

IUCN SSC Species Monitoring Specialist Group

2020 Report



P.J. Stephenson

Chair

P.J. Stephenson

Location/Affiliation

Laboratory for Conservation Biology,
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Number of members

40

Social networks

Twitter: @Monitor_Species
Website: www.speciesmonitoring.org



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 for the 2017-2020 quadrennium

By 2020, the capacity of the SSC network and its partners for data collection, analysis, sharing and use is enhanced, resulting in at least ten significant initiatives starting to fill identified taxonomic and geographic gaps in species data needed for IUCN Red List assessments. We therefore expect Red List assessments for at least 30 species to use richer data sets.

Targets for the 2017-2020 quadrennium

Assess

Research activities: (1) review of IUCN Save Our Species (SOS) portfolio data completed and taxonomic and geographic trends identified; (2) survey of SSC taxonomic Specialist Groups completed and trends in taxonomic and geographic data gaps, as well as Specialist Group monitoring capacity needs, identified; (3) at least one scientific paper published annually promoting the goals of the group and IUCN data products; (4) at least one project implemented per year to demonstrate monitoring tools and best practices and deliver the group's strategic plan; (5) at least three monitoring frameworks produced for specific uses (e.g. protected areas, Key Biodiversity Areas, business, restoration, etc.); (6) a database of monitoring systems, tools and data sources is available online; (7) at least one IUCN data product per year is improved through input from the SMSG.

Act

Technical advice: at least eight monitoring plans are developed for taxonomic Specialist Groups, including at least two for taxa previously unmonitored systematically.

Network

Capacity building: at least one training webinar per year offered to SSC groups and their partners to improve capacity for monitoring.

Proposal development and funding: funding secured annually (CHF) for core and project costs.

Activities and results 2020

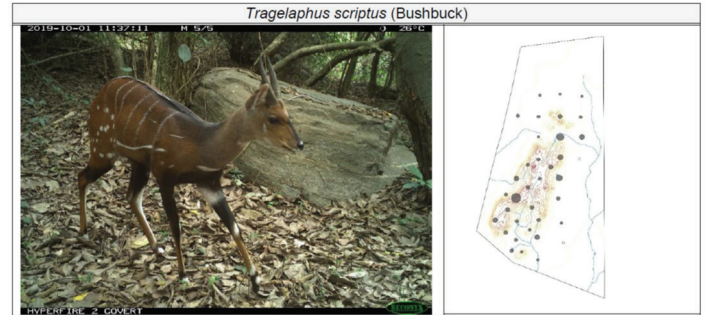
Assess

Research activities

i. In 2020, seven papers were published by the Chair with various group members on biodiversity monitoring issues and IUCN data products: (1) Addison, P.F.E., et al. (2020). 'Bringing sustainability to life: A framework to guide biodiversity indicator development for business performance management'. *Business Strategy and the Environment* 29(8):3303–3313. <https://doi.org/10.1002/bse.2573>; (2) Akçakaya, H.R., et al. (2020). 'Assessing ecological function in the context of species recovery'. *Conservation Biology* 34(3):561–571. <https://doi.org/10.1111/cobi.13425>; (3) Hochkirch, A., et al. (2020). '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) Stephenson, P.J. (2020). 'Technological advances in biodiversity monitoring: applicability,



Working with companies like Enel, and seeing the potential environmental impacts of power plants like this one in Chile, helped the group's Chair & Giulia Carbone of the IUCN Business & Biodiversity team to develop IUCN Guidelines for Planning & Monitoring Corporate Biodiversity Performance which will be published in March 2021
Photo: P.J. Stephenson



The group's project in Ghana, led by the Centre for African Wetlands, has enhanced biodiversity monitoring in Shai Hills Reserve by training Wildlife Department staff to use camera traps which are now delivering results
Photo: Kofi Amponsah-Mensah

opportunities and challenges'. *Current Opinion in Environmental Sustainability* 45:36–41. <https://doi.org/10.1016/j.cosust.2020.08.005>; (5) Stephenson, P.J., et al. (2020). 'The use of traditional and modern tools for monitoring wetlands biodiversity in Africa: challenges and opportunities'. *Frontiers in Environmental Science* 8:61. <https://doi.org/10.3389/fenvs.2020.00061>; (6) Stephenson, P.J. and Stengel, C. (2020). 'An inventory of biodiversity data sources for conservation monitoring'. *PLoS ONE* 15(12):e0242923. <https://doi.org/10.1371/journal.pone.0242923>; (7) Stephenson, P.J., et al. (2020). 'Testing the IUCN Green List of Species'. *Oryx* 54(1):10–11. <https://doi.org/10.1017/S0030605319001200>. (KSR #32)

ii. SMSG projects implemented in 2020 were:
(1) A Global Audit of Biodiversity Monitoring;
(2) Identifying Data Gaps and Monitoring Challenges in Project Portfolio Reporting;
(3) Biodiversity Monitoring and Reporting Frameworks for Business;
(4) Improving capacity for protected area management in Ghana;
(5) Developing and Testing IUCN Green List Standards;
(6) An Inventory of Global Data Sources for Conservation Monitoring. Updates are on the SMSG website at: <https://www.speciesmonitoring.org/projects.html>. (KSR #32)

iii. IUCN biodiversity guidelines for business were drafted and peer reviewed; monitoring guidelines were produced for Alcoa and Boskalis; input was provided into the standards for the IUCN Green Status of Species and the IUCN Green List of Protected and Conserved Areas. (KSR #14)

iv. A database for data sources was published in a science journal (*PLoS ONE*) and posted online; a database of monitoring systems was published in a science journal (*Conservation Biology*) and will be posted online in early 2021; a database of monitoring tools was produced as part of business guidelines and will be published and posted online in early 2021.

v. The Chair is an active member of the IUCN Green Status of Species Task Force and in 2020 he helped finalise the standard and the guidelines; he is also a member of the Green List Working Group of the IUCN World Commission on Protected Areas and in 2020 provided input into the standard for the IUCN Green List of Protected and Conserved Areas. (KSR #14)

Network

Proposal development and funding

i. CHF 120,000 was secured in 2020 for work on the business project and the Ghana project. (KSR #19)

Acknowledgements

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Summary of activities 2020

Components of Species Conservation Cycle: 2/5

Assess **5** ██████████

Network **1** █

Main KSRs addressed: 14, 19, 32

Resolutions addressed: WCC-2012-Res-41

KSR: Key Species Result