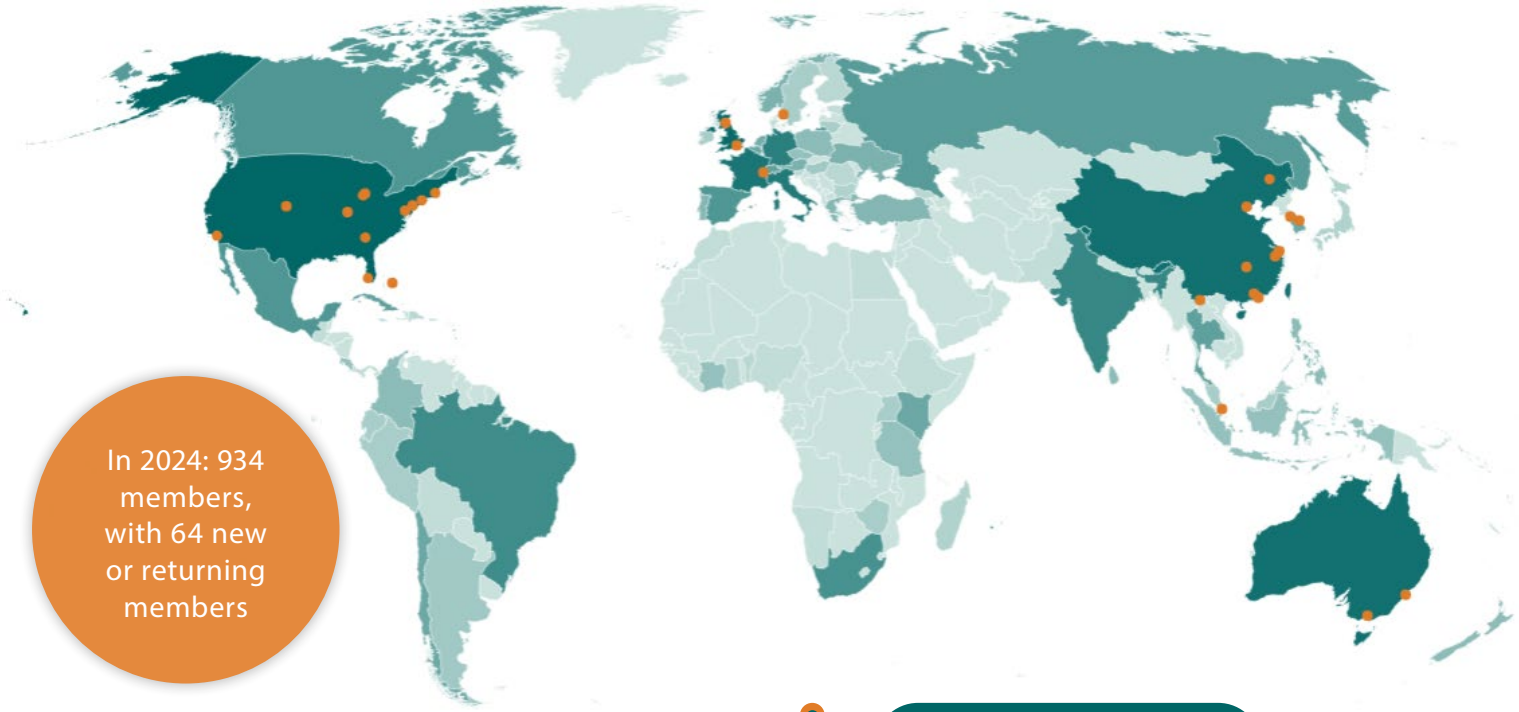
As a membership organisation, our members are at the heart of what we do. Becoming a BGCI member institution is a great way to support the global botanical community; income from membership goes right back through to the development of publications, training materials, funding, and more. BGCI acknowledges that botanic gardens across the globe have varying financial and human resources. As such, BGCI's membership categories and fees are based on the institution's annual budget. Regardless of category, member institutions and their staff have access to the same benefits.

In 2024, we welcomed three new BGCI Patron Gardens, Denver Botanic Gardens (US), Massachusetts Horticultural Society - Garden at Elm Bank (US), and Gothenburg Botanic Garden (Sweden). The 31 patron gardens are some of the largest and most influential gardens in the world and they support BGCI's work both financially and support in leadership.

In total, our membership increased by 64 institutions in 2024. There are now 934 active member organisations from 126 countries. We warmly welcome our new members to help address the challenge of securing plant diversity.

Learn more

Patron Gardens



In 2024: 934 members, with 64 new or returning members

Click on the map to explore 2024 membership

Results of the Membership Survey

BGCI conducted a membership survey in 2024, the first since 2021, to guide on-going development of our strategic plan and to inform our membership programme. Feedback from the survey will influence our priorities, services, and the experiences we offer. In total, the survey received 395 responses from 310 organisations, and 84 countries.

