IUCN SSC Species Survival Commission

Species

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2022 Report of the IUCN Species Survival Commission and Secretariat

Stand-alone report
IUCN SSC Cuban Plant Specialist Group

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 each year. Each SSC 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 Stand-alone Report

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

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

Title of the SSC Group

Photograph(s) of the Chair / Co-Chairs

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

Logo of the SSC 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 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.

Example for the recommended citation:
González Torres, LR. 2023. 2022 Report of the Cuban Plant Specialist Group. In: Nassar, JM, García, L, Mendoza, L, Andrade, ND, Bezeng, S, Birkhoff, J, Bohm, M, Canteiro, C, Geschke, J, Henriques, S, Ivande, S, Mileham, K, Ramos, M, Rodríguez, A, Rodríguez, JP, Street, B, and Yerena, E (Eds.). 2022 Report of the IUCN Species Survival Commission and Secretariat. International Union for Conservation of Nature. 6 pp..

2022 Report

IUCN SSC Cuban Plant Specialist Group

CHAIR
Luis Roberto González Torres
Planta! - Plantlife Conservation Society

RED LIST AUTHORITY COORDINATOR
Luis Roberto González Torres
Planta! - Plantlife Conservation Society

Mission statement

The mission of the Cuban Plant Specialist Group (CPSG) is to contribute to increasing current knowledge on the taxonomy and ecology of the species across the geographic range of distribution and promote their long-term conservation.

Projected impact 2021–2025

Not stated yet.

Targets 2021–2025

ASSESS

T-009 Reassess by 2024 the risk of extinction of all taxa assessed before 2011.
Status: On track

T-010 Publish the checklist of Cuban native plants, the national Red List, and the list of invasive species online by 2021.
Status: On track

T-011 Update the checklist of native, introduced and cultivated vascular plants of Cuba by 2023.
Status: Not initiated

T-012 Update the list of invasive and potentially invasive plants.
Status: On track

T-013 Conduct and support required research to assess the risk of extinction of 10% of native species categorised as DD by 2024.
Status: Not initiated

T-014 Assess the risk of extinction of all the endemic taxa of Bryophyta, Marchantiophyta and Anthocerotophyta by 2024.
Status: Not initiated

T-015 Assess the vulnerability to climate change of selected groups (e.g. orchids and cacti) and plant communities by 2024.
Status: On track

PLAN

T-016 Develop and publish the recovery strategy for at least 20 taxa by 2024.
Status: Not initiated

T-017 Update the management plans of at least five protected areas to include the threatened plants in their conservation objectives by 2024.
Status: On track

ACT

T-018 Increase the population of 10 threatened species by 10% by 2024.
Status: Not initiated

T-019 Organise one annual workshop to promote the cultivation and sustainable use of native plants in gardening and landscaping.
Status: On track

NETWORK

T-001 Establish two new formal partnerships that will provide in-kind support to the Specialist Group with institutions devoted to the conservation of Cuban plants by 2014.
Status: On track

T-002 Recruit at least two experts on management of species subject to traffic by 2021.
Status: Not initiated

T-003 Recruit at least one member per province and per major families by 2021.
Status: Not initiated

T-004 Recruit at least one expert on each of the following topics: population biology, reproductive biology, climate change, population management, conservation planning, ecological restoration, and environmental law by 2021.
Status: Not initiated

T-005 Recruit at least one plant expert from each of the following Caribbean territories: Dominican Republic, Haiti, Puerto Rico, Jamaica, and the Bahamas by 2021.
Status: On track

T-006 Train eight group members as Red List assessors by 2024.
Status: Not initiated

T-007 Train at least 10 partners and collaborators on plant identification, monitoring, and population and management by 2024.
Status: Not initiated

T-008 Establish at least five formal partnerships with protected areas by 2024.
Status: Not initiated

Coccothrinax borhidiana,
Montgomery Botanical Center, Miami, FL, US
Photo: Scott Zona (CC BY 2.0)

COMMUNICATE

T-020 Develop a communication strategy for the specialist group by 2021.
Status: Not initiated

T-021 Publish at least four articles on threatened plants by 2024.
Status: On track

Activities and results 2022

ASSESS

Red List

T-009 Reassess the risk of extinction of all taxa assessed before 2011 by 2024. (KSR 6)

Number of national Red List reassessments published: 109

Result description: In 2022, we assessed the conservation status of 109 taxa from 18 families, including 95 endemic species. Of the total taxa presented, 18 were classified as Critically Endangered (CR), 26 as Endangered (EN), 22 as Vulnerable (VU), one as Near Threatened (NT), 30 as Least Concern (LC), 10 as Data Deficient (DD).) and two were declared Extinct (EX). Of these taxa, 29 are assessed for the first time, 32 are preliminarily assessed taxa, and 48 have been previously categorized, including 16 as Data Deficient. The assessment of the taxa included in this issue supersedes all previous assessments, including assigned categories and criteria.

Research activities

T-010 Publish the checklist of Cuban native plants, the national Red List, and the list of invasive species online by 2021. (KSR 5)

Number of publications produced in internal journals of SSC groups: 1

Result description: The manuscript 'Invasive plants in Cuba: current composition and invasion routes' was completed, where the list of exotic plants that have reached the status of invasive and potentially invasive in Cuba is updated based on the studies and records carried out in the period 2016-2021. This article is in the editorial phase in the journal *Acta Botánica Cubana*. It will be published in the first month of 2023.

