

Species

2013 Annual Report of the Species Survival Commission Specialist Group Reports
 2013 Snapshots Addressing Critical Conservation Issues



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TEAM SPECIES Dena Cator, Rachel Roberts, Olivier Hasinger, Elise Jueni, Claire Santer, Lynne Labanne and Jonathan Hulson.

LAYOUT www.naturebureau.co.uk

COVER White Rhinoceros (Ceratotherium simum) © lan Turk

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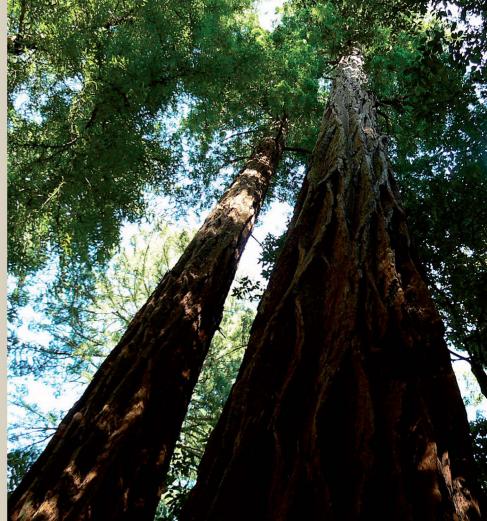
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Coast Redwoods, Los Gatos.

2013 SNAPSHOTS

The Species Survival Commission (SSC) is a science-based network comprising over 9,000 volunteer experts deployed across more than 130 Specialist Groups, Red List Authorities and Task Forces, all working together towards achieving the vision of: "A world that values and conserves present levels of biodiversity."

The SSC works in close association with IUCN's Global Species Programme (GSP) and provides information to IUCN on biodiversity conservation, the inherent value of species, their role in ecosystem health and functioning, the provision of ecosystem services, and their support to human livelihoods. This information is fed into The IUCN Red List of Threatened SpeciesTM.

The unprecedented levels of poaching and illegal wildlife trade over the past few years were met head-on in 2013, with a number of high profile summits and forums co-organized by the SSC. The first-ever global conference on the conservation of pangolins was held by the IUCN SSC Pangolin Specialist Group, and at the Jubilee Meeting of the Parties to the 1973 Agreement on the Conservation of Polar Bears, the five range states of the polar bear agreed to adopt a resolution encouraging the IUCN SSC Polar Bear Specialist Group to determine how best to use traditional ecological knowledge, together with scientific approaches and analyses of polar bear population status for more effective decision-making.



African Elephant Summit

IUCN with the government of Botswana organized an African Elephant Summit from 2–4 December in Gaborone, Botswana. This work related to a Resolution on the Conservation of African Elephants that was passed at the IUCN Jeju Congress in 2012.

The goal of the Summit was to raise awareness at the highest political level about the dimensions of the poaching crisis and the dynamics of the illegal ivory trade, as well as committing to urgent actions for securing viable elephant populations across the continent, halting illegal trade and seeking political, financial, and technical support to implement these urgent actions. It was the first-ever meeting to focus on the dynamics of the entire ivory value chain. The set of urgent measures were drafted prior to the meeting and invited for comment by a broad range of stakeholders. The measures were subsequently finalized and agreed upon by key African Elephant range states at the Summit including Gabon, Kenya, Niger and Zambia, ivory transit states Viet Nam, Philippines and Malaysia and ivory destination states, including China and Thailand. For more details on the meeting itself and its outcomes, please see the Summit page on the IUCN SSC African Elephant Specialist Group website.



CITES CoP16

IUCN played a key role at the 16th Conference of the Parties meeting for the Convention on International Trade in Endangered Species (CITES CoP16) which took place on 3–14 March 2013 in Bangkok, Thailand. Several

issues of critical importance to species conservation were on the agenda, such as proposals to list a number of threatened shark and tree species on Appendix II. One of IUCN's major contributions at the meeting was producing the Analyses of the Proposals to Amend the CITES Appendices which it has undertaken with TRAFFIC since 1987 – the document provides an independent and science-based review of each proposal which the countries party to CITES (most countries in the world) rely on for decision-making. At CITES CoP16, the seminal decision was made to list the oceanic whitetip shark, porbeagle shark, manta rays and scalloped, great and smooth hammerhead sharks on Appendix II. The meeting also addressed international trade issues relating to elephants, rhinos, tortoises and freshwater turtles, pangolins, humphead wrasse, crocodiles, polar bears, snakes, cats, great apes, marine turtles, antelopes, sturgeons, amphibians and trees such as Malagasy ebony and rosewood species. The IUCN delegation was led by the IUCN Species programme and the meeting was attended by 18 Specialist Group members representing many of the species discussed at the meeting. For more information, see here.



Identifying the World's Most Climate Change Vulnerable Species

Most species at greatest risk from climate change are not currently conservation priorities, finds an IUCN study that introduces a

pioneering method to assess the vulnerability of species to climate change. Climate change will have far-reaching impacts on biodiversity, including increasing extinction rates. The study's novel approach looks at the unique biological and ecological characteristics that make species more or less sensitive or adaptable to climate change whereas conventional methods have focused largely on measuring the amount of change to which species are likely to be exposed. IUCN will use the approach and results to ensure The IUCN Red List continues to provide the best possible assessments of extinction risk, including due to climate change. "The findings revealed some alarming surprises," says Wendy Foden of IUCN Global Species Programme and leader of the study. "We hadn't expected that so many species and areas that were not previously considered to be of concern would emerge as highly vulnerable to climate change. Clearly, if we

simply carry on with conservation as usual, without taking climate change into account, we'll fail to help many of the species and areas that need it most."

The paper was published in June in PLOS ONE and has laid the foundations for a range of other assessments across many more species groups



Plants for People

There is growing awareness of how plant species and their habitats, and the benefits that healthy ecosystems provide, are linked to people's livelihoods and well being. However, we need to know more about plant diversity and

its threats in order to better conserve them, and ensure our own survival.

Plants for People (P4P) is a major new initiative to address this knowledge gap by assessing the threat status (using The IUCN Red List Categories and Criteria) of at least 1,500 highest priority species in each of the following groups: crop wild relatives; medicinal plants; timber trees; and palms (6,000 in total). This is a joint initiative of the GSP and SSC. The P4P initiative will collaborate with national, regional, and international specialist organizations working on economically valuable plants. This information will be used to refine criteria for determining sites of significance for useful wild plant species. Such information will form the basis of conservation strategies 'on the ground' including work to ensure the inclusion of significant sites in protected areas and appropriate ex-situ strategies. In parallel, a policy-influencing strategy will be developed for appropriate policy fora (notably the Convention on Biological Diversity) to raise awareness amongst governments, NGOs and other relevant institutions.

In its inception year, 6,747 priority crop wild relative, medicinal plants, timber and palm species were selected for IUCN Red List assessments, and species-specific work plans for 1,500 plant species were submitted to IUCN by the four Specialist Groups. Last year, 3,795 plant species were published on The IUCN Red List (55% of these are useful for people).



The First Asian Rhino Range States Meeting, Bandar Lampung, Indonesia

2-3 October 2013

Significant attention has been paid by the international community in recent years to the

plight of the rhinos in Africa, while there has been relatively little focus on the three Asian species of rhinoceros, which occur in much smaller numbers. As of March 2013, there were over 25,000 rhinos in Africa, compared with only about 3,500 rhinos in Asia. Pressure from illegal hunting of all species of rhino has grown significantly in recent years, linked to a significant increase in non-traditional use of rhino horn and a subsequent escalation of its price in Asian markets, especially in Vietnam and China. A continued increase in illegal hunting of rhinos and in rhino horn demand could rapidly jeopardize the improvements that have been achieved in the status of

Greater One-horned Rhino over the last two decades, and could easily cause the extinction of the Javan and Sumatran Rhinos in the foreseeable future.

The Governments of Bhutan, India, Indonesia, Malaysia and Nepal in recognition of the critical situation facing Asian Rhinos, came together for the First Asian Rhino Range States Meeting on 2-3 October 2013, in Bandar Lampung, Indonesia. The meeting was hosted by the government of Indonesia and facilitated by the IUCN SSC. All five states agreed a common action plan with the aim of increasing 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 and outlined specific conservation actions necessary to secure a steady growth rate of all three Asian Rhino species including: 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 agreement was reached based on the latest knowledge on the status and trends of the three species provided by the IUCN SSC Asian Rhino Specialist Group.

