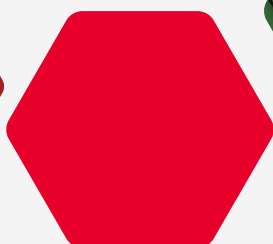




Species

ISSUE 65

2024-2025 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 that were generated during 2024 (full year) and 2025 (first quarter), 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:

Magos Brehm, J, Maxted, N, and Yazbek, M. (2025). 2024-2025 Report of the Crop Wild Relative Specialist Group. In: IUCN SSC and Secretariat. *Species: Annual Report of the IUCN Species Survival Commission and Secretariat 2024-2025*. Gland, Switzerland: IUCN. 8 pp.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

2024-2025 Report

IUCN SSC Crop Wild Relative Specialist Group

CWRSG
CROP WILD RELATIVE SPECIALIST GROUP



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NUMBER OF MEMBERS

64

Mission statement

The vision of the Crop Wild Relative Specialist Group (CWRSG) is the effective conservation and use of crop wild relatives (CWR) – and their increased availability for crop improvement – for the benefit of the environment and human society worldwide.

Projected impact 2021–2025

By the end of 2025, we hope to have established two regional networks of *in situ* conservation sites for active conservation of CWR to complement current *ex situ* conservation activities. Our vision is a developing world in which the full potential of CWR diversity is used to maximise the development of healthy, resilient food systems, where rural communities and family are recognised for their sustaining of vital conservation action, and where nutritional security is not limited by climate change or breeders' access to CWR diversity.

Targets 2021–2025

ASSESS

T-006 Implement research projects on CWR conservation and sustainable use.
Status: Achieved

T-007 Complete threat assessment of around 1,400 global priority CWR taxa.
Status: Not initiated

PLAN

T-008 Plan a European regional network of CWR *in situ* conservation.
Status: Achieved

T-009 Plan regional networks of CWR *in situ* conservation outside Europe.
Status: Achieved

T-010 Plan national networks of CWR *in situ* conservation.
Status: Achieved

T-011 Improve CWR conservation policy context at global and regional levels.
Status: Achieved

T-012 Improve CWR conservation policy context at national level.
Status: Achieved

ACT

T-013 Develop tools and guidelines to help CWR conservation planning or to guide the implementation of *in situ* and *ex situ* conservation actions targeting CWR.
Status: Achieved

T-014 Establish a global network of CWR *in situ* conservation.
Status: On track

T-015 Establish a European regional network of CWR *in situ* conservation.
Status: On track

T-016 Establish regional networks of CWR *in situ* conservation outside Europe.
Status: Achieved

T-017 Establish national networks of CWR *in situ* conservation.
Status: On track

T-018 Advance *ex situ* conservation of representative genetic diversity of the global priority CWR diversity in gene banks.
Status: On track

T-019 Advance *ex situ* conservation of national priority CWR.
Status: On track

NETWORK

T-001 Establish effective links among various stakeholders for the implementation of CWR conservation actions.
Status: Achieved

T-002 Review membership and expand the taxonomic and geographic representation for the Group by inviting new experts from Africa, Central/South America, Asia, Middle East and Oceania.
Status: On track



Beta vulgaris L., primary wild relative
of cultivated sugarbeet
Photo: Joana Magos Brehm

T-003 Build capacity in CWR conservation planning.

Status: Achieved

T-004 Build capacity in red listing.

Status: On track

COMMUNICATE

T-020 Publish papers on CWR conservation and use.

Status: Achieved

T-021 Maintain and update CWR-related websites.

Status: Achieved

T-022 Organise webinars on CWR conservation.

Status: Achieved

Activities and results 2024-2025

ASSESS

Research activities

T-006 Implement research projects on CWR conservation and sustainable use. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 4

Result description: Initiated in 2020 and concluding in 2025, the project 'Vegetation, Culture and Cultivation: Crop Wild Relatives

in Israel' aimed to secure the *in situ* conservation of significant CWR by linking their preservation to historically important crop domestication sites. The UK Defra-funded project 'Development of UK CWR and landrace inventory and conservation measures', launched in 2023, made significant progress in 2024. The project aims to inventory UK CWR and landraces, to plan and implement conservation measures to maximise diversity and resource availability for breeders and farmers. The four-year Nordic CWR project '[Conservation and Sustainable Use of Genetic Resources in the Nordic countries](#)' (2021–2024) forms part of the Nordic Council of Ministers' Nature-based Solutions programme and involves all five Nordic countries, Denmark, Iceland, Norway, Sweden, and Finland, including the autonomous Finnish region of Åland. It has been successfully implemented during the four years of the project. During 2024, the last year of the project, activities have focused on publication and communication of results, for example a project report, policy recommendations, a Nordic wild food plant inventory, work on scientific manuscripts and stakeholder webinars. The project '[Extension of EURISCO for Crop Wild Relatives \(CWR\) in situ data and preparation of pilot countries' datasets](#)', funded by the Federal Ministry of Food and Agriculture of Germany and coordinated by the European Cooperative Programme for Plant Genetic Resources (ECPGR), was extended to 2024 allowing the implementation of further activities related to the documentation and conservation of CWR by members of the CWRSG from Bulgaria, Czechia, Georgia, Italy, Lithuania, Poland, Portugal, and Romania. In 2024, the Spanish members of the CWRSG got involved in a European H2020 funded the four-year project '[COUSIN, Crop Wild Relatives Utilisation and Conservation for Sustainable Agriculture](#)' dedicated to the conservation, characterisation and use of CWR in Europe. Members of the CWRSG partnered in an EC ESFRI Research Infrastructures project

'[PRO-GRACE: Promoting a Plant Genetic Resource Community for Europe](#)' (launched in 2022 and ending in 2025). During this timeframe, the project promoted linkages between European stakeholders to more effectively conserve and use plant genetic resources (PGR) in crop improvement, created mechanisms for conservation, monitoring and access to *in situ* plant genetic resources, promoted and tested unified strategies, procedures and standards for evaluating phenotypic traits of PGR maintained *in situ*, provided the information to end-users (breeders, farmers), and proposed a concept, governance model, and preliminary financial plan of the future [GRACE-Research infra-structure](#). In 2024, an SSC Internal Grant was awarded to the CWRSG to carry out the project 'Assessment of the extinction risk of global priority crop wild relatives to major crops quinoa (*Chenopodium*), strawberry (*Fragaria*) and grape (*Vitis*).

PLAN Planning

T-008 Plan a European regional network of CWR *in situ* conservation. (KSR 8)

Number of species conservation plans/strategies developed: 0

Result description: Within the framework of the project '[Extension of EURISCO for Crop Wild Relatives \(CWR\) in situ data and preparation of pilot countries' datasets](#)', five priority sites for the conservation of CWR in Czechia have been proposed to be integrated within a European network of CWR *in situ* conservation.

T-010 Plan national networks of CWR *in situ* conservation. (KSR 8)

Number of conservation plans/strategies developed: 5

Result description: In Czechia, within the framework of the [National Programme on Conservation and Utilization of Plant, Animal and Microbial Genetic Resources Important for Food and Agriculture \(2023–2027\)](#), 85 priority CWR for conservation

were identified, their threat status was assessed, and occurrence localities compiled, providing a foundation for selecting sites for active *in situ* conservation that will integrate the Czechia network of CWR *in situ* conservation. A significant outcome of the project 'Vegetation, Culture and Cultivation: Crop Wild Relatives in Israel' was its contribution to the groundwork for World Heritage Tentative Listing sites that recognise the intrinsic connection between natural and cultural heritage. Taking into consideration both highly prioritised CWR hotspots and historical evidence of plant use, a national network of 14 different sites were identified in Israel as priorities for conservation. Additionally, conservation planning of CWR in Saudi Arabia was initiated in 2024; a second iteration of CWR conservation planning in the UK was also initiated; and the preparation of a checklist and prioritisation of CWR in Sudan and South Sudan was also carried out in 2024.

Policy

T-011 Improve CWR conservation policy context at global and regional levels. (KSR 9)

Number of policies where SSC members provided technical input: 1

Result description: During 2024, the policy brief '[Nordic wild plant genetic resources: a policy brief](#)', targeting stakeholders in the Nordic region was prepared and will be published in the beginning of 2025.

T-012 Improve CWR conservation policy context at national level. (KSR 9)

Number of policies where SSC members provided technical input: 3

Result description: In 2024, Czechia firmly integrated CWR *in situ* conservation into its [2023-2027 The National Programme on Conservation and Utilization of Plant, Animal and Microbial Genetic Resources Important for Food and Agriculture](#), prioritising it for PGRFA. The recently established collaboration with the Ministry of Environment was a key development

Pistacia atlantica Desf., a close wild relative of cultivated pistachio
Photo: Joana Magos Brehm



and led to the ongoing preparation of the national 'Methodology of *in situ* conservation of PGR in Czechia' (Holubec *et al.*, in prep.). This initiative aimed at strengthening the long-term conservation and sustainable use of CWR in their natural habitats, aligning agricultural and environmental policies, with the Ministry of Environment's support. In Germany, two key policy documents, [Germany's updated National Strategy on Genetic Resources for Food, Agriculture, Forestry and Fisheries](#) and [National PGR Programme](#), were led and prepared in 2024 by a member of the CWRSG from the Federal Ministry of Food and Agriculture. . Finally, in 2024, the implementation of the [Agriculture Act 2020](#) in England, meant that [the conservation of PGR \(including CWR\) has become an integral part of England's agricultural policy](#). In practice, [this act means that farmers and landowners in England can be paid to actively conserve valuable PGR, including CWR](#).

ACT

Conservation actions

T-013 Develop tools and guidelines to help CWR conservation planning or to guide the implementation of *in situ* and *ex situ* conservation actions targeting CWR. (KSR 10)

Number of technical documents provided to support conservation actions: 1

Result description: In Czechia, the year 2024 saw substantial progress in the preparation of a unified national methodology for the *in situ* conservation of CWR (Holubec *et al.*, in prep.) aiming at bridging the agricultural and environmental perspectives, with the anticipated 'Methodology

of *in situ* conservation of PGR in Czechia' poised to become a key document, pending the full support of the Ministry of Environment. The 'Vegetation, Culture and Cultivation: Crop Wild Relatives in Israel' project used a systematic conservation model that incorporated prioritisation of target CWR, species distribution models and historical evidence of plant use. Within the framework of the PRO-GRACE project, systems for documenting, managing, and accessing *in situ* conserved PGR (including CWR) were developed in 2024, with a focus on integrating this data into [EURISCO](#) (European Search Catalogue for Plant Genetic Resources) – Europe's central catalog for *ex situ* PGR.

T-018 Advance *ex situ* conservation of representative genetic diversity of the global priority CWR diversity in gene banks. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 0

Result description: Led by a Jordanian member of the CWRSG, Jordan's National Seed Bank, initially founded in 1993, was significantly upgraded by late 2024 with 3 million Jordanian dinar (£3.2 million) funding secured in 2020; it is a flagship project focused on the *ex situ* conservation of globally important CWR. The new, dedicated facility near NARC (National Agricultural Research Center), developed with guidance from the Millennium Seed Bank, UK, will safeguard crucial PGR using advanced storage methods, recognising the Near East's significance as a centre of origin for these vital resources. In the Nordic CWR project, seeds from a number

of nationally/regionally prioritised species have been collected between 2021 and 2024 (see Target 019). Of these, the following collected taxa are included in the Global priority CWR list: *Allium schoenoprasum*, *Daucus carota* subsp. *carota*, *Diplotaxis muralis*, *Diplotaxis tenuifolia*, *Lactuca serriola*, *Lathyrus sylvestris*, *Medicago sativa*, *Raphanus raphanistrum* and *Vicia sativa*. During 2024, the seeds collected during the timeframe of the project were prepared for long-term conservation, at NordGen.

T-019 Advance *ex situ* conservation of national priority CWR. (KSR 10)

Number of threatened species benefiting from *ex situ* conservation action: 0

Result description: During 2024, within the context of the Nordic CWR project, seed collections were made in Denmark (five accessions, four species), Finland (two accessions, two species), Norway (10 accessions, seven species), Sweden (17 accessions, 10 species). The accessions that live up to the minimum criteria set at NordGen (gene bank for the Nordic countries), will be conserved long-term and made available for users.

NETWORK

Capacity building

T-003 Build capacity in CWR conservation planning. (KSR 2)

Number of people trained in conservation planning: 46

Result description: CWR conservation planning training was provided to 46 undergraduate students from the University of Birmingham.



Aegilops peregrina (Hack.) Maire & Weiller, a secondary wild relative of cultivated wheat, known for its resistance to drought, several pests and diseases
Photo: Joana Magos Brehm

T-004 Build capacity in red listing. (KSR 2)

Number of people trained in assessment tools: 2

Result description: Two postgraduate students from the University of Birmingham were trained in red listing.

Membership

T-002 Review membership and expand the taxonomic and geographic representation for the group by inviting new experts from Africa, Central/South America, Asia, the Middle East and Oceania. (KSR 2)

Number of SSC members recruited: 4

Result description: In 2024, experts from Kenya, Mexico, and the UK joined the CWRSG. In 2025, an expert from Lebanon joined the CWRSG.

Synergy

T-001 Establish effective links among various stakeholders for the implementation of CWR conservation actions. (KSR 1)

Number of in-kind partnerships established and maintained: 3

Result description: In Czechia, a CWR stakeholder group was established comprising national institutions (national gene bank, research institutes, universities), experts with different crop expertise (aromatic and medicinal, cereals, fruits, grasses, legumes, vegetables, and wild hops), and the private sector. The 'Vegetation, Culture and Cultivation: Crop Wild Relatives in Israel' project (2020–2025) focused on the *in situ* conservation of crucial CWR and their connection to sites of historical significance for crop domestication. A key aspect of this initiative was its integrated vision, bridging natural and cultural heritage to support the preparation of World Heritage Tentative Listing sites. This inherently interdisciplinary approach fostered robust collaborations among a diverse group of national and international professionals. Expertise spanned governmental bodies, international organisations, academia, and civil society, encompassing fields such as genetics, botany, archaeology, archaeobotany, and agricultural science. Within the context of the Horizon Europe funded project

'PRO-GRACE Promoting a Plant Genetic Resources Community for Europe', effective partnerships amongst 31 partners from 17 European countries have been established aiming to lay the foundations for a new European Research Infrastructure dedicated to the conservation, management and study of European PGR, including CWR.

COMMUNICATE

Communication

T-020 Publish papers on CWR conservation and use. (KSR 13)

Number of published papers: 16

Result description: Sixteen scientific publications, inventory reports and datasets were published: (1) Aldow, A, et al. (2024). 'Checklist and prioritization of crop wild relatives in Sudan and South Sudan'. *Genetic Resources* 5(10): 81–93, (2) Castillo-Lorenzo, E, et al. (2024). 'Current status of global conservation and characterisation of wild and cultivated Brassicaceae genetic resources'. *GigaScience* 13, giae050, (3) Labokas, J, et al. (2024). 'Enhancing in situ conservation of crop wild relatives for food and agriculture in Lithuania'. *Agronomy*, 14(9): 2126, (4) Lefèvre, F, et al. (2024). 'European genetic resources conservation in a rapidly changing world: three existential challenges for the crop, forest and animal domains in the 21st century'. *Genetic Resources* 5(9): 13–28, (5) Maxted, N, et al. (2024). 'Review of crop wild relative conservation and use in West Asia and North Africa'. *Plants* 13(10): 1343, (6) Nduche, M, et al. (2024) 'Global genepool conservation and use strategy for Dioscorea (yam)'. *Biodiversity and Conservation* 33: 4155–4176, (7) Zair, W, et al. (2024). 'Projected climate change in distribution patterns of crop wild relatives under climate change: A case study of the Fertile Crescent'. *International Journal of Big Data Mining for Global Warming*, (8) Fitzgerald, H, et al. (2024). 'Crop Wild Relatives – Inventories in Nåtö Nature Reserve, Åland Islands, 2023'. *Figshare*, (9) Fitzgerald, H, et al. (2024). 'Nordic Wild Food Plant Inventory'. *Figshare*. Dataset, (10) Pedersen, O. (2024). 'Crop wild relatives in Færder National Park,

Norway. Report from mapping on seven islands in 2021'. *Figshare*, (11) Thulesen Dahl, J, et al. (2024). 'Crop Wild Relatives - Population inventories in Denmark 2023'. *Figshare*, (12) Wreth, C. (2024). 'Developing an optimized PCR protocol for microsatellite analysis in *Vaccinium myrtillus*', (13) Aldow, A, et al. (2025). 'In situ and ex situ conservation gap analyses of crop wild relatives from Northeast Africa'. *Genetic Resources and Crop Evolution*, (14) de Haro Reyes, B, et al. (2025). 'An east - west distribution of genetic diversity in Nordic populations of caraway (*Carum carvi* L.) and its consequences for conservation prioritisation'. Accepted for publication in *Conservation Genetics*, (15) Moulin, M, et al. (2025). 'A crop wild relative inventory for Brazil'. *Crop Science*, (16) Palmé, A, et al. (2025). 'Nordic Crop Wild Relative (CWR) Conservation for a More Resilient Agriculture. A report from a Nordic project 2021 – 2024'. Nordic Council of Ministers. *TemaNord* 2025:515.

T-021 Maintain and update CWR-related websites. (KSR 12)

CWR related websites maintained and updated: 1

Result description: The [Nordic CWR website](#) was maintained long-term by NordGen and members of the CWRSG; three new plant portraits were published during 2024 and a short film about CWR and genetic diversity was made available. The [ECPGR Crop Wild Relatives Working Group](#) website was maintained by the ECPGR Secretariat with information from several CWRSG members.

Scientific meetings

T-022 Organise webinars on CWR conservation. (KSR 12)

Number of scientific events organized: 1

Result description: Within the Nordic CWR project 'Conservation and Sustainable Use of Genetic Resources in the Nordic countries', a webinar series was arranged during the autumn/winter of 2024 on the topic of CWR conservation and use. The six webinars in the series explored key aspects of CWR conservation, including inventory and conservation within Nordic protected areas, seed collection challenges, specific Nordic CWR conservation

recommendations, the importance of genetic diversity for CWR conservation, the utilisation of wild genetic diversity in plant breeding, and also addressed the broader impact of climate change on plant distribution; they were recorded and are available on the [Nordic CWR webpage](#).

Acknowledgements

We thank the following organisations for providing resources or support in conservation planning, conservation implementation, policy enhancement and threat assessment: United Nations Food and Agriculture Organization, ITPGRFA, World Bank, Consultative Group on International Agricultural Research (particularly the Alliance of Biodiversity International and CIAT and ICARDA), Global Environment Facility, IUCN SSC, European Commission, including Horizon Europe Programme, European Parliament, European Cooperative Programme for Genetic Resources (ECPGR), Nordic Council of Ministers, Consejería de Medio Ambiente y Ordenación del Territorio de la Comunidad de Madrid, national governments of several countries and all partners participating in the projects referred in this report.

Summary of achievements

Total number of targets 2021–2025: 21

Geographic regions: 14 Global, 3 Africa, 6 Europe

Actions during 2024–2025:

Assess: 1 (KSR 5)

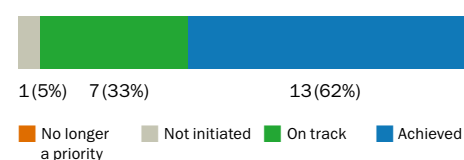
Plan: 4 (KSR 8, 9)

Act: 3 (KSR 10)

Network: 4 (KSR 1, 2)

Communicate: 3 (KSR 12, 13)

Overall achievement 2021–2025:



Suweon Treefrog
(*Dryophytes suweonensis*)
Photo: Amael Borzee



Marsh Cinquefoil
(*Comarum palustre*)
Photo: Magnus Goransson



Phallus aureolatus
Photo: Juliano Baltazar



Eurasian Griffon (*Gyps fulvus*)
Photo: Andre Botha



Black Rhino (*Diceros bicornis*)
Photo: Save The Rhino Trust Namibia



Azores Nursery Spider
(*Pisaura acoreensis*)
Photo: Paulo A.V. Borges



Black and White Snapper
(*Macolor niger*)
Photo: David B. Snyder