



### 2021 Report

# IUCN SSC Species Monitoring Specialist Group



SOCIAL MEDIA AND WEBSITE

Twitter: @Monitor\_Species Website: https://www.speciesmonitoring.org



CHAIR P.J. Stephenson

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#### NUMBER OF MEMBERS

86

#### **Mission statement**

The IUCN SSC Species Monitoring Specialist Group (SMSG) aims to enhance biodiversity conservation by improving the availability and use of data on species populations, their habitats and threats.

#### Projected impact 2021–2025

The Species Monitoring Specialist Group helps build capacity for biodiversity monitoring in a range of stakeholder groups, from government departments to companies to NGOs, and also in taxonomic Specialist Groups. That increased capacity for data access and use will improve adaptive management of conservation projects, which in turn will improve the status of species. However, we cannot predict precisely how many species will have their conservation status improved as a result of our work.

#### Targets 2021–2025 ASSESS

**T-001** Enhance species monitoring and Red List data quality and volume through the testing of monitoring methods and the development and dissemination of lessons, tools and guidelines.

**T-002** Support the development and testing of the Green Status of Species (GSS).

T-003 Integrate the IUCN Red List Index and the Green Status of Species into monitoring tools and guidelines developed by the group so as to encourage uptake by civil society and business as well as countries.

#### **NETWORK**

**T-004** Develop and implement partnerships that result in projects and products that enhance species monitoring.

**T-005** Engage IUCN members and Secretariat teams in group projects.

## Activities and results 2021 ASSESS

#### **Green Status**

T-002 (KSR 6)

Number of new Green Status of Species assessments completed: 2

Result description: The Chair contributed to two GSS assessments (African Penguin, *Spheniscus demersus*; Sahafary Sportive Lemur, *Lepilemur septentrionalis*) included in the latest IUCN Red List (2021-3) as a result of an SMSG project.

#### **Red List**

T-003 (KSR 7)

Number of NGOs and companies using group tools and guidelines that advocate using the Red List Index or Green Status of Species:  $\bf 1$ 

Result description: The group's ongoing project with the IUCN Global Business and Biodiversity Programme has led to the development of a biodiversity strategy and monitoring guidelines for the coffee company Nespresso, with encouragement to use both the Red List and Green Status of Species (see Stephenson & Carbone, 2021c, below).

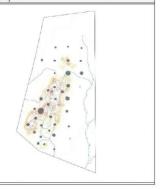
#### Research activities

T-001 (KSR 5)

Number of scientific publications about species research that acknowledge SSC affiliation: 9

Result description: This year there were major advances in testing and comparing monitoring methods at project sites (e.g. Shai Hills, Ghana) and through literature reviews. There was also major progress in the development of monitoring guidelines with the Chair being lead author on the IUCN Guidelines for planning and monitoring corporate biodiversity performance. A research project supervised by the Chair and led by Ines Moreno explored biodiversity data and capacity gaps and causes in East Africa (results to be published in 2022). A grant was also secured from the Swiss government to start a new research project led by the group Chair that will lead to the development of a decision support tool to help multiple stakeholders access





A bushbuck captured by a camera trap in Shai Hills Reserve Ghana, and the species distribution map the speciliast group has helped develop for reserve managers Photo: Kofi Amponsah-Mensah