What members value most about being part of BGCI

Being part of an international network supporting plant conservation

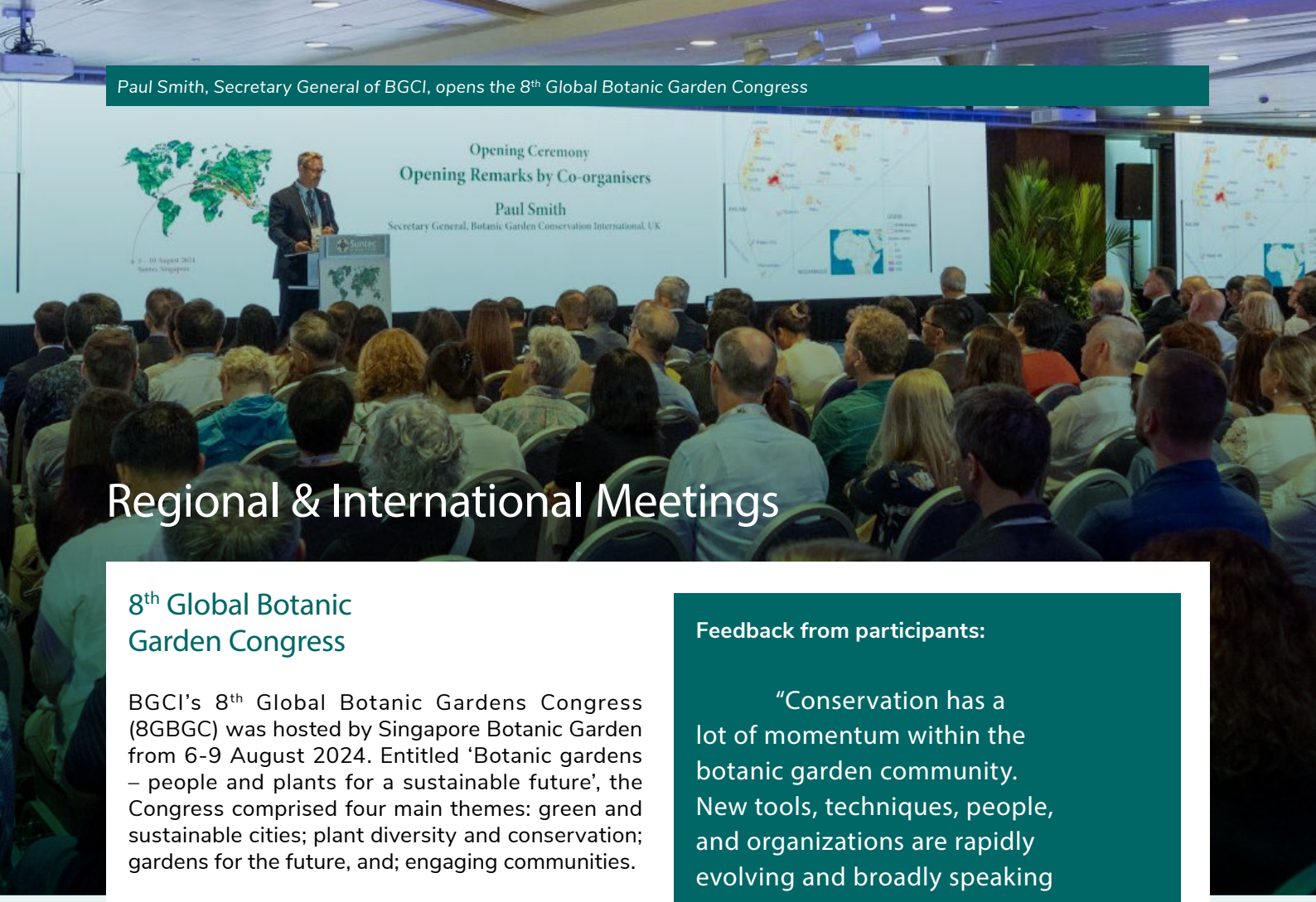
Most useful communications channel

- BGCI's website: 40.67%
- Network emails and newsletters: 23.24%
- Cultivate newsletter: 22.94%
- BGCI's social media feeds: 6.73%
- Network social media feeds: 6.42%

% responses finding member benefits to be very useful

Recommendations to BGCI

- **Facilitate more frequent networking opportunities, such as international conferences, regional meetups, and exchange programmes**
- **Increase the number and diversity of training programmes, including regional and online training sessions**
- **Improve databases through the creation of a centralised database and improve dashboards for analysis and integration**
- **Increase public awareness of BGCI's role as the largest plant conservation network**
- **Encourage more engagement of members of staff across botanic gardens**
- **Improve the website's content organisation**



Paul Smith, Secretary General of BGCI, opens the 8th Global Botanic Garden Congress

Regional & International Meetings

8th Global Botanic Garden Congress

BGCI's 8th Global Botanic Gardens Congress (8GBGC) was hosted by Singapore Botanic Garden from 6-9 August 2024. Entitled 'Botanic gardens – people and plants for a sustainable future', the Congress comprised four main themes: green and sustainable cities; plant diversity and conservation; gardens for the future, and; engaging communities.

950 delegates joined the conference (250 of these online) and participated in seven plenary and panel discussions, 175 talks, and 21 interactive workshops.

Attendees were asked to complete a post congress survey. Of the 143 responses, 99% of attendees found their overall experience to be very good (68%) or good (31%). This was the first congress attended by 58% of respondents and 75% were BGCI members.

We were particularly encouraged by the work that our community of botanical and forestry organisations is doing in species recovery, ecological restoration, sustainability, climate change adaptation and public engagement but there are also challenges that we urgently need to address if we are to maximise our impact.

The take home messages were familiar – the need to share our knowledge and step outside our walls; better communication; the positive role of plants in health etc. – but the real strength of meetings like this is the feeling of togetherness.

Feedback from participants:

"Conservation has a lot of momentum within the botanic garden community. New tools, techniques, people, and organizations are rapidly evolving and broadly speaking we all seem to be pushing in one direction."

"The sessions I enjoyed most were (focused) on community engagement and were highly relevant and aligned with the Congress's core objectives: delivering impactful presentations and fostering intellectual and action-based exchange."

"We have more work to do on integrating databases and sharing data. **The traditional capacity of botanic gardens; curation, collections, etc... are more important than ever in addressing challenges.** We must continue to utilize technology to its fullest."

Our hosts, Singapore Botanic Gardens

Singapore, for the last six decades, has actively strived to achieve a balance between nature and people. This is manifested in its green spaces, green architecture, and magnificent public gardens. That this has been achieved in one of the most densely populated places on the planet is an inspiration to all.

BGCI is hugely grateful to the staff of Singapore Botanic Gardens, who worked tirelessly to host an exceptional congress.

Review conclusions and watch recaps

International Advisory Council

BGCI's International Advisory Council met prior to the 8th GBGC and was attended by a record number of 42 botanic garden directors from five continents. Much of the focus of was on the illegal plant trade. BGCI, IUCN, and its partners will be launching a global public awareness campaign in 2025 targeting consumers who unknowingly buy plants illegally and unsustainably harvested from the wild. However, as BGCI's latest Technical Review shows, there is much more that we can do – including supporting customs and law enforcement, providing plant rescue facilities, working with the horticultural industry to enable and regulate sustainable production, and leading efforts to recover species. BGCI believes that, using our collective power, now is the time to negotiate a mandate and contract with the CITES Secretariat and the Parties to that Convention.

