



Global
Conservation
Consortium

Magnolia

Global Conservation Consortium for *Magnolia*

Annual Report 2021



ATLANTA BOTANICAL GARDEN



**BOTANIC
GARDENS**
CONSERVATION
INTERNATIONAL



M. ashei. Photo by Jeff Talbert

Overview

Led by Atlanta Botanical Garden, in collaboration with BGCI and other partners from across the genus's range, The Global Conservation Consortium for *Magnolia* (GCCM) has been initiated to address the conservation needs of wild *Magnolia* species.

The goal of the GCCM is to mobilise a coordinated network of institutions and experts who work collaboratively to develop and implement a comprehensive conservation strategy to prevent the extinction of the world's *Magnolia* species.

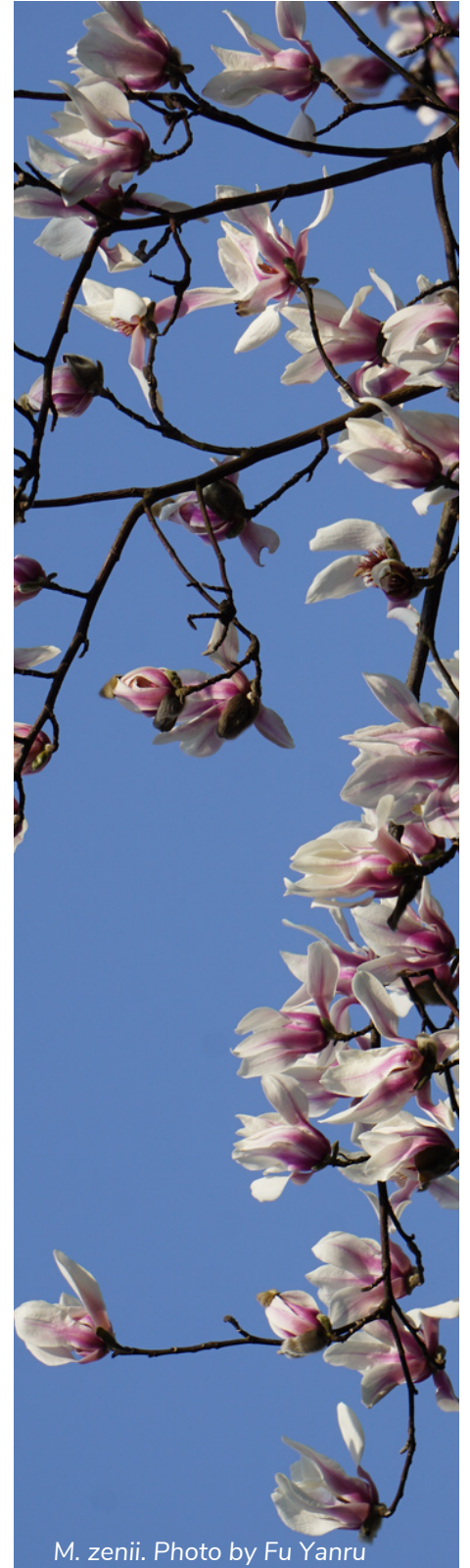
The programmatic objectives of the Global Conservation Consortia are to:

- Foster new and existing network(s) of experts;
- Identify species of greatest conservation concern and prioritize conservation action;
- Ensure effective in situ species conservation;
- Establish, expand and manage ex situ collections of high conservation value;
- Foster applied research (e.g. conservation biology, ecology, horticulture, population genetics, taxonomy) to support species conservation;
- Build capacity to empower and mobilise in-country partners in diversity centres and across species' ranges;
- Increase public awareness and engagement with species conservation issues; and
- Collaboratively fundraise to scale-up conservation action.

The GCCM held introductory meetings in December 2020, inviting the global community to join in *Magnolia* conservation. Since that time we have been conducting Red List assessments, gathering in situ and ex situ information on threatened *Magnolia* species, hosting regional consortium meetings and more. Much has progressed over this year, thanks to the GCCM Steering committee and partners. We would like to share our accomplishments of the last year past year and a half and provide our view for the year ahead.

Thank you to all for collaborating with and supporting the Global Conservation Consortium for *Magnolia*. We look forward to continuing to work with you for *Magnolia* conservation in the years ahead.

-Jean Linsky (GCCM Coordinator) & Emily Coffey (GCCM Lead)



M. zenii. Photo by Fu Yanru

Building the consortium

- The [GCCM Consortium Steering Committee](#) (CSC) was created with BGCI, Atlanta Botanical Garden (as lead institution) and 12 institutional members representing the six regional groups (USA & Canada, Mexico & Central America, Caribbean, South America, East Asia and South & Southeast Asia). The CSC met in November 2020 and have been involved in planning and presenting at regional meetings throughout 2021.
- In 2021, the GCCM hosted virtual meetings for three regions: USA & Canada; Mexico & Central America and South America. These meetings served to introduce the GCCM, its objectives and activities as well as highlight species of concern and ongoing conservation activities in each region. Information for each regional group, including meeting recordings and datasheets are shared via [GoogleDrive](#) and are accessible to participants.



Studying the pollination biology of a wild *M. sinica*.
Photo shared by Weibang Sun.

- A [work plan has been developed and reviewed by the CSC](#). This document includes the goal and objectives of the GCCM over three years and will be used in consortium planning and progress tracking.
- The GCCM has been working with the global GCCs to develop the on-boarding and Affiliate sign up process via the GCCM webpage. All GCCM partners are strongly encouraged to [sign the Affiliate statement of intent when joining the consortium](#) and to further participate as Species Stewards.
- GCCM participants have stepped forward to express interest in being Species Stewards for threatened species in the US and Colombia. A folder with information on the [Roles & Responsibilities](#) within the GCCM is available. A conservation actions sheet will be produced and shared for each regional group for members to share their activities. An example of the sheet is [here](#).

The GCCM steering committee meeting, November 2020



Communications:

- The consortium is showcased via the [Atlanta Botanical Garden website](#) and we have worked with the BGCI Consortium Manager to prepare materials for the [GCCM webpage](#) (part of the GCC programme pages hosted by BGCI) which was launched in September 2021.
- The global newsletter includes regional updates, general consortium information, funding opportunities and events. A total of 282 individuals are currently subscribed to the newsletter and received the December 2021 issue. The newsletter archive is [here](#). You can subscribe to the newsletter [here](#). We have also created a Google Group listserv to facilitate communication amongst the global GCCM community.
- Contact the GCCM Coordinator if you would like to join the GoogleGroup.
- The GCCM launched a Twitter account (@GCCMagnolia) to share consortium news, events and resources.
- Consortium partners have been promoting the GCCM via external presentations such as the Atlanta Botanical Garden Science Cafe and are encouraged to use the GCCM logo and information during related presentations and on social media.

The GCCM has been featured in the following newsletters/outlets in 2021:

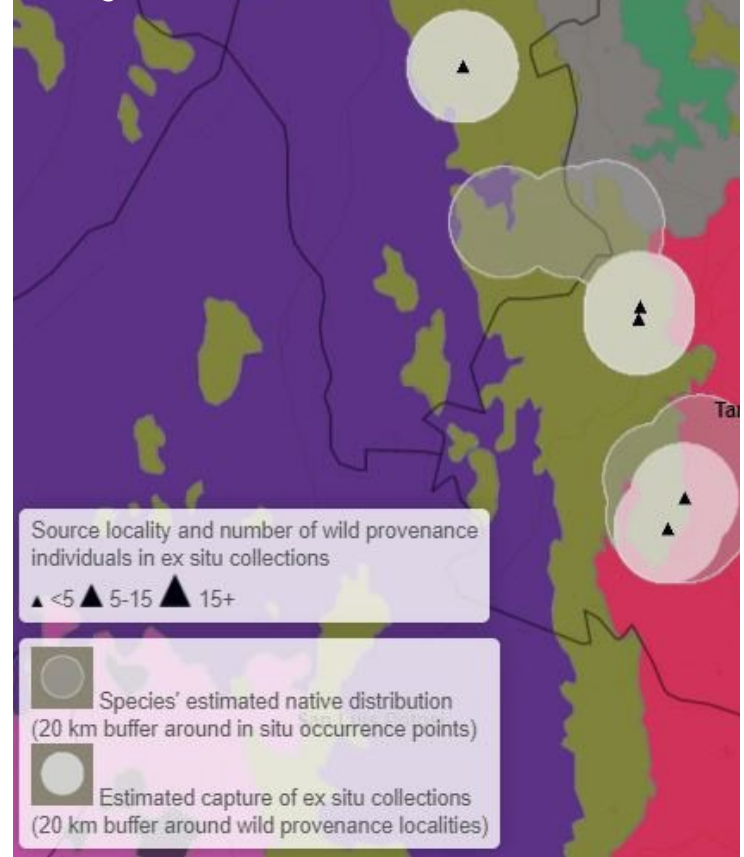
- [Synecology](#), (the Annual Newsletter of the Southeastern Center for Conservation)
- [PlantIntel](#) (Atlanta Botanical Gardens news magazine)
- Magnolia Society International [Journal Volume 56 Issue 107](#)
- BGjournal - [Volume 18 Issue 2 July 2021](#)
- In Defense of Plants Podcast [Episode 335](#)