Third International Congress for Fungal Conservation, Akyaka, Turkey

11-15 November 2013

For the first time since the first Congress was held in 2007, the Third International Congress

for Fungal Conversation was hosted outside Europe in Gökova Bay, Mugla, Turkey on 11–15 November 2013. The five SSC fungi Specialist Groups convened the Congress in partial response to Resolution 033 "Increasing the Attention Given to the Conservation of Fungi". A major advance has been the launch of the Global Fungal Red List Initiative which should make it much easier for the mycological community to start Red Listing and has been generously funded by the Mohamed bin Zayed Species Conservation Fund.

The Congress looked at three key areas for the protection of fungi – science, infrastructure and politics, with the main goal of influencing a global cadre of mycologists and conservationists to converge on a vision of protecting fungi by: exchanging experiences and opinions; becoming familiar with the existing infrastructure for fungal conservation, particularly within IUCN, and explore the relevant political issues related to this; review of the scientific work relevant to conservation, particularly in respect of threats to fungi; identification of the challenges facing fungal conservation and seek to develop the necessary infrastructure, policies and strategies to deal with them; raise the profile of fungal conservation and improve skills in Red Listing, and in identifying important areas for fungi.

Snapshots 3

Report of the Species Survival Commission (SSC) Chair

1. Providing overall leadership and direction to the SSC

Appointing SSC Members

One of the major aspects of leading the SSC into a new quadrennium is the appointment or reappointment of the Commission members. A primary feature of memberships of IUCN Commissions is that they expire 90 days after the close of the IUCN World Conservation Congress, at which time members need to be appointed or reappointed for the next quadrennium (in this case 2013–2016). At one level, the Commission reconstitution process is a huge amount of work and it certainly has taken a huge amount of time in the SSC Chair's Office since the IUCN Congress. At another level, the process provides an opportunity to refresh the Commission, to bring in new leadership, and to ensure that any non-performing parts of the SSC are directly addressed (and if necessary, people may be asked to step aside to make way for new appointees).

Deputy Chair and SSC Steering Committee

The Steering Committee is the governing body of the SSC. The first stage in the reconstitution is the appointment of the SSC Deputy Chair and Steering Committee by the IUCN Council. At its meeting in Jeju on 15 September 2012, the Council appointed Jon Paul Rodríguez (Venezuela) as Deputy Chair, together with 19 Steering Committee Members. In early November, Council appointed seven new Steering Committee members.

Chairs of Specialist Groups and Task Forces and Coordinators of Red List Authorities

The second and much more time-consuming stage of the membership reconstitutions is to appoint the Chairs of the SSC Specialist Groups (SGs) and Task Forces (TF), and the Coordinators of the SSC Red List Authorities (RLAs). All these are approved in advance by the SSC Steering Committee, and the RLA Coordinators are approved in advance by the SSC Red List Committee. The great majority of the appointments were approved by the Steering Committee at its meeting just before the IUCN Congress, but the remainder have been approved in the subsequent months through email consultations with the Steering Committee. The finalisation of each appointment requires each SG and TF Chair, and RLA Coordinator to sign a Letter of Agreement with the SSC Chair. Several new appointments have been made since the last report at the end of 2012:

Access and Benefit-sharing SG: This new SG, shared with the IUCN World Commission of Environmental Law (WCEL), was formally established in December 2013 with Tomme Young as Chair.

Bats: Sergio Solari has been appointed RLA Coordinator for the New World (alongside Daniel Hargreaves who is RLA Coordinator for the Old World).

Cave Invertebrates: This new SG was established in December 2013 with Louis Deharveng and Tony Whitten as Co-Chairs.

Cetaceans: Barbara Taylor is the new RLA Coordinator, replacing Bill Perrin.

Mayra Camino.

Chytrids, Zygomycetes, Downy Mildews and Slime Moulds: Tetyana Kryvomaz is now CZDMSMSG Co-Chair alongside

Climate Change: Stephen Williams is now CCSG Co-Chair alongside James Watson.

Cycads: Patrick Griffith is now CSG Co-Chair alongside John Donaldson and De Wet Bosenberg is the new RLA Coordinator.

Freshwater Fish: Following an extensive internal consultation process led by Paul Skelton, Richard Sneider has been appointed as the new FFSG Chair, replacing Gordon McGregor Reid who has retired.

Freshwater Plants: Melanie Bilz is the new RLA Coordinator.

Giraffe and Okapi: this new SG was established in March and is led by Co-Chairs Julian Fennessy and Noelle Kumpel, with David Mallon as RLA Coordinator.

Hippos: Chris Ransom is the new RLA Coordinator.

Madagascar Plants: Vololoniaina Jeannoda is the new SG Chair and Rakouth Bakolimalala is the new RLA Coordinator.

Marine Fishes: This new RLA, covering all marine fishes for which there is not already an RLA, has been established with Kent Carpenter and Beth Polidoro as the new RLA Coordinators.

Mediterranean Plants: Errol Vela is the new RLA Coordinator.

Molluscs: Several RLA Coordinators have been appointed: Louise Allcock (Cephalopods); Howard Peters (Cone Shells); Eike Neubert (European Land Snails); Manuel Lima (Freshwater Bivalves); Monika Böhm (Sampled Red List Index Molluscs): and Mary Seddon (the remaining species).

Re-introductions: Axel Moehrenschlager is now RSG Co-Chair alongside Frédéric Launay.

Sea Snakes: Arne Rasmussen is the new Co-Chair, replacing Vimoksalehi Lukoschek who has retired; Arne is serving alongside Kate Sanders.

Seahorse, Pipefish and Sticklebacks: Stefan Wiswedel is the new RLA Coordinator.

Small Carnivores: Following an extensive internal consultation process led by Roland Wirth, José González-Maya and Jan Schipper have been appointed as the new SCSG Co-Chairs, replacing Jerry Belant who has retired.

Sturgeon: Jörn Gessner is the new RLA Coordinator.



Rainbow Lorikeet (Trichoglossus haematodus). © Mary Bomford

Task Force on Biodiversity and Protected Areas: Penny Langhammer was appointed to replace Tom Brooks as the SSC Co-Chair later on 15 November 2013, following Tom's appointment as Head of Science and Knowledge in IUCN headquarters, and Stephen Woodley continues as the World Commission on Protected Areas (WCPA) Co-Chair.

Tuna and Billfish: Beth Polidoro is the new RLA Coordinator. The following processes have also been taking place:

Bryophyte SG: Tomas Hallingbäck has announced his intention to step down as BSG Chair at the end of the current IUCN quadrennium. An internal consultation process is underway to appoint a Co-Chair and identification of an RLA Coordinator.

On 14 October, the **Wolf Specialist Group** was merged into the **Canid Specialist Group**. The Canid Specialist Group will now have a Wolf Working Group within it. Simon thanked Dave Mech, the long-serving Chair of the Wolf Specialist Group, for his global leadership of wolf conservation over many years by awarding him the SSC Chair's Citation of Excellence. Luigi Boitani and Claudio Sillero played a critical role in the merging of the two groups.

Discussions are still underway to agree the leadership of the following SGs and RLAs for 2013–2016: Arabian Plant SG and RLA; Butterfly RLA; Central African Plant RLA; Galapagos Plant RLA; Global Tree RLA; Korean Plant RLA; Marine Invertebrate RLA; Medicinal Plant RLA; and Stork, Ibis and Spoonbill SG.

Resignations:

As mentioned above, Vimoksalehi Lukoschek, Gordon McGregor Reid and Jerry Belant have resigned as Chairs/Co-Chairs of the Sea Snake, Freshwater Fish and Small Carnivore SGs respectively. John Albertsen has resigned as Chair of the Swan SG. An interim chair will be appointed, while we take advantage of the International Swan Symposium in 2014 to confirm a long-term replacement. M. Ahmedullah has resigned as Chair and RLA Coordinator of the Indian Subcontinent Plant SG. A process will be started to relaunch this SG. I thank Vimoksalehi, Gordon, Jerry, John and Ahmed for their work as SSC SG Chairs.