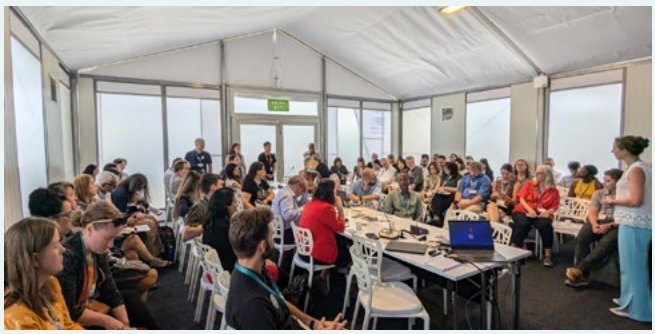
Learn more

GSPC Complimentary Actions adopted at UN CBD COP16

In October, BGCI attended the UN Biodiversity COP16. We were joined by the Global Biodiversity Standard Hub teams, as well as many from botanic gardens in the region to represent plants in this international forum. The goal of attendance was to provide advertisement and information on the new Global Strategy for Plant Conservation (GSPC) and its new Voluntary Complimentary Actions. BGCI and partners hosted a booth and promoted the GSPC at a side event attended by over 50 people. At the end of the two weeks in Colombia, the new GSPC actions were formerly adopted by the CBD. Information sharing and guiding the implementation of the new GSPC actions will be a priority for BGCI in 2025.

BGCI also took part in events, including a press briefing with IUCN, Reverse the Red, World Associations of Zoos and Aquariums (WAZA), Jardín Botánico de Bogotá, Botanical Garden of Rio de Janeiro, and attended events hosted by both the UK and German governments.

Learn more



European Botanic Gardens Consortium – Gothenburg

The European Botanic Gardens Consortium (EBGC), consisting of national representatives from botanic gardens across Europe, convenes twice a year. This year's in-person meeting was held in Gothenburg, Sweden in April. A series of workshops were organised to align with the new GSPC actions and to draft a new EBGC Framework, outlining specific goals and reporting mechanisms. Representatives from 28 of the 37 European countries participated in these sessions.

We extend our heartfelt thanks to the Gothenburg Botanical Garden for their generous hospitality, which included guided tours of the city and nearby islands, as well as the opportunity to partake in the Hanami – Cherry Blossom celebrations.

We would also like to express our deep appreciation to Michael Kiehn, Austria's representative, for his many years of dedicated service to the EBGC and wish him all the best in his retirement.

Looking ahead, our next in-person meeting will be held at EuroGard10 in Rome.

Click here to learn more about EBGC

2024 Botanical Bridges Congress in Cartagena

The 2024 Botanical Bridges Congress was hosted by the Jardín Botánico de Cartagena "Guillermo Piñeres" in Cartagena, Colombia, from 12–16 February 2024. This year's congress explored a wide range of themes that highlighted the intricate landscape of botanical conservation and management, including plant diversity, ethnobotany, botanic garden management, and development, science, and education in botanic gardens. The congress hosted participants from 23 countries with attendance doubling from the previous congress in 2022.

Read more

2024 Botanical Bridges Congress hosted by the Jardín Botánico de Cartagena "Guillermo Piñeres" in Cartagena, Colombia, from February 12-16, 2024.

China National Workshop

BGCI organised a BGCI China Project Strategic Planning Workshop and Conservation Training at Qinling National Botanical Garden in October 2024. The aim was to enhance the capacity of plant conservation practitioners on international project application skills, planning, implementation, management, monitoring and evaluation techniques, and strengthen their communication and cooperation capacity. A total of 163 representatives from 43 botanical gardens, universities, and protected areas in 20 provinces and municipalities directly under the central government participated.

After the workshop, reintroduction activities for three threatened tree species were carried out, including *Ulmus elongata*, *Elaeagnus molis*, and *Abies chensiensis* in Zhashui Base, Shangluo township, Zhashui county. All seedlings were propagated from seeds collected from the wild and raised at the nursery of Qinling National Botanical Garden.

Learn more

Orchids and Bryophytes Conservation Workshop 2024

The Orchids and Bryophytes Conservation Workshop 2024 was held in February 2024, hosted by Dr. Cecilia Koo Botanic Conservation Center (KBCC) in partnership with SEABG Network and 2024 World Orchid Conference. The workshop was attended by more than 20 participants and featured both theoretical and practical sessions, aimed to improve knowledge on conserving native orchids and bryophytes in *ex situ* collections. This included applying *in vitro* conservation strategies such as cryopreservation and micropropagation, to preserve these exceptional plant species.

During the workshop, a fieldtrip to Jing Shui Ying Historic Trail was organised for the participants to observe and understand bryophytes growing in their natural habitat.

KBCC is a non-governmental organisation for tropical plant conservation in Taiwan ROC and currently holds the largest tropical and subtropical orchids and bryophytes *ex situ* collection in the world.

Workshop participants during the extraordinary guided – walk along Jing Shui Ying Historic Trail
Image credit: Dr. Cecilia Koo Botanic Conservation Center

CCABGN Conservation Horticulture Workshop in Guatemala

The Caribbean and Central America Botanic Gardens Network (CCABGN), Jardín Botánico CECON-USAC, Naples Botanical Garden, and the Leon Levy Native Plant Preserve hosted a Conservation Horticulture Workshop in November 2024. Participants from nine Mesoamerican countries engaged in talks, hands-on activities, and field trips, focused on key topics such as collections management, seed banking, and propagation techniques. This workshop enhanced capacity for targets outlined in the Plant Conservation Strategy for the Caribbean Region.

Learn more

The workshop was hosted by the USAC-CECON Botanic Garden in Guatemala.

First Biosecurity and Plant Health Forum on the Southeast Asia region

The first Biosecurity and Plant Health Forum in Southeast Asia region was hosted online in September by Southeast Asia Botanic Gardens (SEABG) Network in collaboration with International Plant Sentinel Network (IPSN). This event, the first of its kind tailored to botanic gardens, highlights an important collaboration between the two networks.

During the forum, over 30 participants from six countries shared their expertise and experiences, discussed current challenges, and prioritised future actions to enhance biosecurity and plant health across Southeast Asia.

The SEABG Network and IPSN are now working to transform these discussions into action, with plans to develop plant health and biosecurity initiatives addressing the region's unique needs.

Learn more

2024 CWR Symposium: Conserving North America's Crop Wild Relatives & Wild Utilized Plants

North America is rich in wild species related to agricultural and horticultural crops and is home to a diversity of wild utilised plants. Crop wild relatives have valuable characteristics that can be used to sustain food production. Wild utilised plants serve important nutritional and cultural roles, especially to Indigenous communities. Most of these plants are poorly conserved and urgent conservation action is required if they are to be available for future use.

The symposium was held in September 2024 and hosted by Denver Botanic Gardens. Made possible through a partnership between BGCI-US and the United States Botanic Garden, the symposium aimed to assess progress towards conserving North American crop wild relatives and wild utilised plants. The symposium was attended by 250 people both in-person and virtually over three days.

Learn more

2024 Annual Academic Conference of Chinese Botanical Gardens

The annual academic conference of Chinese Botanical Gardens is the most influential botanic garden conference in China. The conference presents a unique opportunity to gather botanic gardens and related scholars to exchange experiences and explore best-practice development of botanic gardens. The theme of this year's conference was "Comprehensively Promoting the Construction and Development of Botanical Gardens under the Background of Building a Beautiful China." Over 500 experts and scholars from more than 100 botanic gardens, research, and educational institutions participated in the conference. As one of the co-organisers, BGCI China was invited to address the opening of the conference on global botanic garden development challenges and trends. BGCI China's participation has become an occasion eagerly anticipated by the botanic garden community in China.

Sharing Knowledge and Resources

Sharing Knowledge and Resources

Introduction

Plant conservation, public engagement and botanic garden management capacity is spread unevenly and inequitably across the globe. Institutional capacity is particularly weak in many developing countries and biodiversity hotspots. BGCI plays a crucial role in sharing information, knowledge and skills between different parts of its network through its databases, training and technical support activities.

By the Numbers

Distributed 57 grants worth
$204,647
to 53 institutions across
28 countries

2,497 people engaged
through
16 webinars,
7 training workshops and 21 online training modules

30 botanic gardens accredited
with the total now surpassing 100

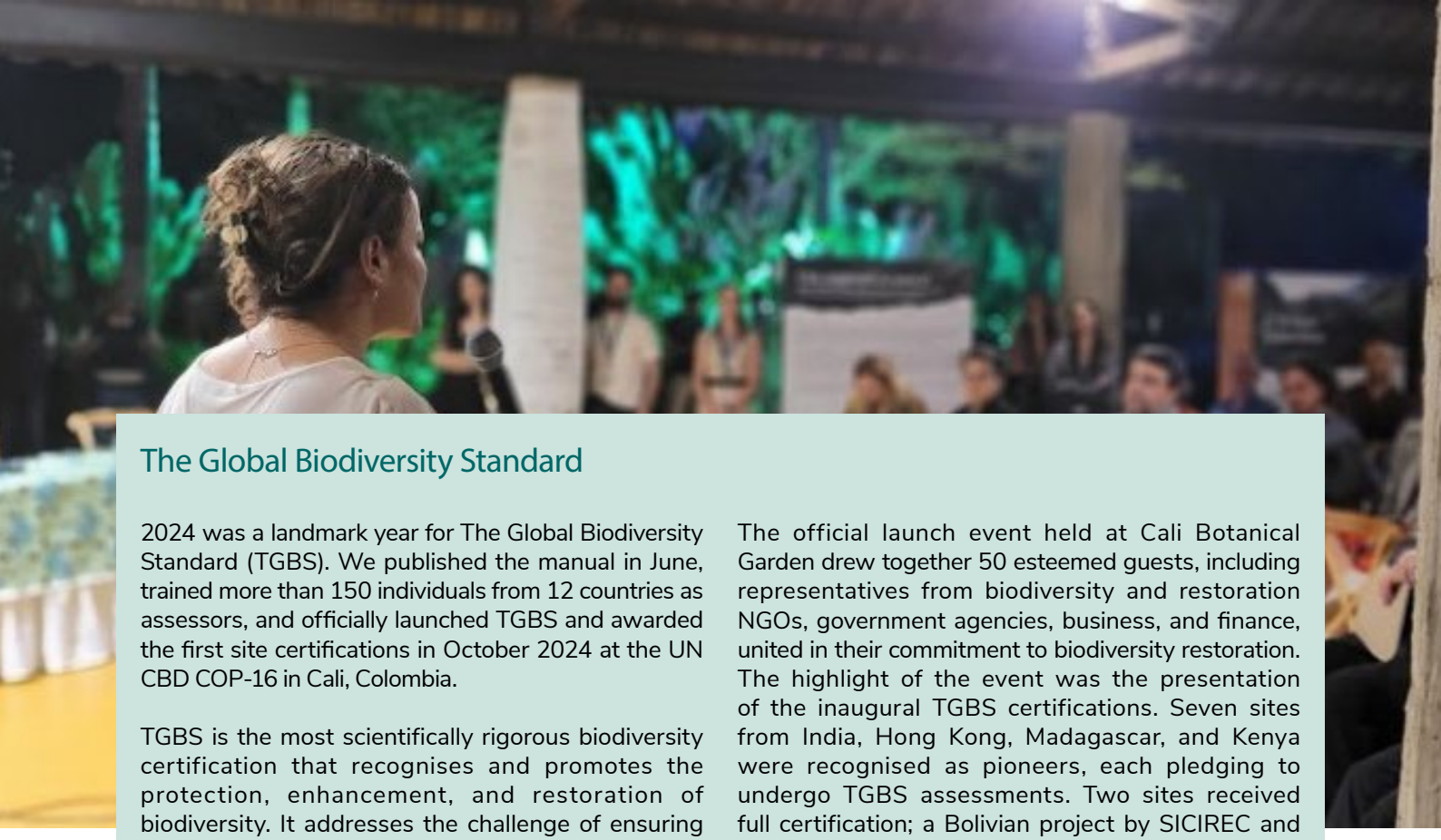
The Global Biodiversity Standard launched
and three sites were certified

BGCI's Data by the Numbers

3,587 gardens
listed in BGCI's GardenSearch

337,974 unique taxa
listed and
1,097 gardens
represented in PlantSearch

9,704 seed accessions
requested on the Index Seminum platform



The Global Biodiversity Standard

2024 was a landmark year for The Global Biodiversity Standard (TGBS). We published the manual in June, trained more than 150 individuals from 12 countries as assessors, and officially launched TGBS and awarded the first site certifications in October 2024 at the UN CBD COP-16 in Cali, Colombia.

TGBS is the most scientifically rigorous biodiversity certification that recognises and promotes the protection, enhancement, and restoration of biodiversity. It addresses the challenge of ensuring good biodiversity outcomes for tree planting and other nature-based solutions, some of which are inadvertently causing harm to our world's ecosystems. TGBS applies the tried and tested expertise of the global biodiversity community to tree planting and restoration initiatives across the world.

This year, BGCI and the Society for Ecological Restoration (SER) jointly published *The Global Biodiversity Standard: Manual for assessment and best practices*. This manual outlines the full assessment process and details how restoration projects can align with the Standard. The manual is now available in both English and French and has been downloaded over 2,000 times since its launch. The publication of this resource represented a key milestone following three years of developing and testing the methodology across over 120 sites in eight biodiverse countries. The manual received widespread support with over 100 academic and environmental NGOs pledging support for TGBS. Further support was received by the Acting Executive Director of the CBD, Dr David Cooper, the IUCN Director General, Dr Grethel Aguilar and the CEO of CIFOR-ICRAF, Dr Eliane Ubalijoro through the manual's foreword.

