

Global Tree Specialist Group Newsletter

October 2022

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GTA Global Tree Assessment



The work of the GTSG is of fundamental importance in assessing the conservation status of trees. Through the Global Tree Assessment we now have an idea of the scale of the threats facing tree species and we continue to draw attention to the plight of trees around the world. It is increasingly important that we become more effective in promoting and initiating conservation action. So far this role has mainly been through providing advice to the Global Trees Campaign and through the actions of individual members of the Group. There is an urgent need to step up conservation planning and action for threatened tree species and we would all like to do more. Currently we are in discussion with the Colombian Plant Specialist Group about ways we can jointly use tree conservation data to plan for conservation action in Colombia. This could become a model for wider application further linking the work of different SSC Groups. In this newsletter, we share how GTA data is used to inform in situ conservation action; how the GTSG contributes to CITES and how the GTSG publicises the need for tree conservation.

As ever, thank you for your commitment to the GTSG.

With very best wishes Sara Oldfield & Adrian Newton Co-Chairs GTSG

Using tree conservation data to inform in situ conservation action

Katharine Davies, BGCI's Tree Data Project Manager and a GTSG member is engaged in planning how tree data can be used to support other conservation projects and initiatives. In this new role, Katharine is looking at ways to provide tree conservation information in accessible formats to conservation planners, especially linking to methodologies for identifying globally important sites to prevent species extinctions. She is working with the Alliance for Zero Extinction (AZE) and Key Biodiversity Area (KBA) Secretariat on the development of customised datasets. As part of her work, methodology will be developed to identify AZE sites for trees, tested with at least five in-country partners. Launched globally in 2005, and now with over 120 conservation partners, the AZE was established to identify, effectively conserve and safeguard the most important sites for preventing global species extinctions. Governments are incorporating the conservation of AZE sites into national policies and international financial institutions such as the World Bank use AZE sites to screen investments for potential impacts on critically important biodiversity. For more on the AZE see: Alliance for Zero Extinction (<u>https://zeroextinction.org</u>).

For more information contact Katharine Davies (katharine.davies@bgci.org)



CITES

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an important mechanism for controlling trade in species that are being unsustainably harvested for international trade. The GTSG has been actively involved in CITES for many years both through the involvement of members at a national level and through global consultation on key issues. This year, Sara Oldfield will represent the GTSG in the IUCN delegation at the 19th meeting of the Conference of the Parties to CITES, to be held from 14 - 25 November 2022 in Panama City, Panama.

As noted in the last newsletter, the proposals relating to tree species that will be discussed at this meeting are proposals to:

- Include Handroanthus spp., Roseodendron spp. and Tabebuia spp. in Appendix II with annotation #17;
- Delete Dalbergia sissoo from Appendix II;
- Transfer Paubrasilia echinata from Appendix II to Appendix I with annotation;
- Include all African populations of Afzelia spp. in Appendix II with annotation #17;
- Include Dipteryx spp. in Appendix II with annotation;
- Include all African populations of Pterocarpus spp. in Appendix II with annotation #17;
- Include all African populations of Khaya spp. in Appendix II with annotation #17

Thank you to all members of the GTSG who have provided information for the IUCN TRAFFIC Analyses of the Proposals to amend the CITES Appendices. The analyses document can be found here: <u>https://www.traffic.org/site/assets/files/19065/iucn-traffic-cop19-full-analyses-1.pdf</u>

Threatened Trees of the US

The work of the Morton Arboretum in partnership with NatureServe and Botanic Gardens Conservation International-US to complete threat assessments for all of the tree species of the contiguous US is now published! To undertake this work an updated checklist of all tree species native to the contiguous US was first developed based on the standardized Global Tree Assessment tree definition and then over 700 new or updated IUCN Red List assessments were carried out together with NatureServe Global Ranks.

The results are presented in Carrero, C., Beckman Bruns, E., Frances, A., Jerome, D., Knapp, W., Meyer, A., Mims, R., Pivorunas, D., Speed, D., Treher Eberly, A. & Westwood, M.(2022). Data sharing for conservation: A standardized checklist of US native tree species and threat assessments to prioritize and coordinate action. Plants, People, Planet, <u>https://doi.org/10.1002/ppp3.10305</u>

This paper includes an updated checklist of native US trees that includes 881 species from 269 genera, with Quercus and Crataegus as the most species-rich tree genera. The first country-wide analysis of tree extinction risk is presented, with patterns of geographic and taxonomic diversity, and leading threats. An estimated 11–16% of US tree species are threatened with extinction, with the most common threat being invasive and problematic pests and diseases. A "crosswalk" process is introduced for efficient, large-scale data sharing between the IUCN Red List and NatureServe, using IUCN Red List Species Information Service (SIS) Connect, which can be applied to other taxonomic groups in North America.

The checklist, threat assessments, and crosswalk methodology represent a significant advancement in prioritizing conservation action for at-risk tree species and restoration of forests in the US, supporting for example the global goals of the UN Decade for Ecosystem Restoration.



Fraxinus americana, The Morton Arboretum

Spotlight on a GTSG Member

Nelson Zamora is a professor and researcher at the Forestry Engineering School at Instituto Tecnológico de Costa Rica. He started his career as a forestry engineer but quickly became interested in plants and taxonomy. Due to his background in forestry, his main interest was found in trees. Since 1986, he has been working on the major project on the <u>Manual de Plantas de</u> <u>Costa Rica</u>.

The last volume (volume 8) in this series was published in 2020, covering all vascular plants of Costa Rica. He has also worked on using information from the Manual de Plantas de Costa Rica, and publishing field guides for selected taxonomic groups to help identify trees in the wild (for an example see https://wdn2.ipublishcentral.com//hipertexto50002 //viewinsidehtml/501275579554901). In addition, he is working with the Costa Rican government forestry inventory, training people in tree identification, collection protocols, etc.

More recently, Nelson Zamora is collaborating with the French institute Cirad, on a mobile phone application called Pl@ntNet. Pl@ntNet is a participatory science platform that enables users to identify plants from their photo, and Nelsn Zamora is helping with the development of a module for plants in Costa Rica.



Nelson Zamora has also been one of our key collaborators in the Global Tree Assessment, and has played a very important role in producing IUCN Red List assessment for trees in <u>Costa Rica</u>.

Publicising the threatened status of timbers

One of the main threats to tree species is overexploitation for timber. It is usually difficult to quantify the threat to individual species, even those that are heavily exploited for international trade – an issue that is apparent when reviewing proposals for listing tree species on CITES. At the end of last year/beginning of this year GTSG members and GTA partners took part in a questionnaire - Data availability for conservation assessments and practical conservation activities for timber species.

Using this information we have been working on a paper to be submitted to The Journal of Sustainable Forestry. It is intended that the paper will act as a call to action to better support data gathering for timber species and making such data more accessible across different audiences as well as encourage synergies between different organisations working in timber trade or on timber issues.

A new report will also focus specifically on timber species. The Red List of Timber Trees aims to stimulate conservation action for this important group of species by identifying which species are under threat. Highlighting that over 4,000 timber tree species have conservation assessments published on the IUCN Red List with a high threat level identified for just over a third of these are threatened with extinction, recommendations for conservation action including encouraging sustainable use and forest management are presented.

For more information contact Megan Barstow (megan.barstow@bgci.org).

Nelson Zamora visiting Katie Marfleet at BGCI in summer of 2022

Recent Publications

The overview paper, "Scientists' warning to humanity on tree extinctions" has generated significant publicity. It is currently the "most downloaded" article from the Plants, People, Planet journal, after only one month since publication. BGCI featured the publication on its homepage with a press release picked up by the Guardian. This highlighted that:

- Billions of people could lose their income, jobs, and livelihoods, if more is not done to prevent tree species extinction.
- Seven urgent actions to avert an ecological, cultural and socio-economic catastrophe are called for ahead of Cop15 of the Convention on Biological Diversity (CBD).
- The call to action has been signed by more than 30 organisations worldwide and reveals the threats species face in regions around the world, including North America and Europe.

Thank you to all GTSG members who signed up as "Global Tree Assessment contributors" as listed in the author string. The paper is available at: https://nph.onlinelibrary.wiley.com/doi/epdf/10.1002/ppp3.10314

Here are some other exciting articles already published in early view of Plants, People, Planet with a focus on conservation assessments for tree species and other aspects of tree conservation action:

Carrero, et al. Data sharing for conservation: A standardized checklist of US native tree species and threat assessments to prioritize and coordinate action. The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/10.1002/ppp3.10305</u>

Dhyani, et al. Reintroduction of Buchanania barberi, a critically endangered tree endemic to the south Western Ghats of Kerala, India.

The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/full/10.1002/ppp3.10334</u>

Erkens, et al. Spatial distribution of Annonaceae across biomes and anthromes: Knowledge gaps in spatial and ecological data.

The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/full/10.1002/ppp3.10321</u>

Hills, et al. Raising awareness through the Global Tree Assessment: Extinction risk of six fully assessed tree groups. The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/full/10.1002/ppp3.10289</u>

Rønsted, et al. Restoration of threatened plant species in Limahuli Va lley on the Hawaiian Island of Kaua'i in the framework of the Global Tree Assessment. The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/10.1002/ppp3.10301</u>

Samain, et al. Meta-analysis of Red List conservation assessments of Mexican endemic and near endemic tree species shows nearly two thirds of these are threatened. The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/full/10.1002/ppp3.10308</u>

Verspagen et al. A method for making Red List assessments with herbarium data and distribution models for species-rich plant taxa: Lessons from the Neotropical genus Guatteria (Annonaceae). The article is available at: <u>https://nph.onlinelibrary.wiley.com/doi/10.1002/ppp3.10309</u>

Keep in Touch

Please let us know what you have been up to and share news with the Group!

Drop us an email (<u>redlist@bgci.org</u>), follow Global Tree Assessment Progress on twitter <u>@GTA_GTSG</u> and check out the <u>GTA website</u> for updates and find out about our practical conservation efforts on twitter <u>@globaltrees</u> and the <u>GTC Website</u>.