Specialist Group, Task Force and Red List Authority Members

The third and final stage in the reconstitution of the SSC for the 2013–2016 IUCN quadrennium is the appointment of the SG, TF and RLA members. The SG and TF Chairs and the RLA Coordinators select their members, and these appointments started early in 2013. Unfortunately, this process was initially much slower than intended because of the lack of a new IUCN Commission Portal which was supposed to have been completed in early 2012 and which would have made membership appointments massively easier. This problem has been affecting all IUCN Commissions, and the Commission Chairs raised the issue with the IUCN Director General. As a result, the IUCN Secretariat has been working on enhancing the new IUCN Union Portal (now operational) so that it can fulfil the functions previously intended for the Commission Portal.

Other SSC Membership Issues

George Archibald, who for many years served as Chair of the SSC WI Crane Specialist Group, was awarded the Order of

Canada. IUCN provided a strong support letter for George's nomination.

Very sadly, Malcolm Coulter, who was Co-Chair of the Wetlands International/SSC Storks, Ibises and Spoonbills Specialist Group, passed away on 2 January 2013. In the coming months we plan to circulate a fuller appreciation of Malcolm's contribution to SSC over many years. Also, on 7 June 2013 Denise Brackett, the wife of former SSC Chair David Brackett, very sadly passed away. Denise lost her long battle with cancer, and was a constant support to Dave during his eight years as SSC Chair from 1996 to 2008.

Travel of the SSC Chair

In addition to reconstituting the SSC membership and bringing in new people, Simon Stuart has travelled extensively during this time period to represent the SSC at important meetings. These include:

- 16 January attendance at the Association of Zoos and Aquariums (AZA) annual directors meeting, New Orleans, with the aim of building a closer relationship between the SSC and North American zoos. On 24 July Simon met with the AZA senior staff at their office in Silver Spring near Washington DC, to discuss a new AZA-SSC memorandum of agreement to outline much closer collaboration in future. The MOA was signed on 19 December. AZA has also recently become a new funding partner of the SSC Chair's Office.
- 20–22 January 1st plenary session of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) in Bonn, Germany. IPBES will become an official, but scientifically independent body charged with conducting biodiversity assessments and related activities in the future. The SSC is now involved in a number of important follow-up items resulting from the Bonn meeting, in particular the design of the IPBES conceptual framework. Furthermore, Phil McGowan has recently agreed to become the SSC focal point for IPBES.
- 9–11 April "Symposium on Synthetic Biology and Conservation" in Cambridge, UK. As a result of this groundbreaking meeting, a special session of the SSC Steering Committee (and its November 2013 meeting in Mexico) will
- Whitebark Pine (Pinus albicaulis) Endangered. © Dr Sally Aitken



- consider the options for future SSC work on synthetic biology, including on de-extinction.
- 23 April Simon, together with Jane Smart, attended a
 meeting with Synchronicity Earth in London to discuss
 possible collaboration on a major fundraising event in 2014
 to celebrate the 50th anniversary of The IUCN Red List of
 Threatened Species™. There has been an agreement to
 collaborate on a masked ball (the Biophilia Ball) in London
 for the 50th anniversary. This will take place in late
 November 2014.
- 13 May Simon had the honour of presenting IUCN's highest award, the John C. Phillips Medal, to Sir David Attenborough during a small reception held at the Royal Botanic Gardens, Kew.
- 24–26 July Washington DC, Simon had a series of important meetings including with AZA (outlined above); Conservation International; the GSP Biodiversity Assessment Unit; senior staff at the Indonesian Embassy in Washington DC and others (including WWF-US and International Rhino Foundation (IRF)) to discuss the forthcoming Asian Rhino Range States Meeting; the US State Department (also with IRF and WWF colleagues) to seek their support for high-level political engagement on Indonesian rhinos and to review the overall progress of the collaboration with IUCN of species-related issues, and to focus in particular on collaboration needed as a result of President Obama's Executive Order on wildlife trafficking. On 26 July Simon took part in the meeting of the Steering Committee of the SSC-WCPA Task Force on Biodiversity and Protected Areas.
- 19–22 August Indonesia, to meet with the organising committee for the Asian Rhino Range States Meeting. On 22 August he participated in the SSC Indonesia members meeting in Bogor. Over 100 people attended, and it was agreed to go ahead and form a national grouping of SSC members in the country, with initial priority actions agreed on national Red Listing and species conservation planning, among other things.
- 23 September Royal Society for the Protection of Birds (RSPB), UK, to discuss closer and more strategic collaborations with IUCN and the SSC in the future.
- 2–3 October, Asian Rhino Range States Meeting, Bandar, Lampung, Indonesia.
- 17 October Meeting with the UK Department of Environment, Food and Rural Affairs (DEFRA), London. DEFRA is the UK State Member of IUCN, so discussions were held on strengthening cooperation between the UK and IUCN. Later on the same day, IUCN Director General Julia Marton-Lefèvre and Simon met with representatives from the Royal Foundation of The Duke and Duchess of Cambridge and Prince Harry to discuss the possible support that the Royal Family might be able to give to the 50th anniversary celebrations of The IUCN Red List of Threatened Species™ in 2014.
- 2–4 November SSC Steering Committee, Cuernavaca, Mexico.
- 11 November Third International Congress on the Conservation of Fungi, Akyaka, Turkey.
- 21–22 November A joint workshop in Beijing convened by the Chinese State Forestry Administration (SFA) and the SSC on commercial bear farming.
- 24–27 November, IUCN Council Meeting, Gland, Switzerland.
- 27 November Annual meeting of the European Association of Zoos and Aquaria (EAZA) in Edinburgh, speaking on "The



The First Asian Rhino Range States Meeting, Bandar Lampung, Indonesia, 2–3 October 2013

Benefits to Species Conservation of the SSC/EAZA Collaboration, and What the Future May Hold".

- 2-4 December African Elephant Summit in Gaborone, Botswana.
- 6 December International Colloquium on Climate Change, Brasilia followed by attendance at the WCEL Steering Committee in Brasilia on 7–8 December at which the new SSC-WCEL Specialist Group on Access and Benefit-Sharing was formed.
- 12–13 December Simon attended a meeting in London of the new collaboration, United for Wildlife (UfW), convened by The Royal Foundation of The Duke and Duchess of Cambridge and Prince Harry to discuss future work on the illegal wildlife trade. Simon is representing IUCN on UfW.

2. Representing the SSC on the Council of IUCN

Simon Stuart attended the 81st meeting of IUCN Council that took place at IUCN headquarters in Switzerland on 27–30 January 2013. This meeting focused in particular on appointing the various committees of the Council. Simon has been appointed to represent the Commissions on the Bureau (i.e., the Executive Committee) of Council for 2013 and 2014. However, in May he resigned from the Bureau in order to take up a seat representing the Commissions on the Search Committee for the next IUCN Director General. Simon has also been appointed to serve on the Council's Finance and Audit Committee (FAC) for the 2013–2016 quadrennium. Simon has also been appointed to the Council's Private Sector Task Force (PSTF) and to the Council's Task Force on the Implementation of the 2012 Congress Resolutions.

The January Council meeting adopted the budget and work plan for 2013, and set in motion a number of important initiatives, including developing a new "Framework of Action to Strengthen the Union". This initiative will focus on improving the ways in which the complex structure functions, both in terms of institutional efficiency and democracy, and also conservation effectiveness.

The work of the Search Committee for the IUCN Director General (DG) has now started, and this has included developing the DG job description, the vacancy announcement and the terms of reference for a search consultant to assist the Search Committee. The vacancy announcement was posted on 15 November 2013.

The 82nd IUCN Council meeting took place in Gland on 24-27 November. On 24 November Simon attended a meeting of the IUCN Commission Chairs, a review of Commission Chair performance with the IUCN President and Director General, and a meeting of the PSTF. The PSTF agreed conditions under which IUCN engagement with Shell could continue, and also decided that SSC and the GSP could not seek funds from Syngenta for the Plants for People, at least until the conclusion of a process to explore a possible collaboration between IUCN and Syngenta. These decisions were subsequently ratified by the whole Council. On 26 November, Simon took part in the FAC meeting at which the 2014 budget was agreed (ratified by Council the following day). Among key decisions of the 82nd Council meeting was an instruction to the head of each programme unit (global and regional) to prepare a three-year plan on integrating the work and capacities of Commissions, Members and National Committees, by 30 June 2014 (with implementation to start by January 2015). This could have farreaching implications for the way in which the IUCN Programme is implemented, and the relationship between the Commissions and the Secretariat. Among many other decisions, the 82nd Council meeting also: agreed that IUCN should apply to the Global Environments Facility for accreditation as a Project Agency; and established a Council Climate Change Task Force.

3. Promoting the biodiversity assessment work of the SSC

The Launch of IUCN Red List Discover

The Red List committee (RLC) also reviewed final plans for the launch of the new popular interface for The IUCN Red List of Threatened Species™, which will be called *Red List Discover*. The first phase generously funded by the Rolex Corporation, went live on 30 April 2013 - see here. Red List Discover is targeted to the non-technical user, such as the general public, and provides a new view of The IUCN Red List. We will soon be starting the second phase of development to improve the search functionality e.g., by common names and increased search speed, and adding more images. Images are key to making the site as engaging and informative as possible. Our aim is to have images available for the majority of species on The IUCN Red List – a huge challenge as currently there are more than 70,000 species featured (currently 5,000 species have images on The IUCN Red List, though there is currently a major push to add more).

Amazing Species

In order to promote popular understanding of threatened species, IUCN SSC continues to feature an Amazing Species each week on its website and those of its partners, and has over 21, 000 followers on Twitter and over 33, 000 on Facebook. The species featured during 2013 are: Iberian Lynx, White-backed Vulture, Lesser Anteater, Chinese Horseshoecrab, Desert Warthog, Fly Orchid, Horn Shark, California Condor, Black-crested Macaque, Sonaghen (a species of salmon), White-bellied Heron, Mountain Gorilla, Galápagos Pink Land Iguana, Hirola (a species of antelope), Middleburg Cycad, Hooded Grebe, Hooded Vulture, Northern River Terrapin, Sunda Pangolin, Taimen (a species of salmon),

Bengal Tiger, Black-bellied Tree Pangolin, Kanthan Cave Trapdoor Spider, Roatán Spiny-tailed Iguana, Bornean Orangutan, Giant Barb (a species of freshwater fish), Bleeding Toad, Giant Guitarfish, Chapa (a species of land snail), Turtleheaded Sea Snake, Lo'ulu (a species of palm), Banana Bat, Saltmarsh Harvest Mouse, Mangrove Finch, Plated Leaf Chameleon, African Penguin, Giant River Prawn, and Hazel Dormouse. Rachel Roberts in the SSC Chair's Office continues to lead this project and she would hugely welcome nominations for species to be profiled in the future.

Securing additional funding to support the activities and staff of the SSC Chair's Office

With the start of the new IUCN quadrennium, it has been necessary to renegotiate the funding agreements for the SSC Chair's Office. The following institutions have made funding commitments for the four years up until 2016 (with a few having increased their funding support): Al Ain Zoo; Bristol Zoo; Chester Zoo; Environment Agency Abu Dhabi; European Association of Zoos and Aquaria; MAVA Foundation; UNEP World Conservation Monitoring Centre; Wildlife Conservation Society; World Association of Zoos and Aquariums; and Zoological Society of London. Simon thanks Razan Khalifa Al Mubarak, Frédéric Launay, Lynda Mansson, Paule Gros, Ghanim Al Hajeri, Mark Craig, Ralph Armond, David Field, Jonathan Baillie, John Robinson, Gerald Dick, Jon Hutton, Bryan Carroll, Lesley Dickie, and Mark Pilgrim for their ongoing generous support to the SSC.

However, at the beginning of the year, there was still a significant funding shortfall for the Chair's Office for the quadrennium, in the order of £390,000. As a result, Simon has been actively working to recruit new funding partners, and there has been considerable recent success. First, Conservation International has now agreed to extend funding up to the end of June 2014, and huge thanks are due to Russ Mittermeier for this continued generosity. Second, five new

Burmese Python (Python bivittatus) Vulnerable. © Mark Auliya





Long-billed Vulture chicks (Gyps indicus). © Chris Bowden

organizations have agreed to become funding partners of the SSC Chair's Office: Zoo Copenhagen; the Association of Zoos and Aquariums; Chicago Zoological Society, the Royal Zoological Society of Scotland; and Zoo Leipzig. Simon thanks Bengt Holst, Kris Vehrs, Jim Maddy, Stuart Strahl, Chris West and Jörg Junhold for agreeing to provide this new support. Finally, UNEP-WCMC agreed to reduce some administrative costs, and special thanks are due to Jon Hutton and Tim Johnson. As a result of this recent fundraising progress and some saving elsewhere, the funding shortfall for the current IUCN quadrennium has been reduced to £160,000. The current fundraising push is continuing, but the progress has been encouraging.

 Assisting in the adoption of The IUCN Red List Index (RLI) as an agreed indicator for measuring progress towards globally agreed targets, such as the United Nations Millennium Development Goals (MDGs) and the 2020 Aichi Biodiversity Targets

The completion of the reassessment of conifers now makes it possible to calculate the first RLI trend for conifers. Conifers therefore join birds, mammals, amphibians, corals and cycads as the groups with global RLI trends (all downwards). As mentioned above, conifers have deteriorated in their status since the first assessment in 1998, though the exact RLI will not be calculated for a few more months.

Other Activities Relating to the Use of Species

The IUCN SSC Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives were translated into Chinese, German, Portuguese, Russian and Spanish, with translation into other languages underway.

Simon Stuart took part in the TRAFFIC International Trustees Annual General Meeting on 13 February, at which the 2012 accounts were formally approved.

On 12 September 2013 a new conservation partnership, United for Wildlife (UfW) was formed, convened by the Royal Foundation of The Duke and Duchess of Cambridge and Prince Harry. The members of UfW are; Conservation International, Fauna and Flora International, IUCN, The Nature Conservancy, Wildlife Conservation Society, WWF and the

Zoological Society of London. Simon Stuart is representing IUCN in the UfW meetings. The main foci of UfW are to develop collaborative initiatives to address the illegal wildlife trade, and to bring a new generation of younger people into the conservation movement. Simon Stuart attended a UfW workshop in London on 12-13 December with the intention of identifying some key activities that the UfW partners could do jointly that would make a significant advance in controlling the illegal wildlife trade. The meeting considered a background report, prepared by TRAFFIC, on illegal trade in elephants, rhinos, big cats and pangolins. The results of the workshop are being pulled together, and it is hoped that the UfW will agree on a small number of joint activities on the illegal wildlife trade during 2014. These were announced at the UfW symposium which took place in London on 11–12 February 2014.

In December 2013 the SSC Boa and Python SG signed a Letter of Intent with the Kering Group and the International Trade Centre (ITC) of the United Nations to form the Python Conservation Partnership: a programme of work for the sustainable sourcing of python skins from Southeast Asia. There is a growing body of work between the ITC and other SSC Specialist Groups looking at sustainable sources of wildlife products, including with the South American Camelid Specialist Group and Crocodile Specialist Group. ITC is also working with the Sustainable Use and Livelihoods Specialist Group (SULi) to develop an analytical framework for evaluating whether or not sustainable sourcing can work for both conservation and livelihoods.

6. Enhancing the work of SSC on plants, fungi, invertebrates and on marine, freshwater and arid-land ecosystems

Most of the activities to enhance SSC's work on these species are already reported on above. As is clear from these reports, there is a significant and growing body of work on plants, invertebrates, and on marine, freshwater and arid-land species (especially reptiles).

Progress on fungi is much slower, although the five SSC fungi Specialist Groups have received a grant from the Mohamed bin Zayed Species Conservation Fund to get started on red listing, working in close collaboration with The IUCN Red List Unit. The

Pelagic Thresher Shark (Alopias pelagicus) Vulnerable. © Bo Mancao



five SSC fungi Specialist Groups convened the Third International Congress for Fungal Conservation in Gökova Bay, Mugla, Turkey on 11–15 November, in partial response to Resolution 033 "Increasing the Attention Given to the Conservation of Fungi". A major advance has been the launch of the Global Fungal Red List Initiative which should make it much easier for the mycological community to start red listing. The Global Fungal Red List Initiative has been generously funded by the Mohamed bin Zayed Species Conservation Fund.

Serious cuts in the SSC Commission Operations Fund mean that it is no longer possible for the SSC Sub-Committees, which come under the SSC Steering Committee, to meet annually. The Freshwater, Invertebrate, Marine and Plant Conservation Sub-Committees are all designed to strengthen the SSC's work in these areas. The Marine Conservation Sub-Committee met in December 2013, but the others will not meet until later in 2014. However, all of the sub-committees are busy working on the priorities that were developed during the previous IUCN quadrennium, and which are in the 2013-2016 Species Strategic Plan.

7. Promoting a process within the SSC to develop a mechanism for measuring the impact of conservation on species more effectively than is currently possible

A meeting was held at the SSC Chair's Office in Bath on 11–12 February 2013, to continue the work on developing a new mechanism to measure the impact of conservation on species. This work has been significantly delayed because of numerous competing priorities, but progress is being made. The methodology itself is now completed and has been tested by its application to all of the world's 200+ ungulate species. The details of the application of the methodology have now been checked with SSC Specialist Groups and work will soon start on a scientific publication, which will describe the methodology and its application to ungulates.

8. Conclusion

The SSC's Newsletter *Species* will be produced once a year from now on and will essentially now be this annual report representing the work of the SSC, including of all of its Specialist Groups, Task Forces, Red List Authorities, Sub-Committees and Working Groups and presenting an overview of the SSC's activities and accomplishments.

Once again, Simon Stuart wishes to thank all of the donors to his office, as well as the SSC Members and GSP staff, too numerous to mention, and in particular the excellent staff in his office: Mike Hoffmann (Senior Scientific Officer); Rachel Roberts (Network Coordination Officer); Jeremy Harris (Development Director); and Jennifer Luedtke (Assistant to the Chair).

Simon N. Stuart

Chair, IUCN Species Survival Commission

Report of the Global Species Programme Director

This document reports work carried out by the Global Species Programme, working jointly with SSC as well as with Members and partners. It does not cover all the work carried out jointly with SSC however – this is included in the report from the SSC Chair. It also reflects progress of other work carried out by the Secretariat including by the Global Director, Biodiversity Conservation Group who has an overall responsibility for knowledge products and leads on the CBD related work, and Tom Brooks, Head, Science and Knowledge who leads on the scientific aspects of the knowledge products.

Valuing and conserving nature

IUCN Red List taxonomic and geographic coverage is expanded (Taxonomic coverage of The IUCN Red List is expanded so that it better informs biodiversity conservation)

Plants: Plants for People (P4P):

The Plants for People project, funded by the MAVA Foundation, will assess the conservation status of the most economically important plants. Working closely with four specialist groups, Crop Wild Relatives, Global Trees, Medicinal Plants and Palms, we aim to assess 6,000 plant species. This will be a substantial contribution to the IUCN's Strategic Plan, helping to expand the taxonomic coverage of The IUCN Red List and improve the information to better inform and guide conservation actions.

In the last four months, significant progress has been made in this ambitious and challenging project. An inception meeting was held, involving 12 participants from the SSC and its Specialist Groups (SGs), IUCN Red List Partners and Global Species Programme staff. The objective of this meeting was to officially start the P4P project, clarify collaboration and start developing a work plan involving the IUCN SSC Plant SGs, Global Species Programme units and IUCN Red List Partners. Each Specialist Group has developed methodologies to select the priority plant species to be assessed and have generated a preliminary priority species list (Table 1). A plant data import interface is being developed by P4P in collaboration with RBG Kew, which will allow for the importation of IUCN Red List assessments held in other external (partner) databases, such as those held at RBG Kew, SANBI in South Africa and the different assessment initiatives in Brazil. The Project Coordinator, Dr Barbara Goettsch, was recruited and she has held meetings with all the Chairs of the P4P SG's.



Mozambican botanists pressing plants collected from the Rovumo Centre of Endemism, northeast Mozambique and southeast Tanzania.

The GSP/CI BAU is also working closely with the Chairs of the Crop Wild Relative Specialist Group and Conservation International staff, to try and identify opportunities for assessing these important species within Latin America. It is hoped that through IUCN Red List assessments and capacity building through workshops, more global conservation attention will be directed towards these priority plant species.

IUCN Red List updates: There have been two updates to The IUCN Red List of Threatened Species™ since the SSC Steering Committee last met in September 2012. The 2012.2 update was released on the 17 October 2012 to coincide with CoP11 of the CBD held in Hyderabad, India. The 2013.1 update was released on 2 July 2013. During this period, the number of species assessed has increased from 63,837 (19,817 threatened) to 70,289 (20,930 threatened). The 2013.2 update was released on 26 November 2013, with a total of 71,576 species assessed (21,286 threatened).

While each update has included many reassessments of species, the main focus in 2013 has been on the addition of new species groups to The IUCN Red List, particularly groups identified under Key Result 1 of the Species Strategic Plan. This has included 452 reptile assessments (around 42% of the described reptiles are now assessed), 763 freshwater shrimps (a comprehensive assessment), 632 marine cone snails (a comprehensive assessment), 371 commercially exploited sea cucumbers, 139 dragonflies, the first batches of the dung

Table 1. Summary of criteria used by each Specialist Group to prioritize plant species to assess.

Specialist Group	Priority criteria	New assessments	Re-assessments	Total
Crop Wild Relatives	Gene pool concept priority setting	1,322	169	1,491
Medicinal Plants	Internationally traded species guided by key policy targets	843	1,157	2,000
Global Trees	Most important commercial timbers	843	822	1,665
Palms	Global assessment	1,348	243	1,591



Forty-four botanists were trained as Red List Assessors, including the Chair of the Global Tree SG, the IUCN SSC Plant Network Support Officer and a member of the IUCN SSC Palm SG, as well as regional experts from Indonesia (not in this photo).

beetles (315 species) done under the Sampled Red List Index (SRLI) approach, 137 European bumblebees, 59 grasshoppers, 84 Aloe species from northeast Africa, 290 plants from East Africa, 801 monocots done under the SRLI approach, and 1,477 cacti species – the first global assessment of a large plant family (the results of this assessment will be announced in 2014). The IUCN Red List now has 19,468 plant taxa assessed (21,284 if the regional assessments are included). While the focus of the two updates in 2013 was on invertebrates (1,440 species assessed) and plants (3,419 species assessed, including 529 reassessments of conifers), assessments and reassessments of vertebrates were also not neglected as assessments for 412 amphibians, 691 birds, 723 fish, and 610 reptiles were published during the year.

IUCN Red List assessments of timber trees in Africa:

- "Red listing of tropical timber species: assessment, policy and practice in Central Africa" involving the Forest Programme this is being led by the PACO Forest Program and involves the IUCN Forest Programme. The focus is on timber species in Central Africa (but doing evaluations at the global scale). There is some engagement with the Global Trees SG. This work will use forestry concession data (the problem in using the data from herbaria is that botanists just don't collect enough large tree specimens to produce accurate evaluations).
- IUCN Red listing project of timber species in DRC:
 "Elaboration de la Liste Rouge des essences ligneuses en
 RDC": involving the Global Trees SG: A second phase
 involving the Central African Red List Authority could be
 linked with the above project. This is a national timber
 species red listing project administrated by the PACO.

Freshwater Biodiversity Unit (FBU): IUCN Red List assessments: We have now completed a comprehensive global assessment of all 763 freshwater shrimps (in collaboration with the IUCN SSC Crabs and Crayfish SG);



Erica verticillata – classified as Extinct in the Wild; currently the subject of a restoration project in South Africa. © SANBI

mapped all 270 freshwater turtles to the global catchment layer (HydroBASINS) – in collaboration with the IUCN SSC Tortoise and Freshwater Turtles SG; drawn up the first global checklist of aquatic and wetland plants (30,000 species names, completed by Richard Lansdown, Chair of the newly Freshwater Plants SG), and; mobilised the Africa spatial database of odonata (110,000 records, completed by Jens Kipping of the IUCN SSC Dragonfly Specialist Group) for submission to GBIF. All these assessments were made possible under the Biofresh project. The West Asia freshwater biodiversity assessment has also made excellent progress with around 500 species assessed at a successful workshop in Jordan, in collaboration with the Royal Society for the Conservation of Nature Jordan (an IUCN Member).

Bumblebees: BAU continues to collaborate with the Bumblebee Specialist Group as part of a global assessment for all bumblebee species. Data have been collected for South American and Central American species, and are currently being reviewed.

Marine Biodiversity Unit (MBU): Our major taxonomic expansion was the addition of the sea cucumbers to The IUCN Red List of Threatened Species™; out of the 371 species, 246 (or 66%) were Data Deficient, 112 (30%) were designated Least Concern, and 18 (4%) were in the threatened categories, with ten Vulnerable and eight Endangered.

Amphibians: BAU: 80 assessments submitted for IUCN Red List version 2013.1, and 332 assessments submitted for IUCN Red List version 2013.2 (the latter comprised primarily of Least

Concern amphibian updates), as well as an ongoing review of 62 assessments made locally for Cuban species, to ensure their compatibility with the global IUCN Red List and the participation of the Amphibian RLA.

More IUCN Red List Assessments are prepared at national and, where appropriate, at regional scales (The ongoing development of national and regional Red Lists is catalysed)

The IUCN Global Species Programme is working on regional assessment projects in Europe (involving GSP staff in the RLU, MBU, HQ and at the Brussels office) and in the Mediterranean (in collaboration with colleagues in the IUCN Centre for Mediterranean Cooperation in Malaga, Spain). Marine regional assessments are being conducted by the MBU and are reported on elsewhere.

Europe: IUCN is currently producing European Red Lists for pollinators (2,000 bees), 300 priority medicinal plants, 1,200 marine fishes and 520 birds (in collaboration with BirdLife). In the last two updates, 253 bee assessments were published (67 global) as well as 99 plant assessments (only three global). The focus on medicinal plants and pollinators underscores the value of The IUCN Red List in providing vital information on factors that inform the state of human well-being.

Country factsheets showcasing the proportion of species that are threatened at the European level were developed for the 27 EU Member States, based on the results of the European Red Lists completed so far. These factsheets were useful in promoting the use of the European Red List data and inform governments about their responsibility to take action to protect European threatened species.

Mediterranean: Red List work in the Mediterranean is still very much in the initial phases of data compilation. Work is underway on a diverse range of taxonomic groups including: 1,420 endemic plants (mostly monocots) which will be a significant contribution to The IUCN Red List once completed, 222 dung beetles, 550 saproxylic beetles, and 164 anthozoans (not just corals but also sea anemones and other related species). A workshop involving 30 experts was held in Malaga in February 2013 to assess 468 butterflies. Work to finalize these assessments is underway. In addition, 500 species of freshwater fishes, molluscs and aquatic plants from the Eastern Mediterranean were assessed during a workshop held in Jordan in April, 2013.

Marine Biodiversity Unit: Four regional workshops were completed or will be completed in 2013, including fishes of the Caribbean, Eastern Central Atlantic, European, and Persian Gulf, to assess approximately 1,620 species. The Caribbean and Eastern Central Atlantic initiatives are nearly complete: out of a combined total of over 2,600 species, less than 500 remain unevaluated. The European and Persian Gulf initiatives represent geographic expansions of the MBU in 2013.

IUCN Red List Index (Wide use of the Red List Index (RLI) as an indicator for monitoring trends in the status of species groups is developed and promoted)

Reassessments of all the world's amphibians, birds and mammals are underway to enable the next IUCN Red List Index data point to be calculated. A number of the reassessment and assessment projects are starting to use online discussion forums to help speed up the process and reduce the costs of holding expensive workshops; these forums are reported on elsewhere. Each update of The IUCN Red List includes these reassessments as they are completed, rather than being held back as in the past, to be published altogether at one time. The 2013.1 update included many conifer reassessments, completing the second complete reassessment of all conifer species. The calculation of the Red List Index is underway and this will be published in 2014. Initial results show that there are significant declines in this taxonomic group with the proportion threatened having increased from 30 to 34% since 1998, partly as a result of the emergence of new diseases.

The IUCN Red List is a scientifically rigorous tool for conservation (The IUCN Red List contains the necessary information to make it a reliable tool for informing biodiversity conservation)

A number of the key documents supporting The IUCN Red List process have been revised or updated since September 2012. Many of these changes were required to ensure that all documents conformed with 'The Rules of Procedure: IUCN Red List Assessment Process 2013-2016', which were approved by the SSC Steering Committee. The IUCN Red List Categories and Criteria booklet was republished with revised Annexes (in all three official languages); the Guidelines for Using The IUCN Red List Categories version 10.1 was released in September 2013 (this key document is being translated into French and Spanish); the Guidelines for Application of IUCN Red List Criteria at Regional levels ver. 4 was finalized and published (in all three official languages); the 'Documentation Standards and Consistency Checks for IUCN Red List Assessments and Species Accounts' has been completely revised and updated and the draft of version 2.0 is available. All the key documents about The IUCN Red List processes and policies concerning use of the data, etc. are now available through a new Key Documents page on The IUCN Red List website.

Yvonne Sadovy, Co-Chair of the IUCN SSC Grouper and Wrasse Specialist Group, studying the Near Threatened Camouflage Grouper (*Epinephelus polyphekadion*) in a spawning aggregation. © Eric Clua.



Former SSC Network Support Officer Andrew Rodrigues completed a consultation for updating The IUCN Red List Documentation Standards for plants. Network support staff worked to update the Terms of Reference for IUCN SSC Red List Authorities. A short report investigating how Specialist Groups incorporate indigenous and traditional knowledge into IUCN Red List assessments was compiled, and this information was shared with Rosie Cooney, Chair of the Sustainable Use and Livelihoods SG.

IUCN Red Listing capacity built through expanded training programmes (Capacity developed to ensure that The IUCN Red List Criteria are applied rigorously and consistently to increase the credibility of The IUCN Red List)

A three-day **IUCN Red List Trainer certificate course** is now in place; targeting people with proven red listing skills and who are responsible for managing IUCN Red List assessment projects. A Training Trainers workshop was held in June 2013 to finalize the course content. Thirty one people are now certified IUCN Red List Trainers.

Red List Assessor Training Workshops: Fourteen Red List training workshops and sessions have been held since Sept. 2012, providing training for a range of ongoing assessment projects, SSC Specialist Groups, national Red List projects, and Red List Partners. A total of 282 people were trained.

Online Red List Training Course: The online IUCN Red List course, Assessing Species' Extinction Risk Using IUCN Red List Methodology, was released in stages on TNC's Conservation Training website during the course of the year. The course covers a range of topics including The IUCN Red List Categories and Criteria, supporting Information for assessments, SIS, and regional assessments. An exam was released at the end of the year.

IUCN Red List Website: Training Pages:

The IUCN Red List website has been updated to include a more focused series of separate web pages explaining all aspects of IUCN Red List Training, see this link.

IUCN Red Listing capacity built through expanded training programmes – Olivier Hasinger trained to be a Red List assessor. Red List training was given to the Otter SG, provided an information session on mammal IUCN Red List reassessments to SSC attendees of the International Mammalogical Congress and shared best practices and lessons learned for Specialist Group operations to the Small Carnivore SG. The SSC Chair's office (Rachel Roberts) led much of the work behind SSC Specialist Group Chair and Red List Coordinator re-appointments in 2013; including updating key documents such as the "Guidelines for Specialist Group Chairs" and "Welcome to the SSC document".

Amphibians: BAU continues to guide RLA members and supervise interns as they undertake their respective species assessments. Our first two institutional partnerships have recently been established: with the Chengdu Institute of Biology of the Chinese Academy of Sciences (CIB) and with CONABIO of Mexico. We are actively discussing other

potential partnerships in Panama, Colombia, northern Central America, the Caribbean and the Philippines.

BAU supported the re-structuring of the IUCN SSC Amphibian Red List Authority (RLA into regional working groups, led by Tier I RLA members, which are taking stewardship of assessments in their respective regions. In support of the new structure, we have collectively trained five interns and seven Amphibian RLA members in the tools of The IUCN Red List trade. Much of this training took place remotely.

However, a two-day training workshop in Sydney, Australia and a five-day workshop in Chengdu, China also took place, as did a one-day IUCN Red List training workshop in the context of the Brazilian Congress of Herpetology (22–26 July 2013), attended by 20 participants inclusive of researchers, professors, students and government representatives.

MBU: Two Old Dominion University Red List Trainings were held this year, with a total of nine participants from Old Dominion University and one from Brown University. An international training program is scheduled for 21 participants from seven countries, including the United Arab Emirates, Qatar, Bahrain, Kuwait, Iran, Jordan, and the United States.