Download the manual now

Following the publication of the manual, TGBS was officially launched in October at the UN CBD COP-16 in Cali, Colombia.

The official launch event held at Cali Botanical Garden drew together 50 esteemed guests, including representatives from biodiversity and restoration NGOs, government agencies, business, and finance, united in their commitment to biodiversity restoration. The highlight of the event was the presentation of the inaugural TGBS certifications. Seven sites from India, Hong Kong, Madagascar, and Kenya were recognised as pioneers, each pledging to undergo TGBS assessments. Two sites received full certification; a Bolivian project by SICIREC and Ecosia, and a Colombian project by Impulso Verde and Reforest'Action. Finally, a special Advanced Certificate was awarded to a project in Uganda led by the Jane Goodall Institute and Ecosia. The event also featured addresses from special guests, Dr Leonardo Salgado Tavares and Dr Gemma Harper from the Brazilian and UK delegations, respectively.

Read more about the launch event

In 2025, we will continue to rollout TGBS, applying the certification scheme to diverse restoration projects worldwide. 2025 will also see the ongoing development of our mentoring programme as we aim to provide tailored support to restoration practitioners. This programme will be critical in connecting biodiversity experts with project implementers, thereby realising real positive biodiversity recovery. The ongoing capacity building of our hub partners will also continue to strengthen the programme and our global reach.

A huge thank you to the Darwin Initiative Extra programme for funding TGBS, our incredible partners and all our supporters who have been vital in getting TGBS to this point in its journey.

Learn more about TGBS and get updates

BGCI's Global Botanic Garden Fund

The Global Botanic Garden Fund (GBGF) awards small grants to drive plant conservation and support botanic gardens across the globe. This is made possible with the support from BGCI/ArbNet Partnership Programme Grants, BGCI/Minnesota Landscape Arboretum Grants, GGI-Gardens Awards Program, Leon Levy Native Plant Preserve Grants, Global Conservation Consortia Grants and US Forest Service Rare Plant Partnership. In 2024, we were delighted to also have funding from The Friends of Bedgebury National Pinetum (Forestry England), to support the Global Conservation Consortia for Conifers grants.

In 2024, BGCI distributed 57 grants worth $204,647 to 53 institutions across 28 countries.

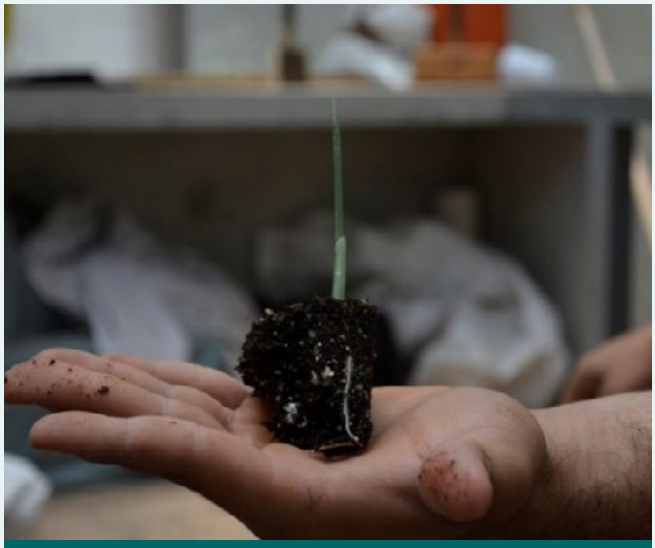
Grants completed in 2024

Seed testing and banking to help conserve species at risk in Mexico

This project supported research and conservation efforts of the "Hermilo Quero Rico" seed bank. Improved focused on monitoring and collecting seeds from 10 at-risk species. Approximately 10,660 seeds were obtained, and 51 new accessions were created for the seed bank. Germination tests were carried out on three of the species and as a result, 208 individual plants were successfully germinated.

Protecting a range-restricted endemic plant in Kazakhstan

Incarvillea semiretschenskia is a relict and range-restricted endemic Kazakhstani plant. Through this project, *I. semiretschenskia* habitats were rediscovered, identifying five local populations and cenoflora of communities with 150+ species. The data supported the species' inclusion in the IUCN Red List as Endangered (EN).



Gaussia gomez-pompae seedling

Expedition team with Incarvillea semiretschenskia

BGCI's Disaster Recovery Fund

BGCI's Disaster Recovery Fund is set up to support the recovery of botanical institutions during and after disasters, from severe weather events to armed conflict.

Donations in 2024 helped support Jardín Botánico Nacional de Viña del Mar in Chile, after it was almost completely destroyed in the wildfires.

BGCI also teamed with Partnerships for Nature to raise funds to develop Therapeutic Horticulture and related areas to support Ukraine's botanical gardens.

You can support the Disaster Recovery Fund here:

Disaster Recovery Fund

BGCI Webinars

BGCI delivered 18 webinars in 2024, engaging over 900 participants. The webinars covered a variety of topics showcasing the breadth and depth of BGCI and partners' work. These included two Marsh Awards ceremonies, sponsored by The Marsh Charitable Trust, on education and conservation, as well as webinars on conservation planning, Global Botanic Garden Fund grants, the International Plant Sentinel Network, The Global Biodiversity Standard, the illegal plant trade, and coastal restoration efforts.

Read more

Vocational Training

In 2024 BGCI delivered 18 training workshops (both online and in-person) on a range of subjects including data tools, red listing, seed collecting, conservation horticulture, and botanic garden management. In addition, BGCI has continued to expand its online training offering by launching some of our modules in additional languages: A Training Program for Oak Stewards is now available in Spanish, Propagation Protocols and Vegetative Propagation of Threatened Trees were launched in French. These initiatives highlight our dedication to breaking down linguistic barriers and delivering accessible, high-quality learning opportunities to enthusiasts and professionals around the world. We now have 15 different modules available on our online training platform.

Across 2024, we engaged 2,852 people; 2,442 through 18 webinars and 18 training workshops and 410 through our 21 online training modules.

BGCI Accreditation

BGCI's Accreditation Scheme reached a significant milestone in 2024 by accrediting the 100th botanic garden, the Jardim Botânico Municipal de Bauru in Brazil.