Data Gathering & Analysis

- A working checklist of *Magnolia* (s.l.) has been compiled using the 2016 Red List publication as a basis and including recently published species. This currently includes 336 species and regional lists of threatened species have been circulated at regional meetings. These lists include the conservation status and number of ex situ collections reporting the species (as of 2020) and are used to highlight potential priority species as well as Data Deficient species requiring additional information.

Example map for *M. tamaulipana*, showing estimated in situ distribution and ex situ collection source localities, which are used to estimate geographic and ecological coverage of ex situ collections.



- As of 2021, a total of 29 IUCN Red List assessments for magnolias have been completed and published on the IUCN Red List by the GCCM. These assessments were compiled by ABG Conservation and Research interns with consultation by species experts as well as by regional plant specialist groups.
- A gap analysis is under way to assess the ex situ status of *Magnolia* globally (i.e. presence/absence of wild sourced material in collections and geographic and ecological coverage of geolocated accessions). This has been gathered from PlantSearch and accessions level data directly contributed by gardens. Mapping of 29 species will be possible using accessions with given and geolocated source locations. A questionnaire on the conservation needs of, actions for and major threats to threatened *Magnolia* species was circulated from September-November 2021 and data from the survey will be included in the gap analysis publication. Species profiles will highlight the specific gap analysis findings and recommendations for the 29 species.

Prioritizing conservation & research activities

- The [questionnaire](#) on on-going and needed conservation activities for threatened magnolia species was circulated in September-November 2021 to gather information for identifying and prioritizing actions. The results of this questionnaire will be included in the global gap analysis and will be used to guide regional discussions for priority species.
- The GCCM has begun to circulate requests for propagation protocols of threatened species using the [Global Trees Campaign propagation protocol template](#). Protocols have been received for 2 species (grafting of *M. pacifica* and *M. taulipana*) and will be stored as resources on the GCCM website.

PROPAGATION PROTOCOL		
Taxon name		
Family		
Collection Number/ Accession Number		
Name/s of propagator/s		
Institution		

VEGETATIVE PROPAGATION		
ROOTING		
Procedures	Material used for rooting	
	Propagation Technique (please specify in detail)	
	Rooting Media	
	Rooting Hormone	
	Container	
	Number of cuttings	
	Environment (describe place and conditions where rooting is taking	



Grafted Magnolias.
Photo shared by Leanne Kenealy.

Funding opportunities & resources

- Calls by relevant funding sources have been gathered by the GCCM and are circulated in the quarterly newsletter. Specific, timely calls for applications from various funding sources will be circulated using the GCCM Google Group listserv. The GCCM coordinator and lead are happy to support applications to any funding bodies through letters of support, review of applications, helping to connect project partners or direct project involvement.
- The GCCM leadership has supported at least 5 funding proposals in 2021 via written letters of support, proposal review and provision of species ex situ data. This includes projects in Colombia, Vietnam and India.
- Magnolia specific resources including horticulture learning modules, action plans, links to meetings and others developed by the GCCM will be shared on the [Resources section](#) of the GCCM website.



GCCM Newsletter December 2021

Welcome to the GCCM Newsletter. This issue features:

- [Sign up as an Affiliate of the GCCM!](#)
- [Working groups info](#) (New: Propagation working group)
- [Magnolia Society International Research Grants](#)
- [Regional Updates](#) (Save the Date: USA/Canada Meeting 2022)
- [Events, Publications, Resources & Funding](#)

If you have news on projects, special events or opportunities related to Magnolia and would like to share via this newsletter [fill out this update form](#) or let us know any time [by email](#). Enjoy!

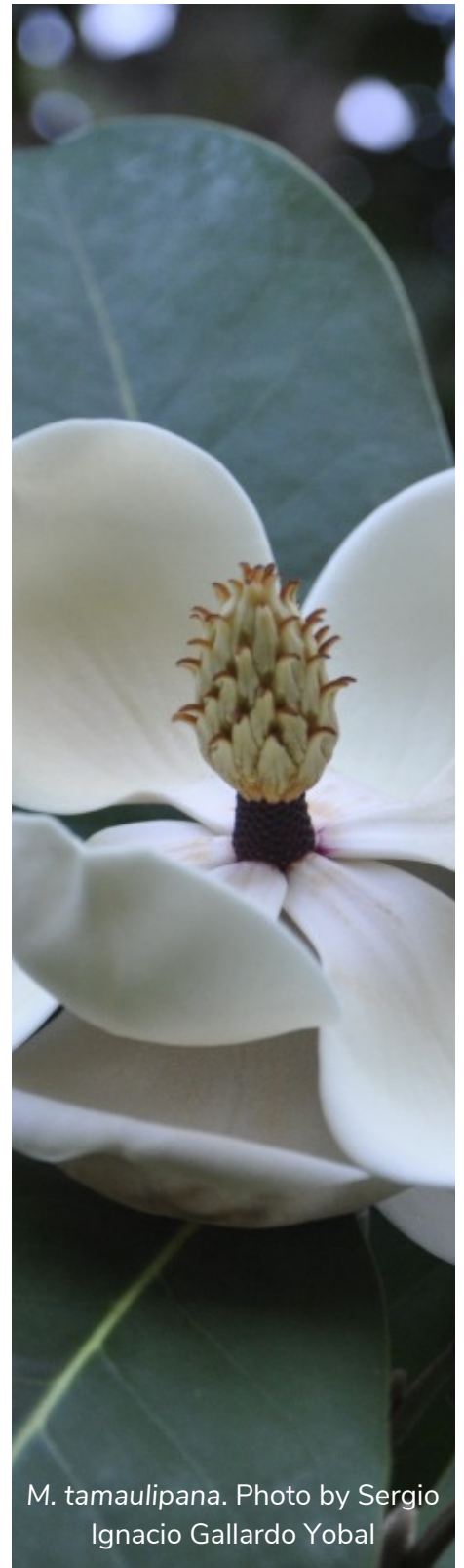
- Jean Linsky (GCCM Coordinator) & Emily Coffey (GCCM Lead)



M. cylindrica.
Photo by Arboretum Wespelaar

Awareness & engagement

- The GCCM has been involved in the development of multi-consortia (i.e. with GCCOaks and GCCCycads) working groups under the Cryopreservation and Conservation Genetics themes. All GCCM partners, globally, are invited to join these working groups to discuss and solve current problems in these thematic areas. Initial meetings have included presentations on the thematic topics as well as discussion on current activities. A new Propagation working group is proposed for development in 2022. Fill out this form to stay informed about meetings of this working group.
- The GCCM has been presented at the following international meetings:
 - The Botanical Bridges III Virtual Symposium (June 2021)
 - The American Public Gardens Association - Virtual Annual Conference 2021 (June 2021)
 - Thailand Threatened Trees Conservation: Magnoliaceae Webinar (August 2021)





Looking Ahead

In the coming year the GCCM plans to:

- complete and publish additional IUCN Red List assessments for newly described species
- host more regional introductory and working meetings
- develop and finalize regional priority species lists
- identify Species Stewards and initiate species projects for priority species
- continue to contribute species and accessions level data for ex situ metacollection management
- initiate creation of conservation action and species recovery plans for priority species
- contribute to expanding and progressing thematic working groups of the GCCs

Acknowledgements:

Prepared by Jean Linsky with contributions from Emily Coffey & Dan Crowley.

Thanks to our funders:





M. zenii. Photo by John Evans.