The IUCN Red List is underpinned by cutting-edge information management technologies (The information technology infrastructure to support Species Strategic Plan objectives is enhanced)

A number of developments involving SIS or the handling of spatial data are underway or close to completion which will greatly enhance the assessment process and handling of all the data collected. These include:

- SIS bug fixing and feature improvements to facilitate the assessment process based on requests from the Red List Technical Working Group (RLTWG).
- Publication workflow being used by the Red List Unit to manage the submission and publishing of assessments, this will soon be made available to all users to track progress of submissions to publication.
- Integrity checker has been re-worked and the new version is in final testing, and the rules for what needs to be checked are being entered in the system.
- The Use and Trade modules have been changed following feedback from the RLTWG. A few minor changes still need to be made before full migration to the new modules.
- A significant change in 2013 was the merger of the Birdlife SIS and IUCN SIS versions. Now there is one SIS database for both institutions, which save time and money on system updates, and this will also make the process of publishing new releases to the website more efficient and faster.
- Improvements in the handling of spatial data implemented during 2013 now make it possible to update the Map Browser and the main IUCN Red List website almost at the same time. The systems for managing and displaying point data (from specimens and observations) are under development.
- Work has started to build the functionality to import data from external databases (e.g. at Kew, SANBI, etc.) into SIS.
- Implementation of an online mapping tool (initially for

- freshwater species) is currently being tested; this tool is integrated with SIS.
- Progress on publishing the RL accounts as citable documents (DOI) has been made: we have met with potential providers and are preparing a brief with (costing + technical requirements) for the virtual RLC meeting.
- Many ESRI GIS licenses have been provided to the SSC Specialist Groups.

The IUCN Red List is used effectively to inform policy and action (The IUCN Red List data and information is increasingly used to inform policy and action in private and public sector)

The European Red Lists are being used in the EU mid-term review of the EU Biodiversity Strategy to measure progress towards achieving EU targets (the review started in 2013 and will be completed by 2014). The European Red Lists are used by the EU financing instrument of the environment (LIFE Programme) to guide the allocation of funds. The Malaga office provided technical support to the Moroccan Authorities to develop their new legislation on protected species (especially related to those species included on The IUCN Red List).

IUCN SSC expertise and knowledge contributed to the 16th CITES Conference of Parties. At this meeting, major decisions were taken by the Parties, many of which relied on information supplied by IUCN SSC. This included updates on the status of wild elephant and rhino populations. In conjunction with TRAFFIC, IUCN SSC analysed the proposals from Parties to amend the appendices and published a detailed, objective evaluation that was widely used to inform decision-making. These objective assessments were supported by the presence of a number of SSC Specialist Group chairs during the meeting, who made key interventions during debate and organized relevant side events (e.g. on pangolin trade).

Marine Biodiversity Unit: Results are driving new US government regulations for protecting and promoting recovery of threatened coral species. Largely based on our 2008 global IUCN Red List assessments of reef-building corals, NOAA has proposed the addition of 66 reef-building coral species to the Endangered Species Act and reclassifying Elkhorn and Staghorn corals as endangered, released in December 2013.

IUCN Red List information was contributed to CBD meetings in relation to the Global Strategy for Plant Conservation.

The Biodiversity Conservation Group is working on a project that will increase the visibility, uptake and use of The IUCN Red List of Threatened Species™; a 30 page booklet titled 'Knowledge Products: a user manual for business'. Funded by the World Business Council on Sustainable development through the IUCN Business and Biodiversity Programme, the purpose of this manual is to promote more and better use of biodiversity information by business to inform environmental risk related to biodiversity impact. It will feature, in a non-technical, clear and business friendly language, The IUCN Red List of Threatened Species™, World Database on Protected Areas, Key Biodiversity Areas, and the Red List of Ecosystems. This booklet will be a new WBCSD manual, launched at the end of 2013.

The IUCN Red List is recognized as a global brand (The Red List developed as a global brand)

Promotion of the use of The IUCN Red List scale through the Zoo, Aquaria and Botanic garden networks continues with more than 15 more organizations asking to use the scale on their signage and/or website, including Wildlife Reserves Singapore which alone has around 1.7 million visitors per year. The scale and buttons are now available in nine languages.

Amazing Species continues with our weekly species feature. Additional effort has been made in the last quarter to push this product out to our partners, members and through the Zoo, Aquaria and Botanic Garden network.

The IUCN Red List website is constantly being modified and improved. Some of the key changes implemented during the reporting period include:

- The launching of The IUCN Red List Discover sub-site aimed at the general public.
- Changes to The IUCN Red List website to increase the amount of information being displayed on the species pages and the layouts of the displays especially for the classification schemes; an ongoing process.
- The ability to do searches for regional assessments from the main page; this requires further refinements.
- The Map Browser is now able to display maps of freshwater species which are mapped using catchments (a different approach to how species are mapped in the terrestrial and marine ecosystems).
- Improvements were made to The IUCN Red List web services (APIs), to allow external systems to easily extract and use IUCN Red List data (including spatial data), as well as enabling initiatives like the Amphibian, Reptile and Mammal assessment discussion forums to work.
- The spatial data at species level can now be downloaded, through a validation process, and this now needs to be extended to all data which is downloadable from the website.
- The pages on The IUCN Red List website are being reviewed and updated, as much as the content management system allows, making it easier to navigate.

As part of the Amphibian RLA restructuring process, a new Amphibian Assessment Forum platform, has been developed in collaboration with the Amphibian Specialist Group (ASG) and iNaturalist, and supported via the Biodiversity Assessment Unit (BAU) to help facilitate and expedite the amphibian reassessment process; a logo has been developed for the RLA (with the kind support of ASG Secretariat).

The IUCN Red List is sufficiently and sustainably financed (Funds secured to ensure the sustainability of the Red List)

300,000 Euros was raised for **CITES CoP16** work, which enabled us to contribute IUCN Red List data and other expert knowledge to the meeting. Staff worked with some Specialist Groups regarding online donation strategies (e.g. African Elephant SG). Network support staff circulated various funding opportunities to SSC Specialist Groups as a part of Chair updates and supported them in fundraising initiatives.

The **Amphibian RLA** central coordination team met at the IUCN SSC Chair's office in Bath, UK, on 11–14 June 2013 to develop an Amphibian RLA strategy and discuss the budget requirements for updating amphibian assessments. A new budget focusing on the cost of individual assessments was subsequently developed and will be used as the basis for a pay-per-assessment campaign. The new Amphibian SG website can be accessed here.

MBU: The core support of the Thomas W. Haas Foundation remains essential to our success. Additionally, initiatives in the Persian Gulf, West Africa, Europe, Gulf of Mexico, and Oceania have been funded in cooperation with Qatar National Research Fund, Qatar University, Qatar Natural History Museum, IUCN West African Marine Programme and EC funding and Harte Institute. GSP has also provided support coming from the US Voluntary Contribution and from Agence Française de Développement.

A number of proposals have been submitted to various donors including the European Commission and the MacArthur Foundation with whom advanced discussions are taking place.

Note that despite some excellent fundraising results (some of which is mentioned in this report) The IUCN Red List funding is far from sustainable. Discussion with the World Bank has been initiated to see if they could be persuaded to regard the knowledge products mobilized through IUCN as global public goods. Jointly with UNEP WCMC we have made an approach to the Joint Research Committee of the European Union with a view to establishing a partnership with that body which could lead to the mobilisation of more resources.

The Biodiversity Conservation Group and the IUCN Science and Knowledge Programme are working on the project Costing the flagship knowledge products mobilized through IUCN. The purpose of this project is to assess costs to date in development and maintenance, and estimated costs for complete coverage, of each of the six flagship knowledge products mobilized through IUCN. This project, which key output will be a scientific report, will be completed by early 2014. This project is key to deliver the future vision of Knowledge Products mobilized through IUCN, including The IUCN Red List of Threatened Species™, and to move towards ensuring sustainable funding.

Strategic oversight is provided to The IUCN Red List (Strategic oversight for delivering the Red List provided by Red List Committee)

Ongoing with significant engagement by GSP.

Measuring Conservation Success (New methods for measuring and categorising the success of conservation in place)

Work initiated WCC-2012-Res-041 called for "Development of objective criteria for a Green List of species, ecosystems and protected areas". The work has progressed most with respect to Protected Areas, but efforts are being made to ensure that Green Listing considers both management effectiveness and

biodiversity outcomes. This would mean that knowledge from The IUCN Red Lists of Species and Ecosystems and from Key Biodiversity Areas would be included as well.

