IUCN SSC Species Survival Commission

Species

ISSUE 64

2023 Report of the IUCN Species Survival Commission and Secretariat

Stand-alone report
IUCN SSC Afrotheria 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 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 standalone 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 Authory 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 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. 2024. 2023 Report of the Afrotheria Specialist Group. In: IUCN SSC and Secretariat. *2023 Report of the IUCN Species Survival Commission and Secretariat.* Gland, Switzerland: IUCN. 6 pp.

2023 Report

IUCN SSC Afrotheria Specialist Group

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NUMBER OF MEMBERS
17

SOCIAL MEDIA AND WEBSITE
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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-based Red List assessments for more Afrotherian species and, therefore, be in a better position to move on to conservation planning, especially for priority species.

Targets 2021–2025

ASSESS

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

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: Achieved

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, *E. 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

Somali Sengi (*Galegeeska revoilii*)
at the DIgri Plateau in the Republic of Djibouti
Photo: Houssein A. Rayaleh

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

PLAN

T-017 Initiate planning for conservation action for De Winton's Golden Mole and van Zyl's Golden Mole (*Cryptochloris* spp.).
Status: On track

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 2023

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: A new phylogeny for golden moles and tenrecs, based on genetic and morphological data, was produced. The manuscript was published in the *Zoological Journal of the Linnean Society* (Bronner, G.N. *et al*. 2023). The new phylogeny strongly supports the placement of *Calcochloris obtusirostris* as the sister taxon of the two species of *Chrysospalax*, *C. trevelyani* and *C. villosus* Smith, 1833. It also supports *Carpitalpa arendsi* as the sister taxon to *Neamblysomus*, a clade which, in turn, forms the sister taxon to *Amblysomus*. The species *stuhlmanni*, long regarded as part of the genus *Chrysochloris* (Bronner and Jenkins, 2005), appears instead as a sister taxon to a *C. asiatica–Cryptochloris* clade. The authors elevate *Kilimatalpa* (Lundholm 1954) from subgeneric to generic status, leaving both generic names monotypic for extant species, in reference to *Kilimatalpa stuhlmanni* and *C. asiatica*. Furthermore, they define the Amblysominae as the group encompassing *Amblysomus* and its sister taxon *Neamblysomus–C. arendsi*. They support the intrageneric relationships of *Amblysomus* as articulated by Mynhardt, S. *et al*. (2015), in particular that the species *marleyi* and *meesteri* Bronner, 2000, previously regarded as subspecies of *A. 'hottentotus'*, comprise the sister clade to all other species of *Amblysomus*. This is also consistent with the treatment of *marleyi* as a separate species of *Amblysomus* by Bronner (1995a, 2000). Also, in support of Mynhardt *et al*. (2015), they place *Amblysomus corriae* Thomas, 1905, the only species of *Amblysomus* broadly distributed throughout the Western Cape province of South Africa, as the sister taxon to the remaining non-*meesteri marleyi* species of *Amblysomus*. Their data do not address the phylogeography of *A. 'hottentotus'* populations outside of the Eastern Cape but are also consistent with Mynhardt *et al*. (2015) by placing *A. septentrionalis–A. robustus* as the most nested clade within the genus, sister to *A. h. hottentotus sensu stricto* (i.e. populations near Grahamstown and King Williams Town in the Eastern Cape).

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: 0

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. They collected over 100 soil samples from various sites along the West Coast and conducted species identification through eDNA 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*) (LC), Cape Golden Mole (*Chrysochloris asiatica*) (LC), Van Zyl's Golden Mole (*Cryptochloris zyli*) (EN) and De Winton's Golden Mole (*Cryptochloris wintoni*) (CR). The results of this project were published in the journal Biodiversity and Conservation (Mynhardt, S. et al. 2023). This study revealed the presence of the "lost" De Winton's Golden Mole, leading to a new ASG Target (Target 4).

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. (KSR 5)

Number of protected areas where monitoring is integrated into management plans: 0

Result description: In 2022 and 2023, fieldwork on tenrecs was conducted in Andohahela, Marojejy, and Ranomafana National Parks; Ambohitantely Special Reserve; and the Andrafiamena-Andavakoera Protected Area. However, these were conducted by Association Vahatra as part of a Madagascar-wide monitoring program and have not been officially integrated into formal management plans.

T-010 Develop and assess field trials for standardised camera trapping methods to determine population estimates for Giant Sengis. (KSR 5)

Number of field trials conducted: 0

Result description: ASG member Francesco Rovero is still involved with camera trapping projects in some areas of East Africa and has coauthored/published a standardized protocol for sharing camera trap data. However, no work has specifically targeted Giant Sengis. In our opinion, this target should be retained for the coming years.

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

Number of surveys conducted: 0

Result description: Two field expeditions in 2023 documented multiple new localities for the Somali Sengi in Djibouti and species abundance in that country seems encouraging. Human-caused threats to sengis in Djibouti are minimal for the foreseeable future. The past year saw no progress for this target for other sengi species. This work is still necessary and feasible providing funding is available.

T-012 Assess trade of genera *Rhynchocyon* (Giant Sengis) and *Petrodromus* (Four-toed Sengi) in East Africa. (KSR 5)

Number of assessments conducted: 0

Result description: Although there was no progress during 2023, there is prior evidence that both *Rhynchocyon* and *Petrodromus* are traded in Kenya, but at present, we have lost contacts that might help us document the magnitude of the trade. We suggest that ASG keeps this target for the coming years.

