



# **2022 Report** of the IUCN Species Survival Commission and Secretariat



Stand-alone report IUCN SSC Conservation Genetics 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:

Segelbacher, G, and Bruford, M. 2023. 2022 Report of the Conservation Genetics 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. 4 pp.



# 2022 Report

# **IUCN SSC Conservation Genetics Specialist Group**



CONSERVATION GENETICS SPECIALIST GROUP

SOCIAL MEDIA AND WEBSITE Twitter: @congenetics Website: https://www.cgsg.uni-freiburg.de



CO-CHAIR **Gernot Segelbacher** University of Freiburg, Germany



CO-CHAIR Margaret E. Hunter US Geological Survey, Wetland and Aquatic Research Center, US

# **Mission statement**

The Conservation Genetics Specialist Group (CGSG) will establish guidance for pressing genetic policy and management issues. The CGSG also provides genetic advice on policy and management within IUCN's Species Survival Commission (SSC) and expert knowledge and assistance to SSC Specialist Groups. The CGSG will facilitate a fuller appreciation, evaluation and conservation of genetic diversity and resources at all levels, providing a forum for all stakeholders to value and conserve this crucial element of Planet Earth's life systems.

Projected impact 2021–2025

Not stated yet.

NUMBER OF MEMBERS 80

# Targets 2021-2025

# ASSESS

T-003 Develop a guidance document for the use of genetics in red listing. Status: On track

# PL AN

T-001 Publish an IUCN Guidance document for monitoring changes in genetic diversity. Status: Achieved

**T-002** Develop a guidance document on biobanks and planning for conservation of intra-specific genetic diversity. Status: On track

T-005 Develop a policy brief on Digital Sequence Information (DSI). Status: Achieved

**T-006** Develop a guidance document on how to include hybrids in conservation planning. Status: On track

# ACT

T-004 Publish a position statement for the use of genetics in defining conservation units. Status: On track

# COMMUNICATE

T-007 Raise awareness of the importance of genetic diversity in policy. Status: On track

# Activities and results 2022 PLAN

# Planning

T-001 Publish an IUCN Guidance document for monitoring changes in genetic diversity. (KSR 8)

Number of technical documents to support the development of conservation plans/ strategies: 1

Result description: The IUCN Guidance document was published on the IUCN website; get access here: https://www.iucn. org/resources/publication/selecting-species-and-populations-monitoring-genetic-diversity.

# COMMUNICATE

# Communication

T-007 Raise awareness of the importance of genetic diversity in policy. (KSR 12)

Inclusion of genetic diversity in CBD and international documents/strategies: Ongoing.

Result description: Indicators of genetic diversity have now been incorporated into the Global Biodiversity Framework, specifically listed under Goal A and Target 4.



CGSG members discussing conservation units at workshop in Edinburgh Photo: Gernot Segelbacher

# Acknowledgements

The Royal Zoological Society of Scotland hosted our workshop at Edinburgh Zoo. G-BiKE made it possible to join COP 15 and helped with dissemination.

# **Summary of achievements**

Total number of targets 2021-2025: 7 Geographic regions: 7 Global Actions during 2022:

Plan: 1 (KSR 8) Communicate: 1 (KSR 12)

### Overall achievement 2021-2025:

