



2022 Report of the IUCN Species Survival Commission and Secretariat



Stand-alone report IUCN SSC Macaronesian Islands Plant Specialist Group 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.

ASSESS ACT PLAN

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

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.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

Example for the recommended citation:

Moura, M, and Caujapé-Castells, J. 2023. 2022 Report of the Macaronesian Islands 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 Macaronesian Islands Plant Specialist Group





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VICE-CHAIR Maria Manuel Romeiras University of Lisbon, Lisbon, Portugal VICE-CHAIR Francisco Fernándes Independent Researcher, Portugal RED LIST AUTHORITY COORDINATOR Luís Silva Universidade dos Açores, São Miguel, Açores, Portugal NUMBER OF MEMBERS

Mission statement

The IUCN SSC Macaronesian Islands Plant Specialist Group (MIPSG) will act as a mechanism for driving and implementing urgent conservation actions across the region, supported by solid and updated scientific evidence, in a collaborative framework that encompasses regional universities, botanic gardens and administrations.

Projected impact 2021–2025

The projected impact of the MIPSG is to conduct new species assessments; *in situ* and *ex situ* conservation actions; network strengthening, and training of collaborators on Red List assessment criteria.

Targets 2021–2025

ASSESS

T-001 Complete and publish new Red List assessments on Macaronesian plants on the IUCN Red List of Threatened Species website. Status: Not initiated **T-007** Monitor populations of Critically Endangered and Endangered taxa and diagnose their current threat status. Status: On track

PLAN

T-009 Ensure upscaling the application of multi-disciplinary research results in the planning of reinforcements, reintroductions and/or assisted migrations of endemic plants.

Status: On track

ACT

T-002 Population-level Monitoring and Analysis: Establish monitoring programmes for selected species and groups of species targeting the monitoring of populations of Critically Endangered and Endangered taxa. Status: On track

T-003 Special initiatives to tackle major conservation crises: bring focused attention to resolving major crises in biodiversity conservation – target species *Musschia isambertoi*.

Status: Not initiated

T-004 Special initiatives to tackle major conservation crises: bring focused attention to resolving major crises in biodiversity conservation, ensuring upscaling the application of multi-disciplinary research

results in the planning of reinforcements, reintroductions and/or assisted migrations of endemics.

Status: Not initiated

T-006 Conduct *in situ* and *ex situ* conservation (seeds, herbarium and living collections) of Critically Endangered and Endangered plants and preventive sampling of seeds of more widely distributed plant taxa.

Status: On track

T-012 Carry out DNA banking and analyses of Critically Endangered and Endangered plants for inclusion in conservation planning and institutional information systems. Status: On track

NETWORK

T-010 Network with research institutions and political actors related to the conservation of insular floras. Status: On track

T-011 Organise capacity building workshops and courses for staff and attract Master's and Doctoral students to collaborate with other teams in the Specialist Group.

Status: Not initiated



COMMUNICATE

T-008 Develop different outreach programmes aimed at stimulating actions and social awareness about the importance and degree of threat of insular floras. Status: On track

Activities and results 2022 ASSESS Red List

T-007 Monitor populations of Critically Endangered and Endangered taxa and diagnose their current threat status. (KSR 5)

Number of species monitored: 5

Result description: The group of Gran Canaria strengthened collaboration with the managers of Protected Natural Spaces of the island and conducted monitoring and fieldwork on endemic plants in the Amagro massif (*Sideritis amagroi*), Barranco del Andén (*Scrophularia calliantha, Digitalis chalcantha* and *Sideritis discolor*) and the Charca de Maspalomas (*Limonium tuberculatum*). Also, the group members from the Azores and Madeira kept monitoring *Arceuthobium azoricum*. All known populations were visited and new locations were found, and taxonomic revisions and monitoring of the *Tolpis* genus in the Azores were made.

PLAN Planning

T-009 Ensure upscaling the application of multi-disciplinary research results in the planning of reinforcements, reintroductions and/or assisted migrations of endemic

plants. (KSR 8)

Number of conservation plans/strategies developed: 5

Result description: In the Canary Islands, Cape Verde, Azores and Madeira, the teams of projects NEXTGENDEM (MAC2/4.6d/236, https://www.nextgendem.eu/es/), MACFLOR (MAC2/4.6d/190, MAC2/4.6d/386; https://macflor.com/) and NEXTPOL advanced in the multi-disciplinary research and conservation of the Macaronesian floras. Many collaborative results of the Macaronesian Islands Plant Specialist Group were presented at the V Floramac conference in La Gomera (https://www.ull.es/eventos/congreso-floramac/), and during the Month of Science organised by the Botanic Garden Viera y Clavijo. A highlight of project NEXTGENDEM appeared in El diario del jardín Botánico number 17, edited by the Real Jardín Botánico de Madrid-CSIC. A conservation

Endemic Leontodon (Asteraceae) from the Azores Photo: Mónica Moura

project is being undertaken to safeguard the island endemic plants *Argyranthemum thalassophylum* and *Euphorbia anachoreta*, as well as the endemic beetle (*Deucalion oceanicum*) on Selvagem Pequena and Ilhéu de Fora in the Selvagens Islands, Portugal. The project entails data collection, genetic assessment, habitat monitoring, captive breeding, conservation strategy development, potential reintroduction planning, and an environmental awareness campaign to protect the unique habitats and endemic species of the Selvagens Islands.

ACT

Conservation actions

T-002 Population-level Monitoring and Analysis: Establish monitoring programmes for selected species and groups of species targeting the monitoring of populations of Critically Endangered and Endangered taxa. (KSR 10)

Number of species with increased or prevented decrease in population or range size, as a result of conservation actions: 3 Result description: The groups of Gran Canaria and Cape Verde initiated the assemblage of a 'Good Practice in Environmental Restoration' handbook which will be published during 2023-2024



Campanula vidalii (formerly as: Azorina vidalii), an endemic Campanulaceae from the Azores Photo: Mónica Moura

under the funding of the NEXTGENDEM project. It will encompass science-based practical tips for restoration, including examples drawn from *in situ* actions developed. In addition, populations of *Azorina vidalii* (EN) and *Lotus azoricus* were monitored in the islands of Faial, Pico and S. Jorge, as part of the LIFE VIDALIA project.

T-006 Conduct *in situ* and *ex situ* conservation (seeds, herbarium and living collections) of Critically Endangered and Endangered plants and preventive sampling of seeds of more widely distributed plant taxa. (KSR 10)

Number of seed accessions collected and preserved in the seed bank: 300

Result description: Project NEXTGENDEM acquired lab appliances to set up a seed bank of Cape Verdean endemic species at the INIDA headquarters in Santiago Island. A duplicate of the accessions corresponding to Cape Verdean endemics will be deposited in the new INIDA seed bank facilities when they are fully operative (prospectively during 2023). Furthermore, 21 new seed accessions were achieved, from 12 Azorean endemic taxa and one Azorean native taxon.

T-012 Carry out DNA banking and analyses of Critically Endangered and Endangered plants for inclusion in conservation planning and institutional information systems. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 1,200 Result description: About 1,200 Canarian

and Cape Verdean endemic taxa from Santiago were sampled and deposited



Periploca chevalierii, an endemic Apocynaceae from Cape Verde Photo: David Padilla for NEXTGENDEM project

in the DNA Bank of the JBCVC-UA CSIC (project NEXTGENDEM, MAC2/4.6d/236). Vouchers of most populations were deposited in the LPA herbarium of the same institution. The expectations of the NEXTGENDEM project have been surpassed because of the good condition of most populations targeted in the field. Preliminary meetings were celebrated with the Spanish node of the Distributed System of Scientific Collections (DiSSCo) to facilitate the participation of the Banks of Biological Samples and data of the JBCVC-UACISC in this international consortium, and to uniformise databases and analytical procedures.

NETWORK

Synergy

T-010 Network with research institutions and political actors related to the conservation of insular floras. (KSR 1)

Number of in kind partnerships established and maintained: 4

Result description: Several groups from the Canaries strengthened collaborative actions with the Naturalis Biodiversity Center in Leiden by sharing information and samples from the DNA bank at the JBCVC-UACSIC and some herbaria. The group from Gran Canaria continued contacts with research groups from the University of Granada to further research initiatives on the diversity and evolution of widespread endemic Macaronesian plants. The JBCVC-UACSIC renewed its condition of Associated Unit to the Spanish Research Council after the corresponding scientific audit.

COMMUNICATE Communication

T-008 Develop different outreach programmes aimed at stimulating actions and social awareness about the importance and degree of threat of insular floras. (KSR 13)

Number of communication products using innovative tools: 25

Result description: Wide coverage of research actions developed in the NEXTGENDEM project in Cape Verde and the Canaries appeared in the online information gazette about insular biodiversity 'Greentank' (https://www.greentank. es/). Also, numerous videos and short reports were published on the Twitter and Instagram accounts of this project (https://twitter.com/NextgendemTech, https://www.instagram.com/nextgendem/). In November, the JBCVC-UACSIC organised the meeting 'Origins, diversity and conservation of the Canarian flora' in Gran Canaria.

Acknowledgements

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NEXTPOL (Spanish Ministry of Science) for funding. The Fundación Canaria Amurga-Maspalomas and the public corporation GESPLAN SA are acknowledged for longterm collaboration and logistical support.

Summary of achievements

Total number of targets 2021-2025: 11 Geographic regions: 5 Africa, 10 Europe Actions during 2022:

Assess: 1 (KSR 5) Plan: 1 (KSR 8) Act: 3 (KSR 10) Network: 1 (KSR 1) Communicate: 1 (KSR 13)

Overall achievement 2021-2025:

4 (36%)	7 (64%)	
Not initiated	On track	Achieved