T-012 Update the list of invasive and potentially invasive plants. (KSR 5)

Number of publications produced in internal journals of SSC groups: 1

Result description: The manuscript 'Invasive plants in Cuba: current composition and invasion routes' was completed, where the list of exotic plants that have reached the status of invasive and potentially invasive in Cuba is updated based on the studies and records carried out in the period 2016-2021. This article is in the editorial phase in the journal *Acta Botánica Cubana*. It will be published in the first month of 2023.

T-015 Assess the vulnerability to climate change of selected groups (e.g. orchids and cacti) and plant communities by 2024. (KSR 6)

Number of new climate change vulnerability assessments completed: 1

Result description: A book about Climatic Change and the vulnerability of Cuba's Biodiversity was published. This book analysed the climatic change impact on 402 Cuban species, including 138 plants. A total of 54 species of orchids and seven cacti were evaluated in this book.

PLAN

Planning

T-017 Update by 2024 the management plans of at least five protected areas to include the threatened plants in their conservation objectives. (KSR 8)

Number of conservation plans/strategies updated: 22

Result description: Since October 2021, Cuba has approved 25 new protected areas. At the same time, the management plan of 22 Cuban protected areas has been updated.

ACT

Technical advice

T-019 Organise one annual workshop to promote the cultivation and sustainable use of native plants in gardening and landscaping. (KSR 11)

Roystonea violacea in bloom at Guantanamo, Cuba, one of the species targeted by the Species Recovery Planning Task Force
Photo: Raul Verdecia

Number of sustainable use practices supported: 2

Result description: In 2022, two courses from the 'National School of Horticulture and Landscaping' have been developed, led by teachers and specialists from the National Botanical Garden. These courses are designed for students of the intermediate technician in Agronomy and Forestry. The Horticulture and Landscaping Manual for Higher Level Technicians was created as part of the course preparation. These courses have a theoretical part and an intense practical part in which students acquire knowledge and skills for their future development as professionals in this speciality. Twenty students have graduated. In addition, five conferences were given on the use of native plants in urban and road trees in Cuban cities. A workshop on urban trees was held where the use of Cuban species in the trees of the city was discussed. In this workshop, the use of endangered species for gardening in cities was proposed.

NETWORK

Membership

T-005 Recruit at least one plant expert from each of the following Caribbean territories: Dominican Republic, Haiti, Puerto Rico, Jamaica, and the Bahamas by 2021. (KSR 2)

Number of SSC members recruited: 4

Result description: Chad Washburn (US, FL), Ethan Freid (The Bahamas), Jacqueline Salazar (Dominican Republic) and William Cinea (Haiti) joined the group this year. They will contribute to assessing the conservation situation of Caribbean endemics that are native to Cuba.

Synergy

T-001 Establish two new formal partnerships that will provide in-kind support to the Specialist Group with institutions devoted to the conservation of Cuban plants by 2014. (KSR 1)

Number of in-kind partnerships established and maintained: 1

Result description: In 2022, the Cuban Plant Specialist Group partnered with the National Botanic Gardens Network to collaborate on plant conservation, training, and data sharing.

COMMUNICATE

Communication

T-021 Publish at least four articles on threatened plants by 2024. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 7

Result description: During this time, seven articles were published related to threatened plants. These articles were published in Cuban and international journals: (1) García-Beltrán, J.A, Toledo, S, Permús, M, González-Torres, L.R, Robledo, L. & Barrios, D. (2022). 'Population structure and conservation of the coastal palm *Coccothrinax borhidiana* (Arecaceae) in the northwest of Cuba'. *Journal for Nature Conservation*, Volumen 68, 126206. https://doi.org/10.1016/j.jnc.2022.126206; (2) https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2007-42982022000200300; (3) http://www.rjbn.uh.cu/index.php/RJBN/article/view/577; (4) Hernández Rodríguez, M, Testé, E, Veltjen, E, Quintana Delgado, J, Palmarola Berejano, A, Valdés de la Cruz, M, Asselman, P, Larridon, I, Samain, MS. & González-Torres, L.R. (2021). 'Effect of the landscape on functional and spatial connectivity in *Magnolia cubensis* (Magnoliaceae) in two mountain massifs of Cuba'. *Conservation Genetics* 22, 1051-1068. https://link.springer.com/article/10.1007/s10592-021-01395-6; (5) http://www.rjbn.uh.cu/index.php/RJBN/article/view/669; (6) Testé, E, Hernández, M, Bécquer, E.R, Valle, O. & González-Torres, L.R. (2021). 'Conservation status and recovery of *Podocarpus angustifolius*: a threatened tree of Cuba'. *Oryx*, Volume 56, Issue 2, 295-297. https://doi.org/10.1017/S0030605321000144; (7) http://www.rjbn.uh.cu/index.php/RJBN/article/view/660.

Summary of achievements

Total number of targets 2021–2025: 21

Geographic regions: 21 America

Actions during 2022:

Assess:	4 (KSR 5, 6)
Plan:	1 (KSR 8)
Act:	1 (KSR 11)
Network:	2 (KSR 1, 2)
Communicate:	1 (KSR 13)

Overall achievement 2021–2025: