



Species

ISSUE 63

2022 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 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:

Taylor, A. 2023. 2022 Report of the Afrotheria 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.

IUCN SSC Afrotheria Specialist Group



SOCIAL MEDIA AND WEBSITE

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NUMBER OF MEMBERS

17

Mission statement

The IUCN SSC Afrotheria Specialist Group (ASG) facilitates the conservation of Hyraxes, the Aardvark, Elephant Shrews or sengis, Golden Moles, Tenrecs, and their habitats by: (1) providing sound scientific advice and guidance to conservationists, governments, and other interested groups; (2) raising public awareness; and (3) developing research and conservation programmes.

Projected impact 2021–2025

When the ASG achieves all its targets, it will be able to deliver more accurate, data-driven Red List assessments for more Afrotherian species and, therefore, be in a better position to move to conservation planning, especially for priority species.

Targets 2021–2025

ASSESS

T-002 Reassess Red List categories for at least 50% of ASG species.

Status: Not initiated

T-003 Conduct surveys to determine the distribution and abundance of five Hyrax species.

Status: Not initiated

T-004 Revise taxonomy of five Hyrax species.

Status: Not initiated

T-005 Complete up to four reassessments of taxonomy of Golden Moles in species where this is necessary (e.g. *Amblysomus* and *Neamblysomus* species).

Status: On track

T-006 Develop a new non-invasive sampling method for Golden Moles, which would facilitate larger sample sizes and eventually lead to a better understanding of species distributions.

Status: On track

T-007 Collect basic data for three Golden Mole species, including geographic distributions and natural history data.

Status: On track

T-008 Integrate the monitoring of Tenrecs in the management of key protected areas with threatened species in order to track their status and threats and identify key conservation concerns.

Status: On track

T-009 Conduct genomic and phenomic studies to clarify the taxonomy and species diversity within the genera *Microgale* and *Nesogale*.

Status: On track

T-010 Develop and assess field trials for standardised camera trapping methods to determine population estimates for Giant Sengis.

Status: On track

T-011 Conduct surveys to assess distribution, abundance, threats, and taxonomic status of the Data Deficient Sengi species (Somali Sengi, *Elephantulus revoilii*; Dusky Sengi, *Elephantulus fuscus*; Dusky-footed Sengi, *E. fuscipes*; Karoo Rock Sengi, *E. pilicaudus*).

Status: On track

T-012 Assess trade of genera *Rhynchocyon* (Giant Sengis) and *Petrodromus* (Four-toed Sengi) in East Africa.

Status: Not initiated

T-013 Develop a survey method to estimate Aardvark (*Orycteropus afer*) population densities and sizes.

Status: Not initiated

T-014 Survey Aardvark populations to determine abundance, distribution, and trends.

Status: Not initiated

T-015 Conduct taxonomic studies to determine the systematics of Aardvarks, with a focus on contrasting Aardvarks from central African forests with southern African savanna Aardvarks.

Status: Not initiated



Young Rock Hyrax (*Procavia capensis*) in Ein Gedi Nature Reserve, Israel
Photo: Alex Alaman



Microgale fotsifotsy from Parc National de la Montagne d'Ambre, Madagascar
Photo: Link Olson

COMMUNICATE

T-001 Update and maintain the Afrotheria.net website.

Status: On track

T-016 Produce one Afrotheria Specialist Group newsletter every year.

Status: On track

Activities and results 2022

ASSESS

Research activities

T-005 Complete up to four reassessments of taxonomy of Golden Moles in species where this is necessary (e.g. *Amblysomus* and *Neamblysomus* species). (KSR 5)

Number of taxonomic evaluations completed: 1

Result description: Dr. Samantha Mynhardt has been working closely with Dr. Robert Asher at Cambridge University, Dr. Gary Bronner (University of Cape Town) and her colleagues at the University of Pretoria, on a new phylogeny for Golden Moles, based on genetic and morphological data. The first draft of this manuscript has been compiled and is under review by the co-authors. The manuscript has been accepted for publication in the *Zoological Journal of the Linnean Society*, and we are busy revising the final draft. Dr. Mynhardt is also working towards a full dataset for a thorough phylogenetic reassessment for *Amblysomus*. Bayesian Phylogenetics and Phylogeography (BPP) analysis was conducted in 2020, and additional samples were collected in 2021 and 2022. Dr. Mynhardt is awaiting sequencing results for the 2022 samples and will use all these data in the phylogenetic analysis.

T-006 Develop a new non-invasive sampling method for Golden Moles, which would facilitate larger sample sizes and eventually lead to a better understanding of species distributions. (KSR 5)

Non-invasive techniques demonstrated to work: 1

Result description: Together with the Endangered Wildlife Trust's Drylands Conservation Programme, Dr. Samantha Mynhardt has developed a successful new non-invasive sampling method for Golden Moles, through eDNA extraction from soil. We collected over 100 soil samples

from various sites along the west coast, and have conducted species identification through DNA amplicon sequencing in all samples. These data have helped to provide a better understanding of the distributions of four Golden Mole species along the west coast: Grant's Golden Mole (*Eremitalpa granti*) (Least Concern), Cape Golden Mole (*Chrysochloris asiatica*) (Least Concern), Van Zyl's Golden Mole (*Cryptochloris zyli*) (Endangered) and De Winton's Golden Mole (*Cryptochloris wintoni*) (Critically Endangered). The results of this project have been submitted for publication in the journal *Biodiversity and Conservation*.

T-007 Collect basic data for three Golden Mole species, including geographic distributions and natural history data. (KSR 5)

Number of species for which basic species information is increased: 1

Result description: Dr. Mynhardt and the Endangered Wildlife Trust did not find eDNA evidence of the endangered Giant Golden Mole (*Chrysochloris trevelyani*), in the Eastern Cape in 2021. However, they did observe what appeared to be Golden Mole activity, and thus still believe it exists there. They collected additional soil eDNA samples early in 2022 and are awaiting sequencing results for these samples. If the species is detected in the samples, they will upload the species records and update the associated data accordingly. An elusive lineage of the Hottentot Golden Mole (*Amblysomus hottentotus*) was found at the only site it is known to occur (Umtata) as well as additional sites in 2021. The distribution of this lineage will be updated once the taxonomy is resolved.

T-011 Conduct surveys to assess distribution, abundance, threats, and taxonomic status of the Data Deficient sengi species (Somali Sengi, *G. revollii*; Dusky Sengi, *E. fuscus*; Dusky-footed Sengi, *E. fuscipes*; Karoo Rock Sengi, *E. pilicaudus*). (KSR 5)

Number of surveys conducted: 1

Result description: Several new occurrence localities for the Somali Sengi have been documented in Djibouti. Based on trapping results, abundance seems comparable to *E. rupestris* or *Macroscelides* spp. from Namibia and South Africa. No progress on

the other species. Possible fieldwork in Uganda 2024-2025 to re-document Dusky-footed Sengi. Possible fieldwork in Ethiopia 2026-2026 to explore the Somali Sengi.

COMMUNICATE Communication

T-001 Update and maintain the Afrotheria.net website. (KSR 13)

Number of taxonomic group web pages updated: 0

Result description: The Afrotheria.net website continues although we have not made any updates during 2022.

T-016 Produce one Afrotheria Specialist Group newsletter every year. (KSR 13)

Number of newsletters published: 1

Result description: We received a few articles (3) for the newsletter during 2022 so have decided to publish it in 2023. Obtaining sufficient articles is a growing issue and we are considering whether we should switch from an annual newsletter to publishing individual articles as and when they are received.

Acknowledgements

We thank our Afrotheria Specialist Group members, all of whom are volunteers, who contributed towards ongoing work on our species and those who contributed towards the annual newsletter. In particular, we are grateful to our section coordinators, Samantha Mynhardt, Lee Koren, Thomas Lehmann, Voahangy Soarimalala, Link Olson and Steven Heritage, as well as our newsletter editor P.J. Stephenson. We also thank Avian Designs for supporting our website at discounted rates.

Summary of achievements

Total number of targets 2021–2025: 16

Geographic regions: 1 Global, 15 Africa

Actions during 2022:

Assess: 7 (KSR 5)

Communicate: 2 (KSR 13)

Overall achievement 2021–2025:

