# IUCN SSC Red List Committee



2019 Report



Jon Hutton

## Chair

Jon Hutton

## Location/Affiliation

Luc Hoffmann Institute, Gland, Switzerland

## **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 cuttingedge 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 List: 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, 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) the IUCN Species Information Service (SIS) interface is improved and made 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) the Red List Partnership is successfully renewed and strategically grown (three new full partners and new parallel partnership process instituted); (15) the governance structures (Red List Committee and working groups meeting annually and working intersessionally) are enhanced to ensure the targets in this strategic plan are met; (16) a searchable database for all National and Regional Red Lists is developed and maintained and linked to the global IUCN Red List; (17) IUCN Red List training resources are regularly updated, augmented, translated into additional languages and made available online.

## Plan

Policy: (1) 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) 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) 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) the number of Red List assessors and Red List trainers is increased (assessors by 250 via online training and 400 via workshop training; 35 trainers trained); (2) 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) online donation campaigns continue to be explored as a mechanism for generating targeted support for specific re/assessment initiatives; (2) 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) 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) the IUCN Red List enhances its credibility in the academic and scientific community (40 peer reviewed publications, symposia at Society for Conservation Biology meetings, DOIs continue); (2) the IUCN Red List enhances its external communication potential and effectiveness.

## **Activities and results 2019**

#### Assess

### Green List

i. The Green List standards and guidelines have been developed and a framework paper has been published, testing this approach for ~200 species covering a wide range of realms and taxa. Other organisations are being helped to test this approach, including National Geographic, US Fish and Wildlife Service, etc. More work is needed to prioritise all unresolved issues in the Green List of species standards, add marine species to the testing, complete end-user surveys and incorporate in communication, develop links to conservation planning, seek RLC and SSC feedback. There are plans to launch the Green List standards at the IUCN World Conservation Congress 2020. (KSR #11)

# Red List

- i. Global comprehensive assessments: Progress has been made on completing the global reptile assessment, and most of the freshwater fish assessment; good progress was 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. Total 35,292 taxa completed so far. (KSR #1)
- ii. Global non-comprehensive assessments: 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. More than 1,500 species were assessed for 2019. (KSR #1)
- iii. Global sampled assessments: First samples completed, for Monocots, Legumes, Cephalopods and Bryophytes on track for 2020. Pteridophytes, Butterflies, Dung beetles and Ascomycete Fungi are behind schedule. More than 750 species were assessed for 2019. (KSR #1)



Vanilla denshikoira (Colombia). This species, described in 2018, is known from only two individuals. It is a wild relative of *V. planifolia*, one of the species used for the production of vanilla. It was discovered in the territory of the indigenous Puinave nation.

Members of this nation are among the authors of the paper describing the species, and they chose the name (Denshikoira is a central figure in Puinave mythology)

Photo: Nicola Flanagan



Thelymitra variegata (Queen of Sheba orchid; Western Australia). This is a narrow endemic to SW Western Australia. It has now been successfully propagated as part of a conservation programme

Photo: Belinda Davis

- **iv.** Core reassessments for long-term indicator groups: 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. (KSR #1)
- v. Comprehensive reassessments to produce Red List Indices (RLIs) for key new indicator taxa: This is behind schedule; only groupers have been reassessed, with cartilaginous fish, tunas and billfish, and seagrasses 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. No meeting of the National Red List Coordination Group was held in 2019. However, in Africa and through the Biodiversity for Spatial Prioritisation in Africa (BASPA) project, an African National Red List Alliance was established for lesson sharing and capacity building, including the following countries: Cameroon, Gabon, Kenya, Malawi, Namibia, Mozambique, Tunisia, Madagascar and South Africa. Through this initiative, Red List experts from South Africa have provided training on Red List data preparation and assessments in Cameroon, Kenya and Mozambique. Plans are underway to submit all Red List assessments for publication. (KSR #2)
- **viii.** Sampled reassessments conducted for speciose taxonomic groups: Monocots, eucots

- (Legumes), and reptiles are on track for back cast assessment; bryophytes, pteridophytes, and reef building corals are behind. (KSR #1)
- ix. The SIS interfaced has been improved to allow the use of > and < signs, change in extinction date, criterion calculator, five years rule in SIS, update on SIS integrity and validity checkers. Also, SIS allows for assessments to be submitted from external databases. (KSR #6)
- x. SIS Connect continues to be developed to allow assessments to be submitted based on existing assessments (such as national level). Spanish and French language assessments are already accepted in SIS, while for Chinese assessments the rationales will need to be translated into English. Work is ongoing to translate all field names, headings, classification schemes, etc., into the other languages. Different taxonomies for national use can now be managed. (KSR #6)
- **xi.** Some progress has been made in terms of the functionality of the Species Information Service (SIS), mostly related to SIS Connect, and this is constantly being updated. (KSR #6)
- **xii.** Guidelines to support the Red Listing process provided and testing for a few taxa on when to list a species as Extinct and Possibly Extinct. (KSR #6)
- **xiii.** 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 Part-

- nership model. Two new Red List partner applications, for Global Wildlife Conservation and Missouri Botanical Garden, have been signed by the IUCN Acting Director General and these partnership agreements await approval at the IUCN Council. The Albuquerque BioPark Red List partnership agreement has been approved by the RLC. (KSR #10)
- **xiv.** 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 2019, a face-to-face RLC meeting was held from 7–10 May 2019 and a virtual meeting on 12 December 2019. Several working groups and task force meetings were held in 2019 to provide strategic guidance on Red List issues. (KSR #10)
- **xv.** A developer has been identified to redevelop the National Red List website and database to be easier to maintain but funding has been a limitation to moving this forward. (KSR #6)
- **xvi.** Training workshop resources are kept updated as the Red List guidelines are updated; they were fully reviewed in 2019. The online course will be under review in 2020. All resources are available in English, French and Spanish, though not yet in other languages. Additional resources (online lessons, workshop sessions) have not yet been fully developed for incorporating climate change into Red List assessments, calculating criteria parameters from available data, and links between

White-bellied pangolin, *Phataginus tricuspis*Photo: Tim Wacher/ZSL



the Red List and other Knowledge Products and processes (e.g. Key Biodiversity Areas, Assessing to Plan (A2P), etc.). (KSR #6)

#### Plan

## Policy

- i. The Red List is maintained as a core offering through IBAT, to nearly 100 commercial users. (KSR #7)
- **ii.** Fifty percent of governments made reference to the IUCN Red List in their sixth National Reports to the Convention on Biological Diversity. (KSR #7)
- iii. The Red List and the post-2020 biodiversity framework and its associated mission, targets and indicators: (1) the Red List provides the underpinning data to the work of the SSC Post-2020 Biodiversity Targets Task Force (https:// research.ncl.ac.uk/biodiversitypost2020/), including specifically; (2) SSC provided input into proposals for the post-2020 species goal, adding a species management target into the zero draft, and maintaining the Red List Index (RLI) as a core indicator; (3) development of the Species Threat Abatement and Recovery (STAR) metric, which draws from Red List data (category, range, elevation, habitats and threats classification schemes) to allow countries and non-state actors to develop science-based targets for biodiversity at the species level under the post-2020 framework; (4) comprehensive evaluation of mammal and bird species extinctions averted since 1993. (KSR #7)

## Network

# Capacity building

i. Since the start of 2017: 767 people have passed the default exam; 1,639 people have participated in Red List Training workshops (workshops of 1–4 days in length); 34 Red List Trainers received their certificates. (KSR #5)

ii. New Red List Authority (RLA) Coordinators are asked to take the online course and to pass the exam. Forty SSC members (some of them RLA Coordinators) and 25 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. Improved linkages with peer organisations and agencies, including other biodiversity knowledge products: (1) the Red List is maintained as a core offering through IBAT, to nearly 100 commercial users; (2) the RLI is maintained as a UN indicator for Sustainable Development Goal 15.5, and reported in the annual Sustainable Development Goals report; (3) both the Red List and RLI are profiled at high-level in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Summary for Policymakers. (KSR #10)
- **ii.** An evaluation and monitoring process of whether existing partners continue to meet the criteria for being an effective partner and to investigate changes and solutions to expanding the Red List Partnership model have been instituted. All Red List partners are mandated to submit annual financial and technical reports to the RLC, and the Global Species Programme will provide a synthesis of the Red List partner reports and report back to the RLC. (KSR #9)

# Communicate

## Communication

i. The IUCN Red List enhances its credibility in the academic and scientific community: (1) searching Google Scholar for "IUCN Red List" and 2019 yields 12,500 results; (2) there was no

specific symposium on the Red List at the 2019 International Congress for Conservation Biology (although there were symposia on Key Biodiversity Areas and the Red List of Ecosystems, both of which referenced the Red List heavily, as well as many individual presentations drawing on the Red List); (3) DOIs were allocated to all Red List assessments and re-assessments published in 2019. (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, and (5) work on data validation script for Red List updates. (KSR #8)

## Acknowledgements

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

# Summary of activities 2019

Components of Species Conservation Cycle: 4/5

Assess 17 Plan 3 Plan 3 Plan 3 Plan 4 Plan 4 Plan 4 Plan 4 Plan 5 Plan 5 Plan 5 Plan 6 Plan 6 Plan 6 Plan 7 Plan 7 Plan 7 Plan 7 Plan 8 Plan 8

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

KSR: Key Species Result