



Species

ISSUE 64

2023 Report of the IUCN Species Survival Commission and Secretariat



The IUCN Species Survival Commission (SSC)

The IUCN Species Survival Commission (SSC) is a science-based network of thousands of volunteer experts from almost every country of the world, all working together toward achieving the vision of “a just world that values and conserves nature through positive action to both prevent the loss and aid recovery of the diversity of life on earth.”

Members of SSC belong to one or more of near 200 Specialist Groups, Red List Authorities, Action Partnerships, Task Forces, and Conservation Committees that make up the Network, each focusing on a taxonomic group (plants, fungi, mammals, birds, reptiles, amphibians, fishes, and invertebrates), national species, or a disciplinary issue, such as sustainable use and livelihoods, translocation of species, wildlife health, climate change, and conservation planning.

Framed by the Species Conservation Cycle, SSC’s major role is to provide information to IUCN on biodiversity conservation, the inherent value of species, their role in ecosystem health and functioning, the provision of ecosystem services, and their support to human livelihoods. This information is fed into the IUCN Red List of Threatened Species.

2021-2025 Species Strategic Plan

The IUCN Species Strategic Plan encompasses the joint work of the IUCN Species Survival Commission and a number of partnerships to achieve more than 2,700 targets proposed by the Network during the 2021-2025 quadrennium.

To accomplish those targets, the Species Conservation Cycle was established, which is the conceptual framework for the Network activities. The Species Conservation Cycle’s main purpose is to guide efforts for valuing and conserving biodiversity through three essential components that are linked to each other:

ASSESS: Understand and inform the world about the status and trends of biodiversity.

PLAN: Develop collaborative, inclusive and science-based conservation strategies, plans and policies.

ACT: Convene and mobilise conservation actions to improve the status of biodiversity.



Their implementation requires two transversal components:

NETWORK: Enhance and support our immediate network and alliances to achieve our biodiversity targets.

COMMUNICATE: Drive strategic and targeted communications to enhance our conservation impact.

SSC Species Report

Annual progress in the implementation of the 2021-2025 Species Strategic Plan is documented in the SSC *Species Report*, which consists of a comprehensive description and analysis of the activities and results generated by the members of the SSC Network and Centers for Species Survival (CSS) each year. Each SSC and CSS group contributes to this document by providing a yearly summarised description of their achievements, which is presented in stand-alone reports.

Structure of the IUCN SSC and CSS Stand-alone Reports

Stand-alone reports summarize the activities conducted and results generated by each group member of the SSC and CSS. Following, is the structure of the stand-alone report and the contents under each session.

Title of the group

Photograph(s) of the Chair/Co-Chairs

Group information

Includes names of Chair/Co-Chairs, Vice-Chairs, Deputy Chairs, Red List Authority Coordinators, Program Officers, Species Survival Directors, and Species Survival Officers, their institutional affiliations, number of members and social networks currently active.

Logo of the group

Mission statement

Includes the mission of the group.

Projected impact for the 2021-2025 quadrennium

Includes the description of the impact on species conservation resulting from the implementation of the targets formulated by the group for the 2021-2025 quadrennium.

Targets for the 2021-2025 quadrennium

Includes the targets planned by the SSC or CSS group for the 2021-2025 quadrennium ordered alphabetically by component of the Species Conservation Cycle. Each target is labeled with a numerical code (e.g., T-001, T-012) that identifies it in the SSC DATA database and its status for the reported year is indicated (Not initiated, On track or Achieved).

Activities and results

Includes the targets for which activities were conducted and results were generated during the reported year, ordered alphabetically, first by component of the Species Conservation Cycle, and second by Activity Category. Description of activities and results includes the indicator that best describes progress, its associated quantitative or qualitative result, and the narrative description of the activity conducted or result obtained. Each activity or result reported is linked to the Key Species Result to which it is mainly associated (e.g., KSR#1, KSR#5).

Acknowledgements

Includes the acknowledgements to funding agencies, partners, and persons who contributed to the progress of the targets of the group.

Summary of achievements

Summarises information of the group's strategic plan for the quadrennium and progress achieved implementing targets for all the components of the Species Conservation Cycle during the reported year.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

Example for the recommended citation:

Álvarez Clare, S., Byrne, A. and Good, K. 2024. 2023 Report of the CSS Trees - Morton Arboretum. In: IUCN SSC and Secretariat. *2023 Report of the IUCN Species Survival Commission and Secretariat*. Gland, Switzerland: IUCN. 10 pp.

2023 Report

CSS Trees - Morton Arboretum



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Mission statement

Safeguarding tree species through global collaborations.

Projected impact 2021–2025

The Center for Species Survival for Trees at The Morton Arboretum will propel Chicago as a national leader in tree conservation, support collaboration and capacity building with in-country partners, further biodiversity research, engage the next generation of tree champions, promote sustainable livelihoods, and mitigate the biodiversity crisis by safeguarding threatened tree species.

Targets 2021–2025

ASSESS

T-001 Work with global partners at IUCN SSC and in-country biodiversity experts to update and conduct IUCN Red List assessments for dozens of priority tree taxa.
Status: On track

T-002 Complete conservation gap analyses for Southeast/East Asian and Mesoamerican threatened oaks.
Status: On track

T-003 Use spatial analyses to identify priority areas for *in situ* conservation of oaks.
Status: On track

T-004 Conduct field expeditions to priority sites to locate Critically Endangered (CR) and Data Deficient (DD) oak species, in collaboration with in-country experts.
Status: On track

PLAN

T-005 Organize and support conservation planning workshops to identify stakeholders, threats, and actions needed to conserve, manage, and recover oaks and other co-occurring, threatened tree species in the regions of operation.
Status: On track

ACT

T-006 Support funding programs for international projects focused on tree conservation, as appropriate, submitted by the CSS Network, SSC Network, Global Tree Specialist Group (GTSG) and our other relevant networks.
Status: On track

T-007 Promote and support *ex situ* conservation collections that offer a last safeguard against extinction and ensure genetically diverse and representative plant material for research and restoration efforts through the botanic garden network.
Status: On track

T-010 Build the pilot Species Stewardship Training Program to aid in capacity building among partners in biodiversity hotspots in Latin America to help them become advocates for protecting natural resources.
Status: On track

NETWORK

T-009 Create and promote educational programs through the Morton Arboretum, Chicago universities, and Latin American

universities to build conservation capacity for the next generation of tree champions.
Status: On track

T-011 Develop a long-term fundraising plan to ensure the sustainability of the center and its projects.
Status: On track

T-012 Support and expand tree conservation work on a global scale through liaison with the CSS, ArbNet, GCCO and SSC network.
Status: On track

T-013 Strengthen our collaboration with the GTSG to grow the Group's expertise, partnerships, and capacity to expand its tree conservation and research efforts, focusing on more priority, threatened taxa globally.
Status: On track

T-014 Host an annual GTSG meeting in 2024 at the CSS - The Morton Arboretum.
Status: On track

T-015 Formalize and implement our partnership with CSS: Freshwater (Shedd Aquarium).
Status: On track

COMMUNICATE

T-016 Present the results from the conservation gap analyses to regional partners in Mesoamerica and Southeast and East Asia.
Status: On track

T-017 Contribute to raising awareness of biodiversity research and tree conservation, while reducing the "plant knowledge



Silvia Álvarez Clare standing under a mature *Guaiaacum unijugum* individual in B.C.S, Mexico
Photo: Víctor García Balderas

disparity” along with our local and international partners.

Status: On track

T-019 Build the CSS’s partnership to raise awareness of sustainable tree conservation through media channels targeting diverse audiences locally and globally.

Status: On track

T-020 Promote the BGCI/ArbNet Partnership Programme and other relevant tree conservation funding opportunities to CSS partners globally as well as sign up for a tree-focused network that supports the CSS’s mission and goals.

Status: On track

T-021 Publish an annual newsletter.

Status: On track

T-022 Present the results from the conservation gap analyses to the Global Tree Specialist Group and SSC network.

Status: On track

T-023 Submit annual reports to disseminate CSS work and results.

Status: On track

T-024 Participate in joint communication/outreach campaigns that are focused on/highlight tree species with Reverse the Red.

Status: On track

Activities and results 2023

ASSESS

Red List

T-001 Work with global partners at IUCN SSC and in-country biodiversity experts to update and conduct IUCN Red List assessments for dozens of priority tree taxa. (KSR 6)

Number of national Red List reassessments published: 0

Result description: Species Survival Officer, Kate Good worked with the Global Tree Assessment team at Botanic Gardens Conservation International (BGCI) and with the Global Tree Specialist Group, to submit and update the Red List assessment for Data Deficient (DD) Mesoamerican oaks and other priority trees. There are 27 Data

Deficient (DD) oak species for which Kate produced updated occurrence maps, including Extent of Occurrence (EOO) and Area of Occupancy (AOO). These data will be used to update the species Red List assessments, which will take place in 2024 and 2025.

Number of new national Red List assessments published: 12

Result description: In 2023, we submitted 12 species for publication on the IUCN Red List that were still outstanding from the Global Tree Assessment.

Research activities

T-002 Complete Conservation Gap Analyses for Southeast/East Asian and Mesoamerican threatened oaks. (KSR 5)

Number of scientific publications about species research that acknowledge SSC affiliation: 0

Result description: In 2023, we prepared a curated set of data points representing the known native distribution of 59 threatened or Data Deficient oak species in Mexico and Central America as part of the Conservation Gap Analysis for Mesoamerica. The dataset consists of 4,490 occurrence points from over 17 unique sources (e.g., Tropicos, GBIF, SEINet Portal Network, and IUCN Red List.) The occurrence data for each species was carefully reviewed by a minimum of two regional experts in the genus. Mapping and calculating protected area coverage for each of the 59 target Mesoamerican

species was finalized. This review will further guide conservation efforts for threatened Mesoamerican oak species and prioritize collection locations in the region. Currently, we are in the process of writing in-depth profiles for each of the 32 threatened species in the gap analysis. These profiles consist of information on distribution and ecology, current threats, conservation activities, as well as most urgent action needed. Each profile will be co-authored by a regional expert who works closely with the species. We expect to have the Conservation Gap Analysis for Mesoamerican Oaks finished by the third quarter of 2024. Kate Good and CSS: Trees Southeast Asia Coordinator, Dr Joeri Strijk (Alliance for the Conservation Tree Genomics, ACTG), are working to gather occurrence data for over 100 oak species native to Southeast Asia. These data will be used in a similar analysis to the one being conducted for Mesoamerican oaks but for Southeast Asian oaks. This analysis is on track to be finished by the second quarter of 2025.

T-003 Use spatial analyses to identify priority areas for *in situ* conservation of oaks. (KSR 6)

Number of species that have been assessed through the different tools: 120
Result description: Utilizing the data from Dr Isabel Loza's models and surveying work, Kate Good produced updated occurrence maps, including Extent of Occurrence (EOO) and Area of Occupancy (AOO) for numerous Data Deficient oak species. This data will be used to update the species Red List assessments in 2024 and 2025.

T-004 Conduct field expeditions to the priority sites to locate critically endangered (CR) and Data Deficient (DD) oak species, in collaboration with in-country experts. (KSR 6)

Number of species that have been assessed through the different tools: 0
Result description: Dr Isabel Loza conducted two expeditions within the Sierra Madre Oriental, Mexico, an unexplored area

of high oak diversity. The initial expedition entailed the exploration of eight localities in the Maderas del Carmen region and four localities in Sierra de la Marta. From these expeditions, we gathered approximately 50 herbarium specimens, representing a diverse range of 12 *Quercus* species. This data will be included in the reassessment of these oak species in 2024 and 2025.

Synergy

T-003 Use spatial analyses to identify priority areas for *in situ* conservation of oaks. (KSR 6)

Number of new range states engaged in determining species distribution range coverage: 3

Result description: In addition to the Conservation Gap Analysis of Mesoamerican Oaks, postdoctoral researcher Dr Isabel Loza of the CSS: Trees - Morton Arboretum is using species distribution models to predict the areas with the highest likelihood of species occurrence. So far, models have been developed for a total of 77 oak species. While the validation of model performance is ongoing, preliminary results have enabled the development of species richness, species rareness, and species irreplaceability maps. Based on these preliminary results, the biogeographic regions exhibiting the highest *Quercus* species richness are the Sierra Madre Oriental (57 species), the Trans Mexican Volcanic Belt (46 species), and the Sierra Madre del Sur (40 species). Additionally, the Sierra Madre Oriental, the Trans Mexican Volcanic Belt, and the Sierra Madre del Sur also hold areas with restricted and irreplaceable species. This work will be published as a scientific paper by the third quarter of 2024. We are working with partners in these regions of Mexico to survey, collect, and conserve these oaks. Dr Loza also visited predicted species occurrence points from her models and was able to identify new individuals for the species. Kate Good has been utilizing these new occurrence points for the Gap Analysis

of Mesoamerican Oaks and creating updated range maps for these oaks to be included in the gap analysis publication.