biodiversity data and tools. Key papers this year as a direct result of the Chair's work or group projects included: (1) Badalotti, A., et al. (2021). 'Improving the monitoring of conservation programmes: lessons from a grant-making initiative for threatened species'. *Oryx* 56:288–294. https://doi. org/10.1017/S0030605320000538; (2) Grace, M.K., et al. (2021). 'Testing a global standard for quantifying species recovery and assessing conservation impact'. Conservation Biology 35(6):1833–1849. https://doi.org/10.1111/cobi.13756; (3) Hochkirch, A., et al. (2021). 'A strategy for the next decade to address data deficiency in neglected biodiversity'. Conservation Biology 35(2):502-509. https://doi.org/10.1111/cobi.13589; (4) Moussy, C., et al. (2022). 'A quantitative global review of species population monitoring'. Conservation Biology 36: e13721. https://doi.org/10.1111/cobi.13721; (5) Stephenson, P.J. (2021). 'Monitoring should not be a barrier to conservation success: a response to Sanders et al.'. *Oryx* 55(5):656. https://doi.org/10.1017/ S0030605321000624; (6) Stephenson, P.J. and Carbone, G. (2021a). Guidelines for planning and monitoring corporate biodiversity performance. Gland, Switzerland: IUCN. https://doi.org/10.2305/IUCN. CH.2021.05.en; (7) Stephenson, P.J. and Carbone, G. (2021b). 'New guidelines allow companies to plan and monitor biodiversity performance at the corporate level'. Oryx 55(4):491-492. https://doi.org/10.1017/ S0030605321000442; (8) Stephenson, P.J. and Carbone, G. (2021c). Nespresso and Biodiversity. Gland, Switzerland: IUCN. Available at: Error! Hyperlink reference not valid.https://www.sustainability. nespresso.com/sites/site.prod.sustainability.nespresso.com/files/Nespresso-And-Biodiversity-2021.pdf; (9) Zwerts, J.A., et al. (2021). 'Methods for wildlife monitoring in tropical forests: Comparing human observations, camera traps, and passive acoustic sensors'. Conservation Science and Practice 3:e568. https://doi.org/10.1111/ csp2.568. The Chair also presented Group work and promoted species monitoring at several conferences including: (1) 'An overview of modern biodiversity monitoring tools: challenges and opportunities',

symposium on Innovations in Biodiversity Monitoring for Conservation (online), International Congress for Conservation Biology, Kigali, Rwanda, December 2021; (2) 'The role of agricultural ecosystems in biodiversity conservation', Landscapes for Forests and Food plenary (online), 2021 Global Landscapes Forum Climate: Forest, Food and Finance - Frontiers of Change conference, Glasgow, Scotland, November 2021; (3) Launch of IUCN Biodiversity Guidelines for Business, We Value Nature Ten Day Challenge, webinar, March 2021; (4) 'The use of environmental DNA in monitoring aquatic biodiversity for conservation: a review of challenges and opportunities', DNAquanet Online Conference, March 2021.

#### **NETWORK**

#### **Capacity building**

T-004 (KSR 1)

Number of partners engaged in group projects: 2

Result description: New partnerships were established in 2021 with: (1) the cruise ship company Viking; the Chair was invited to join the research advisory group and has now developed (and received Viking approval for) a new project due to start in 2022 with two other group members (Jessica Meeuwig and Denise Risch) and their institutions (Blue Abacus and the Scottish Association for Marine Science); (2) the University of St Gallen, Switzerland, for a new research project with the Chair and two group members (Maria Cecilia Londono and Yaa Ntiamoa-Baidu).

#### Proposal development and funding

T-005 (KSR 3)

Number of species monitoring initiatives implemented together with IUCN members, national/regional committees and Secretariat: 2

Result description: Business guidelines for biodiversity planning and monitoring were developed with the IUCN Global Business and Biodiversity Programme at the IUCN Secretariat. The project to assess global monitoring schemes published its results (see Moussy et al., 2021, above), the result of a collaboration with BirdLife International, an IUCN Member.

#### Acknowledgements

We are extremely grateful to the following for their financial support to projects involving the Group in the last few years: Audemars-Watkins Foundation (through the Centre for African Wetlands); Cambridge Conservation Initiative Collaborative Fund for Conservation (through BirdLife International); Global Wildlife Conservation (now Re:wild) (through P.J. Stephenson); National Geographic Society (through P.J. Stephenson); Nespresso, Boskalis and the Alcoa Foundation (through the IUCN Business and Biodiversity Programme); Swiss Network for International Studies (through the University of Lausanne). We are also greatly indebted to the following for informally hosting the Chair: Dr Luca Fumagalli, Laboratory for Conservation Biology, Department of Ecology & Evolution, University of Lausanne, Switzerland, for hosting the Chair since August 2020; Prof. Jaboury Ghazoul, Ecosystem Management Group, Department of Environmental Systems Science, ETH Zürich, Zürich, Switzerland, for hosting/co-hosting the Chair from September 2017 to January 2019; Dr Thomas Brooks, Science and Economic Knowledge Unit, IUCN, Gland, Switzerland, for hosting/co-hosting the Chair from January 2017 to January 2018. We also acknowledge our immense gratitude to Angela Ruiz de Paz and Laura van Galen for their support to the group's work as volunteers.

#### **Summary of achievements**

Total number of targets 2021–2025: 5

Geographic regions: 5 Global

Actions during 2021: Assess: 3 (KSR 5, 6, 7) Network: 2 (KSR 1, 3)

Overall achievement 2021-2025:

