IUCN SSC Red List Committee

2020 Report

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Chair

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Location/Affiliation

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Number of members

26

Mission statement

Provide information and analyses on the status, trends and threats to species in order to inform and catalyse action for biodiversity conservation.

Projected impact for the 2017-2020 quadrennium

The goal of the IUCN Red List of Threatened Species is to provide information and analyses on the status, trends and threats to species in order to inform and catalyse action for biodiversity conservation.

This goal includes the 'traditional' role of the IUCN Red List in identifying particular species at risk of extinction. While the role of the IUCN Red List in underpinning priority-setting processes for single species remains of critical importance, the goal has been expanded to encompass the use of data from the IUCN Red List for multi-species analyses in order to identify and monitor trends in species status and to catalyse appropriate conservation action.

To achieve this goal, the IUCN Red List has three main objectives:

(1) To establish a baseline from which to monitor the change in status of species;

(2) To provide a global context for the establishment of conservation priorities at the local level;

(3) To monitor, on a continuing basis, the status of a representative selection of species (as biodiversity indicators) that cover all the major ecosystems of the world.

With these objectives in mind, the IUCN Red List Committee (RLC) sets forth ten key strategic results as its measures of success and which it aims to achieve by year 2020:

(1) IUCN Red List taxonomic and geographic coverage is expanded to achieve the Barometer of Life target of 160,000 species assessed;

(2) More IUCN Red List Assessments are prepared at national and, where appropriate, at regional scales;

(3) The IUCN Red List Index is widely used as an effective biodiversity indicator;

(4) The IUCN Red List is a scientifically rigorous tool for conservation;

(5) IUCN Red Listing capacity is built through expanded training programmes;

(6) The IUCN Red List is underpinned by cutting-edge information management technologies;

(7) The IUCN Red List is used effectively to inform policy and action;

(8) The IUCN Red List is widely communicated and recognised;

(9) The IUCN Red List is sufficiently and sustainably financed;

(10) Strategic oversight is provided to the IUCN Red List.

Targets for the 2017-2020 quadrennium

Assess

Green status: implement processes for documenting conservation success ('green listing').

Red List: (1) complete global comprehensive assessments for 58,836 taxa; (2) complete global non-comprehensive assessments for 56,434 taxa; (3) complete global sampled assessments for 15,765 taxa; (4) conduct core reassessments for long-term indicator groups (mammals, birds, amphibians, corals, cycads, conifers), totalling 25,790 taxa; (5) complete comprehensive reassessments to produce Red List Indices for key new indicator taxa,

Cattleya araguaiensis in its original habitat at Parque Estadual do Cantão, Araguaia river basin, Tocantins State. Expedition to detect at-risk species occurring inside PAT Cerrado Tocantins area, Brazil
Photo: Eduardo Fernandez

focusing on marine, freshwater and invertebrate taxa, totalling 3,728 taxa; (6) undertake reassessments for selected regions where appropriate policy or implementation mechanisms, adequate funding and capacity exist (e.g. Europe, Africa), totalling 4,352 taxa; (7) involve at least 10 new priority countries, 80% of which are mega diverse, in capacity building / twinning activities / and conducting assessments that feed into national decision-making processes (5,000 taxa); (8) conduct sampled reassessments for speciose taxonomic groups, totalling 10,500 taxa (representing ~420,000 taxa); (9) improve the IUCN Species Information Service (SIS) interface and make it easier to use (building on SIS Connect), including new developments (such as dynamic publishing); (10) develop SIS to allow for increased uptake and use at the national level; (11) enhance the functionality of SIS for storing, managing, manipulating and querying data; (12) update key existing documents and tools for supporting global and regional Red Listing; (13) produce new guidance notes to support the Red Listing process; (14) successfully renew and strategically grow the Red List Partnership (three new full partners and new parallel partnership process instituted); (15) enhance the governance structures (Red List Committee and working groups meeting annually and working intersessionally) to ensure the targets in this strategic plan are met; (16) develop and maintain a searchable database for all National and Regional Red Lists and link it to the global IUCN Red List; (17) ensure IUCN Red List training resources are regularly updated, augmented, translated into additional languages and made available online.

Plan

Policy: (1) ensure Red List data in the Integrated Biodiversity Assessment Tool (IBAT) are used by 80% of international financial institutions (IFIs, etc.) in environmental safeguard screening policies and by 50% of the net worth of Fortune 500 companies to reduce biodiversity risk in investment decisions and business operations; (2) ensure 90% of governments use Red List data in National Biodiversity Strategies and Action Plans (NBSAPs) and all species conservation plans and funding mechanisms make effective and appropriate use of Red List data; (3) ensure Red List data and the Red List Index are profiled appropriately in all assessments and processes informing the post-2020 biodiversity framework and its associated mission, targets and indicators.

Network

Capacity building: (1) increase the number of Red List assessors and Red List trainers (assessors by 250 via online training and 400 via workshop training; 35 trainers trained); (2) ensure all IUCN and Red List Partner staff directly involved in managing Red List assessments and all SSC Red List Authorities are trained and have passed the Red List online exam.

Proposal development and funding: (1) continue to explore online donation campaigns as a mechanism for generating targeted support for specific re/assessment initiatives; (2) ensure the Red List website includes more proactive requests asking users downloading data to consider making a nominal donation to support continuing making the data available.

Synergy: (1) ensure the IUCN Red List improves linkages with peer organisations and agencies including other biodiversity knowledge products; (2) implement a mechanism for engaging with institutions or organisations not currently meeting all the admission criteria for full Red List Partners, nor the strategic commitment, but interested in making a substantial financial or in-kind contribution.

Communicate

Communication: (1) enhance the credibility of the IUCN Red List in the academic and scientific community (40 peer reviewed publications, symposia at Society for Conservation Biology meetings, DOIs continue); (2) ensure the IUCN Red List enhances its external communication potential and effectiveness.

Activities and results 2020

Assess

Green status

i. In 2020, the RLC finalised the relationship between Red List and 'Green Status of Species' (GSS) whereby the GSS standard was formally approved by the RLC. The GSS standard was also unanimously adopted by IUCN Council and it has been signed off by IUCN and given an ISBN. The GSS standard will be translated into Spanish and French. The GSS standard has been tested for ~200 species covering a wide range of realms and taxa. (KSR #11)

Red List

i. Progress has been made on completing the global reptile assessment and most of the freshwater fish assessment; good progress has been made on plant and invertebrate groups funded by the IUCN–Toyota Red List Partnership. A number of freshwater and terrestrial invertebrate groups have not progressed due to lack of funding. (KSR #1)

ii. While we may not reach the Barometer of Life target, good progress is being made overall with non-comprehensive assessments. The Global Tree Assessment has helped to boost the plant numbers. (KSR #1)

iii. First sampled assessments completed, with monocots, legumes, cephalopods and bryophytes on track for 2020. Pteridophytes, butterflies, dung beetles and ascomycete fungi are behind schedule. (KSR #1)

iv. There is progress with reassessments of mammals, birds, amphibians, corals, cycads and conifers with the hope to complete all reassessments by the end of 2020. However, some delays may be expected due to COVID-19. (KSR #1)

v. We are behind schedule conducting reassessments to produce Red List Indices (RLIs) for key new indicator taxa. Only groupers have been reassessed; cartilaginous fish, tuna and billfish, and seagrasses are on track for reassessment. Freshwater decapods, mangroves, horseshoe crabs and bumble bees are behind schedule. (KSR #3)

vi. Regional assessments for Europe and the Mediterranean are completed (7,606 species). (KSR #2)

vii. Neil Cox was appointed by the RLC as a Co-Chair of the National Red List Working Group (NRLWG). The NRLWG, through a series of consultations with the SSC Chair's Office, RLC and the SSC Steering Committee, will be piloting the establishment of a new SSC Specialist Group called the National Species Specialist Group (NSSG) in the 2021–2025 IUCN quadrennium. The terms of reference of the NSSG have been developed and pilot countries are at different stages of establishing the SSC NSSG. We are reinvigorating the national Red List website. (KSR #2)

viii. Sampled reassessments conducted: monocots, eucots (Legumes) and reptiles are on track for back cast assessment; bryophytes, pteridophytes, and reef building corals are behind. (KSR #1)

ix. Quite a bit of work has gone into improving the experience of users into SIS, which is not always very easy due to its underlying technology. A major achievement has been SIS Connect, which allows data from external databases to be submitted. There has been some work carried out to look into how SIS Connect itself can be improved to support a lighter easy interface to SIS, but this has not materialised due to a lack of resources and prioritisation. We have also added some additional features like better view of the criteria calculator, easier navigation and arrangement of assessments, and a new Red List Index module. With the new Red List website, we have also developed quicker mechanisms for publishing which is mostly automated. Some other developments include change in extinction date, five-year rules, SIS integrity checks, taxonomic management update, and better management of the Red List Index process, in a new module. (KSR #6)

x. SIS is being used to undertake and, in some cases, to store national assessments for various countries: Greece – national endemics (new project being developed); Republic of Korea – national endemics (project with the Korean Ministry of the Environment); Malawi – national Red List project coordinated by the South African National Biodiversity Institute (SANBI) and BirdLife South Africa (still in test phase); North Macedonia – national Red List project; Oman – new project which will use SIS to undertake assessments of amphibians and reptiles in that country; South Africa – SANBI uses SIS for some of their national assessments of animal groups (butterflies, mammals, freshwater fish, dragonflies and reptiles); United Arab Emirates – national assessments of birds, mammals, amphibians and reptiles, marine fish and plants are done using SIS and the data is stored for them in SIS; Mozambique – project coordinated by the Wildlife Conservation Society, SANBI and Royal Botanic Gardens, Kew. SIS Connect is being used by countries with their own national Red List process and database to submit global assessments of endemics: Brazil (CNCFlora and potentially ICMBIO), Colombia, Cuba (through the Cuban Plant Specialist Group), New Caledonia (for plants and reptiles), South Africa (SANBI for plants and spiders), Turkey and the US (NatureServe for North American plants). There is also support for assessments in languages other than English, like French, Spanish and Portuguese. The above is not a comprehensive list, but the main instances. (KSR #6)

xi. We are working on adding additional fields and checks (like the integrity checker) to make it easier to validate data in SIS. The taxonomy module has been updated to enable better management of taxonomy. There are a lot more admin reports, which have been added to SIS to enable the Red List Unit to check on data and filter out issues. Reference management is being worked on to duplicate references. SIS Connect makes it easier to bring in bulk assessments from external sources. Partial updates in SIS Connect is being worked on, so that assessors are able to update only specific fields in existing drafts, therefore making the process of manipulating and updating data easier. SIS Connect also has an export feature to enable multiple data extraction types. Better management of data in SIS is an area which is constantly being addressed, with the help of the Red List Unit and the Red List Technical Working Group. (KSR #6)

xii. The Red List Rules of Procedure document has been revised with clear guidance on who can be listed as an assessor in a Red List assessment and providing more details and clarity on the roles of the Red List Authority Coordinator. (KSR #6)

xiii. The Red List Rules of Procedure document has been revised which includes two annexes: (i) taxonomic guidelines and (ii) Conflict of Interest policy and procedures. Additionally, several amendments have been made to the Red List process. (KSR #6)

xiv. The Red List partner agreement is up for revision by the end of the quadrennium and discussions are ongoing to investigate changes and solutions to expanding the Red List Partnership model. Albuquerque BioPark was formally accepted as a Red List partner, bringing the total number of Red List partners to 12. The Red List partnership encompasses 12 partner institutions with the addition of three new partners in the 2017–2020 IUCN quadrennium. (KSR #10)

xv. The Red List Committee convenes twice a year (i.e. face to face and virtually) to track progress on the delivery of the Red List Strategic Plan. In 2020, a face-to-face RLC meeting was held from 10–14 May 2020 and a virtual meeting was held on 9 December 2020. Other working groups and task force meetings were held in 2020 to provide strategic guidance on Red List issues. (KSR #10)

xvi. A developer has been identified to redevelop the National Red List website and database to be easier to maintain but resources and capacity have been extremely limited to move this forward. Funding has been secured for a development team (Octophin Digital) to start redesigning the database to make it more user friendly and transform it into a more practical tool to link to a redesigned website with improved functionality for the regional and national Red List community. (KSR #6)

xvii. IUCN Red List training resources: (1) The final exams were made available in French and Spanish; (2) all course modules and lessons were reviewed and updated (in English, French and Spanish); (3) module 3 (the largest module focusing on the Red List Categories and Criteria) was completely overhauled to fix an ongoing bug issue caused by the Conservation Training website being updated several times. All lessons in this module are now fully functional again (in English, French and Spanish); (4) module 5 (IUCN Red List Mapping Standards) was completely rewritten and rebuilt to bring

this in line with the current Mapping Standards guidelines; (5) the Red List Unit initiated discussions with the IUCN SSC Climate Change Specialist Group to begin the process of developing a new lesson for the course, focusing on how to incorporate climate change modelling in Red List assessments. This work was not completed in the 2016–2020 time period and carries over to 2021–2025. (KSR #6)

Plan

Policy

i. The Red List is maintained as a core offering through IBAT, to nearly 100 commercial users. (KSR #7)

ii. About 50% of governments made reference to the IUCN Red List in their sixth National Reports to the Convention on Biological Diversity. (KSR #7)

iii. Red List data were profiled in the Species Threat Abatement and Restoration (STAR) metric, which is published in the journal *Nature Ecology and Evolution*. In this manuscript, Red List data were used to develop a metric for spatially explicit contributions to science-based species targets post 2020. The development of STAR, which draws from Red List data (category, range, elevation, habitats and threats categorisation schemes), allows countries and non-state actors to develop science-based targets for biodiversity at the species level under the post-2020 framework. Red List data have informed the post-2020 biodiversity framework, and Red List and Red List Index data were profiled in the 2020 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) global report. A comprehensive evaluation of mammal and bird species extinctions averted since 1993 has been completed. (KSR #7)

Network

Capacity building

i. Online IUCN Red List course: 1,464 people successfully completed the Global Red List Assessor course (modules 1–6 of the online course); 1,323 people successfully completed the Regional Red List Assessor course (modules 1–3 and 7 of the online course); 1,205 people successfully completed the Global and Regional Red List Assessor course (modules 1–7 of the online course). (KSR #5)

ii. IUCN Red List Assessor Training workshops: The Red List Trainer network facilitated (1) 46 full-length Red List Assessor Training workshops (3–4 day workshops), involving at least 1,098 participants (some data missing for one of these workshops); (2) 36 short Red List training workshops (1–2 days long), involving 979 participants; (3) 37 Red List sessions (<1 day long) attached to other meetings, conferences and workshops, which were attended by at least 711 people (data missing for one of these sessions).

iii. IUCN Red List Trainers' course: five Red List Trainers' courses were held, resulting in 42 Red List Trainers receiving their certificates. (KSR #5)

iv. New Red List Authority (RLA) Coordinators are asked to take the online course and to pass the exam. Twenty-five Red List Partner staff are certified Red List Trainers and have therefore passed the advanced level exam. We have certainly not reached the target of all SSC RLA Coordinators passing the exam: by May 2020, out of 130 RLA Coordinators, we know that 12 have passed the Advanced exam (seven since 2017); another 11 have passed the Default exam (four since 2017). (KSR #5)

Synergy

i. The Red List is maintained as a core offering through IBAT, to nearly 100 commercial users. (KSR #10)

ii. The Red List Index is maintained as UN indicator for Sustainable Development Goal 15.5 and is reported in the annual Sustainable Development Goals report. (KSR #10)

iii. Both the Red List and Red List Index are profiled at high level in the IPBES Global Assessment Summary for Policy Makers. (KSR #10)

iv. Red List data were used in the development of the Species Threat Abatement and Restoration Metric. (KSR #10)

v. Red List data are constantly being used in the Key Biodiversity Area identification process. (KSR #10)

vi. An evaluation and monitoring process to determine whether existing partners are continuing to meet the criteria for being an effective partner and also to investigate changes and solutions to expanding the Red List Partnership model has been instituted. All Red List partners are mandated to submit annual financial and technical reports to the RLC, and IUCN Global Species Programme will provide a synthesis of the Red List partner reports and report back to the RLC. Other Red List partnership models are being explored. (KSR #9)

Communicate

Communication

i. According to Web of Science, 363 scientific papers had topic = "IUCN Red List" in 2020. This is surely an underestimate of the total output, e.g. 419 had topic = IUCN "Red List" and 532 had topic = "Red List". (KSR #4)

ii. The Red List website is live and working since November 2018, but some issues remain to be fixed and these form an ongoing discussion at the Red List Technical Working Group meetings. Areas that need critical attention are: (1) pdf/doi generation system; (2) Red List APIs (tabular, spatial); (3) SIS Connect; (4) maintaining and upgrading of our hardware; (5) work on data validation script for Red List updates. (KSR #8)

Acknowledgements

We thank all RLC members and partners for their dedication and immense contributions to achieving the targets of the RLC for the quadrennium.

Summary of activities 2020

Components of Species Conservation Cycle: 4/5

Assess	**18**
Plan	**3**
Network	**10**
Communicate	**2**

Main KSRs addressed: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

KSR: Key Species Result