PLAN

Planning

T-017 Initiate planning for conservation action for De Winton's Golden Mole and van Zyl's Golden Mole (*Cryptochloris* spp.). (KSR 8)

Number of species conservation plans/strategies developed: 0

Result description: A recent study revealed the presence of the "lost" De Winton's Golden Mole on the Northern Cape West Coast (Mynhardt, S. et al. 2023). The Endangered Wildlife Trust (EWT) received funding from the Rainforest Trust and Prince Bernhard Nature Fund to raise awareness about the Critically Endangered golden mole and investigate options for conservation action. The EWT is now pursuing funding to support conservation efforts for both *Cryptochloris* species, in particular De Winton's.

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 as the previous year.

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

Number of newsletters published: 1

Result description: The newsletter was published in 2023.

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

De Winton's Golden Mole *(Cryptochloris wintoni)*,
South Africa west coast
Photo: Nicky Souness

Acknowledgements

We thank our Afrotheria Specialist Group members, all of whom are volunteers, who contributed towards ongoing work on our species and to those who contributed towards the annual newsletter. In particular, we are grateful to our section coordinators, Samantha Mynardt, 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

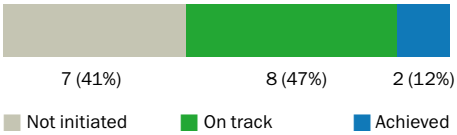
Total number of targets 2021–2025: 16

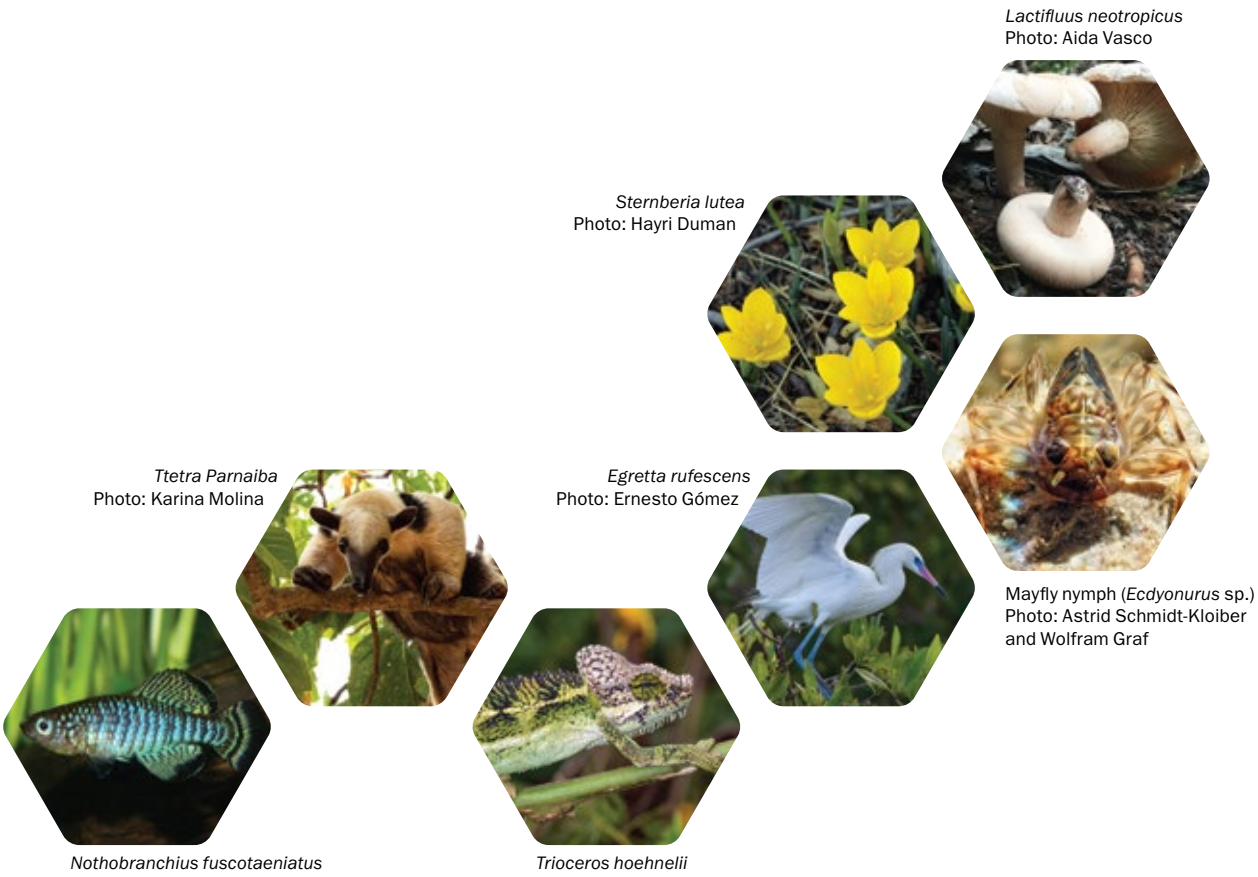
Geographic regions: 1 Global, 15 Africa

Actions during 2023:

Assess: 6 (KSR 5)
Plan: 1 (KSR 8)
Communicate: 2 (KSR 13)

Overall achievement 2021–2025:





Lactifluus neotropicus
Photo: Aida Vasco

Sternberia lutea
Photo: Hayri Duman

Ttetra Parnaiba
Photo: Karina Molina

Egretta rufescens
Photo: Ernesto Gómez

Mayfly nymph (*Ecdyonurus* sp.)
Photo: Astrid Schmidt-Kloiber and Wolfram Graf

Nothobranchius fuscotaeniatus
Photo: Csenge Nagy

Trioceros hoehnelii
Photo: Christopher V. Anderson