T-004 Conduct field expeditions to the priority sites to locate critically endangered (CR) and Data Deficient (DD) oak species, in collaboration with in-country experts. (KSR 6)

Number of new range states engaged in determining species distribution range coverage: 3

Result description: In 2023, Dr Isabel Loza conducted two expeditions within the Sierra Madre Oriental, Mexico, an unexplored area of high oak diversity. The initial expedition entailed the exploration of eight localities in the Maderas del Carmen region and four localities in Sierra de la Marta. From these expeditions, we gathered approximately 50 herbarium specimens, representing a diverse range of 12 *Quercus* species. Notably, new populations of the vulnerable *Q. hintoniorum* were found within the Sierra la Marta region. In a second expedition, we explored seven localities across Coahuila and Nueva Leon states, collecting around 40 herbarium specimens of six *Quercus* species. New populations of the endangered *Q. flocculenta* were identified in San José de la Joya and Betania localities. For several of these species, we also collected samples for genetic analysis. These expeditions were carried out in collaboration with Profauna (Mexican NGO) and the Universidad Autónoma Agraria Antonio Narro.

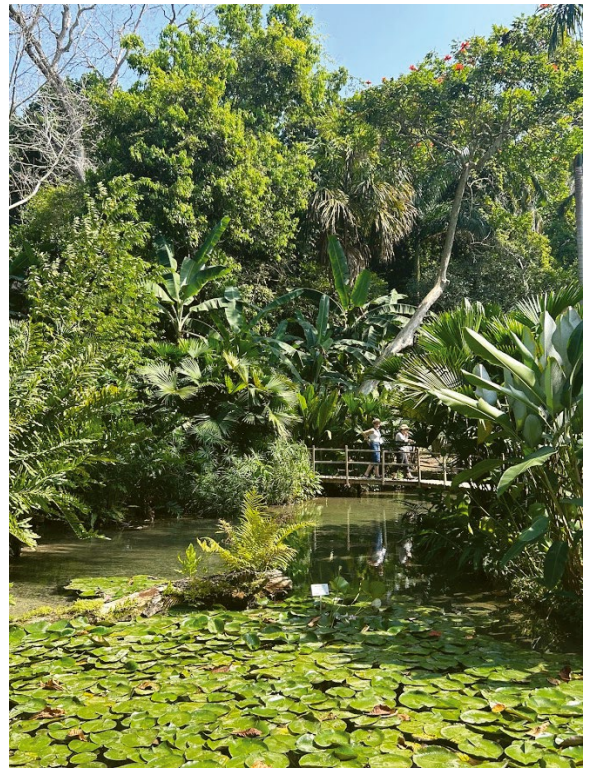
**PLAN
Planning**

T-005 Organize and support planning workshops to identify stakeholders, threats and actions needed to conserve, manage and recover oak and other coexisting threatened tree species in the United States, Mesoamerica and Southeast Asia. (KSR 8)

Number of species conservation plans/strategies developed: 3

Result description: The CSS: Trees staff have been trained in the Conservation

Jardín Botánico Cartagena
(Cartagena Botanical Garden), Colombia
Photo: Karina Orozco



Quercus flocculenta in the field
Photo: Bela Loza



Planning Specialist Group methodology through the facilitator's training course. Also, Species Survival Officer Amy Byrne is part of the Conservation Planning Specialist Group development pathway programme to become a trainer for CPSG. Last year, CSS: Trees led multiple Conservation Action Planning workshops and activities in different parts of the world; the CSS: Trees Director, Silvia Alvarez-Clare, and Agathos Natura (Costa Rican environmental consulting firm) hosted a conservation action planning workshop for *Quercus insignis*, an Endangered oak species native to Mexico and Central America. In total, 35 participants were in attendance, representing NGOs, national parks, universities, and both local and national governments. The group identified key threats and created five central goals with associated strategic actions to outline a *Q. insignis* conservation strategy for Costa Rica. Additionally, Amy Byrne, led a virtual conservation planning workshop for a US species of conservation concern, *Quercus austrina*. Over 30 people from multiple sectors were in attendance. Three virtual workshops were hosted, leading to the development of a draft conservation action plan that outlines the species threats, challenges, goals and actions that the group will implement over the next 10 years. Furthermore, plans are being made to develop a multispecies action plan for the Coahuila, Mexico region. The plan will focus on seven oak species. A collaborative working group to plan this workshop, including government officials, non-governmental organizations (NGOs), university representatives, and local community members was formed. The working

group is also focused on conducting botanical expeditions across this region to identify the priority oak species. Amy Byrne and Silvia Álvarez-Clare have sent their finished conservation action plans to a designer that BGCI works closely with to design a hard copy version of their completed action plans for *Quercus boyntonii* (threatened oak native to the Southeast US) California oaks (six oak species) and *Quercus brandegeei*, a threatened oak native to Baja California Sur, Mexico. These plans will be distributed to project partners and external audiences, as appropriate. Number of plans invited/endorsed by national governments/conservation authorities: 0

Result description: Director Silvia Álvarez-Clare initiated discussions with partners in Costa Rica to begin developing a national tree conservation action plan for Costa Rica. Silvia has been in touch with government parties on this and will be working more on this in 2024 and beyond.

ACT

Conservation actions

T-007 Promote and support *ex situ* conservation collections that offer a last safeguard against extinction and ensure genetically diverse and representative plant material for research and restoration efforts through the botanic garden network. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 70

Result description: In collaboration with partners and members of the Global Conservation Consortium for Oak (GCCO), the CSS: Trees successfully coordinated and hosted multiple tree expeditions in

Mexico (MX) and Central America. These resulted in more than 250 herbarium specimens collected and new mother trees located. In Baja California Sur, MX, our team located and tagged more than 20 individuals of the Critically Endangered *Guaiaacum unijugum*, doubling the known number of trees for the species. In Coahuila, MX, a new population of *Quercus flocculenta* (Endangered) was found, as well as new specimens of more than 10 northern oak species. In Costa Rica and Guatemala, exploration focused on finding mother trees for the restoration of cloud forest ecosystems. In total, we have consulted and worked with partners in central Mexico, Baja California Sur, and Costa Rica for this *ex situ* expedition work. Our partners at the arboretum, Chai-Shian Kua and Chuck Cannon, will be assessing the *Quercus* and *Lithocarpus* species to be surveyed in Malaysia. They are working closely with collaborators at the forestry department in Malaysia. Chuck Cannon is currently working on producing a list of species of concern for both *Quercus* and *Lithocarpus* based upon his expert knowledge of these forests, using the oak Red List and other resources. Chuck will be visiting several mountains to survey for the presence of a list of 'species of interest' because many of these areas have been poorly studied and Fagaceae is often a neglected group of trees in other surveys. He will also be collecting distribution data and checking species names on herbarium specimens in Malaysia's institutional collections in 2024. We have engaged with the Malaysian forestry department to work

together on both the survey as well as the collection of oak and other species in their forests.

T-010 Build the pilot Species Stewardship Training Program to aid in capacity building among partners in biodiversity hotspots located in Latin America and help them become advocates for protecting natural resources. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 33

Result description: The Species Stewardship Training Program is a joint effort between the GCCO and the Center for Species Survival Trees, both hosted at The Morton Arboretum. The program's goal is to provide professional development and training opportunities to partners in biodiversity hotspots with a particular focus on tree conservation. As part of this program, we collaborated with Botanic Gardens Conservation International (BGCI) last year to develop a virtual training module in Spanish, which is in final revisions and will be launched in BGCI's virtual Moodle platform in early 2024. The course, titled "Programa de capacitación para los guardianes de los encinos," includes seven sections with more than three hours of videos and activities. This virtual course will be a valuable resource for training conservation practitioners in Latin America and we plan to translate it into English in 2025. Before the Moodle course was launched, our collaborator Maricela Rodriguez Acosta hosted over 10 workshops in Mexico and Central America that trained more than 60 people on oak collection, propagation, and management, following the content and training outlined in the species steward training modules.

Technical advice

T-006 Support funding programs for international projects focused on tree conservation, as appropriate, submitted by CSS Network, SSC Network, Global Tree Specialist Group (GTSG) and our other relevant networks. (KSR 10)

Number of technical consultations provided to support conservation actions: 2

Result description: In 2023, we supported the submission of the proposal by Dr. Marie-Stephanie, a member of the GTSG to the IUCN SSC Internal Grants. Her project proposal was successful, focusing on a tree conservation project in Mexico. In addition, we worked with new partners in Thailand and Laos to submit a proposal to Fondation Franklinia to support the surveying, collection, and propagation of numerous threatened Fagaceae species. This was a successful proposal, ultimately supported and awarded by Fondation Franklinia. This project will also include conservation action planning wherein Amy will work with Yvette Harvey-Brown of BGCI/GTSG to conduct these conservation action planning workshops for the target tree species.

NETWORK

Agreements

T-014 Host an annual GTSG meeting in 2024 at the CSS - The Morton Arboretum. (KSR 4)

Review the Post-2020 Biodiversity Framework to see how the GTSG can align with it and create a work plan as a group moving forward: Ongoing.

Result description: In 2023, we began these planning discussions with Malin Rivers, Chair of the Global Tree Specialist Group.

Capacity building

T-015 Formalize and implement our partnership with CSS: Freshwater (Shedd Aquarium). (KSR 2)

Number of people trained in conservation action: 10

Result description: In 2023, we met with CSS: Freshwater and discussed our joint project in Central America, as well as co-hosting an in-person event for World Species Congress day. We have been in communication with Shedd partners and have had several meetings to start the Central America project. From the

"tree side", twelve plant nurseries have been established by our partners at Soy Conservación throughout southern Costa Rica to propagate native species. A map with the location of the nurseries can be accessed through their website. A total of 585 seedlings from 29 species have been collected. Additionally, five training workshops have been hosted at two nurseries based on community needs, including sessions on preparing organic substrate, insect repellents, and fertilizers. However, conversations with freshwater scientists revealed that no freshwater mussels occur in the Coton River and fish diversity is low. Therefore, we are re-assessing the scope of this project to either change the project location or use aquatic invertebrates, instead of fish and mussels, as indicators of water quality.

Membership

T-013 Strengthen our collaboration with the Global Tree Specialist Group to grow the Group's expertise, partnerships, and capacity to expand its tree conservation and research efforts, focusing on more priority, threatened taxa, globally. (KSR 2)

Number of SSC members recruited: 10

Result description: We recently met with Malin Rivers, the new GTSG Chair, to discuss the CSS: Trees' involvement and support of the Group. Malin will be working with the CSS: Trees to identify which GTSG members can take on a more leading role. Also, we will discuss the short-term and long-term vision of GTSG collaboratively. We have planned quarterly meetings with Malin to continue to work together on projects and expand and grow the GTSG in 2024 and beyond.

Synergy

T-009 Create and promote educational programs through the Morton Arboretum, Chicago universities and Latin American universities to build conservation capacity in the next generation of tree champions. (KSR 1)



Oaks Action Plan Workshop II
Photo: Maricela Rodríguez

Number of 'in-kind' partnerships established and maintained: 4

Result description: In collaboration with The Associated Colleges of the Chicago Area (ACCA), we developed a syllabus and announcements for a college course and field trip focused on "Forest Ecology in a Changing World". In collaboration with the Monteverde Institute in Costa Rica, we developed a field trip program where students will have the opportunity to engage in tree conservation, forest ecology, and restoration efforts in this region. We started conversations with the National University of Costa Rica to develop a process for an international student exchange. The logistics with visas and credit validation are slow and complex, but we are working together to make this exciting program a success. We hope that the course will be offered in Spring 2025. Finally, in working with the Arboretum education department, we connected with the Chicago Public School system to organize a teachers' field trip that will be taking place in March 2024; they will visit Costa Rica to learn a variety of tree ecology topics and use this information to develop course curriculum to share with their classes at the Chicago schools. We signed a contract with Monteverde Institute to make this happen. Therefore, we created four partnerships that we will continue to work within 2024 and 2025: ACCA, Monteverde Institute, National University of Costa Rica, and the Chicago Public School System.

T-011 Develop a long-term fundraising plan to ensure the sustainability of the Center and its projects. (KSR 1)

Number of 'funding' partners established and maintained: 3

Result description: We advanced the activities for the first year of our Walder Foundation grant. Also, our Center is well-funded through a variety of grants and cooperative agreements we have received in 2023 and continue to receive on an annual basis from close partners, and we will plan to think more strategically about funding the Center's work beyond 2025. We established and/or continued our work with three funding partners in 2023: USFS, US Botanic Garden and Walder Foundation.

T-012 Support and expand tree conservation work on a global scale through liaison with the CSS, ArbNet, GCCO and SSC network. (KSR 1)

Number of 'in-kind' partnerships established and maintained: 1

Result description: Through the CSS, GCCO, ArbNet, and SSC networks, we grew our global tree partnerships and projects in 2023. More specifically, the GCCO continues to recruit new members/partners to support our ongoing oak conservation efforts. For example, at a workshop hosted by the GCCO in Baja California in September 2023, we recruited new partners from this region to execute new oak projects in 2024 and future years. We created several contracts and supported funding proposals by these partners, which was successful, in conserving oaks within the region. Also, we grew our partnerships with institutions in Southeast Asia to work with the CSS on future tree conservation projects as well. We established one official in-kind partner and an MoU with a partner in Vietnam to work on future funding proposals together

to support tree conservation projects in Southeast Asia. Finally, we started conversations with the Medicinal Plant Specialist Group and the Global Tree Specialist Group to discuss how we can work together in the future.

Number of 'funding' partners established and maintained: 3

Result description: The CSS supported the execution of the ArbNet funding opportunity that was shared in the third quarter of 2023; this funding opportunity supports tree conservation projects globally. We received funding from three partners: US Botanic Garden, Fondation Franklinia and USFS in 2023 to support our work within the CSS, GCCO and ArbNet.

COMMUNICATE Communication

T-016 Present the results from the conservation gap analyses to regional partners in Mesoamerica and Southeast and East Asia. (KSR 13)

Number of print communications materials distributed in relation to specific taxonomic groups: 1

Result description: We shared previously developed gap analyses with partners so they could learn more about the importance/purpose of the gap analysis and could work with us on the development of the Mesoamerica and Southeast Asia gap analyses. In 2024, once the Conservation Gap Analysis of Mesoamerican Oaks is officially published, we will have numerous communication plans in place to share with our partners in a variety of outlets.

RaMP intern Víctor García Balderas measuring the width and height of each *Guaiaacum unijugum* seedling after transplanting
Photo: Silvia Alvarez-Clare



Number of digital communication outputs developed in relation to specific taxonomic groups: 2

Result description: We communicated with partners numerous times to share the purpose of the gap analysis and why their collaboration is important in order to receive data for the development of the gap analysis. We developed several presentations to share updates on the conservation gap analysis that were communicated with internal and external partners, appropriately. In 2024, once the Mesoamerica gap analysis is officially published, we will have numerous communication plans in place to share it with our partners in a variety of outlets.

Number of SSC members' presentations developed in relation to specific taxonomic groups: 1

Result description: We hosted a workshop in Baja California where we reached partners local to the region and other parts of Mexico and Southern California to share more information about the gap analysis as well as receive feedback/data that contributed to the Mesoamerican gap analysis.

T-017 Contribute to raising awareness of biodiversity research and tree conservation, while reducing the “plant knowledge disparity” along with our local and international partners. (KSR 13)

Number of media articles mentioning IUCN Species theme: 5

Result description: In 2023, we activated key audiences to conserve trees using various communication methods and outlets. We developed and contributed to newsletters, presentations, and webinars to promote the work of the Center, created training materials that build capacity for our local partners in tree diversity hotspots, and coordinated a teacher exchange program to promote the inclusion of tree conservation in Chicago schools curricula. Some highlights include the ‘Celebración de los Árboles’ at Morton Arboretum; this yearly event hosted at The Morton Arboretum celebrates the vibrant cultures of Latin America, where the Arboretum does important work to protect and conserve threatened trees and the ecosystems they support. Last year, the CSS Trees supported the event by hosting a booth at the festival and giving talks to community partners and visitors. We received a group for El Valor (a Mexican community group from Chicago), as well as many visitors to our booth. We held for the second consecutive year the ‘*Quercus brandegeei* Community Festival’ in Baja California Sur, in an environment where student participation prevailed. More than 200 people who attended the festival of the Arroyo Oak enjoyed the activities, contests, prizes and gifts. There were informative talks, workshops, drawing contests, and stands by local producers. Many attendees from different places joined the tree adoption

campaign of our ‘Save the Encino Arroyo’ programme, and a total of 70 trees were delivered for planting. The Global Consortium for Oak Conservation (GCCO), San Diego Zoo Wildlife Alliance (SDZWA), the Ensenada Scientific Research and Higher Education Center (CICESE) and the Autonomous University of Baja California (UABC), successfully hosted a professional workshop in Ensenada, Baja California, Mexico. In this workshop, participants had the opportunity to share tools and information about oak conservation and research, network and strengthen collaborations between US and Mexican partners, learn how to become a species steward – a role within the GCCO– and plan collaborative conservation projects. Participants also learned more about the Mesoamerican Gap Analysis and how they can participate in co-authoring species profiles for the seven target taxa that occur in Baja California. Additionally, the IUCN SSC released a position statement last year on the role of botanic gardens, aquariums, and zoos in species conservation. President and CEO of Morton Arboretum, Jill Koski, represented the botanic garden community in the press release by providing a quote: “With one-third of the world’s tree species threatened with extinction, cross-sector conservation efforts are more important than ever. This position statement serves as a timely call to action for arboreta and

other botanic gardens to continue and expand our impactful work conserving the world's trees, which are essential to all life on earth." This is a great example of the impact that the Walder Foundation funds are already having on promoting tree conservation at a global level.

T-019 Build the CSS's partnership to raise awareness of sustainable tree conservation through media channels targeting diverse audiences locally and globally. (KSR 13)

Number of print communications materials distributed in relation to specific taxonomic groups: 4

Result description: In 2023, we worked closely with the arboretum's public relations and marketing team to share the exciting launch of the Center for Species Survival, Trees at The Morton Arboretum. We collaborated with the new Walder Foundation-supported Center for Species Survival: Freshwater, led by Shedd Aquarium, to create a joint press release and promote Chicago as a hub for biodiversity conservation. This resulted in coverage by WBEZ and other media outlets. Related publications: (1) Alvarez-Clare, S., Mileham, K., Rodríguez, J. and Knapp, C. (2023). 'Two Centers for Species Survival launch collaborative conservation programmes'. *Oryx*, 57(5), 553-553; (2) Brinckwirth, C. et al. (2023). 'Environmental factors can influence spatial aggregation and acorn production in the endemic and Endangered oak *Quercus brandegeei* in Mexico'. *Botanical Sciences*, 101(3), 761-774.

Number of digital communication outputs developed in relation to specific taxonomic groups: 4

Result description: As part of the dissemination efforts, we contributed content such as sharing the goals and objectives of the CSS: Trees work plan to various newsletters, such as the Global Conservation Consortium for Oak (GCCO), Botanic Gardens Conservation International, and ArbNet newsletters.

Number of SSC members' presentations developed in relation to specific taxonomic groups: 6

Result description: We presented the work of the CSS: Trees at over five conferences, workshops and webinars, including the Center for Plant Conservation conference, the US Forest Service series of educational webinars, and Southeast Asia training workshops, among many.

T-020 Promote the BGCI/ArbNet Partnership Programme and other relevant tree conservation funding opportunities to CSS partners globally as well as signing up for a tree-focused network that supports the CSS's mission and goals. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 2

Result description: Distributed funding opportunities via the GCCO and ArbNet newsletters quarterly in 2023 and via email threads on an opportunistic basis as well.

T-022 Present the results from the conservation gap analyses to the Global Tree Specialist Group and SSC network. (KSR 13)

Number of scientific events in which the members participated: 0

Result description: We have started discussions with GTSG to host a meeting in 2024 to present the results of the Mesoamerica gap analysis. We will present the gap analysis at future CPSG and other specialist group meetings.

T-024 Participate in joint communication/outreach campaigns that are focused on/highlight tree species with Reverse the Red. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 1

Result description: We are working with Reverse the Red to contribute to the World Species Congress Day 24-hour virtual event. We started planning this in 2023.

Summary of achievements

Total number of targets 2021–2025: 22

Geographic regions: 21 Global, 1 America

Actions during 2023:

Assess: 7 (KSR 6)

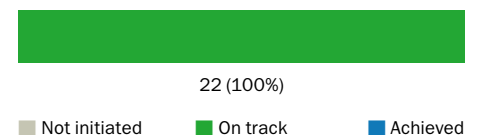
Plan: 2 (KSR 8)

Act: 3 (KSR 10)

Network: 7 (KSR 1, 2, 4)

Communicate: 10 (KSR 12, 13)

Overall achievement 2021–2025:





Nothobranchius fuscotaeniatus
Photo: Csenge Nagy



Tetra Parnaiba
Photo: Karina Molina



Trioceros hoehnelii
Photo: Christopher V. Anderson



Sternberia lutea
Photo: Hayri Duman



Egretta rufescens
Photo: Ernesto Gómez



Lactifluus neotropicus
Photo: Aida Vasco



Mayfly nymph (*Ecdyonurus* sp.)
Photo: Astrid Schmidt-Kloiber and Wolfram Graf