Learn more about their accreditation and the accreditation process

Through setting international standards, the scheme places high value in the activities that botanic gardens do uniquely well. These include; documenting, understanding, growing and conserving plant diversity, and communicating its value to the public. The accreditation process allows gardens to identify gaps that might be within their programmes and uses BGCI's networks and resources as mentorship tools to improve their standards.

We would like to thank all the botanic gardens who have taken part in and supported our accreditation scheme and for being so willing to continue raising standards to safeguard plant diversity worldwide.

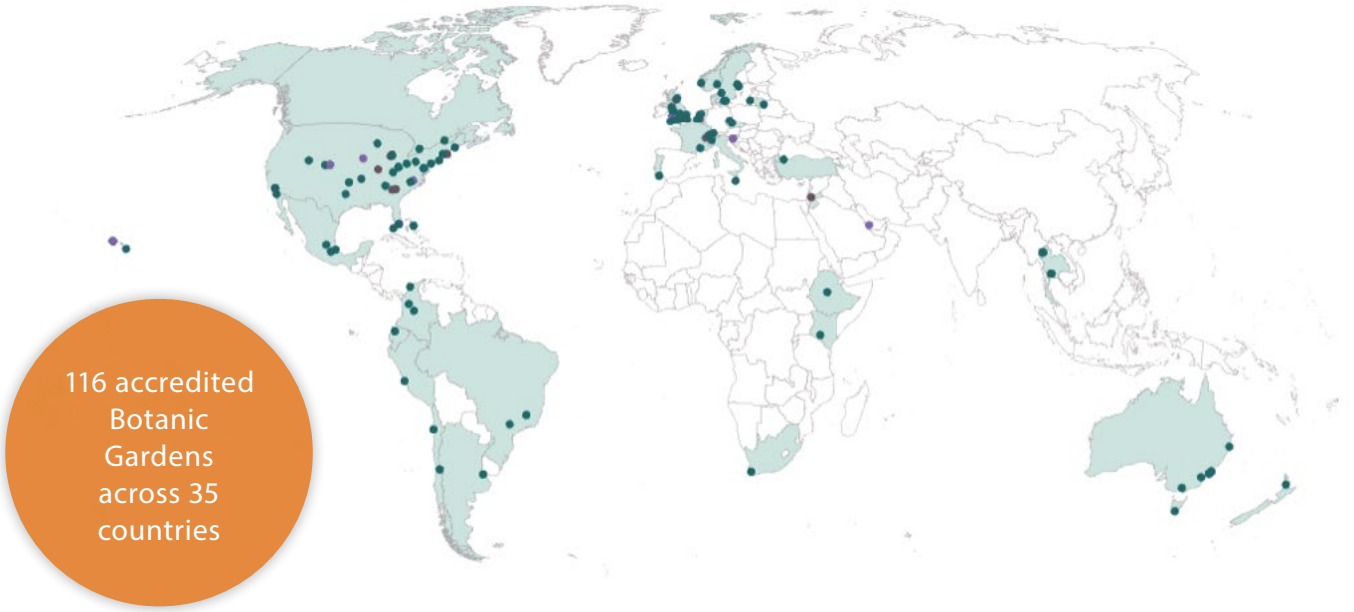
Take a look at the list of BGCI Accredited Botanic Gardens and why not join them?

Email accreditation@bgci.org

"The Accreditation demonstrates that the garden has global best practices in place, so is a great endorsement for the garden"

Tonia Cochran, Inala Jurassic Garden, Australia

Educational event for young people at our 100th Accredited Garden, Jardim Botânico Municipal de Bauru.



BGCI Podcast

2024 saw the inaugural series of BGCI's first foray into the world of podcasting. The Understory focused on the amazing work that took place at CBD COP-16, held in Colombia in October 2024. We interviewed Malin Rivers about the Global Tree Assessment, and David Bartholomew about The Global Biodiversity Standard, alongside some of our colleagues in the conservation sector, including voices from Reverse the Red, PlantLife, Birdlife International, and more!

We'd love for you to take a listen, and make sure that you subscribe to be the first to hear when we return for series 2!

Listen to series 1 now

Roots

In 2024, we published two editions of Roots. The first explored **Conservation Prioritisation,** featuring the Global Tree Assessment. The second issue highlighted the **indispensable role of volunteers** in botanic gardens.

Read Roots Issue 21:2

BGjournal

2024, saw two issues of BG Journal published. In advance of the CBD COP16 the first issue in the year looked at how botanic gardens are aiming to achieve the **Kunming-Montreal Global Biodiversity Framework**. The second issue of 2024 focuses on the International Plant Sentinel Network and the fantastic work being done to **understand, monitor, and control plant pests and diseases globally.**

Read BGjournal Issue 21:1

Addressing Global Challenges through Public Engagement and Education

Addressing Global Challenges through Public Engagement and Education

Introduction

BGCI's network of botanic gardens attracts hundreds of millions of visitors each year. BGCI plays a key role in supporting botanic garden education and outreach activities, to engage audiences in addressing global challenges such as sustainability, biodiversity loss and food security.

BGCI provides a range of tools, resources, and support for botanic garden education. As part of this, the education team has been involved in three Darwin Initiative projects, in Malawi, Vietnam and Tajikistan, providing the public engagement component of these projects.

By the Numbers

9 education consortium members
representing
six continents

102 members
of the *Global Learning and Outreach Network for Botanic Educators*

4,001 individuals engaged
with public awareness raising project activites in Vietnam, Malawi and Tajikistan

Stories on addressing global challenges

A New Platform for Collaboration: The Launch of GLOBE on LinkedIn

In 2024, we launched GLOBE – the *Global Learning and Outreach Network for Botanic Educators* – on LinkedIn, providing a dedicated platform for education and public engagement specialists and professionals from botanic gardens worldwide. This network is a space where education professionals can connect, share best practice, and ask questions and collaborate. GLOBE strengthens the role of botanic gardens as leaders in community outreach and botanical knowledge dissemination by bringing together expertise from across the globe.

Join us on LinkedIn

Project team and volunteers in Vietnam

Mr Tu (Head of Langur Volunteer Conservation) taking a school group to observe langurs

Awareness raising activities in Vietnam

Tuyen Hoa district in Vietnam's Quang Binh province, located in the Indo-Burma biodiversity hotspot, boasts exceptional natural and cultural wealth. The region's evergreen tropical forests are home to unique fauna and flora. This includes the Endangered (IUCN) and CITES Appendix II listed white-cheeked langur, and threatened tree species such as the Critically Endangered ebony *Diospyros mun* and the Endangered legume *Pterocarpus macrocarpus*. Illegal cutting of valuable timbers, wildlife hunting, of the white-cheeked langur, agricultural expansion, and indiscriminate collection of non-timber forest products, are key drivers of biodiversity loss.

This multi-partner project aims to protect the white-cheeked langur and its habitat in the limestone mountains of the Quang-Bing province, while improving livelihoods through enhancing and implementing sustainable practices, responsible forest use, and restoration. Public engagement activities included a Train-the-Trainer programme on biodiversity and zoonotic disease prevention, a school programme about the langur and its habitat, a teacher's toolkit with activities on conservation, and the creation of awareness materials such as leaflets, posters and videos.

Read more

Behaviour change approaches in Malawi

The main aim of this project is to develop sustainable livelihoods options from native plants and fungi from Mount Mulanje Biosphere Reserve as alternatives to current practices that damage mountain ecosystems, reducing biodiversity, and livelihood opportunities.

The education component of this Darwin Initiative funded project focuses on using a behaviour change approach, designing interventions to address key biodiversity challenges of the Mount Mulanje area. Activities have included radio programmes to inform the community about the forestry act and tree tenure rights and leadership training to Group Village Heads equipping them with skills for leading community meetings on biodiversity loss and illegal practices (charcoal burning). Additionally, leaflets and co-sponsoring the annual Porters' race to promote and engage local communities with the project's key messages have further supported the project's goals.

Read more

Clement from WESM giving a workshop to a secondary school

Porter's race runners sponsored by the project

Engaging Communities Through Conservation in Tajikistan

In southern Tajikistan, BGCI is leading a multi-partnership conservation initiative to protect the region's unique broadleaved forest biodiversity, which includes wild relatives of cultivated crops such as apples, pears, plums, and cherries. These valuable species face threats from overexploitation, making conservation efforts vital. The project focuses on enhancing community capacity in Sari Khosor and Nureddin Mahmudov to develop sustainable livelihood options through agroforestry and forest restoration. By diversifying home gardens and restoring degraded woodlands, the initiative aims to benefit both biodiversity and local communities in the long term.

This project is a collaborative effort between BGCI, Kulob Botanic Garden, the local NGO Ganji Tabiat, and Zam-Zam, a women-led community organisation.

A cornerstone of the project is its public engagement component. The BGCI education team, in coordination with local partners, is working to involve and empower communities through targeted outreach interventions. During a recent visit to Tajikistan, the team conducted a series of workshops with local communities in four villages. The workshops aimed to collaboratively develop a public engagement plan by brainstorming, with community members, about target audiences, key messages, and expected changes. Building on this input, a draft plan was developed as a foundation for co-creating outreach interventions with community members later next year. The Tajik project team received training in using a co-creation approach, so they can continue to involve local community members in designing interventions tailored to their needs, promoting ownership and long-term support for conservation efforts.

In addition to these interventions, week-long open days will be organised at Kulob Botanic Garden to promote the project's goals. These events will highlight conservation policies and facilitate exchanges between local environmental initiatives and forest departments, fostering a collaborative approach to conservation.

The effectiveness of these education and engagement interventions will be measured through baseline and end-of-campaign surveys. These surveys will assess changes in awareness, knowledge, and attitudes towards conservation, ensuring that the project delivers meaningful and lasting impact over its duration.

We are honoured to be part of this project and to have the opportunity to work hand in hand with our local partners. Together, we aim to support the livelihoods of people in the rural communities of Tajikistan, while protecting the region's extraordinary biodiversity for future generations.

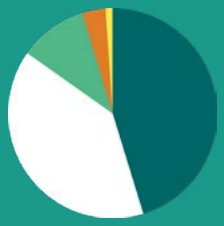
Read more

Workshop to develop public awareness strategy

An Effective and Resilient BGCI

Finance

Income (£)



- Grants (govt): 1,671,717
- Grants (other): 1,460,110
- Membership: 389,486
- Donations: 133,481
- Other: 40,056

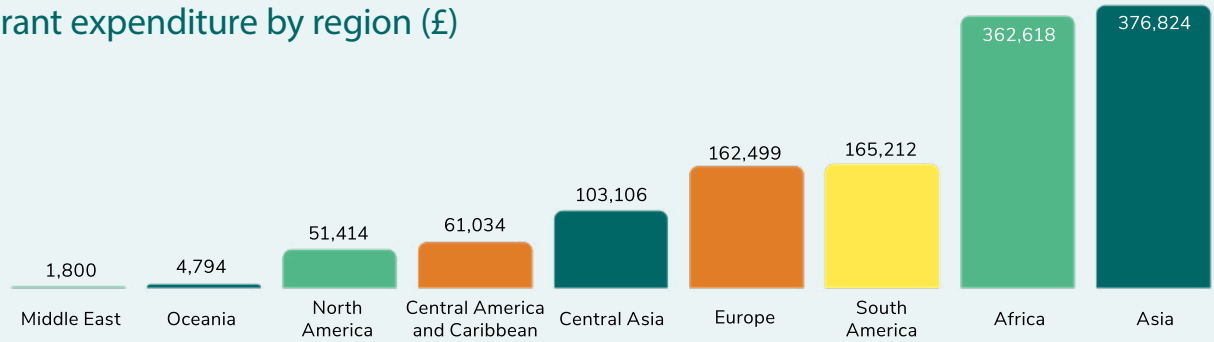
Total income: 3,694,850

Expenditure (£)

- Staff costs (projects): 918,949
- Staff costs (other): 395,896
- Partner grants: 1,289,301
- Consultants & workshops: 196,706
- Other: 537,536*

Total expenditure: 3,338,388

Grant expenditure by region (£)



Staff

Joined in 2024

By the numbers

44 Staff members

13 Board members

Laxmi Aggarwal
Conservation Policy Officer

Marcello De Vitis
TGBS Conservation Officer

Dylan Fuller
Plant Health Assistant Officer

Thomas Gichuru
Conservation Project Manager, IKI

María José Mata Quirós
Latin America & Caribbean Programme Officer

Sharon Kogo
Conservation Project Manager, IKI

David Justin R. Ples
Southeast Asia Programme Officer

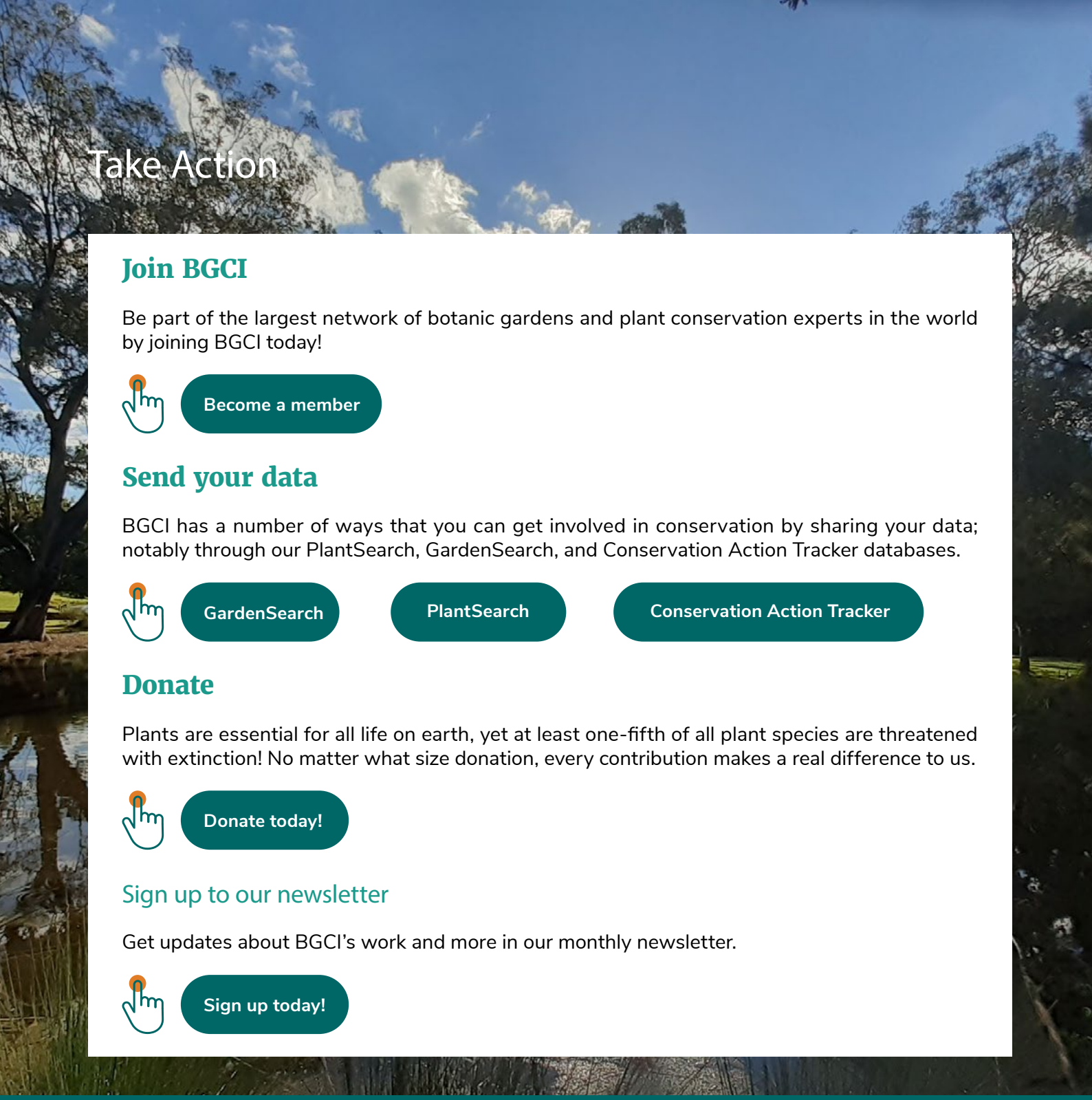
Mark Richardson
Executive Director (BGCI-US)

Raakel Toppila
Programme Assistant

Our sponsors

BGCI is incredibly grateful for our sponsors.

Sponsor	Country	Contributed to
Darwin Extra	UK	The Global Biodiversity Standard
Ecosia	Germany	Tree species recovery
Fondation Franklinia	Switzerland	Tree conservation prioritisation and action
Frankfurt Zoological Society	Germany	Rhino browse studies in Zambia
Illegal Wildlife Trade (IWT) Challenge Fund	UK	Illegal trade
Indianapolis Zoo	USA	Colombian tree assessments and planning
Institute of Museums and Library Service (IMLS)	USA	BGCI databases
International Climate Initiative (IKI)	Germany	BGCI projects in Kenya, Rwanda, Uganda and Ethiopia
IUCN Edge	Switzerland	Tree conservation planning
Keidanren Foundation	Japan	Plant conservation in Samoa
Leon Levy Foundation	USA	Global Botanic Garden Fund
Minnesota Landscape Arboretum	USA	Global Botanic Garden Fund
National Geographic	USA	Plant conservation in Kurdistan
Natural Environment Research Council (NERC)	UK	Biodiversity Impact Credits
Rewild	USA	Global Tree Specialist Group
San Diego Botanic Garden	USA	Illegal Trade, Global Botanic Garden Fund, Disaster Recovery
Stanley Smith Horticultural Trust	UK	Conference bursaries
Sylvia Scholarship Fund	UK	Conference bursaries
The Botanist	UK	Global Botanic Garden Fund
The Darwin Initiative	UK	BGCI projects in Kenya, Malawi, Vietnam, Cambodia, Ivory Coast, Tajikistan, and Tanzania
The Friends of Bedgebury National Pinetum (Forestry England)	UK	Global Botanic Garden Fund
The Gordon & Betty Moore Foundation	USA	The Global Biodiversity Standard
The Huntington	USA	Global Botanic Garden Fund
The Marsh Charitable Trust	UK	Marsh Awards
The Morton Arboretum	USA	Global Botanic Garden Fund
The Rufford Foundation	UK	Ecological Restoration Alliance
UK Department of Food & Rural Affairs (Defra)	UK	International Plant Sentinel Network
UK Research & Innovation (UKRI)	UK	Research on plant pests and diseases
United States Botanic Garden	USA	Global Botanic Garden Fund
USDA Forest Service	USA	Global Botanic Garden Fund



Take Action

Join BGCI

Be part of the largest network of botanic gardens and plant conservation experts in the world by joining BGCI today!

Become a member

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.

GardenSearch

PlantSearch

Conservation Action Tracker

Donate

Plants are essential for all life on earth, yet at least one-fifth of all plant 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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United Kingdom

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BGCI-Southeast Asia: Singapore Botanic Gardens (Singapore)
BGCI-Africa: hosted by IUCN ESARO (Kenya)

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