



2013 Annual Report

to the Environment Agency - Abu Dhabi



**Framework Support for Implementing
the Strategic Plan of the
IUCN Species Survival Commission**

2013 Annual Report

to the Environment Agency - Abu Dhabi

Framework Support for Implementing the Strategic Plan of the IUCN Species Survival Commission



Contents

5 Introduction

6 Activity Reports

- 8 Sustainable Use and Livelihoods Specialist Group: 2013 Annual Report
- 14 The IUCN Red List Unit: Release of the Training Curriculum, Translating the Red List Categories and Criteria into Arabic and 2013 updates
- 22 Reptiles on the IUCN Red List
- 28 Bumblebees on The IUCN Red List: Assessing the Species of the Americas
- 32 Analysis of Cati on The IUCN Red List
- 36 Magnolias on The IUCN Red List
- 40 Slipper Orchids on The IUCN Red List
- 44 Carnivorous Plants on The IUCN Red List
- 50 Sturgeons on The IUCN Red List: Assessing the North American Species
- 52 Key Biodiversity Areas: Sites of Significance for Biodiversity
- 58 Asian Species Action Partnership: 2013 Activities
- 64 The Amphibian Red List Authority: 2013 Activities
- 70 The Invasive Species Specialist Group: 2013 Activities
- 76 The Species Conservation Planning Subcommittee: 2013 Activities
- 84 The Climate Change Specialist Group: 2013 Activities
- 86 IUCN SSC Preparations for the World Parks Congress

Introduction

Simon Stuart, Chair, IUCN Species Survival Commission

It is with a great sense of accomplishment that I present the IUCN Species Survival Commission's (SSC) 2013 report under the "Framework Support for Implementing the Strategic Plan of the IUCN Species Survival Commission (SSC)". This framework agreement was generously funded by the Environment Agency - Abu Dhabi (EAD) for a three-year period (2011-2013).

This is the third and final annual report from the SSC to the EAD under the 2011-2013 agreement, though I am delighted to announce that the EAD has now signed a new agreement for 2014-2016. Under the Memorandum of Agreement signed in June 2011, it is stated that "the funds will be used for the implementation of the SSC Strategic Plan, as adopted and agreed by the IUCN World Conservation Congress. The funds will be allocated to particular items of work in the Strategic Plan at the discretion of the Chair of the SSC, in consultation with EAD and the Global Species Programme, focusing in particular on high-priority activities that are poorly funded from other sources". The Strategic Plan is detailed in Annex 1 of the Memorandum of Agreement, and the eighteen activities selected for funding in this first year were chosen based on this plan.

The sixteen Activity Reports that follow cover a very broad range of issues. As reported in 2013, the EAD support has been instrumental in helping to launch or grow five major global initiatives on sustainable use and livelihoods, Red List training, Key Biodiversity Areas, invasive species and species conservation planning. I am very satisfied with the progress achieved on all of these, and there is no question that the support from EAD has been critical in leveraging additional funding from other sources for all of these initiatives. As a result of the EAD agreement, we have also been able to strengthen one regional initiative: the Asian Species Action Partnership focused on saving Critically Endangered terrestrial and freshwater vertebrates in Southeast Asia.

Also, as in previous years, EAD support has been used to improve the coverage of plants on The IUCN Red List of Threatened Species™. In this report we present information from the assessments being undertaken on four charismatic plants groups: magnolias, cacti, slipper orchids and carnivorous plants (the conifer work reported on in 2013 now being complete). The assessment of the status of the bumblebees of the world (which is part of the SSC's current focus on pollinators) is continuing, as is the update of all the amphibian assessments, the global assessment of all reptile species, and the reassessment of sturgeon species.

EAD support has been instrumental in enabling the SSC Climate Change Specialist Group to hold its first meeting and prepare its first workplan; it has also been critical for helping the SSC to prepare for the 2014 IUCN World Parks Congress.

It is abundantly clear from this report that the most generous EAD support to SSC is enabling us to advance our work on a number of important fronts. We are hugely grateful for this, and, on behalf of the entire SSC, I would like to express our deepest appreciation and thanks to the EAD, and especially to its Secretary General, HE Razan Khalifa Al Mubarak.



Simon N. Stuart



Activity Reports





Saker Falcon *Falco cherrug*



Sustainable Use and Livelihoods Specialist Group: 2013 Annual Report

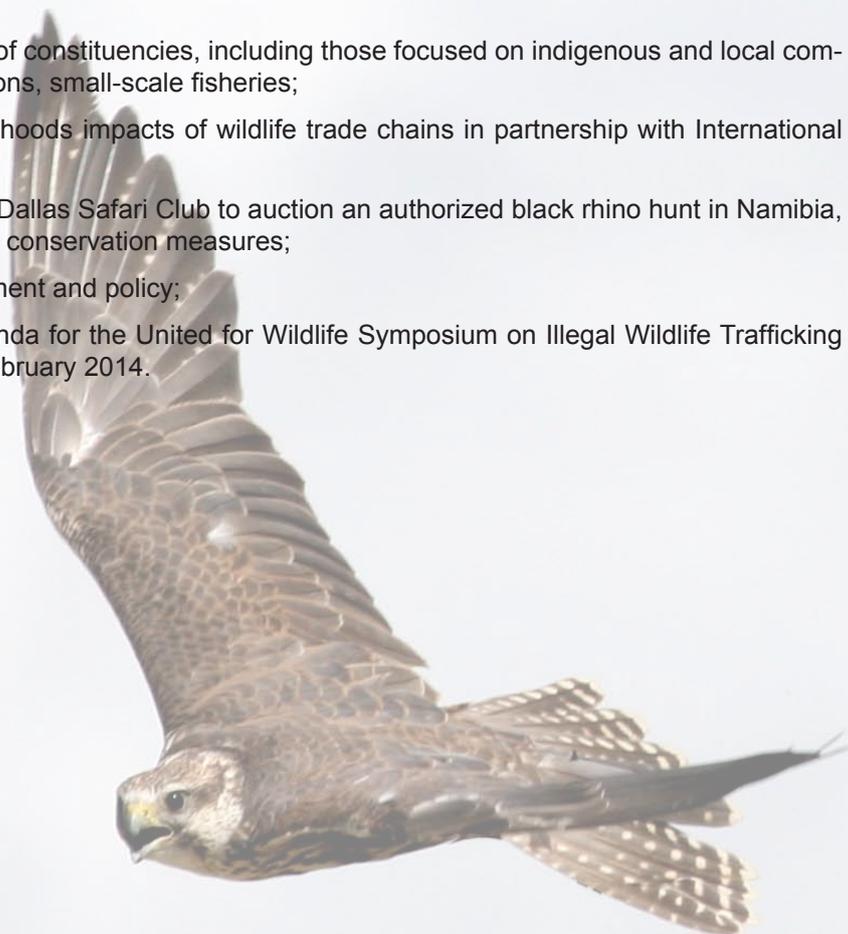
Dr Rosie Cooney, Chair, IUCN CEESP-SSC Sustainable Use and Livelihoods Specialist Group

Michael Murphree, Interim Chair

Sarah Doornbos, Administrative Officer

Key activities and achievements

- Establishing new communications platform;
- Development and initial consultation of draft strategy;
- Engagement in CITES - influencing policy, building relationships;
- Establishing identity and key relationships for SULi in area of small-scale fisheries;
- Carrying out initial planning for World Parks Congress, particularly liaising with stream leads and influencing development of ideas for streams;
- Building strategic relationships in a number of constituencies, including those focused on indigenous and local communities and knowledge, hunting organisations, small-scale fisheries;
- Initiating analysis on conservation and livelihoods impacts of wildlife trade chains in partnership with International Trade Centre;
- Response to a request for support from the Dallas Safari Club to auction an authorized black rhino hunt in Namibia, with the proceeds going into Namibian rhino conservation measures;
- Undertaking a global study of seal management and policy;
- Participation in the development of the agenda for the United for Wildlife Symposium on Illegal Wildlife Trafficking held at the Zoological Society of London, February 2014.



Building SULi

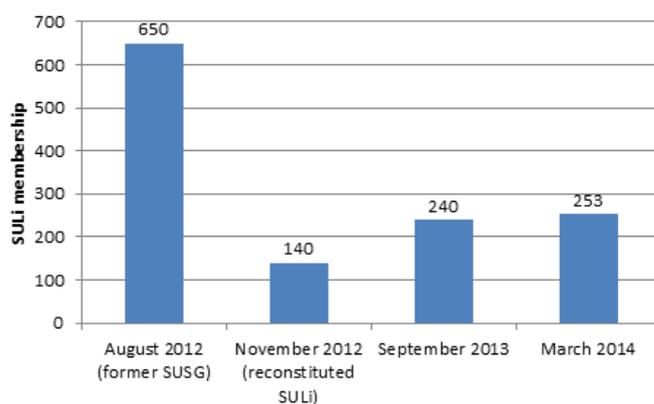
Membership, Governance, Planning

The membership of SULi has continued to grow steadily with the current membership standing at 253 (see table below). The process for membership application has become more formalized with each member submitting an application with a brief CV. The emphasis is on members who are recognized specialist in their fields. Applicants that do not meet these criteria are referred to other relevant networks or professional organizations that cater for a more generalized membership.

The Steering Committee of SULi met in Cambridge, UK in September 2013 where the emphasis was on drafting a strategic plan. In the second half of 2014, Rosie Cooney will finalize this plan based on the output of the Cambridge meeting.

The governance structure of SULi, and in particular the role of regional groups, was discussed at the Steering Committee meeting. A short review was conducted on the work of the two regional groups currently in operation: North America, led by Shane Mahoney, and Europe, led by Robert Kenward. It was agreed that the emergence of coherent sub-groups focused on common issues (whether regional or thematic) will be supported within the overall structure of SULi. It is intended that this process should develop organically rather than being imposed from above – from a nuclei of interacting members that can grow into organized structures. This development will start with the establishment of sub-groups on DGroups for particular regions or themes. Examples of existing sub-groups are “CITES”, “Hunting” and the “Sustainable Development Goals”.

The Chair, Rosie Cooney, went on maternity leave in January 2014 and, in consultation with the Chairs of the SSC and CEESP, asked Michael Murphree to act as interim Chair for the period January to June 2014.



Activities and achievements

Communications and convening

The use of the D-Group email listserve is working well and there has been a wide range of active discussions between members. It has proven to be an effective, low cost means of obtaining specialist contributions from members on key issues of sustainable use.

The group has also managed to show its importance as a convening body by being able to act as a pivot on issues where multi-disciplinary skills are required and linkages with other SSC Specialist Groups or individuals is needed, such as in the seal management and policy study.

Building understanding of theory and practice

Wildlife trade, conservation and livelihoods

Based on relationships initiated at CITES CoP 16 and discussions with the International Trade Centre (ITC), a study is underway with the goal of developing an “Analytic Framework” to guide the analysis of wildlife trade chains. The objective of the study is to better understand how wildlife trade chains interact with conservation and livelihoods by providing a set of key questions for the individuals and organizations examining these chains. A wide range of examples on how and why each question is important will be provided.

ITC is one audience for this study, as it is engaged in carrying out a series of examinations of wildlife trade chains with the aim of improving their contributions to conservation and livelihoods, but the broader audience is all practitioners and researchers engaged in the study of, or intervention in, wildlife trade chains for livelihoods and conservation purposes. SULi’s CITES and Livelihoods Working Group will review the study with an aim of integrating its outputs with the work of the Working Group.

Key researchers and writers of this study are Rosie Cooney, Dilys Roe, Simon Milledge and Michael t'Sas-Rolfes, with Thomasina Oldfield of TRAFFIC acting as major reviewer. A range of SULi members with expertise across various areas of wildlife trade, as well as an external economics reviewer, have been asked to review draft outputs.

A new study involving Kering (previously PPM, the luxury group that owns Gucci), ITC and IUCN is currently under development. The IUCN involvement is being led by Dan Natusch of the Boa and Python Specialist Group (BPSG). This study builds on the previous IUCN/ITC/TRAFFIC study on the conservation and animal welfare aspects of trade in Southeast Asian boas and pythons, and includes extensive exploring of the livelihood aspects. BPSG has approached SULi for advice on methodologies for assessing livelihoods and several SULi members have provided input. SULi will act both as provider of expertise on livelihoods and as liaison with the CITES and Livelihoods WG on this project, exploring opportunities to link the two, including through “road testing” the draft CITES and Livelihoods “Toolkit” in the python study. Rosie Cooney is in liaison with Dan Natusch and Juan-Carlos Vasquez of the CITES Secretariat on this.

The FAO-led study on wild meat in Southern African Development Cooperation (SADC) is underway in partnership with SULi, Panthera, and the ZSL/WCS Rangeland Programme for Cheetah and Wild Dog. This study is being carried out by Peter Lindsey (SULi member) and the outputs will be taken to SADC with the view of catalyzing a SADC-wide strategy to address and improve management of the legal and illegal use of wild meat. The first draft report has been produced and is currently under review by interim Chair Michael Murphree and co-sponsors FAO.

Small scale fisheries (SSF)

A SULi Panel Discussion on sustainable use and integrating local and scientific knowledge in SSF management was held at the MARE *People and the Sea* conference in June 2013. This conference provided SULi an initial opportunity to air its proposed focal issues in this area to a key audience of social and natural scientists, practitioners, and those engaged in policy development (e.g. Food and Agriculture Organization – FAO).

In preparation for this conference, SULi, in cooperation with the IUCN Commission on Ecosystem Management (CEM) Fisheries Expert Group (FEG), organized a meeting with key FAO personnel leading the development of FAO's *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries* (the SSF Guidelines). Vivienne Solis, Despina Symons and Jeppe Kolding attended this meeting, along with invited representatives of ICSF (International Collective in Support of Fishworkers) and the Too Big to Ignore Project (a global research initiative focused on SSF). After some discussion on FAO's priorities and approach it was agreed that the three groups would collaborate on two focal issues related to implementation of the SSF Guidelines. SULi and FEG have developed and submitted to FAO ideas and content for an FAO workshop in October 2013 focused on the implementation of the Guidelines. The aim of the workshop is to develop a plan of work to support the implementation of these issues (through development of research synthesis, case studies, workshops, guidelines etc, as appropriate) and then jointly seek funding for it.

Supporting indigenous and local communities in sustainable use of WLRs

SULi has developed a Concept Note on “Integrating Traditional Knowledge and Science in Red List Assessments” (developed primarily by Sarah Doornbos). We are currently seeking comments from the CEESP Committee on Traditional and Indigenous Knowledge, and are awaiting some case studies on medicinal plants from the Medicinal Plant Specialist Group. This concept note will be discussed at the Red List Committee meeting to be held in October/November 2013).

The draft Fungi Charter, requested from IUCN by the Parties to the Bern Convention under the Council of Europe, has been revised to take into account detailed comments from various Parties (particularly UK, Switzerland and Germany), and a revised version has been circulated by the Bern Convention Secretariat. The Standing Committee meeting at which this will be considered for adoption by the Parties will take place in December – SULi is liaising with the IUCN Secretariat to have joint IUCN Secretariat-SULi representation at this meeting to present and answer questions on the document.

Recreational hunting and wildlife management

SULi is part of the Saker Falcon Task Force established under the Convention on Migratory Species. Robert Kenward was contracted in his capacity as SULi in Europe (ESUG) Chair/SULi Vice-Chair for Europe to provide analysis on current Saker falcon populations, trends in trapping, and advice on how the Task Force can best en-



gage with trappers to improve monitoring of populations and sustainability of harvest and trade. This report has been submitted and is under consideration by the other members of the group.

Influencing practice and policy

International wildlife trade and CITES

Around 14 SULi members participated in CITES CoP 16, most as members of other NGO or country delegations. Holly Dublin, Diane Skinner, Despina Symons, Thomasina Oldfield, Rosie Cooney and Michael t'Sas-Rolfes were on the IUCN delegation. A full report of the meeting in relation to sustainable use and livelihoods is available separately.

Wild meat, conservation and food security

Rosie Cooney and Diane Skinner of SULi participated in the first meeting of the Collaborative Partnership on Wildlife (CPW) in the margins of CITES CoP 16 in Bangkok in April 2013. Rosie Cooney and Ali Kaka participated in an informal CPW meeting in the margins of the CIC General Assembly in Budapest, April 2013.

At the first meeting the Terms of References and Workplan for the CPW were developed, its governance structure established, and the Partnership was officially launched. At the second meeting, CPW policy briefs on wild meat and food security were put forward and debated.

The next CPW meeting will be held in Milan ahead of the CIC General Assembly in April 2014 with Michael Murphree attending this meeting for SULi.

Supporting indigenous and local communities in sustainable use

Helen Suich of SULi has been participating in the Steering Committee for the development of the IUCN Knowledge Product currently called Human Reliance on Biodiversity (previously Human Dependence on Nature), including providing technical input and participation in a Steering Committee meeting in Gland in August 2013.

World Parks Congress

Rosie Cooney participated in developing CEESP's bid to lead a stream focused on "A new social compact for conservation" (led by Nigel Crawhall). This bid was not successful as a stream, but has become a crosscutting theme for the Congress.

Rosie Cooney and Michael Murphree have been liaising with and providing input into the development of two Congress streams in particular:

- Stream 4 on "Supporting Human Life" (organized by FAO and the Japanese Ministry of Environment); SULi has been tasked with organizing a workshop session in this stream on sustainable use;
- Stream 6 on "Enhancing the Diversity and Quality of Governance".



Seal Range State Management and Policy Review

Commissioned by the International Fur Federation, the primary objective of this study is a survey of range state policy and management responses to growing and/or abundant seal populations. This includes population management for the purposes of sustainable use of seal products, population reduction, and (lethal or non-lethal) management of perceived conflicts with fisheries. The study takes a case study approach, focusing on the following proposed species: Cape fur, Northern fur, Hooded, Harp, Grey, Harbor and Crabeater seals. The countries covered are Namibia, Canada, European Union countries, Russia, Greenland, Norway, and the USA.

The study has a technical review committee that includes members of the SSC Pinniped Specialist Group, independent experts and SULi, represented by North American Regional Chair Shane Mahoney. The consultant selected after careful consideration of five experts will be Dr. David Cumming.

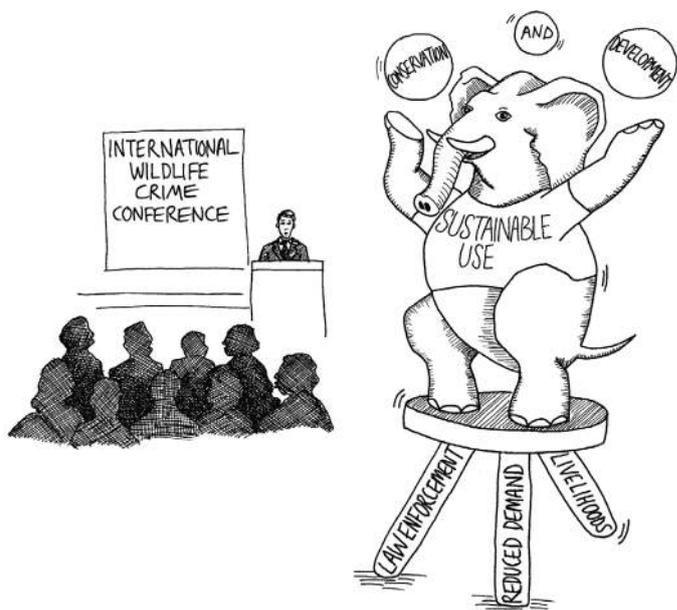
United for Wildlife Symposium on Illegal Wildlife Trafficking and UK Heads of State meeting on Wildlife Crime

In February 2014, the Government of the United Kingdom hosted a meeting on wildlife crime for Heads of State in London. The intention of this meeting was to issue a declaration committing key nations to tackle wildlife crime. SULi was invited to provide comment and input into this declaration which was done by Rosie Cooney and Michael Murphree.

Prior to the Heads of State meeting, a two-day symposium was convened by the “United for Wildlife” partnership. In the face of an overwhelmingly dominant attitude of enforcement and demand reduction as key strategies, several SULi members sought to ensure that strategies adequately recognized the importance of livelihoods, incentives, and sustainable use in efforts to combat wildlife crime.

Working closely with Dilys Roe of the International Institute for Environment and Development (IIED), three dimensions to the subject were identified and a briefing paper entitled “The elephant in the room: sustainable use in the illegal wildlife trade debate” was published. The three main points of this paper are as follows:

1. Large-scale international trafficking can have major negative livelihood impacts on rural communities, leading to an influx of arms, destabilized governance and degrading the natural resource base that for many is their greatest asset.
2. Incentives for communities and the private sector living with wildlife to engage in and support efforts against wildlife crime are critical – whether these incentives derive from sustainable use of wild resources, support for alternative livelihoods, employment as game guards, payments for environmental services or other means. High-level commitment to combat wildlife crime through better regulation, enforcement and international cooperation will continue to struggle where local communities are highly motivated to support or engage in illegal activity. This means Community-Based Natural Resource Management, and other responses that engage local communities as active partners in efforts to combat wildlife crime, need to be incorporated as critical elements in response strategies.
3. Enforcement approaches to dealing with transnational organized wildlife crime can have disproportionately negative impacts on local people, even where they are minor users of wildlife rather than the main drivers of the illegal activity. Enforcement often takes a one size fits all approach, without distinguishing between wildlife use for subsistence use and wildlife use as a part of organized crime (“crimes of need vs crimes of greed”). Enforcement strategies need to be carefully targeted, with safeguards to protect small-scale users from abuses.



Responses to other requests for input

- On request from the SSC, SULi is leading the development of an Annex to the Guidelines for Appropriate Uses of IUCN Red List Data on harvesting of species listed in The IUCN Red List as threatened. Thomasina Oldfield will report separately on this.
- On request from the SSC, SULi provided input into the development of the Large Carnivore Manifesto for Europe, led by the IUCN Large Carnivore Initiative for Europe and the Reintroductions Specialist Group, which was up for endorsement by the European Union. A consultation was carried out (led by Rosie Cooney) among relevant European members. Key issues were the role of hunting in enabling more positive human-carnivore interactions and the need to respect local needs and concerns regarding reintroductions/spread of large carnivores. Our comments made a significant difference to the final draft.
- On request from IUCN and SULi members, SULi developed a response to the European Commission’s call for input from stakeholders on European Union proposed changes to CITES implementing legislation. Proposed changes would require the issue of an import permit to enable import of hunting trophies listed in Annex B of the European Wildlife Trade Regulation (roughly corresponding to CITES Appendix II). Currently hunting trophies fall under a “personal effects” exemption provided for under CITES, and are further subject to some additional EU “stricter domestic measures”, particularly a requirement for an export permit to be issued by the exporting state. Rosie Cooney developed an initial draft after initial consultation with EU-based SULi members. This was circulated to “hunting” and “CITES” sub-groups of SULi and key SSC Specialist Group Chairs, then to all SSC SG Chairs, and a final response was then submitted by Luc Bas, Director of the Brussels IUCN office.
- As an Aichi Target Champion (for Target 14) Rosie Cooney has collated relevant SULi activities (and others) for the IUCN Global Species Programme to form part of an IUCN submission to CBD for the October SBSTTA (July 2013).



Hooded seal *Cystophora cristata*
© Aqqa Rosing-Asvid

- On request from IUCN Drylands Initiative, Rosie Cooney sought input from some relevant SULi members and provided comments and input to a draft policy on Land Degradation Neutrality and the post-2015 Sustainable Development Goals.
- On request from the Dallas Safari Club, Rosie Cooney wrote a letter in support of the controversial auction of one male Black rhino in Namibia. The letter highlighted the contribution this auction made to Black rhino conservation and sustainable use. Dr Mike Knight Chair of the African Rhino Specialist Group also drafted a similar letter.
- Working with IUCN partners to amend a proposed European Parliament resolution on Illegal Wildlife Trafficking. The resolution was passed with reservations from SULi and other partners.

Emphasis for 2014

- Following on from the activities of 2013, the main emphasis of the SULi work programme will be:
- Continued development of the SULi membership and links with other Specialist Groups and IUCN Commissions;
- Attendance at both the CEESP and SSC Steering Committee meetings;
- Sustainable use of terrestrial wildlife, including subsistence and sport hunting issues;
- Supporting and contributing to a range of fisheries issues, small scale, commercial and recreational;
- Issues related to illegal killing and wildlife trafficking, working with other Specialist Groups and partners in research, management and policy responses;
- Undertaking the seal management and policy study;
- Preparing for the World Parks Congress taking place 12-19 November in Sydney.

The IUCN Red List Unit: Release of the Training Curriculum, Translating the Red List Categories and Criteria into Arabic and 2013 updates

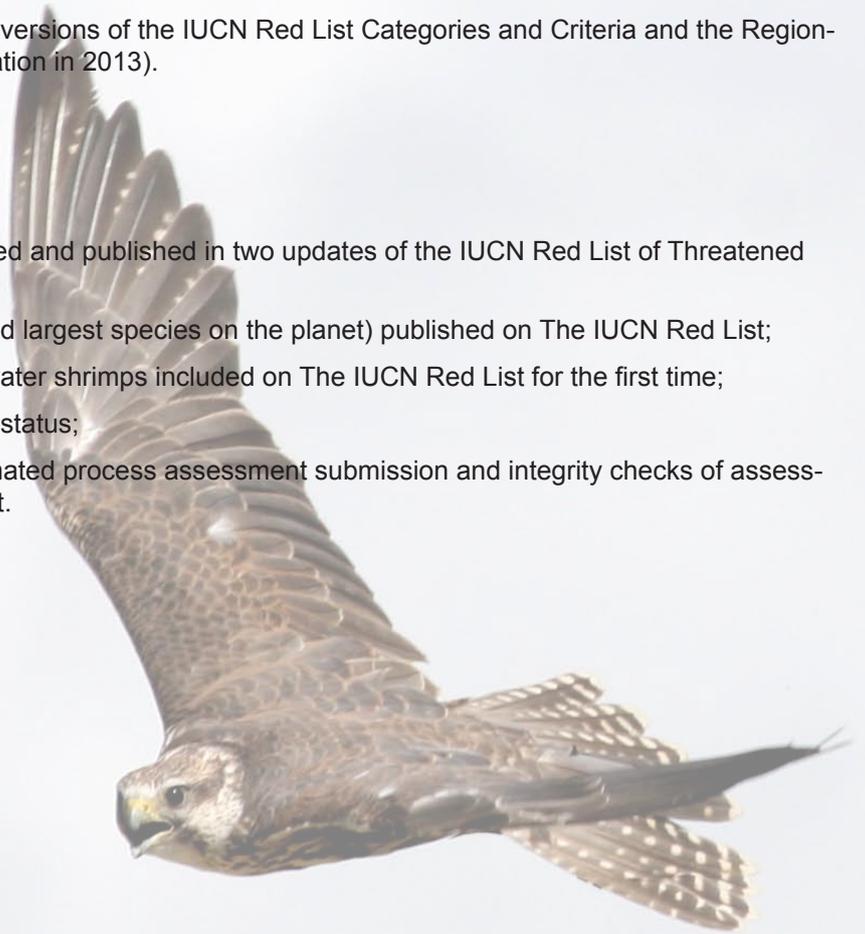
Caroline Pollock and Craig Hilton-Taylor, IUCN Red List Unit

Key achievements in training and translation

- The online IUCN Red List training course released and being actively used;
- Development of a final exam for the online course well underway (for release in 2014);
- French and Spanish translations of the online IUCN Red List training course and training materials ready for review (for release in 2014);
- 12 Red List Assessor Training events held in 2013, involving more than 240 participants;
- Number of certified IUCN Red List Trainers increased to 31;
- Arabic language translations of most recent versions of the IUCN Red List Categories and Criteria and the Regional Guidelines booklets underway (for publication in 2013).

Updates to the Red List

- Over 8,000 submitted assessments reviewed and published in two updates of the IUCN Red List of Threatened Species™;
- Reassessment of all conifers (the oldest and largest species on the planet) published on The IUCN Red List;
- Assessments for all cone snails and freshwater shrimps included on The IUCN Red List for the first time;
- 15 species show genuine improvements in status;
- Major progress towards releasing an automated process assessment submission and integrity checks of assessments for publication on The IUCN Red List.



Background

Around the world, governments, conservation organizations and the private sector continue to rely on The IUCN Red List of Threatened Species™ and regional and national red lists to help guide decision making and action planning. It is vital that IUCN Red List assessments are objective and have a scientific basis to ensure that they guide appropriate actions to prevent extinctions and conserve the integrity and diversity of nature. To achieve this, it is essential that high-quality red list training is available to scientists around the world.

Funds donated from EAD have helped the IUCN Red List Unit to develop a range of Red List training resources and to improve accessibility to these materials. This is resulting in a growing global network of Red List Assessors with the skills to improve and maintain the high quality of data available on the IUCN Red List and in national and regional Red Lists. There are three main components to the Red List Training initiative:

- IUCN Red List Assessor training curriculum
- IUCN Red List Trainer certification course
- Online Red List training course

Having developed and implemented the IUCN Red List Assessor training curriculum in 2011-2012, our main focus for 2013 was on the online Red List training course and the IUCN Red List Trainer certification course.

Online IUCN Red List Training Course

In 2013, we were delighted to release the online IUCN Red List training course (Assessing Species' Extinction Risk Using IUCN Red List Methodology). This course was developed in collaboration with The Nature Conservancy (TNC) and is hosted on their Conservation Training website (www.conservationtraining.org), alongside a wide range of other free online training courses for conservation practitioners.

The online IUCN Red List Training course includes seven modules: 1) Introduction to the IUCN Red List; 2) The IUCN Red List Assessments; 3) IUCN Red List Categories and Criteria; 4) Supporting Information for IUCN Red List Assessments; 5) IUCN Red List Mapping Standards; 6) IUCN Species Information Service; and 7) Regional IUCN Red List assessments. All modules can be completed online, or users can choose to download each lesson to work on offline.

The first module (M1) was released in June 2013 and the final modules (M6 and M7) were released in September 2013. At the end of December 2013, there were a total of 932 user enrolments across the seven modules. By 7th March 2014, this had risen to 1,814 enrolments (a 95% increase within 3 months); on the same date the total number of unique users for the entire course was 742 (see Table 1).

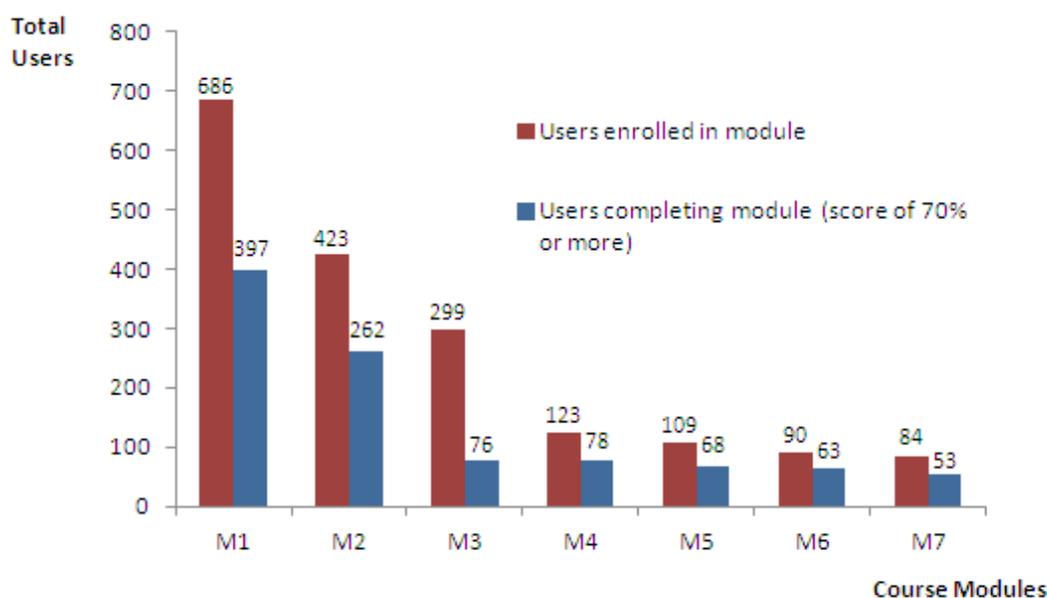


Table 1. Total users enrolled in the online course modules and users who have completed each module with a score of 70% or more.

Less than a year after its release, it is clear that the online course is already proving to be an extremely useful resource. The only part of the course that has not yet been released is the final exam and certificate; development of these began in 2013. Three versions of the final exam will be released in 2014 to accommodate:

- Users who have completed only those modules relating to global red listing.
- Users who have completed only those modules relating to regional red listing.
- Users who have completed only all of the online course modules.

The final exam is designed to automatically generate a list of 25 questions randomly selected from various “question banks” containing questions on each of the different topics covered in the course modules. This ensures that each exam is more or less unique and avoids users being able to copy correct answers from a previous attempt or another user and use these to pass the course. For this system to work effectively, each question bank must contain more than one question.

To date, over 220 questions have been written into the system. These are now in a review stage and should be finalised for release by April 2014; over time, more questions will be added to the system as these become available to continually improve the exam process.

The course certificate has also been designed and will be included in the course to be made available to users who pass the final course exam.



CERTIFICATE OF ACHIEVEMENT

IUCN, International Union for Conservation of Nature, hereby recognizes

CAROLINE POLLOCK

As having fully and successfully completed the final exam
online course

*Assessing Species' Extinction Risk Using IUCN Red
List Methodology*

ConservationTraining logos here

07 March, 2014

Translating the IUCN Red List Training materials

French and Spanish Translations

In an endeavour to improve understanding of IUCN Red List methodology in major regions of the world and increase effectiveness and value of Red List training, one of the key aims of the training resources development process is to translate these materials into a range of languages. In 2013 we made substantial progress in translations to make the online course and other training materials available in IUCN's three official languages (English, French and Spanish).

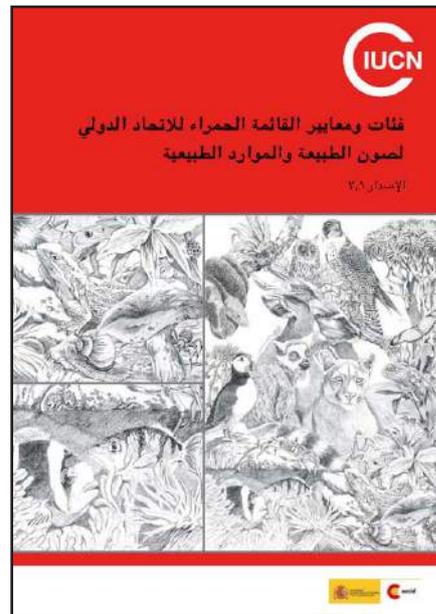
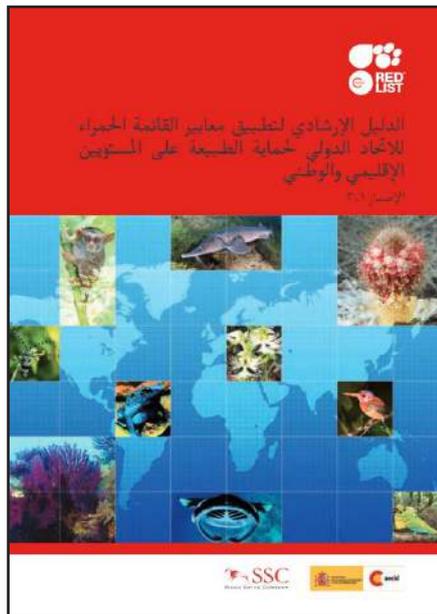
By the end of 2013, most of the online training course and key documents regularly used in IUCN Red List training workshops had been translated into French and Spanish. The plan for 2014 is to review these translations and release the first French and Spanish versions of the course by the end of March 2014.

Arabic Translations

Work is also underway on the Arabic translations of the IUCN Red List Categories and Criteria and the Regional Guidelines booklets. In 2009, Arabic translations of the first edition of the IUCN Red List Categories and Criteria and version 3.0 of the Regional Guidelines were published by the IUCN Centre for Mediterranean Cooperation. Since then, some errors were identified in these translations. In 2012, a second edition of the Categories and Criteria and an updated version of the Regional Guidelines have also been published; the changes in these updated documents also need to be reflected in the revised Arabic translations.

In 2013 we began the process of revising and updating the Arabic translations of these documents. This process involves identifying appropriate people to correct errors in the original translations, update the Arabic versions to incorporate changes brought in through the more recent publications, a review panel checking and agreeing that the final revised translations are appropriate, then publishing the booklets and making these available.

Identifying suitable people with appropriate experience and time available to translate these technical documents has been a lengthy process. However, with the assistance of knowledgeable members of the IUCN Species Survival Commission, potential translators with a good understanding of the IUCN Red List Categories and Criteria and the Red List assessment process have been identified and their participation in the translation process has been requested.



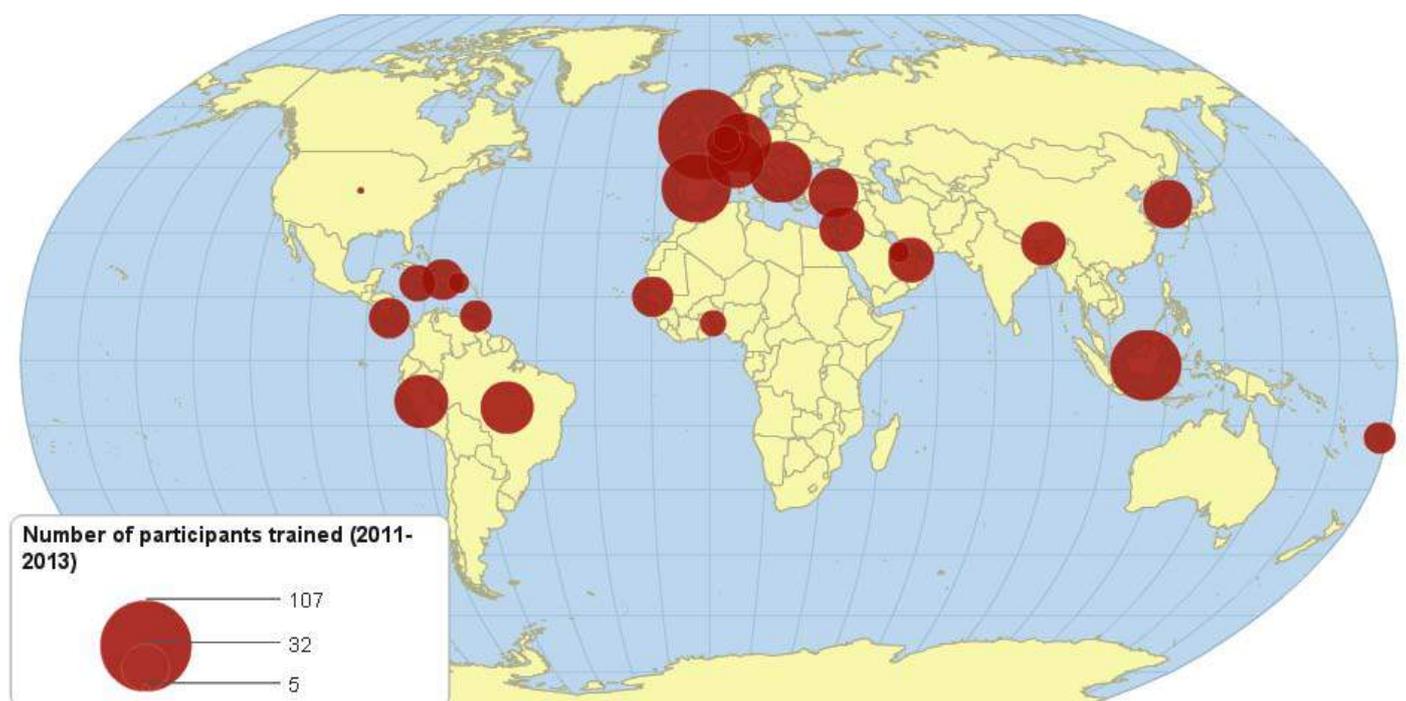
We anticipate completing and publishing the updated Arabic versions of these booklets by mid- 2014.

IUCN Red List Assessor Training Workshops

The IUCN Red List Assessor training curriculum is now being used as the standard approach for IUCN Red List Assessor Training workshops. The training curriculum and materials are available to all certified Red List trainers, and all of the presentations are available to download from the IUCN Red List web site. Not all training workshops and use of the presentations are reported back to the IUCN Red List Unit; it is likely that there is much more use of these materials in workshops and meetings around the world than can be reported here.

In 2013, at least seven full-length IUCN Red List Assessor Training workshops were held (in Europe, Middle East, and Asia) involving more than 150 participants. In addition to full training workshops, the training materials were used to provide background presentations and shorter training sessions involving at least 86 participants (held in Europe, the Middle East, Caribbean, and South America). Since the start of 2011, at least 848 people have been trained through 48 training workshops and sessions.

Although certified Red List Trainers are beginning to receive direct requests for training, the IUCN Red List Unit continues to be a focal point for these requests, particularly from national Red List projects.



We still eventually hope to offer regular Red List Assessor training workshops organised directly through the Red List Unit; this would not only provide more consistent training opportunities for experts to become Red List Assessors, but would also add to support for Red List Trainers by allowing future trainers to experience the Red List Assessor curriculum in person before they attend a Red List Trainer workshop.



Participants in the IUCN Red List Assessor Training workshop held in Bogor, Indonesia, August 2013.

IUCN Red List Trainers' Workshops

The Red List Trainer certificate course was initially developed in 2011-2012. In 2013, the lessons learned through a test workshop (held in December 2011) were used to refine the course format. This revised workshop format was used for the first time in June 2013 to certify Red List Trainers from a range of IUCN SSC Plant Specialist Groups (based in RBG Kew and RBG Edinburgh) and staff involved in coordinating major Red List assessment projects.

This course is designed to provide motivated Red List Assessors, Red List Authority Coordinators, and global and regional assessment project staff with the skills and confidence to teach the Red List Assessor training course. The Red List Trainer Certification course is a 3-day course mostly focusing on:

- The format and materials used for IUCN Red List Assessor Training workshops;
- Providing advice on training techniques and organizing training workshops;
- Providing guidance on explaining complex issues and answering questions that commonly arise when training new Red List Assessors.

Day 3 of the course involves a practical exam to test each participant's presentation skills, knowledge, and ability to answer questions that typically may be asked in a training workshop. The inclusion of this important exam and the intensity of the course itself allow one Red List Trainer workshop to accommodate a maximum of 10 participants.

Feedback from participants attending the Red List Trainers' course has been very positive. Since they received their certificates, all of these Red List Trainers have facilitated training workshops and sessions, making use of the advice and IUCN Red List training materials provided during and after the course.

The next Red List Trainers workshop is scheduled for June 2014, in Cambridge, UK.

As mentioned in last year's report, initial plans to develop the Red List training website, which would include a password-protected section specifically for materials, discussion boards and information for Red List Trainers, have been postponed. Currently, a free online file hosting service is being used to ensure all certified Red List Trainers have easy access to the most up-to-date training materials.

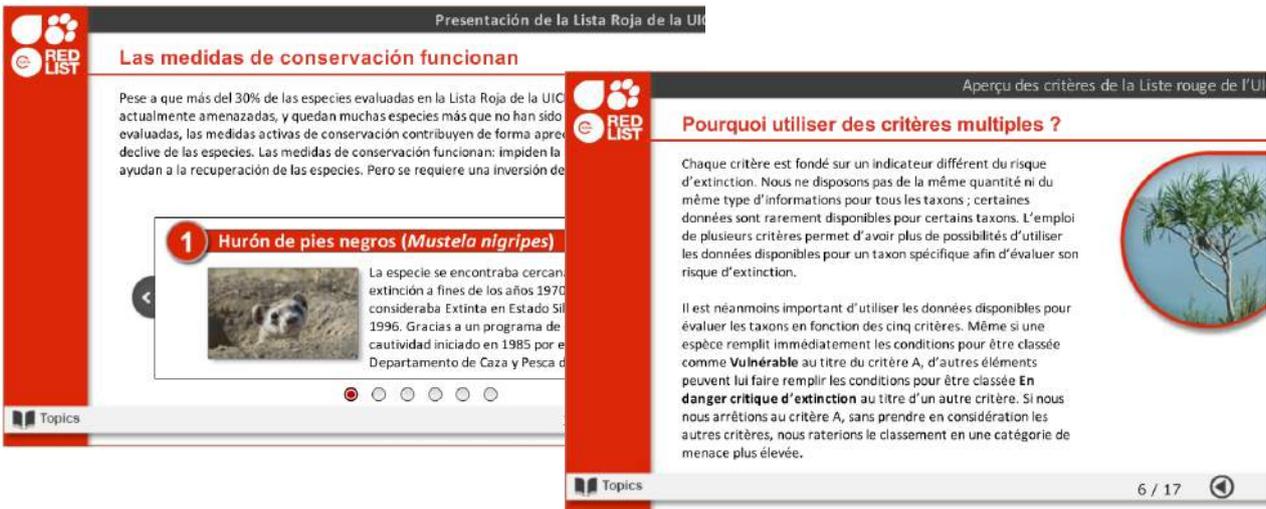


Group photo of participants in the IUCN Red List Trainers' workshop held in Cambridge, UK in June 2013.

Next Steps for 2014

In 2014, we will continue to work toward Result 5 of the Red List Strategic Plan (IUCN Red Listing capacity built through expanded training programmes), building on the work that has already been completed. This will include:

- Holding at least one IUCN Red List Trainer workshop (already scheduled for June 2014);
- Actively follow-up on training workshops and sessions being facilitated by certified Red List Trainers to compile more comprehensive information on training being carried out by this network and to identify and resolve any issues encountered;
- Investigate the alternative options for providing for Red List Trainers with easy access to Red List Training materials and to share training experiences (e.g. an online Wiki) and begin developing this resource;
- Release the French and Spanish versions of the online IUCN Red List training course;
- Continue to maintain Red List training materials to account for updates in Red List guidance documents and add new materials (e.g., case studies, exercises, etc.);
- Finalise and publish the revised Arabic versions of the IUCN Red List Categories and Criteria and the Regional Guidelines booklets.



Spanish and French modules of the online training course.

2013 Updates to The IUCN Red List

IUCN Red List Updates

IUCN strives to update The IUCN Red List at least twice each year. In 2013, funding donated from EAD helped the Red List Unit to complete two successful updates of The IUCN Red List.

In 2013, the Red List Unit processed 8,222 global assessments, including assessments for 6,101 species being assessed for the first time, and reassessments for 2,121 species. In addition to global assessments, 536 European regional assessments were also published on The IUCN Red List web site.

The IUCN Red List of Threatened Species™ 2013.2

Login | FAQ | Contact | Terms of use | IUCN.org

RED LIST Guiding Conservation for 50 Years

::About ::Initiatives ::News ::Photos ::Partners ::Sponsors ::Resources

Enter Red List search term(s) GO OTHER SEARCH OPTIONS Discover more

DONATE NOW!

LEAST CONCERN (LC) NEAR THREATENED (NT) VULNERABLE (VU) **ENDANGERED (EN)** CRITICALLY ENDANGERED (CR) EXTINCT IN THE WILD (EW) EXTINCT (EX)

Celebrating 50 Years of The IUCN Red List
30 January 2014 - Throughout 2014 we are celebrating the significant contribution of The IUCN Red List of Threatened Species in guiding conservation action and policy decisions over the past 50 years. The IUCN... [more](#)

Emergency three-year action plan for lemurs
21 February 2014 - Primatologists from Bristol Zoological Society, Conservation International, and the IUCN Species Survival Commission Primate Specialist Group have developed an emergency three-year action plan... [more](#)

Professor Gordon McGregor Reid awarded the IUCN Species Survival Commission Chair's Citation of Excellence
21 February 2014 - In February 2014, Gordon McGregor Reid received the SSC Chair's Citation of Excellence in recognition for his exemplary, visionary and charismatic leadership of the Freshwater Fish... [more](#)

World leaders clamp down on the illegal wildlife trade
18 February 2014 - Heads of State, ministers and high-level representatives of over 40 countries as well as 11 international organizations have committed to taking decisive and urgent action to tackle the global... [more](#)

UAE Taking a Step Forward to Stop Shark-Finning in the Middle East
16 February 2014 - Seven Arab countries sign an agreement in Dubai that will protect migrating marine animals. Marine life is exposed to an increasing pressure as a result of overfishing around the... [more](#)

Facebook Like 30,234 people like this. Sign Up to see what your friends like.
Twitter Follow @AmazingSpecies

Amazing Species
RED LIST

PUERTO RICAN SKINK
Spondylurus nitidus
© Alfredo D. Colon Archilla

This work allowed us to publish a full reassessment of all conifer species (605 species), and first-time assessments of all of the world's cone snails (633 species) and freshwater shrimps (763 species). This also allowed us to highlight genuine changes in status for 62 species, including 47 species deteriorating enough to move into higher threat categories, and 15 species showing genuine improvements in status.

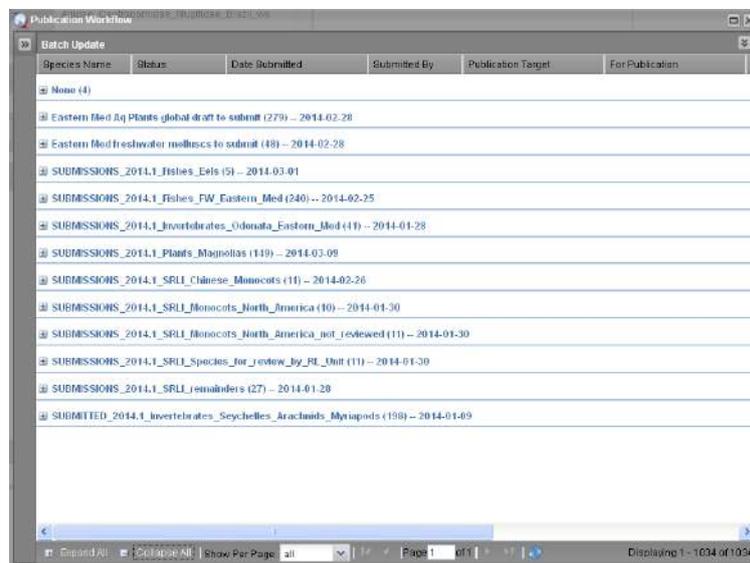
Automated Integrity Checks and Submissions Process

Processing submissions for The IUCN Red List involves checking assessments for errors, including missing or inadequate supporting information and incorrect application of the IUCN Red List Categories and Criteria. If errors are identified, Red List Unit staff must then liaise directly with Assessors or Project Managers to resolve these issues. This process can take several days, weeks, or months depending on the quality of the assessments being submitted to the Red List Unit.

IUCN Red List assessments are stored and managed within an online database system: the Species Information Service (SIS). Assessors around the world are granted access to this password-protected system to allow them to compile and edit assessments before submitting these to the Red List Unit. In light of the time-consuming task of carrying out manual checks to find assessments that are missing the required information, in recent years work has been underway to develop an automated submissions process within SIS, including a series of integrity checks to catch submissions that are missing required information and return these to Assessors before they are submitted to the Red List Unit.

In 2013, major progress was made in developing the automatic submissions process and integrity checks. Thanks to EAD funding, the Red List Unit was able to undergo a review process to check the functionality of this new system. It is now in the final review stages and will be ready for release by March 2014.

Implementation of the automated submissions process and integrity check system in SIS will improve management of the submissions process and will greatly reduce the amount of manual checks that need to be carried out by assessment project managers and the Red List Unit, thus speeding up the process of finalising assessments for publication on The IUCN Red List. The system will also allow more time within the Red List Unit to focus on checking for errors in the application of The IUCN Red List Categories and Criteria.



The screenshot shows a web application window titled "Publication Workflow". It features a "Batch Update" button and a table with the following columns: Species Name, Status, Date Submitted, Submitted By, Publication Target, and For Publication. The table contains several rows of submission data, including categories like "None (4)", "Eastern Med Bq Plants global draft to submit (279)", "Eastern Med freshwater molluscs to submit (48)", and various "SUBMISSIONS_2014.1" entries for different taxonomic groups and regions. The bottom of the window shows a pagination bar with "Page 1 of 1" and "Displaying 1 - 1034 of 1034".

Species Name	Status	Date Submitted	Submitted By	Publication Target	For Publication
None (4)					
Eastern Med Bq Plants global draft to submit (279)		2014-02-28			
Eastern Med freshwater molluscs to submit (48)		2014-02-28			
SUBMISSIONS_2014.1_fishes_Eals (5)		2014-03-01			
SUBMISSIONS_2014.1_fishes_FW_Eastern_Med (240)		2014-02-25			
SUBMISSIONS_2014.1_invertebrates_Odonata_Eastern_Med (41)		2014-01-28			
SUBMISSIONS_2014.1_Plants_Magnolias (119)		2014-03-09			
SUBMISSIONS_2014.1_SRLI_Chinese_Monocots (11)		2014-02-26			
SUBMISSIONS_2014.1_SRLI_Monocots_North_America (10)		2014-01-30			
SUBMISSIONS_2014.1_SRLI_Monocots_North_America_not_reviewed (11)		2014-01-30			
SUBMISSIONS_2014.1_SRLI_Species_for_review_by_Red_List_Unit (11)		2014-01-30			
SUBMISSIONS_2014.1_SRLI_remainders (27)		2014-01-28			
SUBMITTED_2014.1_invertebrates_Seychelles_Arachnids_Myriapods (198)		2014-01-09			

Next Steps for 2014

In 2014, we will continue to process and publish assessments on The IUCN Red List. This work will include:

- Release the automated submissions process and integrity check system in SIS;
- Provide support for SIS users, including providing clear guidance on the new submissions system in SIS;
- Process assessments being submitted for publication on The IUCN Red List;
- Release at least two updates of The IUCN Red List of Threatened Species™.

Reptiles on The IUCN Red List

Philip Bowles, Coordinator, IUCN SSC Snake and Lizard Red List Authority

Neil Cox, Manager, IUCN-CI Biodiversity Assessment Unit

Marcelo Tognelli, IUCN-CI Biodiversity Assessment Unit

Key achievements

Central Asia

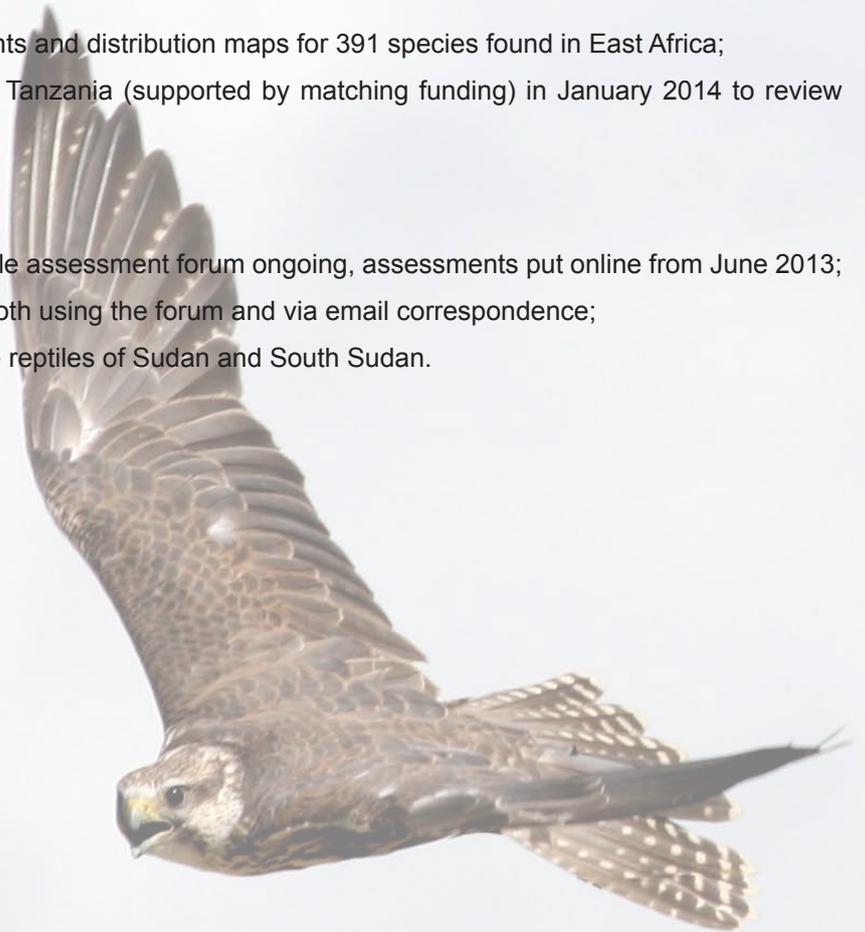
- Compilation of an updated species list for the snakes and lizards of Central Asia, Ukraine, Belarus and Moldova – a total of 191 species;
- Preparation of species accounts and distribution maps for 150 reptile species.

East Africa

- Preparation of species list, draft assessments and distribution maps for 391 species found in East Africa;
- Assessment workshop held in Bagamoyo, Tanzania (supported by matching funding) in January 2014 to review these accounts and maps.

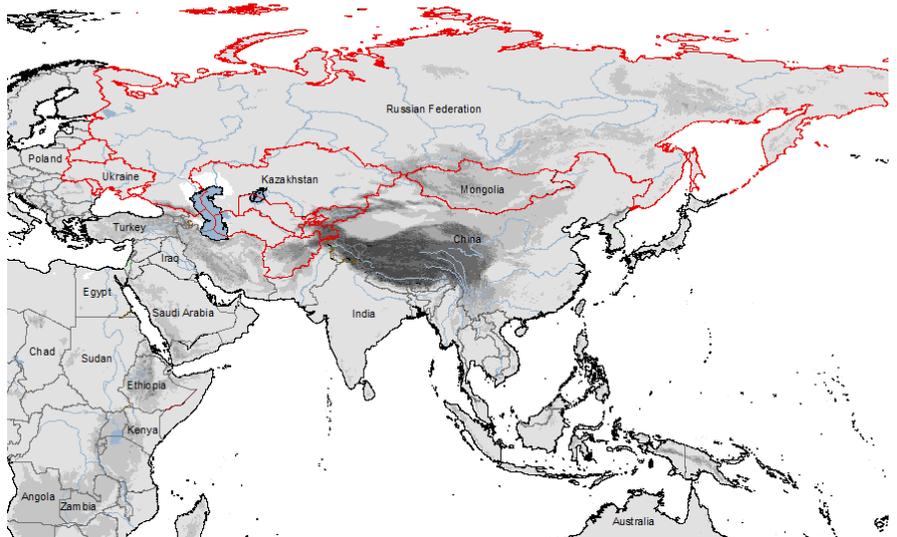
Horn of Africa

- Completion of a website to host a new reptile assessment forum ongoing, assessments put online from June 2013;
- Review of data contributed by specialists both using the forum and via email correspondence;
- Work underway on a checklist paper on the reptiles of Sudan and South Sudan.



Central Asia

Draft assessments of the reptiles of Central Asia and three territories in Eastern Europe were prepared by Philip Bowles of the IUCN-CI Biodiversity Assessment Unit (BAU). These accounts and maps were prepared in order to determine the conservation status of the reptile fauna of Ukraine, Moldova, Belarus, and Central Asia (the Asian portion of the Russian Federation; Kazakhstan; Tajikistan; Turkmenistan; Uzbekistan; Kyrgyzstan; Afghanistan; and Mongolia). This area represents the entirety of the Western Palearctic region not previously assessed as part of the Global Reptile Assessment.



Preparation of the accounts and maps took place thanks to the generous financial support of the Environment Agency - Abu Dhabi (EAD), and is ongoing with over 75% now prepared. The intent is to review these assessments using the online Red List assessment forum developed with EAD support.

Background

Temperate Asia comprises the largest portion of the world's largest continent. While this vast area is rather low in reptile diversity, it includes large tracts of desert where reptiles are often the dominant predators, and high montane regions with endemic reptile taxa. As such, understanding the conservation status of reptiles in Central Asia is important to fully understand and characterize the status of the region's ecosystems as a whole.

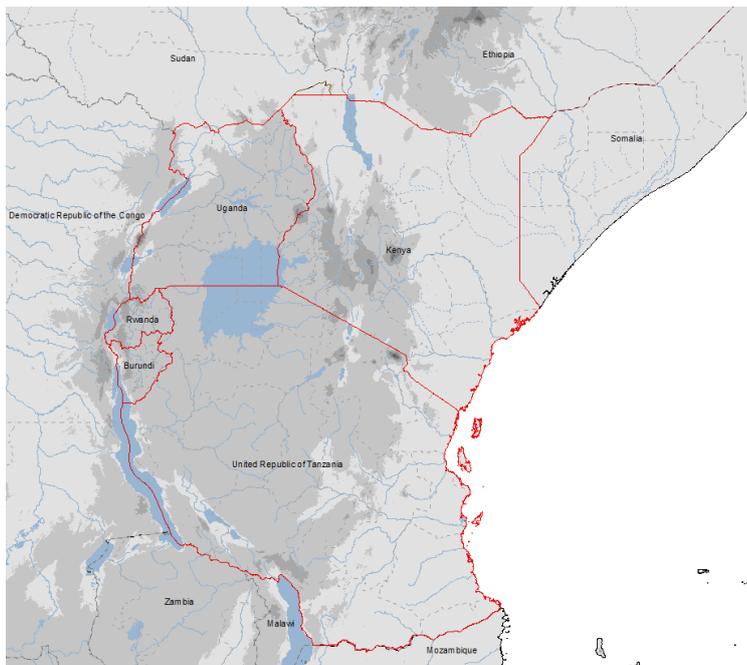


Leopard gecko *Eublepharis macularius*
© Eduardo Santos

Data Collection

From August 2013, following work to develop a preliminary species list and obtain initial reference material, and the completion of EAD-supported data collection for the reptiles of East Africa, species entries were prepared in IUCN's Species Information Service (SIS) database for 191 species of reptiles recorded from Central Asia, Ukraine, Belarus and Moldova, representing all known lizards – including amphisbaenians – and snakes presently recognized for this region. Work is ongoing to complete accounts and accompanying distribution maps for each species, and at the time of writing had been completed for 150 species.

The data included all available literature information on species' distributions, population status, ecological requirements and possible threats. This is a particularly poorly-known region; a 2008 guide to the lizards of the Western Palearctic was the primary distributional reference for this group, and the 2013 companion volume on snakes became available during the course of data collection, but much of the data was compiled based on an extensive review of the available primary and secondary literature, and from contacting specialists with recent experience in the region. Data compilation, and the preparation of associated distribution maps, will be completed by the end of April 2014.



Future Activities and Final Products

The forum will enable contributors to comment on, provide data for and suggest amendments to the draft species accounts and maps. A subsequent “post-workshop” cleanup and review process by BAU staff will incorporate these changes into the SIS species accounts and will ensure that the application of the Red List Categories and Criteria is accurate and consistent. It is likely that the final data will be presented in a published IUCN report. Red List accounts for species whose ranges have been fully assessed as a result of this process will then be submitted for publication on the Red List website.

East Africa

Terms of reference were agreed for an assessment of the snakes and lizards of East Africa by the joint IUCN-Conservation International Biodiversity Assessment Unit (BAU) in April 2013, supported by the generous financial support of the EAD. The goal was to compile data on and determine the conservation status of each of the 391 reptile species (excluding chameleons, turtles and crocodiles) found in Tanzania, Kenya, Rwanda, Burundi and Uganda. This work was completed by August 2013, and laid the groundwork for an assessment workshop supported by matching funding from the World Wildlife Fund in January 2014.

Background

East Africa is among the most herpetologically diverse regions of the African continent, and an area of high endemism among reptiles: 27.8% of snakes and lizards in the region, excluding chameleons (108 of 391 species) are endemic to East Africa as a whole; a little over half of these are endemic to Tanzania alone.

At the same time, this is an area of high population growth and development, with the attendant loss of natural habitats. Two of the eight African biodiversity hotspots – characterized by a combination of high species diversity and the loss of much of their original vegetation – lie partly within East Africa: the Coastal Forests of Eastern Africa, and the Eastern Afromontane region. The latter includes Tanzania's Eastern Arc, a significant area of herpetological endemism.

Data Collection

The primary reference to reptiles of the East African reptiles is now over a decade old, having first been published in

2002, and the initial work updated the species list and taxonomy and obtained additional reference material. Following this process, from May 2013 species accounts were prepared in IUCN's Species Information Service (SIS) database for 391 species of snakes and lizards (including amphisbaenians) recorded from East Africa (encompassing Tanzania, Kenya, Burundi, Rwanda and Uganda). This list excluded chameleons (57 species); this group exhibits a peak in both diversity and endemism in East Africa, but was evaluated in a parallel assessment process organized by the Chameleon Specialist Group and supported by BAU staff. Similarly, assessments of crocodiles and turtles are underway by the interested Specialist Groups, and so these animals too were excluded. The final list included all other reptile species currently recognized for or expected to occur in the region.

Data were collected and distribution maps prepared for each of these species based on the available literature. This data included information on species' distribution, population status, ecological requirements and possible threats. Data compilation, and the preparation of associated distribution maps, was completed by the end of August 2013.

The Assessment Workshop

In collaboration with IUCN's Climate Change Unit and with financial support from the World Wildlife Fund, BAU organized a workshop in late January 2014 bringing together ten reptile experts. These experts were both international herpetologists and expert participants from Tanzania and Kenya. Participants were given presentations on the Global Reptile Assessment and the IUCN Red List of Threatened Species Categories and Criteria— the global gold standard used to assess extinction risk for a species. Experts were split into four working groups, each facilitated by a trained IUCN staff member. The species were divided into geographically distinct units (for example 'Eastern Arc'). This method allowed maximum utilization of the time available to the experts for reviewing the data that had been collected for each species.

The data for each species was discussed and supplemented by the information collated within SIS and on hard copy maps printed from the shapefiles created during the data compilation stage. This process was particularly important for 'grey' information, i.e. information of which the participants were aware, but had yet to be formally published. Data on threats in particular, which was poorly-represented in the primary and secondary literature used to compile the accounts but well-known to the regional experts, is difficult to obtain outside this kind of workshop setting, and the workshop participants provided critical information necessary to inform the conservation status of each species.

Using the data discussion as a foundation, the workshop participants were required to agree on an IUCN Red List Category for each species (where Critically Endangered, Endangered and Vulnerable species are considered to be threatened with extinction).

Future Activities and Final Products

Following the successful completion of the Bagamoyo workshop, the process of post-workshop review has begun: the accounts and maps drafted at the workshop will be individually cleaned up and checked for consistency with the IUCN Red List Categories and Criteria by BAU staff. Outstanding questions will then be identified and resolved through remote correspondence with the specialists who had attended the workshop and with additional specialists who were unable to attend. The final accounts and maps will be made available, probably on the IUCN Red List assessment forum, for final comments and corrections from the specialists prior to final submission to the Red List. This peer review process is an essential part of the quality control IUCN Red List assessments go through prior to publication, and ensures that the resulting assessments provide the best available scientific consensus concerning the status of these species, and are fully supported in the database (and on the IUCN Red List website) with relevant literature and references.

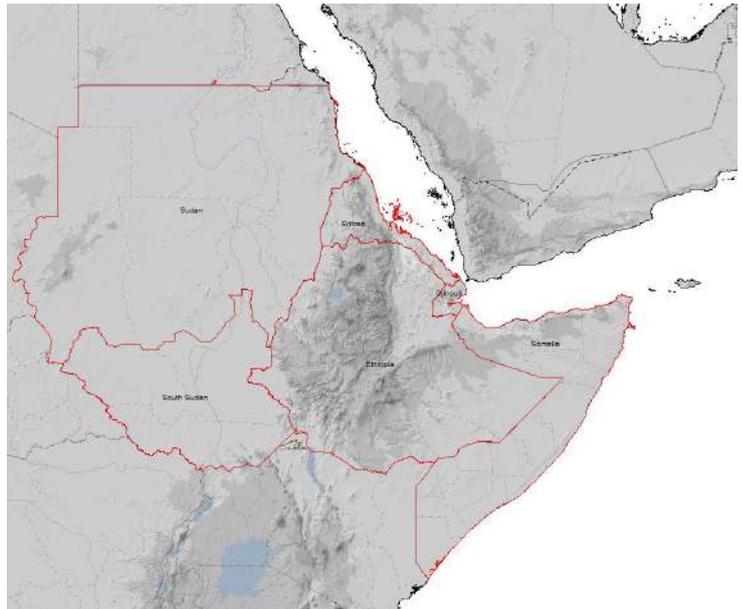
It is envisaged that this review process will be finalized by June 2014, with expected publication on the Red List late in 2014. The maps prepared with EAD support also represent an important component of an ongoing study investigating the likely impacts of climate change on African vertebrates, which will be submitted as a peer-reviewed paper at a date yet to be determined.

Country	Species	Endemic
Tanzania	279	65
Kenya	218	13
Rwanda	62	3
Burundi	48	0
Uganda	129	1

Table 1: Provisional numbers of species of snakes and lizards (excluding chameleons) in each country in East Africa

Horn of Africa

Draft assessments and distribution maps for the reptiles of the Horn of Africa were prepared by the IUCN-CI Biodiversity Assessment Unit (BAU) in 2012, as detailed in the previous report. An online forum tool and an associated website to support general Red List assessments were developed thanks to the generous financial support of the Environment Agency Abu Dhabi. The Horn of Africa reptile assessment was the project chosen to pioneer the use of an online forum for a large scale Red List assessment project. This report provides an update on the progress of and challenges encountered in the use of this new tool.



Background

The Horn of Africa and the two Sudans consist of mainly arid, moderate to high-elevation habitats with a high human population density: Ethiopia is the second-most populous country in Africa. Within this wide area 337 species of lizards, snakes and turtles have been recorded. This combination of high species richness and high human population densities makes this area important for understanding the conservation needs of dryland areas.

Many species are endemic to this region, particularly in Ethiopia and/or Somalia (approximately 22% of reptiles known from the latter country appear to be endemic to Somalia). At the same time this area is a biogeographic transitional zone between Mediterranean faunas in the north and east and East African reptiles in the south, while the humid forests of South Sudan represent the western range margin for many Central African species. The Horn lies directly across the Red Sea from the Arabian Peninsula, and the two regions share 34 species (10% of the total known from the Horn, and 19.8% of the Arabian reptile fauna).

Checklist of the Reptiles of the Sudans

One proposed product of the Horn of Africa reptile assessment was a peer-reviewed reptile checklist for Sudan and South Sudan, a region that has been neglected in the herpetological literature. The recent political division has the potential to result in confusion over references in the historical literature to “Sudan”.

While the assessment feedback was limited, progress has been made on compiling a species list to the two Sudans, including obtaining novel and previously unpublished species records, complete with specific locality data. A checklist is now in preparation, with unit member Phil Bowles as the lead author.

Future Activities and Final Products

BAU staff are considering approaches to supplement the forum process to accelerate progress on completing the Red List assessments, including visits to key specialists during in an environment that will allow more structured data collection than the online forum. A subsequent “post-workshop” cleanup and review process by BAU staff will incorporate these changes into the SIS species accounts and will ensure that the application of the Red List Categories and Criteria is accurate and consistent. It is likely that the final data will be presented in a published IUCN report. Red List accounts for species whose ranges have been fully assessed as a result of this process will be submitted, likely in 2015, for publication on the Red List website.

The Online Assessment Forum

IUCN's Amphibian Specialist Group (ASG), with support from the BAU, has developed a tool for permitting IUCN Red List assessments to be conducted remotely. With support from EAD, development of the corresponding BAU website was completed by May of the same year by unit staff, with development taking slightly longer than anticipated due to the need to produce supporting website content to improve accessibility.

With the assistance of iNaturalist, the managers of the forum, the Horn of Africa assessment forum went online from June 2013, and the small number of specialists with expertise in the reptiles of the Horn of Africa and the Sudans were contacted for their input regarding the distributions, population status, ecology, and – critically – threats to the species to be assessed, and to determine the appropriate conservation status of each species applying the IUCN Red List Categories and Criteria.

The response from these specialists was disappointing, due in large part to the substantial time commitment dem-

anded by an assessment forum covering almost 350 species. Of the specialists contacted, only one commented on the forum pages itself and so limited the intended value of the online tool for promoting discussion. While other specialists were mostly keen to be involved in the assessment process, they preferred to share data via email correspondence as being more convenient (especially for large datasets, and for data that is presently confidential). There was a particular shortage of feedback on threats and the conservation assessments themselves, the key information that was mostly unavailable from published literature, and as a result the assessment process – originally envisaged for completion by October 2013 – is still ongoing by the time of writing in March 2014.

In addition to the Horn of Africa reptile assessment and the two final projects within the global chameleon assessment, the forum will be used to host the Central Asian draft reptile assessments. This work is likely to be supplemented by unit staff travelling to the region to liaise with key specialists in person, a step also proposed to obtain further information on species included within the Horn of Africa assessment. Herpetologists with expertise in the regions being assessed will be invited to review and amend the accounts and maps once the accounts are online, to provide additional data and to determine the appropriate conservation status of each species applying the IUCN Red List Categories and Criteria.



Arabian Chameleon *Chamaeleo arabicus*

Bumblebees on The IUCN Red List: Assessing the Species of the Americas

Neil Cox, Manager, IUCN-CI Biodiversity Assessment Unit

Sarina Jepsen, Coordinator, IUCN SSC Bumblebee Specialist Group

Key achievements

- The BAU and South and Central American members of the SSC Bumblebee Specialist Group (BBSG) collaborated to complete profiles for over 40 bumblebee species;
- 46 North American bumblebee species were assessed by Xerces Society staff and the pre-assessment stage is underway for the remaining North American species.



Central and South America

Capacity building

As a follow up on the significant training provided to the South and Central American bumblebee experts during 2012, technical support was again provided to enable the collection of information needed to best understand the conservation status of bumblebees for these regions. In particular, assistance and advice was given in the application of the IUCN Red List Categories and Criteria, with most species assigned a provisional threat Category by the end of 2013.

Data compilation

Data for nearly the 41 species of bumblebee recognized from South and Central America have now been fully entered into the IUCN Species Information System, and Red List conservation assessments of their status have been drafted. Information is still outstanding for several Central American species, and species occurring in both Central America and North America. The Biodiversity Assessment team will be following up with experts from Central America in 2014 to finalize information from Latin America.

Following finalization of the maps for the species of these regions in 2014, the data will be reviewed by the Bumblebee Specialist Group Red List Authority for scientific accuracy, with a view to publication of completed accounts on the IUCN Red List of Threatened Species in late 2014. Once these data (including the maps) are available it will be possible to both identify priority areas for maintaining species richness and conserving threatened species, and examine conservation actions that can assist in mitigating threats (such as competition from introduced bumblebee species).

North America

Data compilation

Xerces Society staff applied the IUCN Red List Categories and Criteria to 46 North American bumblebee species. We used a database of nearly 300,000 electronic North American bumblebee records that was assembled from nearly 150 academic, research, citizen science and private collections by Paul Williams (Chair of the IUCN Bumblebee Specialist Group, or BBSG), Robbin Thorp (BBSG Co-Regional Coordinator for North America), Leif Richardson (North American BBSG member), and Sheila Colla (BBSG Co-Regional Coordinator for North America) for the guide book: *Bumblebees of North America* (2014). We used this database to evaluate changes in each species' extent of occurrence (EOO), per-



sistence, and relative abundance over the past decade. To identify potential biases in the data set, we also evaluated the survey effort that has occurred over space and time.

Analyses

We evaluated changes in each species' spatial distribution over time using extent of occurrence (EOO) and a measure of persistence (described below). We also assessed changes in each species' relative abundance, which we consider to be an 'index of abundance relevant to the taxon', as specified by the IUCN Red List Categories and Criteria (IUCN 2012). For both the EOO and persistence calculations we divided the database into historical (1805 – 2001, N=128,572) and current (2002-2012, N=73,626) records. This timeframe was chosen as IUCN criteria stipulate that species decline must have been observed over the longer of three generations or 10 years.

Results to date

Preliminary results of the South and Central American assessments

The preliminary results have assessed 1 species as Critically Endangered, 2 Endangered, 1 Near Threatened, 24 Least Concern, 3 Data Deficient, and 10 Not Evaluated (see Figure 1). While, relatively few of the species reviewed to date are assessed as threatened with extinction, there are considerable threats to even widespread species. The threats most frequently observed for bumblebees in Latin America, are typically habitat loss, often through conversion of species rich habitats (particularly in the Andes) into monoculture agriculture; and the displacement of native species of bumblebees by invasive competitor European bumblebees (*Bombus terrestris* and to a lesser extent *B. ruderatus*) that have been introduced for their pollinator services.

While spatial data (and conservation assessments for 10 species) are still under compilation, an initial review of the available information does not indicate any distinct 'hotspots' of threatened bumblebee species in Latin America. There are threatened species provisionally recognized from the Southern Cone of Chile and Argentina, the Atlantic Forest of Brazil, and the highlands of Central America. Important information is particularly still needed on the status of several bumblebee species in Central America, some of which are regional endemics potentially threatened by habitat loss.

Preliminary results of the North American assessments

We used each of the quantitative measures (changes in range loss, persistence, and relative abundance), range maps, sampling effort, recent literature, and best professional judgment to assign each North American bumblebee species to a preliminary IUCN Red List Category (IUCN 2012). Categories were assigned based on the data that was available,

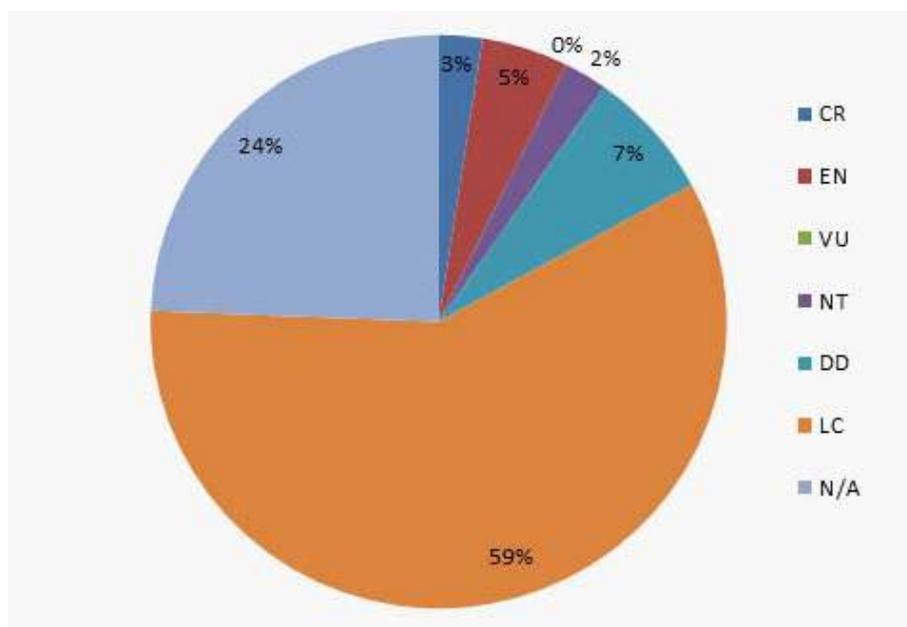


Figure 1. Percentage of South and Central American assessed species in each IUCN Red List Category.

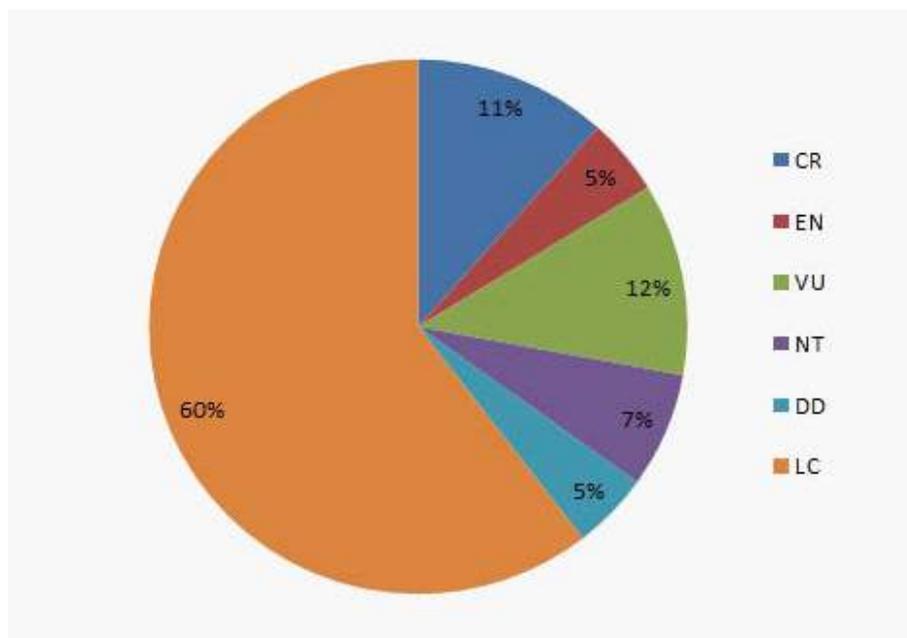


Figure 1. Percentage of North American assessed species in each IUCN Red List Category.

and each species' range size, as well as the degree of confidence that we had in population estimates. Because there are limitations in evaluating extinction risk using museum specimen data (presence-only data collected by many individuals in a non-random manner), we generally erred on the side of categorizing a species as less threatened than was justified by quantitative analysis alone.

We have assigned preliminary Red List Categories to each bumblebee species. Five species are listed as Critically Endangered, two species are listed as Endangered, five species as Vulnerable, three species as Near Threatened, twenty-six species as Least Concern, and two as Data Deficient (see Figure 2) Our preliminary results suggest that approximately one-third of the North American bumblebee fauna (or 15 of the 46 species assessed) fall into a threatened category.

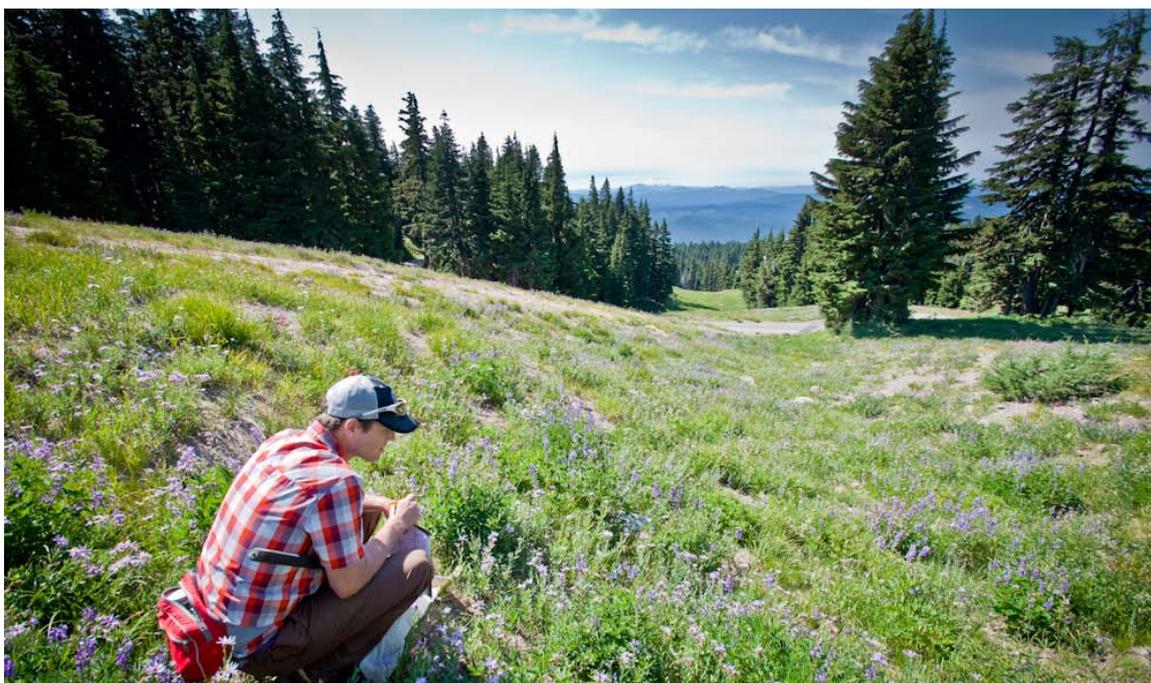
Our assessments have been sent to all of the North American members of the Bumblebee Specialist Group for review. Once comments are received, they will be incorporated into the assessments. Over the course of 2014, North American members of the BBSG will compile information on the taxonomy, distribution, population status, habitats & ecology, use & trade, threats, conservation actions, and literature for all North American species, then the complete assessments will be submitted to the IUCN for publication on The IUCN Red List.

Conclusions

Progress has been made in collecting key information about the bumblebees of Latin America, more is now understood about the threats to these species and preliminary results are available to guide conservationists as to which species are at risk of extinction. The proposed publication of information about these species from this region on the IUCN Red List of Threatened Species, can be seen as an important step forward in recognizing and understanding the global threat to key pollinator species.

Next steps for 2014

It is anticipated that information gathered for all bumblebee species of South and Central America will be published and the assessments for all North American species will be submitted by the end of 2014.



R Hatfield surveying for *Bombus occidentalis*

Analysis of Cati on The IUCN Red List

Bárbara Goettsch, Coordinator, IUCN SSC Cactus Red List Authority

Key findings

- 1477 (99%) species published on the Red List;
- Calculated percentage of species in each Red List Category;
- 1438 range maps for cacti;
- Hotspots of threatened cactus species identified;
- Countries with highest number of Critically Endangered species identified;
- Most important threats to cacti categorised.



After four years of intense work, we are pleased to report that the Global Cactus Assessments (GCA) has been completed. The last phase of this project, during which we processed assessments, published them on The IUCN Red List, and analysed the information, was made possible by the generous support of EAD. We present here a summary of the project and the main findings.

The species were assessed in a series of workshops planned according to the distribution of the species and the experts. We organised a total of 9 workshops which gathered over 50 experts. A summary of the workshops is presented in Table 1.

Workshop	Dates	Country/Region	Number of experts	Number of facilitators
Mesoamerican region	26-30 April 2009	Mexico	13	4
Chihuahuan Desert region	16-20 November 2009	Mexico	13	3
Sonoran Desert	10-13 May 2010	USA	10	3
Brazil I	2-5 June 2010	Monaco	5	3
Brazil II	8-9 August 2010	Brazil	5	2
Southern Cone	20-24 September 2010	Argentina	10	4
Andean region	2-6 May 2011	Chile	9	4
Caribbean region	25-28 July 2011	USA	9	3
Baja California region	6-7 February 2012	Mexico	3	1

Table 1. Workshop title, dates and country the workshop took place, number of experts and facilitators attending.

A total of 1477 out of 1480 species were assessed following The IUCN Red List Categories and Criteria. We found that 28% of all extant species are threatened with extinction (Figure 1).

There were no species assessed as Extinct or Extinct in the Wild, only two species were Not Evaluated and one species, assessed in 2002, still needs to be reassessed.

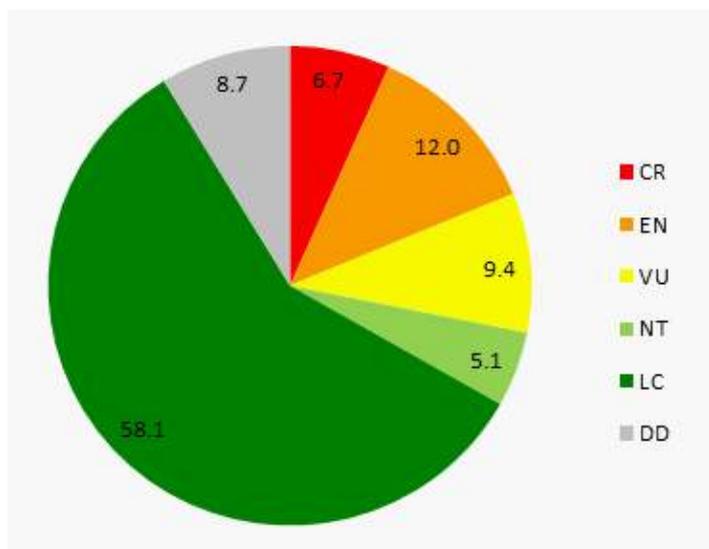


Figure 1. Percentage of cactus species in each IUCN Red List Category.

The GCA generated a total of 1438 species range maps – this is the first time all species of a diverse plant family are mapped (no maps were generated for Data Deficient species or those species Not Evaluated). These range maps have allow us to visual for the first time the geographic location of threatened cactus species hotspots (Figure 3).

Unexpectedly, southern Brazil and northern Uruguay were revealed as the main hotspot of threatened cacti, with a total of 28 Critically Endangered, Endangered or Vulnerable species. This area had never before been identified for such importance. Other major hotspots are found in central and northern Mexico. There are also some areas which are not particularly rich in species, but have a high proportion of threatened species; these are found in Guatemala, Peru and Chile.

The countries the highest species richness, number of threatened species and number of Critically Endangered species are summarised in Table 3. Mexico is by far the country with the highest diversity of cacti; it is also the country with the highest number of threatened and Critically Endangered species, followed by Brazil. In terms of numbers of threatened species these two countries are followed by Chile, Peru and Argentina. While in terms of number of Critically Endangered species, they are followed by Peru, Chile, and Argentina and Cuba.



This beautiful white flowering cactus, *Echinopsis terscheckii*, has a relatively wide range in Argentina and Bolivia. However, this species is listed as Vulnerable because around 30% of the population has been lost due to urbanization and the use of the species as wood.
 © Marcelo Trevisson

The range of threats affecting this plant group is very diverse (Figure 2). The most important proximate drivers of extinction risk among threatened cacti are specimen collection for horticulture (affecting 47% of threatened cacti), smallholder livestock ranching (31%) and smallholder annual agriculture (24%).

We are finalising a scientific manuscript that will contain the major results found in this assessment, including spatial analyses. All the experts and facilitators who kindly provided their time and knowledge to complete the largest plant assessment to date will be co-authors of the manuscript. The results generated from the GCA will allow planning better conservation strategies based on sound scientific information. We are hoping that conservation actions will soon start taking place in order to safe guard these magnificent plants.

Country	Total species	Threatened species	Critically Endangered species
Mexico	599	140	31
Brazil	271	131	28
Argentina	205	27	5
USA	166	12	4
Peru	139	31	9
Chile	83	32	6
Cuba	31	10	5
Puerto Rico	13	2	1
Dominican Republic	21	4	1
Haiti	24	4	1
Costa Rica	32	8	1
Guatemala	36	7	1
Uruguay	47	21	1

Table 3. The 13 countries with the highest number of species, threatened species, and Critically Endangered species.

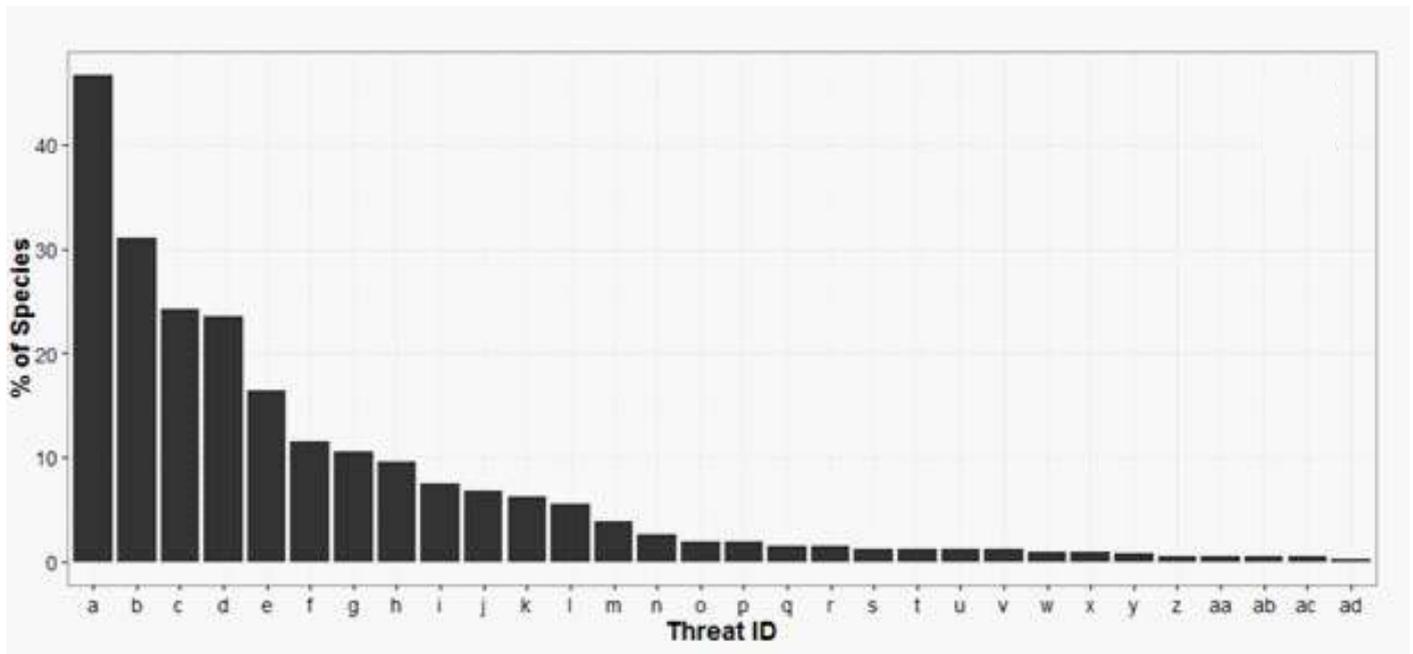
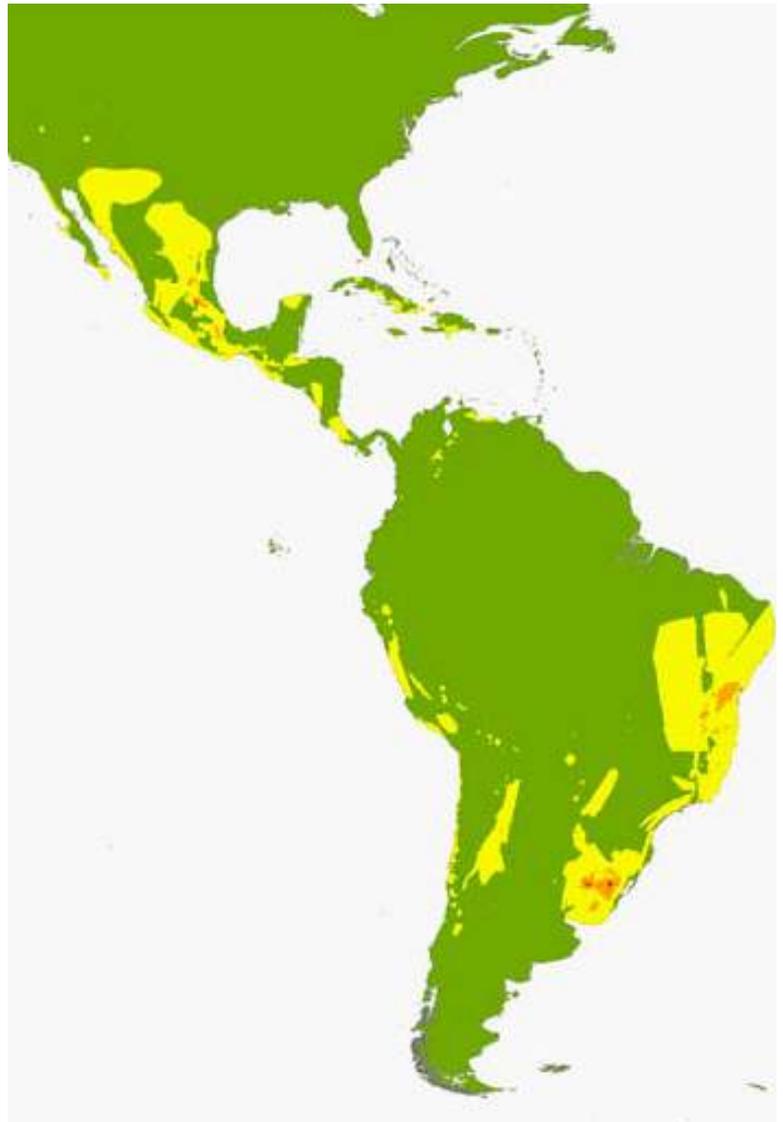


Figure 2. Percentage of cactus species in each IUCN Red List Category.

Figure 3. Geographic distribution of threatened cactus species; the red areas contain the highest number of threatened cactus species.





Guiding
Conservation
for 50 Years

Magnolias on The IUCN Red List

Sara Oldfield, Chair, IUCN SSC Global Tree Specialist Group

Summary of achievements

This project has successfully achieved the goal of transferring and updating data for all taxa in the *Magnoliaceae* family from *The Red List of Magnoliaceae* into IUCN's Red List data management system, SIS (Species Information Service). Data originally collected for *The Red List of Magnoliaceae* was not recorded in SIS and the inclusion of these taxa on the Red List required, where possible, the supplementation of new data in order to meet the documentation standards.



Background

The Red List of Magnoliaceae was published in 2007 by Fauna & Flora International. Led by the IUCN SSC Global Tree Specialist Group, with support from the Botanic Gardens Conservation International, the collection of information for The IUCN Red List assessments included in the publication was a collaborative effort involving botanists worldwide. A major component of the assessments was the analysis of species distributions using information compiled from a variety of sources including regional and monographic floras, national Red Data Books, online herbarium specimen databases and the taxonomic and ecological scientific literature. Species mapping to support the assessments was undertaken by Daniele Cicuzza at the University of Bournemouth.

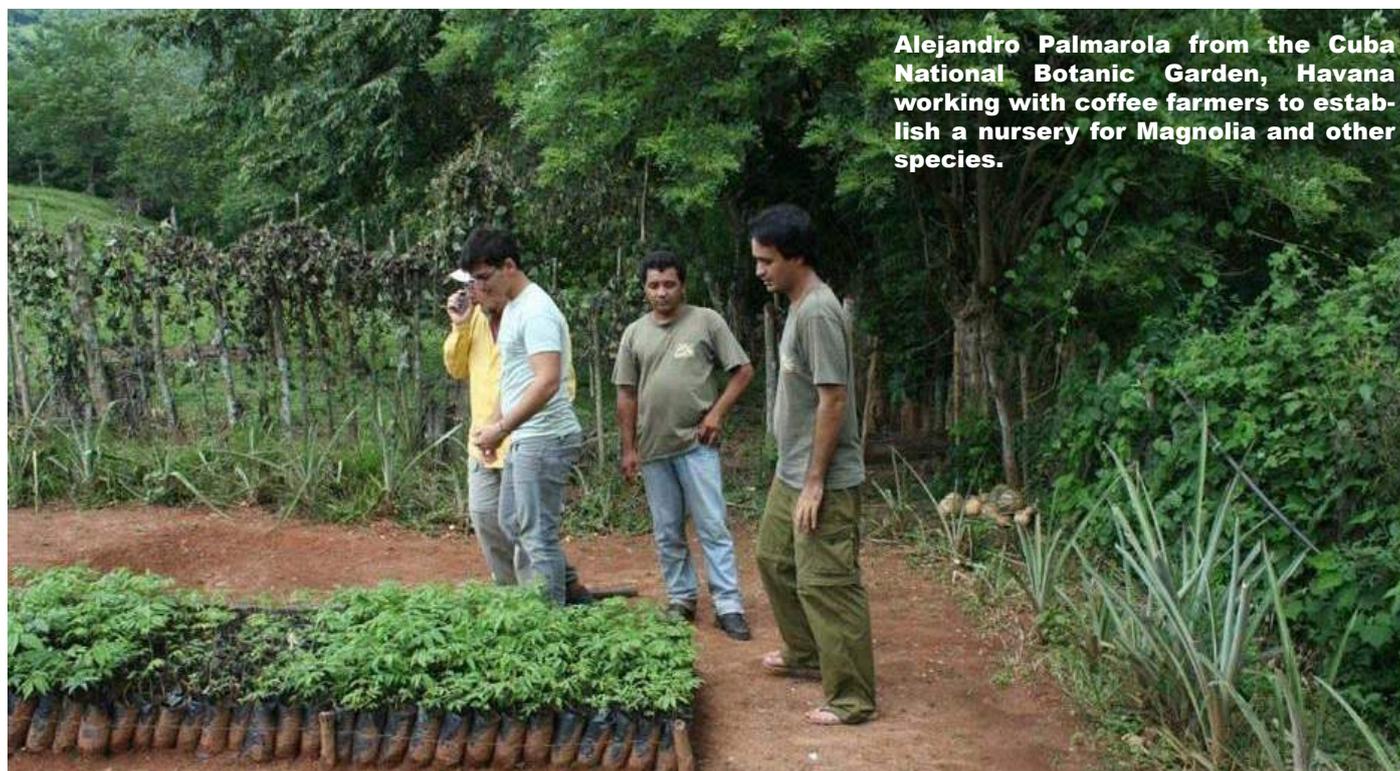
Magnolia cubensis ssp. *acunae* is known from Cuba where it is widely scattered in the montane rainforests of the Guamuhaia range. Currently, illegal logging, clearing of the land, the introduction of exotic species, and the use of herbicides are the primary threats to the remnant mature individuals.



Progress

Work in 2013 was focused on the final checking process. For this important stage in the assessment process, IUCN contracted an expert in Red List assessments to review all the data collected for Magnoliaceae and recorded in SIS. The categories were revised for various species – mainly moving from DD to LC on the basis of wide distributions. This process identified the need to find more information on generation length assessed using the A criterion before the assessments can be confirmed. Generation length is expected to be around 200 years for certain species. There is also a need to find more specific information on threats in the areas where some of the species occur.

A total of 149 species are now in the queue for uploading to The IUCN Red List.



Alejandro Palmarola from the Cuba National Botanic Garden, Havana working with coffee farmers to establish a nursery for Magnolia and other species.

Summary of IUCN Red List assessments

A total of 261 species were assessed as follows:

Critically Endangered	25
Endangered	67
Vulnerable	42
Near Threatened	14
Least Concern	37
Data Deficient	76

These results suggest that around 51% of Magnolia species are threatened with extinction, 20% are not threatened and relatively widespread and abundant but 29% require further research and information. The Critically Endangered species occur in the following countries China (6); Colombia (12), Cuba (2), Haiti and Dominican Republic (3), India (1), Mexico (1). Through the review and update of these assessments we can now identify regions where the most significant declines have occurred, identify which species are facing extinction and which threats require urgent action.

It has been recognized that many of these species are currently absent from ex situ collection and given the level of present and future decline from disturbance may require seed collection. It must be noted that many of the species categorized as Critically Endangered are faced with extinction as they are fragmented and cannot maintain a viable population for the future. Because the generation length is expected to be around 200 years for certain species, these require urgent conservation action and habitat protection through collaboration with international organizations and protected area management.



Magnolia Capacity building workshop in Colombia organised by Jardín Botánico de Medellín.



Further research

Working with its global network of botanic gardens and members of the IUCN SSC Global Tree Specialist Group, BGCI will continue to collect information to supplement existing conservation-relevant information in view of updating assessments on The IUCN Red List. We are particularly keen to assemble more information for the species in Malaysia and Indonesia.

BGCI is currently recruiting a Red List Manager and making strenuous efforts to collect more data for Magnolia species which do not quite meet the minimum documentation requirements for inclusion on The IUCN Red List will be a priority task.

Finally, as we strive to complete the publication of Magnolia assessments, we are cognisant that data on these species will be very valuable for the exciting new Plants for People (P4P) project that has the overall aim to create IUCN Red List assessments and take conservation action for the 6000+ plant species that are most important for humankind.

Slipper Orchids on The IUCN Red List

Mike Fay, Chair, IUCN SSC Orchid Specialist Group

Hassan Rankou, Coordinator, IUCN SSC Orchid Red List Authority

Summary of achievements

In this project, we have:

- Completed the IUCN Red List assessments of all species (52) in the genus *Cypripedium* and submitted them for publication to the IUCN Red List Unit in Cambridge, UK;
- Compiled data for approximately 50% of *Paphiopedilum* spp. and entered these data into the IUCN Red List data management system Species Information Service (SIS) in preparation for assessment.



Background

There are approximately 160 species of slipper orchid worldwide, instantly recognisable thanks to their slipper-like flowers. These species receive much public interest due to their fascinating flowers, the environments in which they grow, and because hybrids derived from the wild species are becoming increasingly affordable and intriguing gifts.

There are five genera of slipper orchids: *Cypripedium* with 52 species distributed across the northern temperate regions, *Paphiopedilum* with 88 species in Southeast Asia, *Phragmipedium* with 25 species in Central and South America, *Selenipedium* with five species in Central and South America and *Mexipedium* with a single species that is endemic to Mexico and may already be Extinct in the Wild.

Most of the slipper orchids are severely threatened by habitat destruction and over-collection by plant collectors and growers. Although habitat destruction affects all species, over-collecting is a particularly serious threat to those species important in trade and can lead to the near extinction of a species in the wild within a few years of discovery. Slipper orchids are traded in large numbers, mainly as living plants extracted from the wild and man-made hybrids.

Despite the threats to these species and their high profile for conservation, only few global assessments have been published to date in The IUCN Red List of Threatened Species database. Therefore, this project aims to create and complete the red listing of Slipper Orchids and publish the conservation assessments on the global IUCN Red List.

Key achievements

- Data compilation and map creation for 100 slipper orchid species;
- Completed the red listing of the genus *Cypripedium*: 52 new assessments submitted to The IUCN Red List of Threatened Species;
- Data compiled for approximately 50% of *Paphiopedilum* spp. and entered in the IUCN Red List data management system, SIS (Species Information Service). Twenty assessments for *Paphiopedilum* spp. are completed and data have been compiled for another 20 species assessments.



The assessment process

In the pre-assessments phase of the project, data were gathered, edited to meet IUCN standards, and entered into SIS. During the assessment phase, the IUCN categories and criteria were applied to each species according to .

A total of 100 maps have been created in the form of shapefiles in Arc GIS (75 complete maps, 25 incomplete due to data deficiencies), using point locality data from different resources [Global Biodiversity Information Facility (GBIF), herbarium labels and scientific literature]. The area of occupancy (AOO) and extent of occurrence (EOO) were based primarily on data points and calculated with GeoCAT.



Cypripedium tibeticum © Philip Cribb

Major threats

Most slipper orchids, including species of *Cypripedium* and *Paphiopedilum*, require particular environments and are sensitive to environmental change. The major threats include logging, deforestation, ruthless collection for regional and international trade, exploitation for horticultural purposes, trampling, recreational activities, ecological disturbance, mining, urbanisation, infrastructure development and management activities. These threats can have direct (e.g. destruction of plants) or indirect (e.g. alteration of habitat) effects.

General threats are climate change, drought and soil erosion. In addition, intrinsic factors which increase the risk of extinction for many species are small population size, restricted distribution, low dispersal rate and low recruitment rate.

Summary results of Red List assessments

The IUCN Red List assessments for *Cypripedium* revealed that 87% of species are in a threatened category and only 13% are not threatened. The threatened categories for *Cypripedium* are: 8% Critically Endangered, 46% Endangered, 25 % Vulnerable and 8% Near Threatened.

A similarly shocking picture is emerging for *Paphiopedilum* species, for which most of the completed conservation assessments are being categorised as threatened.

Having completed the *Cypripedium* accounts and half of the *Paphiopedilum* accounts, we are now intend to work on assessments for all remaining slipper orchids (a complete subfamily) and to publish the results on The IUCN Red List of Threatened Species. This will be a major step forward in the red listing of orchids and will allow us to carry out further statistical analyses on these charismatic plants. Finally, we are investigating the possibility of publishing the results as a paper in a scientific journal and possibly as a book.

Formosa's Lady's Slipper *Cypripedium formosanum* is native to Taiwan.
© Stephan Gale



Carnivorous Plants on The IUCN Red List

Robert Cantley, Chair, IUCN SSC Carnivorous Plant Specialist Group

Charles Clarke, Coordinator, Carnivorous Plant Red List Authority



Introduction

The mission of the Carnivorous Plant Specialist Group (CPSG) is to help ensure that the conservation status of all carnivorous plants are adequately and accurately documented, and to assist in raising public awareness and encourage initiation of appropriate conservation measures.

Our key objective is to ensure that The IUCN Red List is updated as quickly as possible, commencing with those taxa that are currently listed as Data Deficient and which have been identified by experts within the CPSG as being most in need of conservation action.

The CPSG currently has a membership of 6, including our Patron, Sir David Attenborough.

Background

Upon being appointed, the Carnivorous Plant Specialist Group determined that the genus most in need of new and updated IUCN Red List assessments is *Nepenthes*. This large genus comprises more than 140 species, with a centre of distribution in Southeast Asia. The vast majority of species occur in Indonesia, Malaysia and the Philippines, with outliers in Australia, New Caledonia, Indo-China, India, Sri Lanka, Seychelles and Madagascar. The last round of Red List assessments for *Nepenthes* was conducted in the late 1990s and was published by Arx et al. (2001). Since that time, a large number of new *Nepenthes* taxa have been described, but not assessed for the Red List. While several other species were assessed in 2001, they have not been surveyed since.

Given rapid rates of habitat destruction in Southeast Asia, coupled with a dramatic increase in the horticultural popularity of *Nepenthes*, we were concerned that a number of species that were not considered threatened in 2001 may now be threatened. However, in order to determine whether or not our suspicions were correct, it was necessary to conduct field surveys for the Not Evaluated (NE) and Data Deficient (DD) species, as well as new assessments for species that were assessed in 2001. This is a substantial task that we expect to take at least 2-3 years in total.

Key 2013 activities

As detailed in our 2012 report, a research project was undertaken in 2013 with the aim of gathering data for The IUCN Red List assessments of 19 *Nepenthes* pitcher plant species. Each of these species was considered threatened in the wild, and adequate, up-to-date information about their conservation status was lacking. Of the 19 species intended for survey, 13 had not been previously assessed.

Five field expeditions were undertaken to various parts of Southeast Asia during 2013, including Sumatra (two expeditions), New Guinea, Palawan, Luzon, and Sulawesi. The principal objectives of the project were twofold:

- Expeditions to the habitats where these species have been recorded by suitably qualified personnel, with the express aims of surveying the Area of Occupancy (AOO), Extent of Occurrence (EOO) and estimating the population size and condition. Where possible, an assessment would be made of the primary threats to the species and, where appropriate, suggestions may be offered as to how these threats might be mitigated.
- Data from surveys were collated by the CPSG Red List Authority, distribution maps prepared and supporting documentation gathered for input into SIS. This allowed for reliable, up-to-date IUCN Red List assessments.



Trip no.	Geographical area	Participants	Month of travel	DD/NE <i>Nepenthes</i> species surveyed
1	Sulawesi	Ch'ien Lee	March	<i>N. nigra</i> , <i>N. pitopangii</i>
2	Sumatra	Charles Clarke		<i>N. aristolochioides</i> , <i>N. naga</i> , <i>N. rigidifolia</i> , <i>N. sumatrana</i>
3	Philippines	Charles Clarke, Ch'ien Lee	July	<i>N. alzapan</i> , <i>N. campanulata</i> , <i>N. deaniana</i> , <i>N. gantungensis</i> , <i>N. leonardoii</i> , <i>N. mantalingajanensis</i> , <i>N. mira</i> , <i>N. philippinensis</i> , <i>N. palawanensis</i>
4	Sumatra	Nana Hernawati	October	<i>N. adnata</i> , <i>N. tenuis</i>
5	New Guinea	Charles Clarke, Ch'ien Lee	October-November	<i>N. klossii</i> , <i>N. lamii</i> , <i>N. monticola</i> , <i>N. papuana</i> , <i>N. paniculata</i>
-	Data derived from other sources	Charles Clarke, Ch'ien Lee, Nana Harnawati	N/A	<i>N. chaniana</i> , <i>N. clipeata</i> , <i>N. pilosa</i> , <i>N. rowanae</i> , <i>N. tenax</i> , <i>N. treubiana</i>

Table 1. Summary details of the field expeditions undertaken. Species from the original list are in purple text; species that we substituted for ones on the original list are in blue text, while species in green text were additional.

Challenges and setbacks

In late 2012, a powerful typhoon hit the southern Philippines, devastating large parts of eastern Mindanao. This made it impossible to schedule field expeditions to this restive part of the Philippines. Seven of the species that we originally intended to survey occur in this region (*N. copelandii*, *N. micramphora*, *N. mindanaoensis*, *N. peltata*, *N. petiolata*, *N. robcantleyi*, *N. saranganiensis*), thereby reducing the number of “assessable” species on our original list to 12.

Furthermore, we were unable to find any suitable researchers to undertake the expeditions to central Borneo to survey *N. pilosa*. In the end, *N. pilosa* could not be assessed, so we substituted it with *N. chaniana*, a species that was described in 2006 and used to be considered to be *N. pilosa*. We based our assessment of *N. chaniana* on recent field observations undertaken by Charles Clarke and Ch'ien Lee. We amended the existing assessment of *N. pilosa* to DD. Once it became apparent that we would be unable to survey several species from the Philippines, we asked Nana Hernawati, a *Nepenthes* specialist from Sumatra, if she could undertake a series of three field expeditions to survey several of the Sumatran DD and NE species. She agreed and so far has completed one of those expeditions.

Outcomes

The project delivered significantly better outcomes than originally anticipated: a total of 28 *Nepenthes* species were surveyed, with 26 receiving new or revised Red List assessments. All data were entered into the Species Information Service, distribution maps were created and these assessments were reviewed by the end of 2013.

This project has resulted in new, complete Red List assessments for more than 15% of all *Nepenthes* species and has resulted in a significant reduction in the number of Data Deficient and Not Evaluated species. This stands us in good stead to attain our goal of revising the Red List assessments for all *Nepenthes* species in the next few years.

Table 2 summarises the *Nepenthes* species that have been assessed for The IUCN Red List as a direct result of this project. Of these 28 species, two (*N. alzapan* and *N. pilosa*) were assessed as DD and as such do not contribute to the total number of species given effective RL assessments. Of the 26 species given an effective RL assessment, the breakdown of numbers for each assessment category were as follows: CR – 4 species, EN – 7 species, VU – 9 species, LC – 6 species. Three of the four CR species were assessed as CR in 2001; the only new addition to this group was *N. rigidifolia*, which was previously NE. While there is cause for deep concern about the long term survival of several species, there are also grounds for cautious optimism as more than half of the species were assessed as LC or VU, indicating that there are no strong threats to the majority of *Nepenthes* species at present, and that the distribution and intensity of threatening processes is confined to certain geographical areas and species that are prized in horticulture.

In addition to the species surveyed for IUCN Red List assessments during this project, a new, undescribed species of *Nepenthes* was discovered on the expedition to Mount Doorman in New Guinea. As no herbarium specimens have been collected yet, this species is unlikely to be formally described for at least another 1-2 years and little is known about its geographical range and population size at present. Nevertheless, the discovery of a new species represents an excellent, unexpected outcome of this project.

<i>Nepenthes</i> species	Previous Red List category	2013 Red List category
adnata	DD	EN
alzapan	NE	DD
aristolochioides	CR	CR
campanulata	CR	EN
chaniana	NE	EN
clipeata	CR	CR
deaniana	NE	VU
gantungensis	NE	VU
klossi	VU	EN
lamii	VU	VU
leonardoii	NE	VU
mantalingajanensis	NE	VU
mira	VU	VU
monticola	NE	LC
naga	NE	VU
nigra	NE	LC
palawanensis	NE	EN
paniculata	EN	EN
papuana	DD	VU
philippinensis	NE	LC
pilosa	DD	DD
pitopangii	NE	VU
rigidifolia	NE	CR
rowanae	NE	LC
sumatrana	CR	CR
tenax	NE	LC
tenuis	DD	EN
treubiana	VU	LC

Table 2. *Nepenthes* species assessed in this project and their assessment categories.

Conclusions

Our work this year has brought to light for the first time the extreme plight of some of the species surveyed. One such example is *Nepenthes rigidifolia*; discovered and described in 2004, this species is Critically Endangered, with less than 12 mature plants remaining in habitat at only a single known locality. Of all carnivorous plants, *Nepenthes rigidifolia* may be the most at risk at present and faces almost certain extinction within the next few years, unless urgent measures are taken to protect the remaining plants and establish an ex-situ breeding programme.

The CPSG wishes to express its gratitude for the generosity of the Environment Agency - Abu Dhabi, without which the field surveys necessary for the vastly important work undertaken this year would not have been possible.



Nepenthes klossii is an example of a poorly-known species that was assessed for The IUCN Red List in 2001, but whose conservation status changed, due to habitat destruction.
© Ch'ien C. Lee



Nepenthes glabrata is a high-altitude species found in central Sulawesi.
© Ch'ien C. Lee

Sturgeons on The IUCN Red List: Assessing the North American Species

Phaedra Doukakis, Co-Chair, IUCN SSC Sturgeon Specialist Group

Summary of activity

The North American members of the Sturgeon Specialist Group and selected experts have begun the process of re-assessing all North American sturgeon species, aiming for completion by 2016 when the 2006 assessments expire.



Updating the North American species

Thanks to the generosity of EAD, the Sturgeon Specialist Group (SSG) was able to organize a side meeting before the 7th International Symposium on Sturgeons (ISS7), held July 21-25, 2013 in Nanaimo, BC, Canada. The goal of this meeting was to prepare for an update of IUCN Red List assessments for all North American sturgeon species.

While the Eurasian sturgeons were assessed in 2009, revealing a severe decline in the conservation status of these species compared to the 1996 assessment, North American sturgeons have not been assessed since 2006. In an attempt to meet the required maximum 10-year interval in the updates of Red List species assessments, the North American members of the SSG and selected experts gathered for a preparatory meeting on July 20, 2013 in the facilities of Vancouver Island University.



Prior to this meeting, a significant effort was undertaken to revise the membership of the SSG in order to expand its geographic coverage and to bring in more junior level members. As such, the meeting was a chance to introduce new members in addition to planning future activities. However, the main focus of the meeting was to devise a process for completing the updated assessment of North American species. One of the biggest challenges identified was the process of identifying and evaluating separate stocks and populations of North American sturgeons and completing the overall species level assessment.

A significant opportunity was identified in that several North American scientists are currently creating a book detailing the current status of North American sturgeon species, which could provide much of the basic information needed for updating the status reviews. Status reviews of North American sturgeon species have also been completed by national agencies in the USA and Canada, or are underway, providing another significant resource.

Given financial constraints, the meeting participants agreed to carry out assessment work as a series of web-based meetings and surveys. Since this time, the SSG Chairs and the Red List Authority (RLA) Coordinator have discussed the issue with other IUCN personnel in order to understand the pitfalls and benefits of such remote approaches. The SSG and RLA Coordinator are now starting the process of identifying the most appropriate experts to participate in the update. It is envisioned that the North American assessments would result in the availability of new rankings in 2015-16.

Key Biodiversity Areas: Sites of Significance for Biodiversity

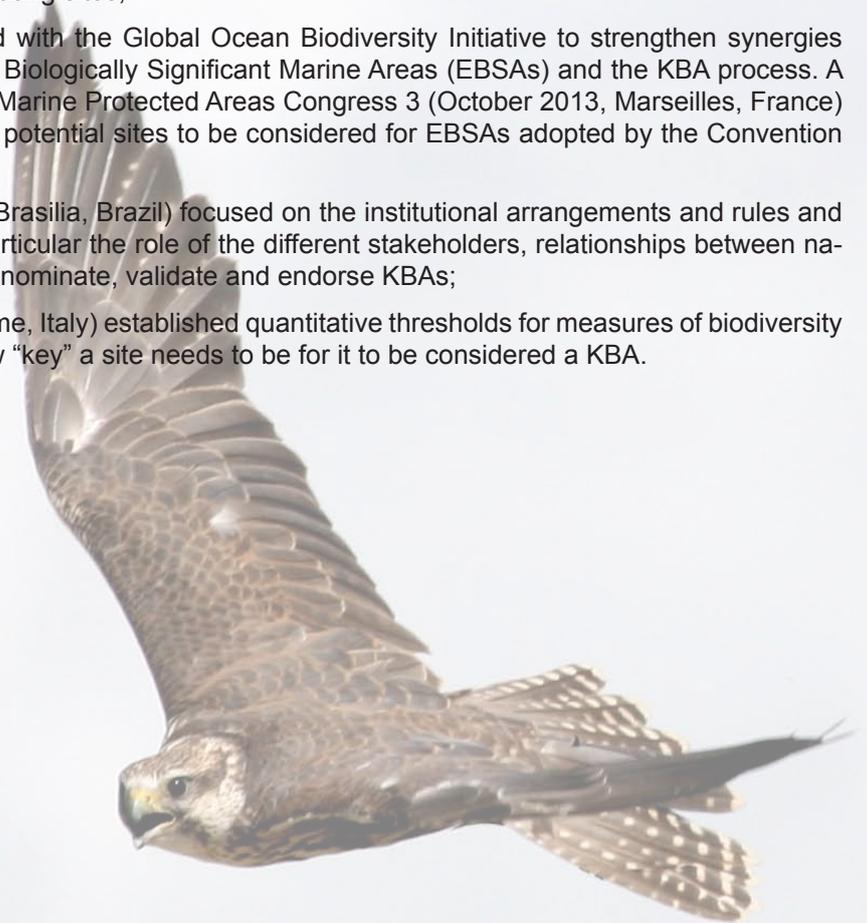
Penny Langhammer, Co-chair SSC-WCPA Joint Task Force on Biodiversity and Protected Areas

Annabelle Cuttelod, Conservation Planning Officer, IUCN Global Species Programme

Diego Juffe, Programme Officer, Aichi Targets and IUCN Knowledge Products, IUCN Biodiversity Conservation Group

Key activities and achievements

- More than 200 people have contributed to date to the development of the new standard for Key Biodiversity Areas (KBAs);
- A Criteria and Delineation workshop (March 2013, Front Royal, USA) defined scientific criteria for identifying KBAs and agreed on key considerations for delineating sites;
- A Joint Marine Working Group was created with the Global Ocean Biodiversity Initiative to strengthen synergies between the identification of Ecologically or Biologically Significant Marine Areas (EBSAs) and the KBA process. A workshop was held during the International Marine Protected Areas Congress 3 (October 2013, Marseilles, France) to discuss how KBAs could provide a list of potential sites to be considered for EBSAs adopted by the Convention on Biological Diversity;
- A Governance workshop (November 2013, Brasilia, Brazil) focused on the institutional arrangements and rules and procedures for the new KBA standard, in particular the role of the different stakeholders, relationships between national and global processes, and process to nominate, validate and endorse KBAs;
- Thresholds workshop (December 2013, Rome, Italy) established quantitative thresholds for measures of biodiversity significance, in other words, for defining how “key” a site needs to be for it to be considered a KBA.



Contents

1. Global consultation process

2. Progress in 2013

2.1 Regional consultations

2.2 Criteria and Delineation workshop

2.3 Irreplaceability study to inform KBA thresholds

2.4 SBSTTA side event on KBAs

2.5 Joint Marine Working Group

2.6 Governance workshop

2.7 Thresholds workshop

2.8 End use applications of KBAs

3. Road map for 2014-2015

3.1. Upcoming events and documents

3.2. Timeline for KBA consultation

1. Global consultation process

One of the two objectives of the WCPA/SSC Joint Task Force on Biodiversity and Protected Areas is to convene a global consultation process to consolidate scientific criteria and methodology for identifying sites of significance for biodiversity (Key Biodiversity Areas). These criteria will support national and regional processes in identifying important sites within their jurisdiction and will help national government agencies, decision makers, resource managers, local communities, the private sector, donor agencies, and others to target the implementation of site conservation safeguards. They will also contribute to the fulfillment of Target 11 of the new CBD Strategic Plan, which requires the identification of “areas of particular importance for biodiversity.”

A high-level “Framing workshop” held in June 2012 in Cambridge, UK was a major milestone in the development of the new KBA standard. Leading thinkers and practitioners from across the conservation community and related sectors, including Dr. Ashraf Saad Al-Cibahy from Environment Agency Abu Dhabi, were invited to contribute to this strategic exercise. The Framing workshop yielded consensus on the overarching vision and mission of the standard and purpose of the criteria, and it outlined the main technical issues that needed to be addressed. Five technical working groups were proposed on (1) Thresholds; (2) End users and applications; (3) Criteria and delineation; (4) Governance of the process; and (5) Joint working group between the Global Ocean Biodiversity Initiative (GOBI) and the Task Force on Biodiversity and Protected Areas. The progress reported for 2013 reflects the outputs of these working groups.

Documents and information related to the global consultation are available at: www.iucn.org/key_biodiversity_areas/.

2. Progress in 2013

The past year has seen tremendous progress with the KBA initiative including technical workshops, regional and thematic consultations, end user consultations, scientific research, and preparations for the World Parks Congress 2014.

2.1 Regional and thematic consultations

Several regional and thematic consultations were held in 2013 to inform stakeholders about the KBA consultation process and to seek technical input:

- Private and financial sector: “Biodiversity & Ecosystem Services in Impact Assessment”. Symposium organized by the International Association for Impact Assessment (IAIA). Washington, DC, USA on 8 February 2013 – Presentation and groups exercise – 20 participants;
- Eastern North America: “Biodiversity without Boundaries” meeting, Baltimore, USA on 17 April 2013 – 35 participants;
- Genetic biodiversity: “ConGRESS” final meeting, Gregynog, UK on 18 April 2013 – 35 participants;
- Scientific community: International Congress for Conservation Biology, Baltimore, USA on 23 July 2013 – presentation and panel discussion on KBAs.



Photo of a KBA: "Cies Islands IBA".
© Diego Juffe

2.2 Criteria and Delineation workshop

A technical workshop on Criteria and Delineation for KBAs was held at the Smithsonian-Mason School of Conservation in Front Royal, USA (11-15 March 2013). Forty experts on plants, fungi, vertebrates and invertebrates, as well as terrestrial, marine, and freshwater ecosystems specialists, from 31 different organizations and 16 countries, were invited to this workshop. The workshop had two main objectives. The first was to develop draft criteria for KBAs that span the genetic, species and ecosystem levels of biodiversity and can be applied for all regions, biomes and taxa and that build on existing criteria in pragmatic ways. The second was to provide guidance on the delineation of KBAs to increase the consistency and repeatability of the delineation process.

The workshop proposed four criteria for the identification of KBAs. To qualify as KBA a site must contribute significantly to the global persistence of: (A) Threatened biodiversity, (B) Geographically restricted biodiversity, (C) Biodiversity through outstanding ecological integrity, and (D) Outstanding biological processes.

The workshop reached ten points of agreement on KBA delineation and recommended a two-step process for delineating site boundaries: (1) deriving initial site boundaries based on biological data, and (2) refining biological map to yield practical boundaries as needed. Delineation should occur in consultation with relevant stakeholders, and the confidence in boundary delineation should be documented and reflected in the cartography of KBAs.

A draft report is available at http://www.iucn.org/key_biodiversity_areas/.

2.3. Irreplaceability study to inform KBA thresholds

One of the major challenges in the development of the KBA umbrella standard is to determine how "key" a site needs to be for it to be considered a "Key Biodiversity Area". This requires establishing thresholds for measures of biodiversity significance. Sites where biodiversity values exceed these thresholds trigger KBA status. But how should these thresholds be set?

A collaboration of experts from BirdLife International, Imperial College London, IUCN, Microsoft Research, the Sapienza University of Rome, and the University of Kent has designed and undertaken a set of analyses to inform this question using available data on birds. Led by Dr Moreno di Marco of Sapienza University of Rome, the group's work draws from three published bird atlases, which map bird sightings across grid cells for Australia (through Birds Australia), Europe (through Sovon), and Southern Africa (through the Southern African Bird Atlas Project), along with IBAs (Important Bird and Biodiversity Areas, a subset of KBAs) for the three regions. The analyses use formal techniques for calculating the degree to which each atlas grid cell is "irreplaceable", and then examine the factors that influence correspondence be-

tween cell irreplaceability and site identification as an IBA. The results were presented at the technical workshop on KBA thresholds held in December 2013 (section 2.7) and are being prepared for publication in a scientific paper.

2.4 SBSTTA side event on KBAs

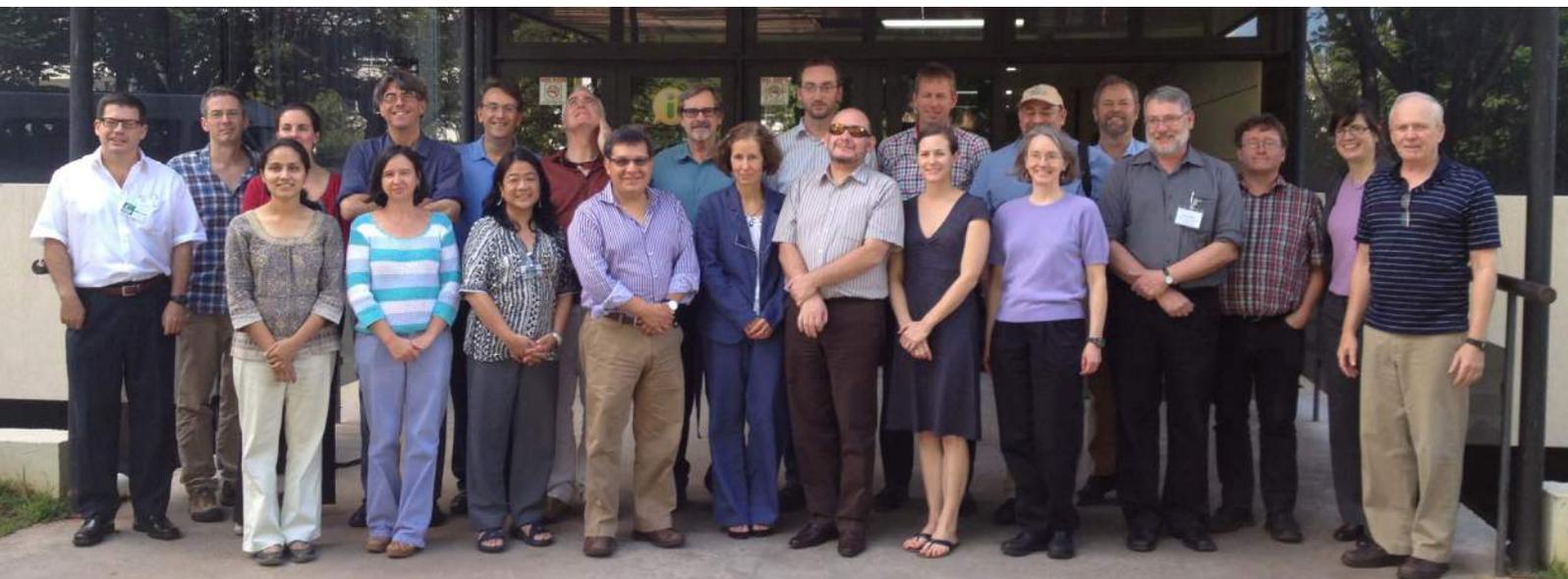
A side event on Key Biodiversity Areas was held at the Seventeenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 17) (October 2013, Montreal). This event was organized by the IUCN Biodiversity Conservation Group and chaired by CONABIO from the Government of Mexico. The side event was well attended (35 participants) and featured presentations from IUCN, the Alliance for Zero Extinction, BirdLife International, and the Government of the Philippines. Further information on this event is available at <http://www.cbd.int/doc/meetings/sbstta/sbstta-17/information/sbstta-17-inf-10-en.pdf>.

2.5 Joint Marine Working Group

A Joint Marine Working Group was created between IUCN and the Global Ocean Biodiversity Initiative (GOBI) to strengthen synergies between the identification of Ecologically or Biologically Significant Marine Areas (EBSAs) and the KBA process, and to ensure clear communication and collaborations. A meeting of this joint marine working group was held during the International Marine Protected Areas Congress 3 (October 2013, Marseille) to discuss how KBAs could provide a list of potential sites to be considered as a “shadow list” for EBSAs adopted by the Convention on Biological Diversity.

2.6 Governance workshop

A technical workshop on KBA Governance was hosted by the Government of Brazil in the Ministry of the Environment in Brasilia (6-9 November 2013). Thirty-four participants, from 10 countries, representing academics, government agencies, national and international NGOs, the financial and private sectors, and three IUCN Commissions were involved in this workshop. The workshop discussed possible institutional arrangements, and rules and procedures, for the new KBA standard, in particular the role of the different stakeholders and the relationships between national and global processes. Participants drafted a Terms of Reference for a new KBA Committee that would report to the chairs of WCPA and SSC. They also developed a process for nominating, reviewing and endorsing KBAs and procedures for incorporating additional data into existing KBAs. A draft report from this workshop is available at http://www.iucn.org/key_biodiversity_areas/.



Participants of the KBA Governance workshop, Brasilia.

2.7 Thresholds workshop

A technical workshop on KBA Thresholds was hosted by Sapienza University and Fondazione BioParco in Rome, Italy (1-5 December 2013). Thirty participants with expertise spanning ecosystems and biomes, taxonomic groups, and genetic biodiversity contributed to this workshop. The workshop proposed quantitative thresholds of biodiversity significance for the four criteria recommended at the Criteria and Delineation workshop, and a fifth criterion proposed at the Framing workshop (on quantitative analysis). Discussions were informed by analyses presented by Dr. Moreno di Marco

of Sapienza University that explored conditions under which sites identified through threshold approaches (specifically, Important Bird Areas) align to grid cells identified through comprehensively quantitative calculation of irreplaceability. The thresholds proposed at the workshop are currently being examined for their implications for existing KBAs and the likelihood of committing commission errors (identifying too many sites) and omission errors (missing really important places). A draft report from this workshop is available at http://www.iucn.org/key_biodiversity_areas/.

2.8. End use applications of KBAs

Interviews have been conducted with various stakeholders and end-users on their needs and use of the KBA methodology, including members of the financial sector (World Bank, International Finance Corporation), national governments, donors (Global Environment Facility, Critical Ecosystem Partnership Fund), NGOs (WWF, Birdlife), High Conservation Values network, indigenous people and local communities (ICCA Alliance), and climate change experts (IUCN Climate Change Specialist Group). These interviews will constitute a series of case studies and be synthesized in a publication in 2014.



3. Road map for 2014-2015

Following two years of consultation and technical work, the next phase of work involves writing the new KBA standard, undertaking broad stakeholder consultation, submission to IUCN Council and launch of the methodology, and implementation projects in selected countries and regions.

3.1. Upcoming events and documents

The results of these technical workshops and consultations will form the basis of three documents that will receive wide stakeholder review over 2014:

- KBA Standard – short summary of KBA criteria, thresholds, and core documentation, for approval by IUCN Council in November
- KBA Methodology – more complete document to include purpose and objectives of KBAs, description of and rationale for criteria and thresholds, delineation guidelines, minimum standard documentation document, technical annexes
- KBA Application and End-Users document

The KBA Standard and Methodology will be launched in November 2014 at the World Parks Congress in Sydney, Australia with a high-profile side event to raise broad awareness about the new IUCN Knowledge Product. In addition, details of the KBA Standard and Methodology will be presented in technical sessions within Stream 1 “Reaching Conservation Goals”. There will be a discussion panel with end-users (including representatives from protected areas

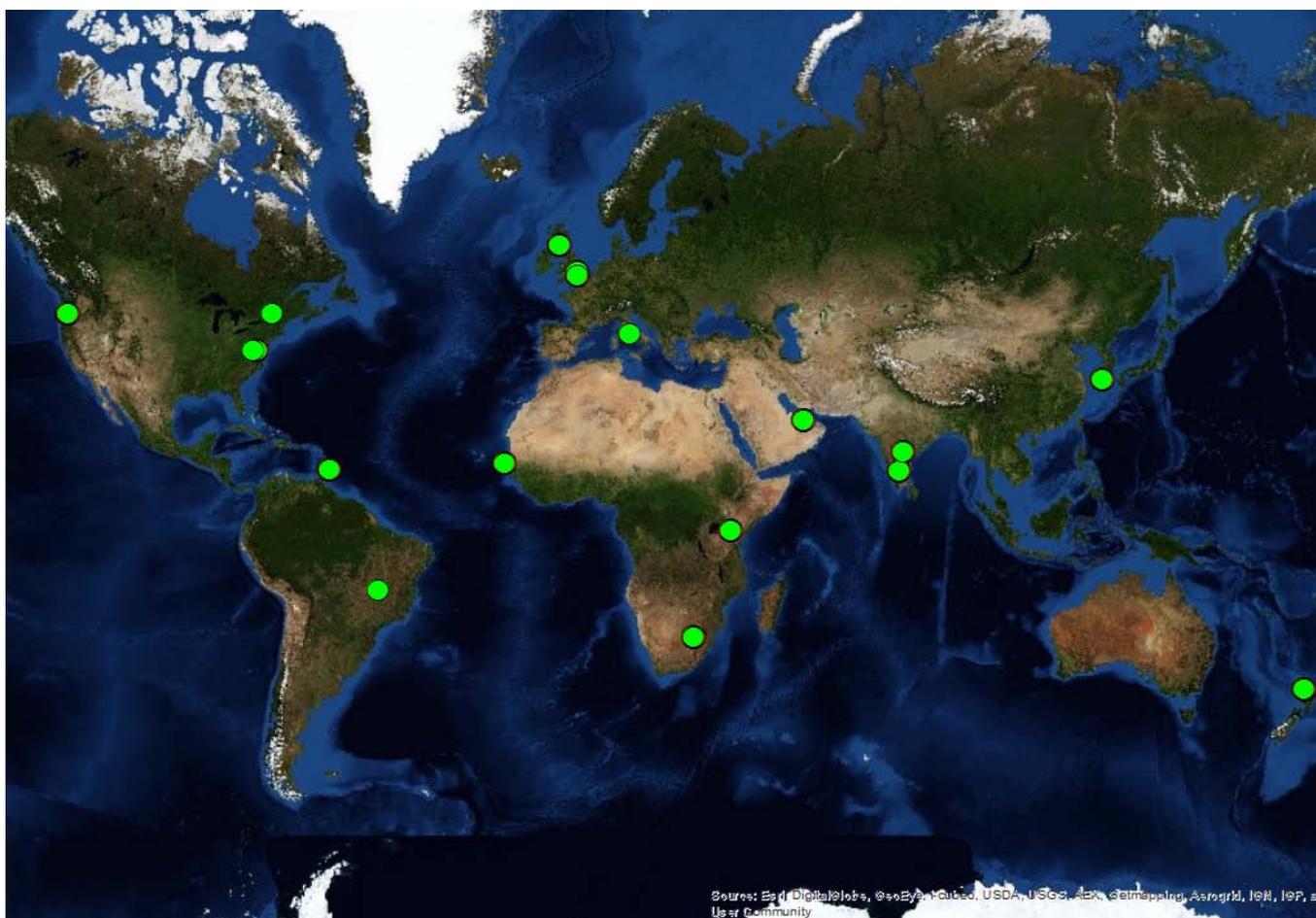
governmental agencies, international conventions, NGOs, private sector, donors and indigenous communities) and a series of national case studies on KBAs in national planning and policy-making.

3.2 Timeline for KBA consultation

The KBA consultation process will unfold according to the following timeline in 2014:

- Draft KBA standard and methodology (February-March)
- Technical review of KBA methodology (April)
- Revisions following technical review (May)
- Second review and e-consultation (June)
- Finalize KBA standard and methodology (July-August)
- Submit KBA standard to IUCN Council (October)
- Launch KBA methodology at World Parks Congress, Sydney, Australia (November)

In 2015, the focus will turn to implementation with a series of projects, subject to funding, to identify KBAs in new regions or for new taxonomic groups. The KBA committee and governance mechanisms for the new standard will be established.



Regional and thematic consultations on the KBA standard to date.

Asian Species Action Partnership: 2013 Activities

William Duckworth, Technical Coordinator, Asian Species Action Partnership



Form and function

Previously known as Action Asia, the Asian Species Action Partnership (ASAP) has progressed with a clear definition of its form and function. It is an interagency coalition to address extinction risk among the most threatened non-marine vertebrates of Southeast Asia.

Organizations within the international conservation community have joined forces to minimize impending extinctions in this area of the world where habitat loss, trade and hunting have contributed to a dramatic loss of its biodiversity.

ASAP is a species-specific response to an emergency call, aimed at focusing attention on a region that, without more serious conservation intervention, is likely to see the demise of much of its biodiversity. By mobilizing support where it is urgently needed, drawing on the collaborative expertise of conservation practitioners, pooling resources and efforts to maximize efficiency, and galvanizing political will, ASAP hopes to prevent the extinctions imminent within the next two to three decades.

Presently, there are 154 species on The IUCN Red List of Threatened Species that meet all of the four ASAP criteria for eligibility: 1) Critically Endangered 2) vertebrates 3) occurring regularly in Southeast Asia 4) in land or freshwater habitats.

The list of participating organizations include: BirdLife International, Conservation International, European Association for Zoos and Aquaria, Fauna & Flora International, Fonds de Dotation pour la Biodiversité, International Rhino Foundation, IUCN Species Survival Commission, IUCN Asia Regional Office, TRAFFIC, Wetlands International, Wildlife Conservation Society, Wildlife Reserves Singapore, World Association of Zoos and Aquaria, World Wildlife Fund, and Zoologische Gesellschaft für Arten- und Populationsschutz.

ASAP's major objectives are to:

- identify and catalyze urgent actions to reduce immediate threats causing ASAP species' decline;
- facilitate the effective conservation of these species by raising their public profile;
- catalyze a range of recovery activities for ASAP species by strengthening ongoing, site-based conservation action and promoting new such initiatives;
- encourage collection and distribution of information essential for the conservation action for ASAP species.

The ASAP secretariat has engaged in outreach to bring attention to the initiative and the threats facing eligible species. Presentations have been made at the Association for Tropical Biology and Conservation meeting in Banda Aceh in March 2013, the Saola Working Group meeting in Vientiane in April 2013 and at the Sixth Annual Bristol Conservation and Science Foundation Symposium in November 2013.

Furthermore, information about ASAP has been made available through the Mongabay website (<http://news.mongabay.com/2013/0828-avery-asian-species-action-partnership.html>), a forthcoming TRAFFIC publication and has also been disseminated widely by email.

Facilitation and support of planning meetings for IUCN threatened species

A Ten-Year Action Plan for the Indochinese Hog Deer (*Axis porcinus annamiticus*)

Hog deer were previously numerous and widespread in suitable habitat in much of Cambodia, southern Vietnam, lowland Thailand and probably in the plains of Lao PDR. During the mid- and late- twentieth century, hog deer underwent rapid range-wide reductions and is now on the verge of extinction in Southeast Asia. Hog deer went extinct in Thailand by the mid-1980s (some of the last remaining individuals from Southeast Thailand were captured for captive breeding), and almost certainly soon after from Vietnam and Lao PDR. It is thought that potentially thousands, or tens of thousands, of hog deer remained in Cambodia until the mid-1980s and that hog deer were widespread and of no conservation concern in Myanmar. Since then, however, the population in Cambodia has collapsed and is likely declining at a similar rate in Myanmar.

ASAP provided neutral facilitation for a planning meeting held in October 2013, in Phnom Penh, to develop the components of a ten-year national action plan for Indochinese hog deer in Cambodia. Twenty-four participants attended from more than ten different organizations. Where possible, the IUCN SSC Strategic Planning for Species Conservation: A Handbook (IUCN SSC, 2008) was used in the development of this action plan.



Major Steps Towards Asian Rhino Recovery

The Sumatran Rhino (*Dicerorhinus sumatrensis*) is listed as Critically Endangered on The IUCN Red List of Threatened Species™ and its total population could be fewer than 100 individuals. An estimated 50 individuals of the Javan Rhino (*Rhinoceros sondaicus*) survive in Java's Ujung Kulon National Park and are also listed as Critically Endangered. The Greater One-horned Rhino (*Rhinoceros unicornis*) has an estimated 3,339 individuals remaining mainly in India and Nepal, and is listed as Vulnerable. It could easily be lost if current trends in the illicit trade in rhino horn continue.

At a meeting of the five Asian Rhino range states – Bhutan, India, Indonesia, Malaysia and Nepal – a shared action plan was agreed upon. It aims to increase the populations of Asian Rhino species by at least 3% annually by 2020. This agreement, called the Bandar Lampung Declaration, was reached after two days of negotiations at the Asian Rhino Range States Meeting held in Bandar Lampung, Indonesia, hosted by the government of Indonesia and facilitated by the IUCN SSC.

The agreement is based on the latest knowledge on the status and trends of the three species provided by the IUCN SSC Asian Rhino Specialist Group. The commitment outlines specific conservation actions necessary to secure a steady growth rate of all three Asian Rhino species – Sumatran, Javan and Greater One-horned. These actions include improving the biological management and monitoring of the species, strengthening the protection of their habitats, performing strict anti-poaching operations, introducing tougher penalties for those that illegally kill Asian Rhinos, and maintaining the ban in the international trade of all rhino products. The Bandar Lampung Declaration can be accessed at the following link: https://cmsdata.iucn.org/downloads/arrsm_bandar_lampung_declaration_final.pdf.

IUCN SSC Otter Specialist Group

As a result of discussions with ASAP, the IUCN SSC Otter Specialist Group (OSG) has decided to prioritize action in tropical Asia. ASAP attended and facilitated several sessions at a training course and conservation workshop held in Bangalore, India, in November 2013, which clarified the direction the Specialist Group will take. The direction was ratified by OSG's management team at a meeting in Luxemburg in February 2014. Although otters are not yet considered ASAP species, they have exhibited such steep declines that three species will listing as Critically Endangered if conservation action is not greatly stepped up.

Coordinated action for the conservation of White-bellied heron (*Ardea insignis*)

The White-bellied heron is the most threatened species of heron in the world and threats to its survival are intensifying. In order to prevent further and perhaps irreversible decline of the species, action across its three remaining range states needs to be better coordinated, including sharing of current research and findings. To that end, ASAP is helping to collate existing information, identify key players, and bolster support for the species with the ultimate goal of identifying a

coordinated approach to its conservation.

Reciprocation

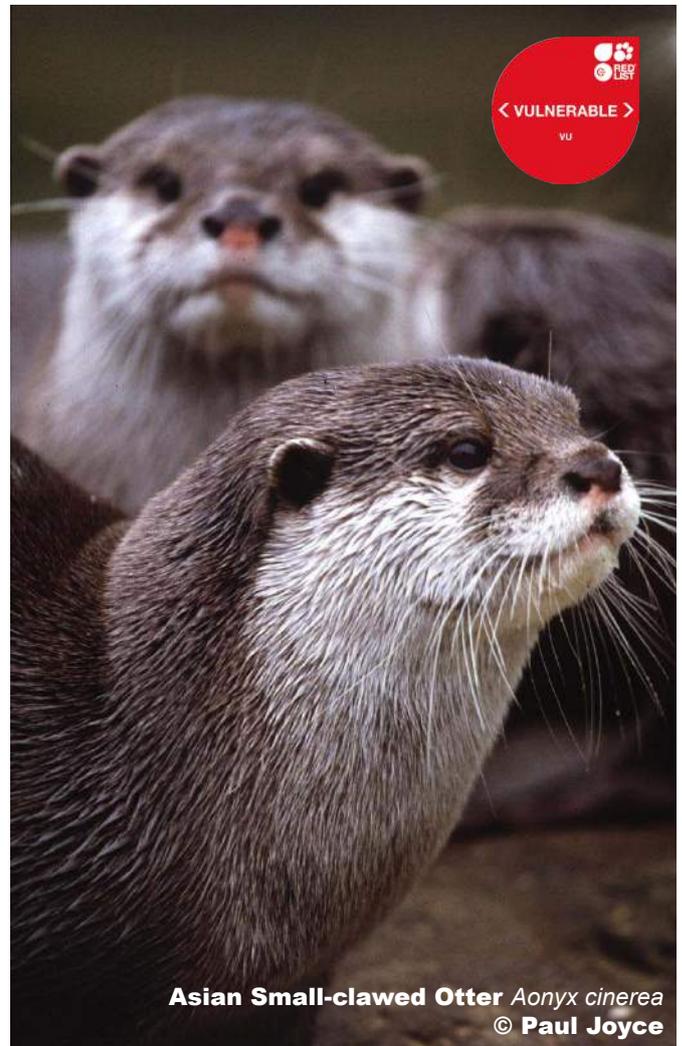
Saola (*Pseudoryx nghetinhensis*) is one of the most urgent cases among the ASAP species and was prioritized for early attention. In return, the Saola Working Group of the IUCN SSC Asia Wild Cattle Specialist Group is helping ASAP by advising the fledgling support alliances forming for other ASAP species, notably Cat Ba Langur (*Trachypithecus poliocephalus poliocephalus*), Edwards's Pheasant (*Lophura edwardsi*) and Indochinese Hog Deer (*Axis porcinus annamiticus*).

A special review of non-Panthera cat status in South-east Asia

The ASAP review process revealed that little information on ASAP species is readily available, especially as regards up-to-date status information for many of the Southeast Asian species. Specifically, Cat species are often regarded as being highly susceptible to extinction.

In response, the IUCN SSC Cat Specialist Group is producing a special issue of its journal, *Cat News*, dedicated to Southeast Asia's non-Panthera cats and is expected to go to press in the coming weeks. This species journal issue reveals that, perhaps contrary to expectations, most of the relevant species are doing well where protected areas with basic management exist. However, where threats – notably snaring – are unchecked, cat densities have declined so rapidly that they are now barely detectable.

One species, the Fishing Cat (*Prionailurus viverrinus*) is not at all taken care of by the established protected area systems and requires urgent intervention to prevent its decline to a Critically Endangered status.



Javan songbird crisis

Wildlife trade in Southeast Asia is driving many species to extinction. When this trade has a strong international aspect, interventions are especially difficult. One notable case is entirely domestic – the trade in Indonesian songbirds.

Most traded songbirds are sold within Java and several species are now approaching extinction in the wild – only a few species have viable captive populations. Some species – notably Bali Starling (*Leucopsar rothschildi*) – are widely recognized as trending towards an Endangered status, but economic strengthening in Indonesia has resulted in a host of other species following the same downward trajectory.



During 2013, the EAZA Passeriformes Taxon Advisory Group convened a Threatened Asian Songbird Working Group (TSWAG) to address this issue. ASAP attended the inaugural meeting and assisted the data collection which helped to define the extent of the problem and determine priorities; a meeting in mid-2014 will determine the plan of action. The TSWAG has been assisting in securing resources and action for the species for which the situation is already clearly urgent.

Review of Red List categories of Southeast Asian mammals

IUCN has committed to review, and where necessary revise, the Red List assessments of all the world's mammals by 2015. ASAP are closely involved in the process by acting as reviewer of Southeast Asian species which are not yet listed as Critically Endangered, but might warrant this status. ASAP will also review currently Critically Endangered pangolins, otters, small and medium cats, Asian wild cattle, and small carnivores.

Engagement with donors and other partners

Links with donors

ASAP advises on the selection of reviews and often conducts reviews of proposals for funding Southeast Asian species-focused projects submitted to several donors. In some cases this arrangement is informal. However, an ASAP staff member is also a member of the CEPF's Indo-Burma hotspot Regional Implementation Team. Discussions on formalization with other donors are ongoing with the intent of bringing attention to ASAP species within existing funding streams.

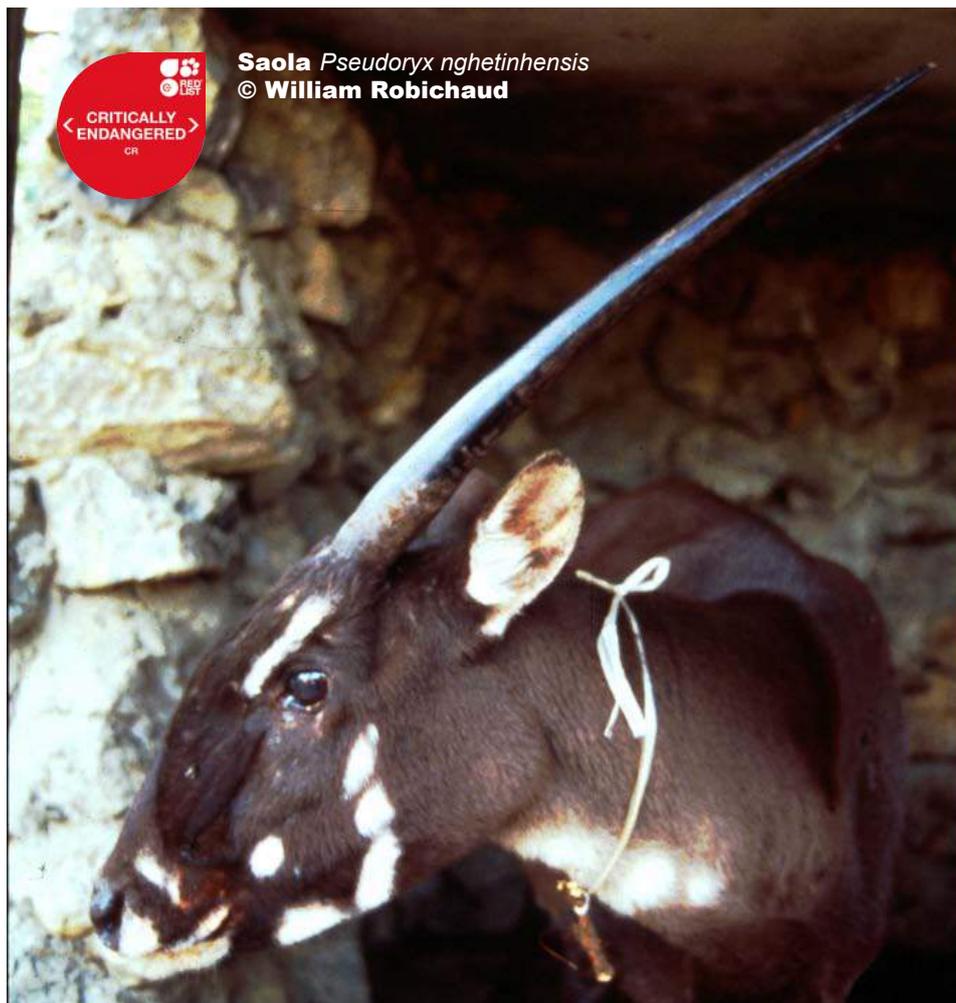
Continued links with EAZA

EAZA support in 2011 and in subsequent years has been crucial to establishing ASAP. At EAZA's invitation, ASAP attended their annual meeting in Edinburgh, Scotland, in September 2013. This meeting marked the close of the EAZA-IUCN SSC Southeast Asia Campaign and allowed many links between ASAP field partners and the zoo community to be strengthened or initiated.

The coordinator of the Saola Working Group (SWG) also attended the meeting, which helped the SWG to advance their collaboration with EAZA's new 'Intensive Management of Saola Advisory Group' (IMSAG). The IMSAG was established by EAZA in recognition that intensive management (which may also include captive breeding) is likely essential for the conservation of this species, and also in response to the SWG's request to EAZA for technical support with Saola captive management. At the time of writing, the SWG coordinator, the IMSAG chair, and EAZA's Executive Director are finalizing plans to meet with senior government officials in Lao PDR and Viet Nam to discuss the approach to be taken. Some of the SWG core funding is now coming from EAZA member zoos and some of them helped fund the SWG's 2013 biennial meeting. In addition, EAZA has established an emergency Saola response fund, which the SWG can access if a Saola comes into captivity unexpectedly (e.g. is found alive in a poacher's snare and kept by villagers).

Various EAZA Taxon Advisory Groups (TAGs) are in discussion with ASAP about directing resources into areas where uncharismatic ASAP species will also benefit – these funds are available in large part because of the charismatic nature of other TAG animals.

Finally, discussions are being between ASAP and EAZA on the topic of continuing EAZA's attention on Southeast Asia, following the close of the EAZA-IUCN SSC Southeast Asia Campaign. ASAP are part of the decision-making body for allocating the remaining Campaign funds.



The Amphibian Red List Authority: 2013 Activities

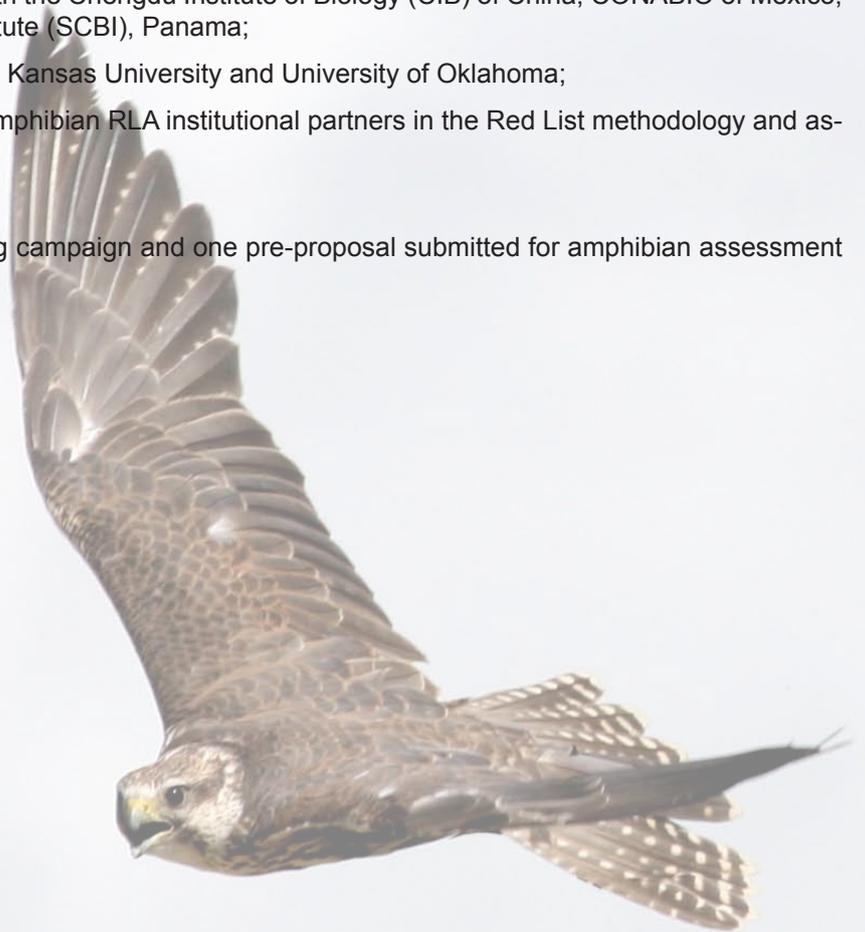
Ariadne Angulo, Coordinator, IUCN SSC Amphibian Red List Authority

Jaime Garcia-Moreno, Director of Conservation and Partnerships, Amphibian Survival Alliance

Jennifer Luedtke, Deputy Coordinator, IUCN SSC Amphibian Red List Authority

Key achievements

- Amphibian Survival Alliance Director of Conservation and Partnerships joined the Amphibian RLA Central Coordination Team;
- Launch of the new Amphibian Assessment Forum online platform;
- 412 amphibian assessments published in 2013 and 54 amphibian assessments submitted for Red List version 2014.1 by February 28, 2014;
- Formalization of institutional partnerships with the Chengdu Institute of Biology (CIB) of China, CONABIO of Mexico, and Smithsonian Conservation Biology Institute (SCBI), Panama;
- Developing collaborations with Carib-PARC, Kansas University and University of Oklahoma;
- Remote training of 33 individuals and two Amphibian RLA institutional partners in the Red List methodology and associated tools;
- Four Red List training workshops;
- One amphibian assessment mini-fundraising campaign and one pre-proposal submitted for amphibian assessment funding for the tropical Andes;
- Two published papers.



The beginning of the 2013-2016 IUCN Quadrennium provided an important opportunity to re-think the structure and functioning of the IUCN SSC Amphibian Red List Authority (RLA). In this context, the Amphibian RLA is being re-structured into regional working groups, led by Tier I RLA members, which are taking stewardship of assessments in their respective regions. Most of the RLA members from the previous 2009-2012 Quadrennium have agreed to stay on and we have also brought on board new members for important and speciose regions that had previously not been represented in the Amphibian RLA (Colombia, Mesoamerica, Southeast Asia, Mainland South Asia and West Africa). Other than the Amphibian RLA Central Coordination Team, all Amphibian RLA members and interns give their time and expertise voluntarily. Herein we report on the different developments, activities and outputs of the Amphibian RLA.

Central Coordination Team

The Amphibian RLA has benefited significantly from the addition of a new addition to its central coordination team: Dr Jaime Garcia Moreno, Amphibian Survival Alliance Director of Conservation and Partnerships, who is responsible for bringing institutional partners to the Amphibian RLA.

The Amphibian RLA Central Coordination Team met at the IUCN SSC Chair's office in Bath, UK, on 11-14 June, 2013 to develop a strategy and discuss the budget requirements for updating amphibian assessments. A new budget focusing on the cost of individual assessments was subsequently developed and is being used as the basis for pay-per-assessment email and online campaigns. In addition, live training on the Red List methodology, IUCN's Species Information Service (SIS) database and GIS tools and protocols was provided for Dr Jaime Garcia Moreno and SSC Chair office intern, Evie Morris.

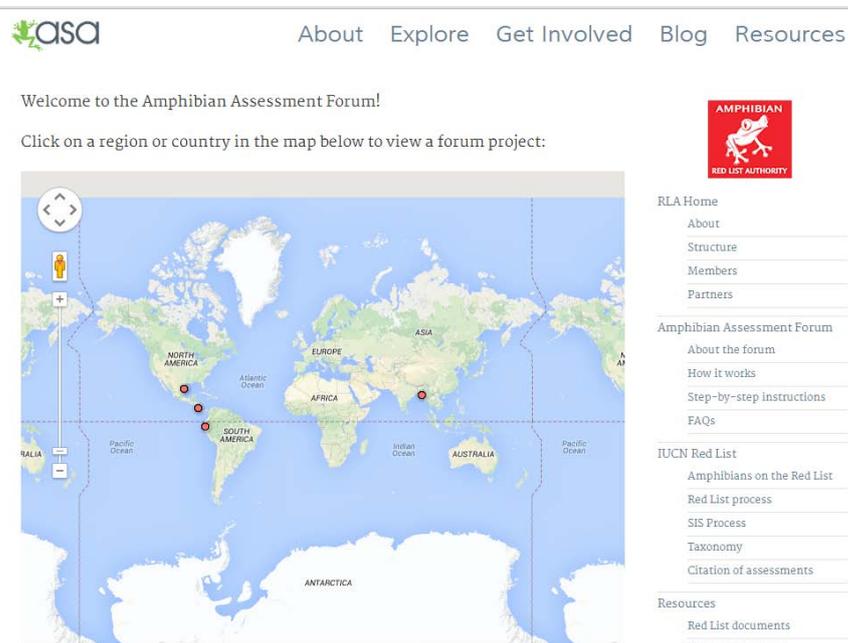
Products and outputs

As part of the restructuring of the Amphibian RLA, we have launched a new Amphibian Assessment Forum online platform (<http://www.amphibians.org/redlist/forum/>), developed in collaboration with the Amphibian Specialist Group (ASG) and iNaturalist, and supported by the Biodiversity Assessment Unit (BAU), to facilitate and expedite the amphibian re-assessment process. This platform is more efficient than the previous one, allowing for content held in the IUCN database system, the Species Information Service (SIS), to appear in assessment forums without manual input and allowing for the collation of comments by assessment section. In addition, as the forum platform was developed as an open access tool, it has been made available to other SSC Specialist Groups and over half a dozen of them are now using the tool.

The Amphibian RLA submitted 80 amphibian assessments for Red List version 2013.1 and 332 assessments for Red List version 2013.2, totalling 412 amphibian assessments submitted in 2013. The second submission was comprised primarily of Least Concern amphibian updates without changes - or "fast-track" assessments - undertaken by SSC Chair's office intern, Evie Morris. A first batch of 54 amphibian assessments was submitted for Red List version 2014.1 in late February and the Amphibian RLA expects to submit a second batch before the March 21st deadline. In addition, the development and revision of assessments is ongoing, as is the fast-tracking of Least Concern (LC) and Data Deficient (DD) North American and Southeast Asian species.

Partnerships

Our first three institutional partnerships have recently been established: with the Chengdu Institute of Biology of the Chinese Academy of Sciences (CIB) through a grant to Dr Xie Feng, with CONABIO (Comisión Nacional para el Cono-



cimiento y Uso de la Biodiversidad) of Mexico – both of which were finalized in September 2013 – and with the Smithsonian Conservation Biology Institute (SCBI) of Panama, finalized in March 2014.

CIB has committed to reassessing all Chinese species by the end of this year and is also updating the amphibian species on the China National Red List. CONABIO is committed to reassess all Mexican species during this year and, in addition to managing the electronic forum, it will be hosting a workshop in early June 2014. SCBI of Panama has taken the lead on Panamanian assessments and is already coordinating with the local experts, with Dr Brian Gratwicke acting as a focal point.

We are actively discussing other potential partnerships in Colombia, northern Central America, the Caribbean and the Philippines. Drs Rafe Brown (Kansas University) and Cameron Siler (University of Oklahoma) are organizing the experts of the Philippines to update the assessments from the archipelago.

Carib-PARC is becoming a sub-chapter of PARC (Partners for Amphibian and Reptile Conservation) for the insular Caribbean, and they are taking on the challenge of updating assessments for this region, with Dr Carlos Martínez Rivera acting as the focal point, and a Red List workshop programmed for November 2014.

The opportunities offered by the new structure adopted by the Amphibian RLA, together with the adoption of new tools, were presented last July to the herpetological community as part of the symposium on amphibian conservation organized in the framework of the meetings of the Society for Conservation Biology in Baltimore, USA.

Capacity Building

In support of our new structure, we have collectively remote-trained (via free online communication tools) 23 Tier I and II Amphibian RLA members, 10 interns and two Amphibian RLA institutional partners in the tools of the Red List trade. In addition, there have been various Red List training workshops undertaken as part of the Amphibian RLA's activities, namely:

- A two-day Red List training workshop at the Australian Museum in Sydney, Australia was held on 27-28 June, 2013. It was attended by the Tier I RLAs for Southeast Asia and Melanesia, and a new intern for the SE Asia region.
- A five-day Red List training and assessment workshop at the Chengdu Institute of Biology, in Chengdu, China was held on 12-16 August, 2013. It was attended by the 2 Tier I RLAs for China, 6 Tier II RLA members and 3 volunteers.
- A one-day Red List training workshop in the context of the Brazilian Congress of Herpetology in Salvador, Bahia, was held on 23 July, 2013. This workshop was attended by 20 participants inclusive of researchers, professors, students and government representatives.
- A three-day Red List training workshop was held at the Instituto de Investigaciones de la Amazonía Peruana (IIAP),



Participants at the training workshop, at IIAP in Iquitos, Peru.

Iquitos, Peru, from 9-11 January, 2014. It was supported by the Instituto de Investigaciones de la Amazonía Peruana (IIAP), the SSC, the Peru regional branch of the Amphibian Specialist Group (ASG Peru) and the Amphibian Red List Authority. The workshop was attended by 29 participants from five institutions, fifteen of which were undergraduate students from a local university and were selected to attend through an application process; the other applicants (university professors, government representatives, researchers and postgraduate students) were personally invited to attend. Taxonomic expertise at the workshop covered amphibians, reptiles, fishes, birds, mammals and plants, with a focus on Amazonian biodiversity.

We continue to guide RLA members and supervise interns as they undertake their respective species assessments.

Fundraising

On 11 February, 2014, the George Rabb amphibian assessment mini-fundraising campaign was launched through email. This campaign was directed at ASG members in developed countries, and had a web platform (<http://www.amphibians.org/support/redlisting>) established to allow for secure donations. A total of USD\$ 1,925 was received as a result of this campaign, with 98% of the funds coming from the original challenge. The Amphibian RLA is currently working on developing another mini-fundraising campaign, this time directed to the general public. We envision launching this campaign before June 2014.

A pre-proposal was submitted for the JRS Foundation on February 21, 2014, focusing on the reassessment of extinction risk of amphibians of the southern Tropical Andes and the development of an online spatial tool to allow users to submit mapping contributions to inform assessments.

CONABIO has allocated some staff time, and budgeted for a Red List workshop to update the Mexican assessments.

NB: The Amphibian Survival Alliance is currently exploring an integral collaboration with institutions that could eventually host and support the Amphibian RLA in a structural fashion, and is currently entertaining conversations with Texas A&M University to this avail.



Publications

The Amphibian RLA (via Ariadne Angulo) participated in the following two publications:

Foden, W.B., S.H.M. Butchart, S.N. Stuart, J.-C. Vié, H.R.Akçakaya, A. Angulo, L.M. DeVantier, A. Gutsche, E. Turak, L. Cao, S.D. Donner, V. Katariya, R. Bernard, R.A. Holland, A.F. Hughes, S.E. O'Hanlon, S.T. Garnett, Ç.H. Şekercioğlu & G.M. Mace. 2013. Identifying the world's most climate change vulnerable species: A trait-based assessment of birds, amphibians and corals. *PLoS ONE* 8(6): e65427. doi:10.1371/journal.pone.0065427

Ficetola, G.F., C. Rondinini, A. Bonardi, V. Katariya, E. Padoa-Schioppa & A. Angulo. 2014. An evaluation of the robustness of global amphibian range maps. *Journal of Biogeography* 41: 211-221, doi:10.1111/jbi.12206.

How The IUCN Red List contributes to amphibian survival: a case study

Melanophryniscus admirabilis is a toad described in 2006 and first assessed for The IUCN Red List in 2008 as Near Threatened (NT). It is a microendemic of southern Brazil and has recently been in the national media because the installation of the PCH Perau de Janeiro hydroelectric dam on the Forqueta River has temporarily been put on hold due to this species' existence in the area. Should the dam be built, the entire area of occupancy of this species would be affected - either its terrestrial habitat would be flooded or its reproductive water resource would run dry.

Given its increased extinction risk because of these plans, this toad was reassessed as Critically Endangered (CR). As a result of this listing, experts on *M. admirabilis* will now have the opportunity to access the necessary funds to work towards protecting this species' habitat and ultimately ensuring its survival.





Atelopus limosus, an endemic species of toad from central Panama.
© Brian Gratwicke

The Invasive Species Specialist Group: 2013 Activities

Piero Genovesi, Chair, IUCN SSC Invasive Species Specialist Group



Background

The Invasive Species Specialist Group (ISSG) aims to reduce threats to natural ecosystems and the native species they contain by increasing awareness of invasive alien species, and of ways to prevent, control or eradicate them. It currently has over 200 core members from over 35 countries and a wide informal global network of over 2000 conservation practitioners and experts who contribute to its work.

The ISSG promotes and facilitates the exchange of invasive species information and knowledge across the globe and ensures the linkage between knowledge, practice and policy so that decision making is informed. The two core activity areas of the ISSG are

- Policy, technical advice and advocacy, and,
- Information exchange through online resources and tools and through networking.

Policy, technical advice and advocacy

Throughout 2013, ISSG continued mainstreaming the invasive alien species issue at the international level, working in synergy with the IUCN Secretariat, global Conventions, Regional bodies and National governments to support the development of science based policies on this issue.

Following are some of the highlights of this area of work:

1) Following the Agreement signed by the IUCN and ISSG with the Secretariat of the Convention on Biological Diversity (CBD) in November 2011, to support and assist the implementation of the Strategic Plan 2011-2020 in relation to invasive species, ISSG (Chair and Program Officer) in the past two years have attended the sixteenth and seventeenth Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) meetings of CBD and the eleventh Conference of the Parties (COP11) as members of the IUCN delegation contributing and submitting to interventions relevant to the invasive species issue, as well as assisting and supporting country delegations. During the meeting, the ISSG maintained a kiosk on invasive species to disseminate information on the available information tools to support work on the issue, and participated to the first meeting of the Steering Committee of the GIASIP.



The GIASIP Partnership Gateway

Invasive Alien Species Information Services

Search SEARCH

All Taxonomy

HOME THE PARTNERSHIP AICHI BIODIVERSITY TARGET 9 INFORMATION SERVICES TOOLS PATHWAY INFORMATION ANIMAL SPECIES

PLANT AND FUNGAL SPECIES BACTERIA AND VIRUS SPECIES FORUMS LITERATURE WEB RESOURCES SEARCH USING THE SITE SITE MAP

Welcome to the GIASIP Partnership

Welcome to the Gateway for the **Global Invasive Alien Species Information Partnership (GIASIP Partnership)**.

The GIASIP Partnership has come together in order to assist Parties to the Convention on Biological Diversity, and others, implement Article 8(h) and Target 9 of the Aichi Biodiversity Targets – "By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment"

This site will assist scientists, environmental managers, policy-makers and others by providing links to necessary information and a forum to raise issues for discussion.

This site has been developed for the GIASIP Partnership and is maintained by the Natural History Museum

2) During the eleventh Conference of Parties (COP11), ISSG, with the IUCN's Invasive Species Initiative, signed a Memorandum of Cooperation (<http://www.cbd.int/doc/agreements/agmt-iucn-2012-10-10-moc-web-en.pdf>) with the Secretariat of the CBD in support of the Global Invasive Alien Species Information Partnership (GIASIP), formed to promote collaborative activities among the participating organizations, and the SCBD to facilitate access, exchange and analyses of the information on invasive alien species with a view to supporting action by Parties to the CBD and other Governments and by other organizations and stakeholders, to prevent control and eradicate invasive alien species in line with Article 8(h) of the CBD, and other relevant agreements, and to achieve Aichi Biodiversity Target 9 of the Strategic Plan of Biodiversity 2011-2020.

Two key resources are being developed within the framework of this Partnership; these are the Global Register of In-

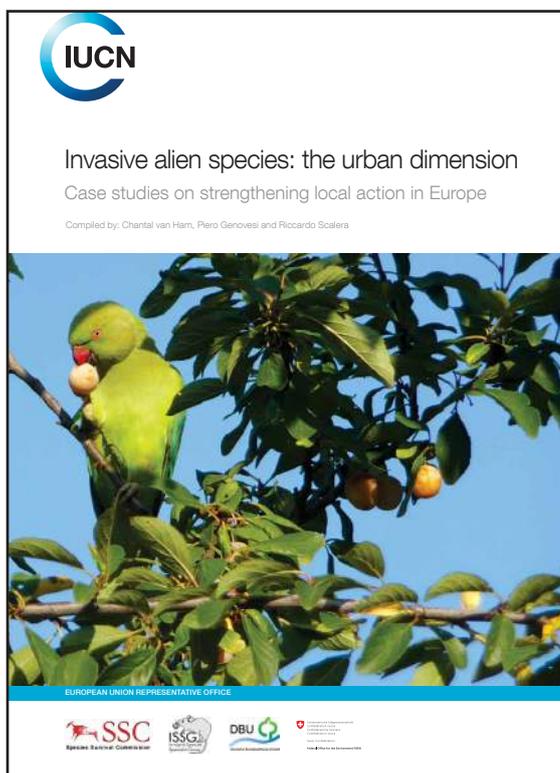
roduced and Invasive Species (GRIIS) which is envisioned to serve as the global master list of known introduced and invasive species; and b) the prototype of the 'Invasive Alien Species Pathway Management Toolbox'.

In 2013, the ISSG Chair was invited to be a member of the Steering Committee of the GIASIP, which is co-chaired by Dr. Braulio Ferreira de Souza Dias, Executive Secretary of the CBD. A first teleconference of the Steering Committee was held on the 10th of March 2014. Technical meetings were held in London during May 2013, and a meeting of the Chairs of the working groups was organized at the headquarters of Global Biodiversity Information Facility (GBIF) in December 2013. ISSG attended these meetings, contributing their expertise and knowledge.



3) The ISSG Chair with the Global Coordinator of the IUCN's Invasive Species Initiative represents IUCN in the Inter-agency Liaison Group on Invasive Alien Species. This Group was established in 2009 in response to an invitation from the CBD Executive Secretary pursuant to CBD decision IX/4. The purpose of the Liaison Group is to facilitate cooperation among relevant organizations to support measures to "prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species" (Article 8(h) of the Convention on Biological Diversity), consistent with relevant decisions of the Convention. The ISSG Chair attended and contributed to the Fourth Inter-Agency meeting held in the IUCN ESARO offices in Nairobi in early 2014.

4) The ISSG in close collaboration with the IUCN Brussels Office has been deeply engaged in the discussion held at the European Union level on a proposed legislation on invasive species. A draft regulation on the issue was released by the European Commission in September 2013. Since September, the Chair of the ISSG has been working with key members involved in the decision making process providing technical and scientific inputs leading to the adoption of the legislation. The Chair of ISSG has been an advisor of the Members of the European Parliament nominated by the European Parliament to report on the legislation; he has participated in technical meetings with the European Commission and the Permanent Representatives of European Member States, and has co-organized and attended several conferences on the issue.



5) ISSG is leading the development of Invasive Species Indicators as part of the Biodiversity Indicators Partnership, a CBD mandated initiative. ISSG is working with partners on identifying which invasive alien species indicators are priorities, what are protocols for data collection, analysis and then storage and maintenance of data. Selected indicators include measuring trends in the numbers of introduced and invasive species, trends in the numbers of outbreaks of wild life disease caused by invasive alien species; trends in the numbers of legal instruments that have been enacted by countries related to the management of invasive alien species. ISSG is also exploring the possibility to develop an indicator of the pathways of invasive species introductions.

ISSG is contributing results of two of these indicators as well as content to the Chapter dealing with the pressure of invasive alien species of the Global Biodiversity Outlook 4 (GBO4).

6) ISSG worked in cooperation with the IUCN Brussels Regional office to organize the conference titled "Urban areas and biological invasions: what can cities do about it?", that took place at IUCN Headquarters in Gland, Switzerland on 5 September 2013. The conference was supported by Deutsche Bundesstiftung Umwelt and the Swiss Federal Office for the Environment. The conference provided an opportunity to share examples, establish cooperation and strengthen action for the prevention, control and management of invasive alien species across Europe. IUCN Director General Julia Marton-Lefèvre opened the meeting, which was chaired by the ISSG Chair.

The results of the conference, and several case studies collected from several areas of Europe have been compiled and

published in a book presented at the conference.

7) ISSG has continued its long standing collaboration with the Bern Convention of the Council of Europe.

The chair of ISSG and ISSG member Andrea Monaco attended the 10th Meeting of the Group of Experts on invasive species of the Bern convention organized in Alghero (Italy) on 20-22 June 2013. During the meeting, ISSG presented the on-going activities aimed at developing a Code of Conduct on Hunting and Invasive Species, and European Guidelines on Invasive Species and Protected Areas. The ISSG Chair also reported on the international activities on invasive species.

Based on the outcomes of this meeting, ISSG finalized the code of conduct on invasives and hunting, developed in cooperation with the European Federation of Hunting Association.

Also, ISSG has developed European guidelines on invasive species management in protected areas. The code of conduct and the guidelines have been formally adopted by the Standing Committee of the Bern Convention in December 2013 (<https://wcd.coe.int/ViewDoc.jsp?id=2072579&Site=&BackColorInternet=B9BDEE&BackColorIntranet=FFCD4F&BackColorLogged=FFC679>).

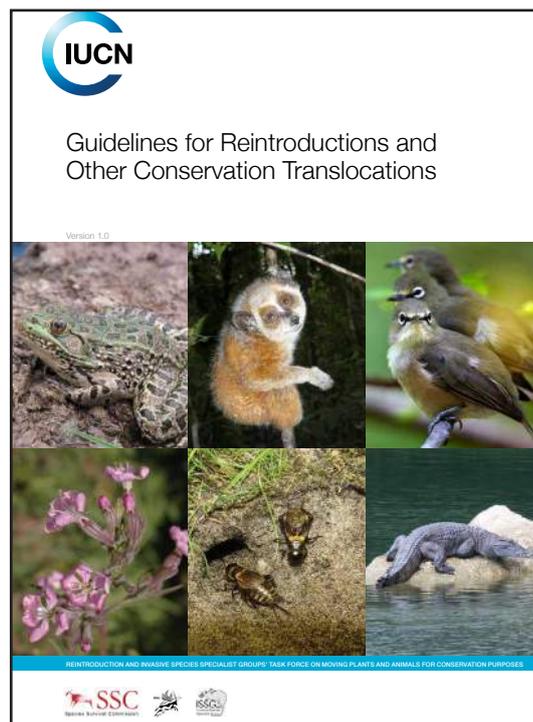
The ISSG organized a the Meeting of the Select Group of Experts on Invasive Alien of Bern Convention, that was held in Rome, Italy, on 7 March 2014. The meeting, attended by 10 key European experts on the issue, permitted to discuss future activities of the Bern Convention on invasive species, and to strengthen collaboration between ISSG and the Convention.

8) On June 12th, the ISSG Chair participated in a Webinar on “*Managing invasive alien species at the local level*”, co-organised by URBIS and IUCN Brussels (http://www.iucn.org/news_homepage/all_news_by_theme/species_news/?13041/Webinar-Managing-invasive-alien-species-at-the-local-level). The ISSG Chair opened the scientific program of the webinar, providing an overview of the issue. The topic will be further discussed in a conference on “*Invasive Alien Species: the Urban Dimension*” to be held at the IUCN Headquarters in Gland, Switzerland, on September 5th (<http://iucn.org/about/union/secretariat/offices/europe/?13073/Conference-Invasive-Alien-Species-the-Urban-Dimension>).

9) The ISSG Chair attended a conference on invasive alien predator, held in Luleo (Sweden) on 16-19 June 2013, organised by the LIFE+ Project “*Management of the Invasive Raccoon Dog in the North European countries*” (https://jagareforbundet.se/Global/Mardhundskonferens%20inbjudan%20och%20program_130524.pdf), and supported by several institutions including the Directorate for Nature Management (Norway), the Danish Hunters Association (Denmark) and the Federation of Associations for Hunting and Conservation of the EU (FACE). Chair of ISSG opened the conference with a presentation titled “*Toward a coordinated policy to prevent and manage biological invasions – an analysis of the global, European and national contexts*”.

10) In July 2013, ISSG supported the launch of the revised ‘*Guidelines for Reintroductions and Other Conservation Translocations*’ (<http://www.iucn.org/about/work/programmes/species/?13377/New-Guidelines-on-conservation-translocations-published-by-IUCN>), developed jointly by the IUCN SSC’s Reintroduction Specialist Group (RSG) and the ISSG.

11) ISSG jointly organised a workshop on “*How to communicate on pests and invasive alien plants?*” with the European Plant Protection Organisation and the Council of Europe, that was held on 8-10 October 2013 in Oeiras, Portugal, at the kind invitation of the Direcção-Geral de Alimentação e Veterinária (Portuguese Plant Protection Organization), the Centre for Functional Ecology (University of Coimbra) and the Agrarian School of Coimbra (Instituto Politécnico de Coimbra). The workshop was aimed at civil servants, scientists, land managers, members of NGOs, journalists, and any other interested persons. It was attended by 65 participants from 25 countries, including Australia, Belgium, Czech Republic, Denmark, Finland, France, Germany, India, Israel, Italy, Jersey, Netherlands, Netherlands, Portugal, Kenya, Russian Federation, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, United States (http://archives.eppo.int/MEETINGS/2013_conferences/communication_pt.htm).





Information exchange through online resources

Redesign of the Global Invasive Species Database

The ISSG has been working on the development and enhancement of its online resources, including the redesign of its flagship product the Global Invasive Species Database (GISD). This is now complete and a prototype of the redesigned database has been circulated among key IUCN experts for a review.

The redesigned GISD presents vastly improved search functionality including providing users a selection of options to search on the taxonomy of the species, the region of presence, the pathways of introduction, the impacts it causes, etc, and other annotations related to the species. Download functions have also been made available.

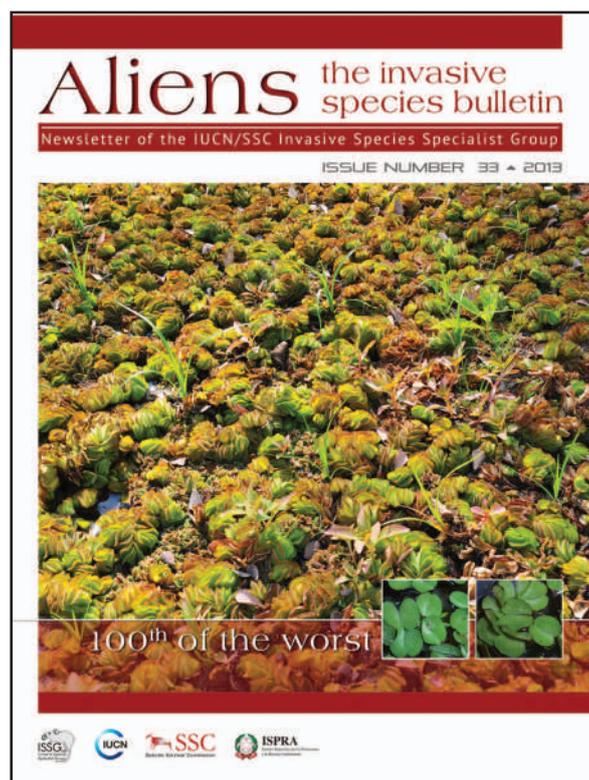
The redesigned GISD, with its improved functionalities, provides a better presentation of data and information to stakeholders. The ISSG is working on completing full integration with The IUCN Red List; as well as exploring similar links with other IUCN Knowledge products such as the World Database of Protected Areas.

Three other resources in development include the Global Register of Introduced and Invasive Species (GRIIS), a database dedicated to the impact of invasive alien species on native species and natural areas on islands- the Island Biodiversity and Invasive Species Database (IBIS) and the Invasive Alien Species Pathway Management Resource. Options are being explored to develop a common database to feed information to all of ISSGs information resources.

Aliens newsletter

Issue 33 of the Aliens Newsletter was published in 2013. The newsletter presents redesigned and improved graphics, including the cover page and content.

Issue 33 reports a study published in Nature on the nomination of an invasive species as one of the “100 of the World’s Worst Invasive Alien Species”. The study has been authored by several ISSG members, including the Chair, Piero Genovesi (Luque *et al.* (2013) Alien species: Monster fern makes IUCN invader list. Nature, 498, 37). A more detailed article on this study was published in Biological Invasions (Luque *et al.* (2013) The 100th of the world’s worst invasive alien species. Biological Invasions). This article presents the first new addition to the widely cited IUCN ISSG list of “100 of the World’s Worst Invasive Alien Species”, a list created over a decade ago to raise awareness of the impacts of invasive alien species. The new nomination to this list, to replace the eradicated Rinderpest virus was the aquatic invasive plant Giant salvinia (*Salvinia molesta*). The selection was made by the global community of invasion biologists (over 650 experts from over 60 countries). This new addition to the list has permitted to draw public attention to the damage caused by invasive alien species.



Aliens-L

The ISSG continues with maintaining and running the Aliens-L list service which is an active and dynamic list service with over 1170 members.

Aliens Referral Service

The ISSG continues to support researchers, practitioners and communities with their information needs and linkages to experts through its referral service.

Giant Water Fern *Salvinia molesta* by Geoffrey Howard, IUCN

The Giant Water Fern is an unattached floating plant which originates from tropical South America, but is now widespread and usually invasive in lakes, rivers and wetlands around the tropical world. The plants are small floating units of several tightly packed "leaves". It spreads through small plant fragments which are moved along its invasion pathways by water currents, winds, water-birds, other animals and people. Once established on a water body, salvinia grows very quickly in warm climates with adequate dissolved nutrients and forms mats which can double their area in less than three days. Beneath such mats, light is minimal and oxygen can become depleted, with dramatic negative effects on submerged animals and plants and, of course, fisheries.



from Wikimedia Commons

© John Forlonge

Prevention of new infestations of giant water fern establishing in areas where it is already abundant is virtually impossible, but new growths may not become invasive if water nutrient levels are low and if the water temperature is not warm (regularly below 15°C). The plants can be cleared manually or with mechanical harvesting equipment, but new plants will grow if this is not repeated often and re-invasion from plant fragments is likely. Herbicides can be used to clear an infestation of salvinia but this is always risky in freshwaters where non-target organisms abound. Fortunately there is a very effective biological control organism widely in use and widely available - a small herbivorous weevil, *Cyrtobagous salviniae* which has been shown to be host-specific and so no risk to other vegetation; like its food plant, it does not thrive when water temperatures are low and so has little impact in cold climates.

Species Conservation Planning Sub-committee: 2013 Activities

Mark Stanley Price, Chair, IUCN SSC Species Conservation Planning Sub-committee



Introduction

The SSC species Conservation Planning Sub-Committee (SCPSC) had a busy year in 2013, making progress on its objectives, but also learning some important lessons, which are noted here. A full Sub-committee meeting in August 2013 was greatly helpful as it set the scene for future activities.

This report describes those activities funded directly through the support of the Environment Agency - Abu Dhabi, through the SSC Chair's office, and those that were continuing or followed up from 2013; there is a further listing of other activities by SCPSC members that are directly supportive of species conservation planning, and which have value added to SSC by virtue of the support of EAD.

Financial support from EAD

Brown howler monkey, Argentina

The need to plan urgently for this species is included in the 2012 report. A planning meeting was held in March 2013 and was developed and facilitated by two SCPSC members, both members of the Conservation Breeding Specialist Group (CBSG), A Desbiez and P Miller. From this meeting the "Status Review and Population Viability Assessment (PVA): A first step in building a Species Conservation Strategy" was produced. The executive summary of the population viability assessment workshop (Agostini I, Desbiez ALJ & Miller P (Editors). 2013. Brown Howler Monkey Conservation Workshop IUCN SSC Conservation Breeding Specialist Group (CBSG), Brasil) from the meeting includes:



"Participants then proceeded to a threat analysis and concluded that the two biggest challenges to Brown howler monkey conservation in Misiones were: lack of public awareness of the species and yellow fever outbreaks. To take advantage of the participants' areas of expertise, this workshop focused mainly on all aspects of yellow fever outbreaks. A flow chart was constructed to represent the factors (and the interactions between them) that influence the probability of occurrence of a yellow fever outbreak (e.g. virus virulence, mosquito species demographic dynamics, etc.) and its impact on brown howler population (population structure and connectivity, general health status, genetic resistance, etc.). Through this diagram, the most important gaps in knowledge were identified and a list of prioritized objectives and actions to be implemented was created."

SCPSC will be following up to encourage the next steps which will be full conservation planning for the species.

Western Derby Eland, Senegal

Planning for this species proceeded on schedule in January 2013, and was deemed most effective, but highlighted the dire state of the remaining wild population in Niokolo-Koba National Park. A Western Derby Eland Conservation Strategy was produced (Brandlová K., Mallon D., Hejmanová, P., Regnaut S., Jůnková Vymyslická P., Fedorova T., Žáčková M., Ndiaye S. 2013. Western Derby eland (*Taurotragus derbianus derbianus*) Conservation Strategy. Prague: Czech University of Life Sciences Prague.). The meeting was largely designed, and then facilitated, by SCPSC member D Mallon.



Madagascar pochard, Madagascar

Spearheaded by Durrell Wildlife Conservation Trust and the Peregrine Fund, this planning workshop was called to analyse the causes of this species' dramatic reduction and presumed extinction from 1982 to sightings of the birds in the wild in the 2000's. SCPSC provided D Mallon as a co-facilitator in Madagascar, where he also ran a one-day training session on species conservation planning for Malagasy NGO's. A meeting report or conservation strategy is due at the end of March 2014.

Support to Chair of SCPSC

EAD resources were used to support the Chair part-time throughout 2013. The Chair is extremely grateful for this support, and is emphatic that developing and leading such a Sub-Committee, and leveraging activity and product from volunteer members, would be nearly impossible without being able to provide compensation for the time they dedicate.

Follow up activities from 2013

Mentoring a Specialist Group

Through 2012-2013, EAD funding provided support to SCPSC member P McGowan to work with a Specialist Group (SG) to orient it to the merits of species planning, and to guide it into doing some planning. The selected SG was the

Freshwater Crab and Crayfish SG. Many lessons were learnt in this process, which will inform SCPSC's own marketing strategy.

This initiative will bear fruit in 2014 as this SG will be planning for the conservation of the highly threatened, and endemic crab *Johora singaporensis* in late March. The meeting will be supported by Wildlife Reserves of Singapore through a contact made by the SCPSC Chair when at the Sumatran Rhino Crisis Summit in April 2013 (below).

EAD supported P McGowan in September 2012 to design and run a workshop for representatives of the main range states of the Humphead wrasse: Philippines, Malaysia and Indonesia. This is a significant test case as it involved a species of great commercial importance which is being over-utilised. The meeting was significant in orienting participants to the concept of conserving the species instead of designing sustainable harvest regimes. At the time, there was talk of a follow up meeting being needed: this will now take place in late 2014, again run by the Grouper and Wrasse SG and the Marine Conservation Sub-committee, with P McGowan present.

Wild Asian Buffalo, India

Liaising with the Asian Wild Cattle SG, this planning meeting was held in Nagpur in November 2012. The 2012 report noted the significance of the two relevant states, Chhattisgarh and Maharashtra collaborating over a conservation issue for the first time. The resulting conservation strategy has been prepared, but issues remain over the appearance and attributing of credit in this complicated institutional landscape. It is hoped that this will be resolved soon and SCPSC is maintaining pressure for completion.

Crau grasshopper, France

This flightless grasshopper is a priority for the Grasshopper SG and SCPSC has been encouraging planning works to promote planning within invertebrate conservation. The Grasshopper SG Chair, now also Chair of the SSC Invertebrate Conservation Sub-committee, is most supportive. A planning meeting will now be held in early June 2014 and some SCPSC financial support is likely. This meeting has had a long gestation of encouraging the relevant parties and also placing two Masters students to acquire information critical for planning through the summer of 2013.

Other species activities by SCPSC Chair

Sumatran Rhino Crisis Summit, Singapore, April 2013

The Chair was invited to the Sumatran Rhino Crisis Summit as an independent species conservation resource. Subsequently, due to the SSC Chair being unable to participate, he led the IUCN delegation to the meeting, which was also attended by SCPSC member C Lees, from CBSG Australasia.

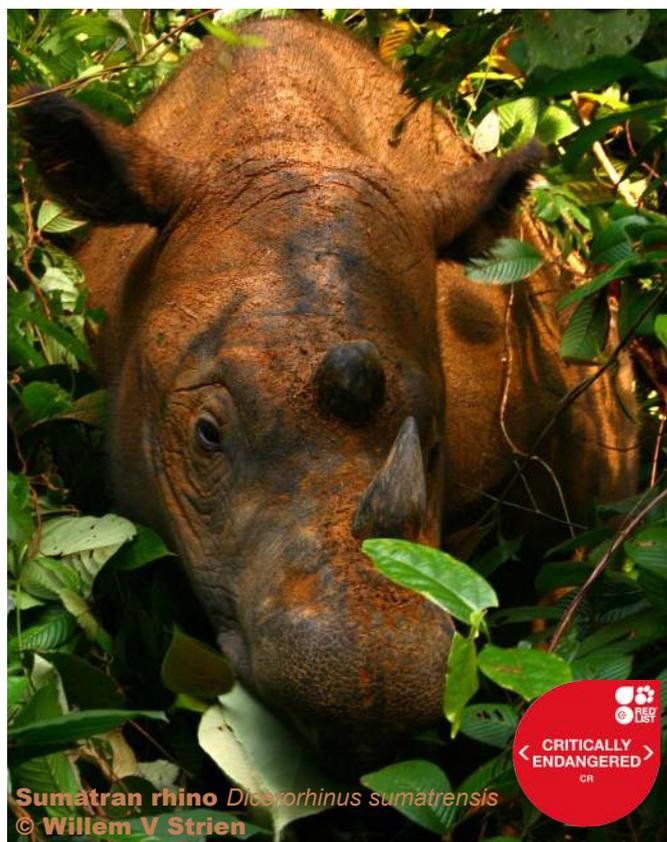
The meeting followed an unusual facilitation process, but ended with recommendations. The following was amongst the results:

Vision: that the Sumatran rhino exists in range states of Indonesia and Malaysia in the wild and in confined conditions where they are secure and in adequate numbers across multiple sites under collaborative management as a single meta-population.

Building on the strong political will and the common vision, the governments of Indonesia and Malaysia commit to:

Objectives:

1. Ensure no further losses, starting with a capacity to protect audit in all areas holding rhinos;
2. Increase effort to understand reproductive pathology;
3. Accurate estimate of SR population in Indonesia and Malaysia; and
4. Fully bilateral functioning cooperation.



Unfortunately, soon after the meeting, it was apparent that collaborative management and the concept of a single meta-population were not going to be a reality.

The SCPSC Chair was asked to continue providing input for meeting follow-up, and drafted a framework for an Emergency Plan. He also prepared an executive summary of this framework which provided material for drafting what became the Bandar Lampung Declaration of the First Asian Rhino Range States Ministerial Meeting held in Indonesia in October 2013.

Participation in the Dama gazelle workshop, Scotland, November 2013

A small group of antelope specialist gathered in Edinburgh to review knowledge of the Dama gazelle, its status in the wild and in captivity, its taxonomy, and the way forward to improve the conservation of this Critically Endangered species. Part of the justification came out of the potential synergy between Dama conservation and activities in the Sahel by the Sahara Conservation Fund. In March 2014, the workshop report is in the final stages of completion.

The third meeting of the SCPSC, UK, August 2013

This meeting was held, courtesy of the SSC Chair's office, at Oxford. Of the 14 current members, 11 were present, with one joining by skype almost full-time (K Lindeman), one at critical points (L Pagni) and one apology (A Desbiez). The IUCN Secretariat was represented by D Cator, and the SSC Office by R Roberts (part-time).

'Actions for the future' were developed, for short, medium and long-terms. A review at the end of December 2013 showed progress on almost all activities for the short timeframe. The communications aspect, involving upgraded web content, has been deferred to the second quarter of 2014, when training needs and solutions will also be given more attention.

A shared Google site was established during the SCPSC meeting and this now houses all known Species Conservation Strategies that essentially follow the SSC planning approach. Some iguana plans have been added by way of illustrating uptake, and three marine Fishery Management Plans have been added for contrast and to demonstrate the scale and complexity of planning for such marine species of commercial value.

C Lees and K Lindeman conducted a first analysis of the plans, on multiple criteria, and made some interesting conclusions. Amongst these were:

1. The pool of 19 strategies separated out into two types of product:
 - Strategies: typically broad, overarching documents, often range-wide and multi-national in scope (though not always), characterised by the absence of specific responsibilities and time-lines for the actions advocated (7 out of 19).
 - Plans: varied in scope and focus but characterised by the inclusion of responsibilities and time-lines (12 out of 19).
2. The documents in hand were a mixture of workshop reports, draft strategies and final strategies, which may or not have been endorsed by the relevant governments; there is an issue over the time taken between workshop and endorsement by government(s) (see re the Indian wild buffalo above). Obviously the preparation, participation and process of planning must be designed to ensure swift review and approval of any workshop output by government(s) to maximise the prospects of effective conservation actions.
3. Climate change was mentioned as an issue in only 4/19 cases (see table).
4. Many plans were silent on abundance: if data for current abundance was given, often there were no target numbers or, if target numbers were given, sometimes there were no baseline figures. Clearly, the planning process needs to improve here.

The Library of SCS and comparable analysis will be continued as the number of Species Conservation Strategies grows.

Chair attendance at the SSC Steering Committee meeting, Mexico, November 2013

A report on SCPSC activities was presented; the Steering Committee agreed to relatively minor changes in the Terms of Reference of SCPSC. The only substantive issue was that of endorsement of plans. Applying the agreed criteria by several members of SCPSC to the sawfish global conservation strategy did not lead to endorsement with the feeling that the criteria were inadequate rather than the strategy. The SCPSC will re-think the criteria and fundamental purpose of endorsement, accepting that different criteria will apply for broad strategies rather than detailed action plans (above). Support to IUCN Mediterranean Office project: training for conservation planning in the Maghreb, April and June 2013. This project involved orienting conservation officials in each of Morocco, Tunisia and Algeria to species conservation

planning. The Chair had for some time been liaising with the project officers to develop agenda and content. The Chair was subsequently invited to run a session at each of the Tunisian and Algerian meetings on 'human-human conflict'. In 2014, the project is entering a new phase of bringing planners together from all three countries for a shared exercise on Cuvier's gazelle.



Climate Change SG (CCSG)

This is a newly-formed disciplinary SG, responding to evident need within SSC. Its two co-Chairs determined to start only with a steering group, and to lay substantial groundwork before considering a wider membership.

The SCPSC Chair was invited to join this group, which met regularly through 2013 by conference call. The CCSG then held its first face-to-face meeting in Cambridge in December 2013. This was a remarkably productive session of top-level climate experts. Outputs included assignments to draft a guide for SG's on climate change, within a maximum of 30 pages. This will be completed in draft by the end of quarter 1 2014. The SCPSC is seen as an essential test user of the product, for it is notable that the SSC species conservation planning approach in current form makes no mention of climate change.

Membership of this SG is likely to involve quite considerable work going forward, testing the CCSG's advice and methods, and ensuring that climate change becomes an established part of the species planning process, but does not overwhelm or dominate it, if done exhaustively.

Amphibian SG working group on Species Conservation Strategies

In 2013, the Amphibian Survival Alliance committed to push forward the recommendation of the 2005 Amphibian Conservation Action Plan. Accordingly, the Amphibian SG established a series of working groups with specific mandates. The SCPSC Chair was invited to co-facilitate the working group of species conservation strategies with F Andreone. The important aspect of this working group is that it doesn't do planning for amphibians, but will identify priorities (acknowledging that many plans for amphibians already exist) and then assist relevant parties to undertake planning.

Significant activities by other SCPSC members (not exhaustive)

Caroline Lees

Feb 2013: Tasmanian Devils - some follow-up for the Tasmanian Government on the CBSG 2012 program evaluation and strategy review for the insurance meta-population. Numbers are now around 600 and is moving from captive and free-ranging facilities and into protected wild areas.

March 2013: Sumatran rhino workshop – modelling. Not much modelling work was achieved during the meeting, but development of the “emergency plan” post-workshop spawned another round of questions around which populations should be considered too small to recover through protection alone and what the observable characteristics of a viable

population might be (e.g. annual percentage females with young? number of females? percent recruitment?)

April 2013: Workshop on Christmas Island skinks and geckos - all remaining individuals of the species have been moved into captivity for 10 years to provide for their return to a better protected wild area (should this prove possible). This workshop was reviewed the 3-year plan for this project, looking at progress to date against previously agreed goals, unforeseen challenges and revision of strategy in this light; facilitation, small population management advice and some modelling.

May 2013: Kakapo – there are only about 130 individuals left and they are a very slow growing species. We are working with the recovery team to develop a plan for genetic management of remaining wild stocks in order to maximise gene diversity and minimise inbreeding using field observations, molecular work and some tools we usually apply to captive populations.

Ongoing: development of the Abruzzi tables of tools and their uses and most appropriate situations, for CBSG and SCSPC.



David Mallon

Western Derby Eland: plan and facilitate conservation strategy workshop (Senegal, January 2013).

Lead training session on species conservation planning at 14th annual Conservation Workshop for Fauna of Arabia (UAE, February 2013). Intention to include planning sessions for selected species from 2014 onwards.

Goitered gazelle: Lead workshop on Caucasus restoration strategy (Baku, Azerbaijan April 2013).

Bongo: facilitate workshop on regional collection plan and future reintroduction (UAE, May 2013).

Okapi: plan and facilitate conservation strategy and Red List assessment workshop (DR Congo, May 2013).

Saiga antelope: co-facilitate CMS workshop (Kazakhstan, June 2013).

Eritrea: update on status of antelopes; discuss antelope conservation and action planning for key species (Soemmering's gazelle, dorcas gazelle, red-fronted [Heuglin's] gazelle) with the newly independent Forestry and Wildlife Authority (September 2013).

Snow Leopard: participate in Global Snow Leopard Forum, Bishkek, Kyrgyzstan (October 2013). Draft / revise sections for updated version of the Snow Leopard Survival Strategy (June-end 2013).

Sand Cat: facilitate conservation workshop on Arabian sand cat, Al Ain Zoo, UAE (plus co-write report/conservation strategy) (November 2013).

Dama Gazelle: facilitate round table/workshop on conservation review/action, RZSS, Edinburgh (November 2013).

Madagascar: Lead 1-day training course on species conservation planning for Malagasy NGOs, Antananarivo (December 2013).

Madagascar pochard: Facilitate Pochard Conservation Strategy workshop, Antananarivo (December 2013).

Urs and Christine Breitenmoser

Design and facilitate workshop on conservation of the Arabian leopard, Oman.

Looking forward

2013 left many initiatives on which the Chair will follow up. One of the major activities, now ongoing is the systematic assessment of all Specialist Groups for their planning needs. This is being done in several ways:

- Secretariat staff are assessing each SG and its Chair according to agreed criteria of conservation urgency, Chair energy and commitment etc;
- The SCPSC Chair is reviewing all media e.g. SSC e-bulletin, all SG newsletters to see where any interest or intent to plan has been stated;
- Personal networking and contacts.

When collated and tallied this should result in a matrix of planning priority and opportunity. The next step will be to communicate with each priority Chair on a highly individualized basis, using all information available as to why the SG should do some planning. This will be the opposite of a standard round-robin email to all Chairs and is confidently felt to be much more likely to elicit positive responses.



In 2014, the Chair will be taking part in planning exercises for, at least, the Hainan gibbon, the Crau grasshopper, will be providing input to such as a Slow Loris Action Plan, and the planning component of the ZSL EDGE Fellows training programme. There will also be a large increase in the visibility of SCPSC with a good and updated website and also some training activities.

All activities are leading towards the concept and design of the second version of the SSC planning handbook. In reality, given the range of situations with which species conservation planning has to cope, the second version is more likely to be a set of Guidelines rather than a prescriptive handbook. This will be delivered by the end of the quadrennium.

Acknowledgements

The present level of activity in and for SCPSC could only be achieved with the support of the Environment Agency - Abu Dhabi, to which the Chair is most sincerely grateful. He also appreciates the efforts and support of the SSC Chair, the Chair's Office and the IUCN Species Programme Secretariat.

Climate Change Specialist Group: 2013 Activities

James Watson and Stephen Williams, Co-chairs, IUCN SSC Climate Change Specialist Group

Summary of achievements

- Holding the first Climate Change Specialist Group face to face meeting (Cambridge, December);
- Developing SSC Best Practice Guidelines for Climate Change Vulnerability Assessment (CC VA);
- Working with IUCN World Commission on Protected Areas on developing Best Practice Guide Managing Protected Areas in the Face of Climate Change: Guidance for Protected Areas Managers and Planners;
- Working with the IUCN Net Positive Impact (NPI) committee to ensure NPI guidelines are climate-smart;
- Working closely with the IUCN Key Biodiversity Area (KBA) process to ensure the new criteria set for the delineation of KBAs are climate appropriate.



The key objectives of the Climate Change Specialist Group (CCSG) are to design a strategy to help the IUCN Species Survival Commission (SSC) respond to climate change impacts, develop the ongoing work on species' susceptibility to climate change into IUCN guidelines to inform conservation actions, provide information and recommendations about enhancing species climate change, with a view to ensuring that biodiversity concerns remain central and promote co-ordination of climate change responses between SSC Specialist Groups, SSC partner organizations and other IUCN Programme areas. In order to advise the SSC effectively, the CCSG focus on 11 different Working Themes.

The CCSG logo was based on the Golden Bowerbird (*Prionodura newtoniana*), a rainforest specialist endemic to the mountains of the Australia Wet Tropics World Heritage Area. The Golden Bowerbird is considered to potentially be the most vulnerable species in the region due to the future impacts of climate change and has been shown to be already declining and contracting up in elevation in line with the predictions based on species distribution models and projected future climate for the region (Williams et al. 2003, 2010, Williams & Scheffers 2013).



Progress in 2013

The CCSG is now led by an 18-members steering committee from all continents and with a functioning website <http://iucn-ccsg.org>. The attendance of steering committee members at various conferences around the world (SCB, ESA, UNFCCC, etc) has meant that interest in the specialist group is growing.

As the CCSG is still quite new, the key objectives of this group were built upon over the past twelve months during the regular phone call meetings. In summary, the key objectives that have been identified over the past 12 months are 1) to design a strategy to help the SSC respond to climate change impacts, 2) develop the ongoing work on species' susceptibility to climate change into IUCN guidelines to inform conservation actions, and 3) provide information and recommendations about enhancing species climate change, with a view to ensuring that biodiversity concerns remain central and promote coordination of climate change responses between SSC Specialist Groups, SSC partner organizations and other IUCN Program areas.

During the year, many steering committee members have been working hard on a set of IUCN SSC Best Practice Guidelines for Climate Change Vulnerability Assessment (CC VA) and a formal review paper has been submitted to Nature Climate Change and is under review. These SSC guidelines are seen as critical by many of the specialist groups to help guide people on the best ways to do vulnerability assessment. They will be completed within the next six months. At the same time, steering committee members have been heavily involved with the drafting on new IUCN Key Biodiversity Area (KBA) guidelines, the IUCN Net Positive Impact (NPI) guidelines, and on the IUCN's World Commission on Protected Areas (WCPA) best practice guidelines on climate-smart protected area management which will be released at the World's Parks Congress later in the year.



Participants in the 2013 CCSG Steering Committee meeting.

The major activity over the past year was the first formal meeting of the steering committee of the CCSG, which was conducted in Cambridge over three days in December at 2014. The major outcome of this meeting, attended by 15 members of the steering committee (and from academic institutions, non-government organizations and government departments), was the design of a work plan for the next three years.

IUCN SSC Preparations for the World Parks Congress

Jeff McNeely, SSC Liaison to the World Parks Congress

Key activities

In preparation for the World Parks Congress, the SSC and IUCN Global Species Programme have developed a Strategic Plan that indicates how species can fit into each of the 8 Streams and 4 Cross-cutting Themes that form the Congress Programme.



Protected areas (PAs) today cover about 12.7% of the land area (about 16 million square kilometers, roughly the size of Russia) and about 1.7% of the marine area (about 8 million sq km). Some important habitats, such as forests, have an even greater percent of their coverage in PAs (about 18.8%). PAs are often the last, best refuges for rare or threatened species, and tend to contain the ecosystems that are closest to containing their full complement of species. Expanding the PA estate and improving its management is therefore of particular interest to those concerned about species.

The 6th World Parks Congress (WPC) will be held in Sydney, Australia, on 11-19 November, 2014. This once-a-decade event is organized by IUCN, with its World Commission on Protected Areas taking the lead. The WPC offers an outstanding opportunity for the Species Survival Commission (SSC) and the IUCN Global Species Programme (GSP) to share perspectives on species conservation with colleagues from all parts of the world.



IUCN
WORLD PARKS
CONGRESS
SYDNEY 2014



The WPC is designed to strengthen conservation targets while engaging a varied audience from government to general members of society who care about the health of our planet; engage with development sectors and inspire citizens to connect with nature; and demonstrate nature-based solutions to global challenges such as climate change, health, and supporting human life. It will collate and communicate the most compelling and inspiring solutions to global challenges, and help create new sustainable commitments for PAs across the conservation, development, and business sectors. Species clearly must be an integral part of such an initiative.

In preparation for the Congress, SSC and GSP have developed a Strategic Plan that indicates how species can fit into each of the 8 Streams and 4 Cross-cutting Themes that form the Congress Programme. This will build on past participation of SSC in previous meetings of the WPC, but expand that participation, make it more systematic, and use the opportunity to strengthen IUCN's work on species.

The Plan indicates the potential for effective SSC involvement in the Congress, suggesting objectives, activities, and follow-up that will promote both improved management of protected areas and enhanced efforts at conserving species. It provides a framework for planning SSC involvement, but does not limit individual SSC members (who may also be members of other commissions, such as WCPA) who may want to contribute in other ways. But keeping track of species interests at the WPC will enable coordination and cooperation and thereby enhance inclusion of species in the outputs of the WPC.

The objectives of SSC participation include incorporating species perspectives into all relevant elements of the WPC; enabling SSC members to contribute to the content of the WPC and its outputs; and highlighting particular issues of greatest concern to species conservation or species management in relation to protected areas. Issues of particular interest include:

- The extinction crisis: SSC puts considerable effort into addressing the growing threats to species of plants and animals, and the WPC offers an opportunity to bring the latest findings to an audience that includes many people who are in a position to help implement corrective action. The SSC and GSP will launch the latest update of the Red List at the WPC. Since 2009, SSC has convened a joint taskforce with WCPA on the interface between species and



Photo: Hamilton Lund, courtesy of Destination NSW

protected areas, with its two objectives being 1) to understand factors which influence protected area success in safeguarding species populations, and 2) to consolidate a global standard for the identification of sites contributing significantly to the global persistence of biodiversity (“key biodiversity areas”). The launch of the joint taskforce’s work will comprise a major contribution to the WPC.

- **Illegal and unsustainable harvesting of wildlife:** Otherwise known as poaching, the problem has become far more serious, with organized criminal gangs with international connections devastating populations of high-value species such as elephants and rhinos in Africa. The WPC offers an excellent opportunity to bring this issue to the attention of a broader public, exploring its dimensions and seeking an international response sufficient to stop, or at least greatly reduce, the illegal and unsustainable harvesting of wildlife and damaging of their habitats within PAs (and outside as well).
- **Animal and human health:** SSC’s Wildlife Health Specialist Group has long been a leader in this field. It is involved in health surveillance, wildlife disease management, disease ecology, epidemiology, and related health disciplines. Public interest in this field is growing with the potential spread of zoonoses (diseases transmitted from animals to humans, such as West Nile virus and avian influenza) and PAs could provide a reservoir of wildlife diseases that could be spread to domestic animals. Following the Strategic Plan members of the Wildlife Health Specialist Group will convene a session at the WPC on these topics.
- **Invasive alien species:** SSC’s Invasive Species Specialist Group has been a leader in promoting action against non-native species that cause ecological or economic damage to native species and ecosystems. It, too, will be present at the Congress, and help to bring this issue to the attention of PA managers and the general public.

- Climate change: This topic is being widely addressed, and arguably is the top environmental issue on the public agenda. Most attention (and funding) is given to issues like fossil fuels and mitigation of carbon emissions, and the impacts of climate change on species and protected areas receive insufficient attention. SSC's Climate Change Specialist Group has shown that species form part of healthy ecosystems that can enhance the capacity to adapt to changing conditions brought about by global warming, changes in the distribution of rainfall, melting ice caps, ocean acidification, and many others. They will ensure that WPC outputs on climate change reflect species appropriately.
- Sustainable use and livelihoods: Since at least the time of the 1982 WPC in Bali, Indonesia, the role of PAs in contributing to human well-being has been a topic of considerable importance, especially to government PA agencies in developing countries. The joint SSC-CEESP Sustainable Use and Livelihoods Specialist Group will ensure that species issues are well integrated into the programme.
- The application of science to management: SSC has long been a leader in applying the best available science to management, and the launch of the latest synthesis of The IUCN Red List of Threatened Species will demonstrate the major source of information about species status and distribution for protected area managers.

In preparation for the WPC, the SSC Liaison for the Congress has been working with the relevant Specialist Groups, Chairs of IUCN's other five Commissions, and SSC members to ensure significant contributions to the Congress. We have encouraged the Congress Organizers to invite the Director General of INTERPOL to give a plenary speech on the issue of international trade in threatened species. We also participated in the 1st Asia Parks Congress, held in Sendai, Japan on 13-17 November 2013, which included a session on the WPC and a message from the Asia Parks Congress to the WPC. It includes a call to "establish comprehensive, adequate and representative national protected area systems that are based on sound scientific analysis to ensure ecological representativeness and/or cover species/genetic diversity and/or conserve threatened species rather than being based on political or economic rationales."

The World Parks Congress will offer an outstanding opportunity to promote the issues affecting species conservation to professionals working in the field, and to a global audience.