Population-level Monitoring and Analysis (Monitoring programmes established for selected species and groups of species)

The Monitoring Framework for the SOS project portfolio is currently being rolled out. While SOS will not directly implement or set up monitoring programmes for all the Critically Endangered species it supports, it will be able to capture and collate data received from SOS grantees (when these are collected) and make these available for further use/analysis.

Currently the SOS Secretariat requests its grantees to indicate the proportion (estimated %) of the global population of each target threatened species their projects are supporting.

Invasive Species (Measures to manage invasive species greatly enhanced through focused efforts involving knowledge, policy and action)

Invasive Species Initiative: ISI has been supporting the Invasive Species Specialist Group in many aspects of data storage and dissemination concerning invasive species and especially, in formalizing a framework for understanding pathways of invasion and ways to address these to reduce or block new biological invasions. However, much of the Initiative's work involves the development of capacity for the establishment and implementation of invasive species strategies in developing countries.

Integrating IUCN Knowledge Products (IUCN's key biodiversity knowledge products (e.g. Red List and WDPA) fully integrated to allow interoperability and to maximize efficient use)

The intersections between IUCN Red List data and protected areas are done on a regular basis to keep the integration between The IUCN Red List and Protected Planet via the Map Browser, as up-to-date as possible.

Work on linking The IUCN Red List to the Global Invasive Species Database (GISD) is ongoing. More than half of the GISD species now have entries in SIS, allowing them to be selected as named invasives under the threats classification scheme and this coding in turn provides the link between the two systems. The integration will be fully implemented once the new GISD database and website is released.

Species Conservation Strategies, Action Plans and Tools (Conservation action for species improved through application of IUCN species specific conservation strategies and action plans and other relevant tools)

GSP staff participated in the Species Conservation Planning Sub-Committee meeting that took place August 20–22.

Setting global standards for the identification of sites of biodiversity conservation significance (Global standard for defining and identifying "key biodiversity areas" developed and adopted)

Following the recommendations resulting from the high-level "Framing" meeting held in Cambridge in 2012, several technical workshops have been organized this year:

- The Criteria and Delineation workshop (11–15 March 2013, Front Royal, USA – 40 participants) was dedicated to define the criteria of the new KBA standard, building on existing criteria and to agree on key considerations for delineating KBAs.
- The Threshold workshop (2–5 December 2013, Rome, Italy

 about 30 participants) established thresholds for measures
 of biodiversity significance, in other words at defining how
 "key" a site needs to be for it to be considered a "Key Biodiversity Area".
- The Governance workshop (6–9 November 2013, Brasilia, Brazil – about 40 participants) focused on the governance mechanisms of this new standard.
- A Joint Marine Working Group has been created in collaboration with the Global Ocean Biodiversity Initiative (GOBI) to strengthen the synergies between the identification of EBSAs and the KBA process. In particular, Key Biodiversity Areas could provide a list of potential sites to be considered for the Ecologically and Biologically Significant Areas (EBSAs) adopted by the Convention on Biological Diversity. A workshop was organized during the International Marine Protected Areas Congress 3 (IMPAC3), in Marseille, France, on 22 October 2013, to look at marine Key Biodiversity Areas challenges, in particular with regards to large mobile marine species.
- Interviews were conducted with various stakeholders and end-users (such as the World Bank, donors, NGOs, Indigenous people and local communities, etc.) on their needs and use of the KBA methodology.
- Finally, regional presentations and consultations have been organized during existing regional events, such as the "Biodiversity without Boundaries", in Baltimore (USA) on 17 April 2013.

The results of these technical workshops will be integrated into a draft methodology that will be available for comment next year, before being launched in November 2014 at the World Parks Congress, Sydney (Australia). A newsletter is sent out periodically and the website has been updated. For more information, please contact Annabelle.cuttelod@iucn.org.

Applying IUCN standard for identification of sites of global biodiversity conservation significance (Biodiversity conservation action improved through the application of consolidated standards)

Freshwater Biodiversity Unit, BIOFRESH project:

FBU continues to lead Work Package "Informing Policy for Conservation Planning" providing input to the European Science Policy Interface relating to: i) Freshwater KBAs as input to systematic conservation planning for "efficient" site networks for freshwater species; ii) gap analyses in relation to Protected Areas; iii) predicted species range shifts under climate change scenarios, and iv) optimal site networks for maximising Ecosystem Service provisions. These analyses

utilize the European and Global IUCN Red List data sets. A number of key publications will be submitted early 2014.

Freshwater Biodiversity Unit, freshwater KBAs: We held our first two KBA workshops (Bosnia for the Balkans Region; Morocco for the Northern Africa region) to obtain stakeholder input to validate sites of proposed freshwater KBAs. Approximately 150 new sites have been identified. Once processing is completed these new KBAs will be represented in the World Biodiversity Database which has now been modified (under Biofresh) to accept and display freshwater data sets. Many members of the SSC Specialists Groups provided excellent input at these workshops.

FBU is also involved in the drafting of the CEPF ecosystem Profile for the West Africa Guinea Forest Hotspot in collaboration with IUCN PACO.

Invasive Species Initiative: Criteria for KBAs: ISI is involved in a process to identify and describe KBAs for the extensive lake and catchment of Lake Victoria in East Africa and its catchment in five countries in order to then assess the various levels of threat to such KBAs from invading species – and then to develop solutions for their better management of these threats. At the same time, ISI is assisting the Lake Victoria Basin Commission to streamline monitoring systems for the all-pervading water hyacinth invasion and also to assess the water hyacinth extent and impacts across continental African states (on behalf of UNEP) and to suggest lasting means of management of this alien water weed – inside and out of KBAs.

Re-introductions (Information and advice service in place to support species reintroductions)

GSP assisted the Reintroduction Specialist Group in communicating their work and distributing the new Reintroduction Guidelines.

Conservation Breeding, and links to ex-situ community (Advice and facilitation in place to support ex-situ species recovery programmes)

Dena Cator participated in the CBSG Strategic Committee Meeting that took place in April. GSP regularly interacts with the World Association of Zoos and Aquariums (WAZA) which is

Release of Wood Bison from transport crates – Russia. © IUCN SSC Reintroduction Specialist Group



an IUCN member and partner, exchanging information relating to the work of the SSC Specialist Groups.

Global and regional policy for biodiversity conservation (Global and regional policy mechanisms influenced to enhance the effectiveness of biodiversity conservation)

Invasive Species Initiative: A main activity for ISI is the continuing provision of capacity enhancement for developing country governments to fulfil their responsibilities to the CBD in relation to Invasive Species – by assisting the achievement of Aichi target 9 through the development of National Invasive Species Strategies and Action Plans, species specific strategies and management regimes for their worst invasions. The Initiative is simultaneously contributing to the on-going debates of the Inter-agency Invasive Species Liaison Group, to harmonize approaches of the CBD and the various other conventions and international organisations with responsibilities for preventing biological invasions.

The GSP (Dena Cator) co-managed the Analyses of the Proposal to Amend the CITES Appendices project for CITES CoP16. She was also the coordinator for the IUCN delegation at CITES CoP16 which included technical input (e.g. contribution of IUCN Red List data and IUCN expertise) as well as delegation logistics (e.g. providing support to participating SSC Specialist Groups).

The GSP contributed information to CBD meetings and the Global Strategy for Plant Conservation.

Policy and action at national and cross-boundary levels (Actions and policies for species and sites implemented at the national level)

Freshwater Biodiversity Unit, TWAP (Transboundary Waters Assessment Programme) project: The FBU is participating in an innovative partnership with the IUCN Global Water Programme to contribute species threat and spatial data to the TWAP, a multi-partner project funded by the Global Environment Facility. This is an exciting opportunity to apply IUCN Red List data to conservation monitoring and decision making in transboundary river basins. See this link.

Invasive Species Initiative: is working to revise and update invasive species prevention and management strategies (and later policies) for both freshwater and terrestrial invasive species in SADC (Southern Africa Development Community involving 15 countries including two Indian Ocean island states) and simultaneously encouraging cross-border cooperation between neighbouring states within SADC to cooperate on the management of biological invasions – especially where several countries' borders meet. GSP was involved in coordinating strategic input / interventions for various national / species – level issues (e.g. bear bile farming in Asia, pygmy sloths in Panama, proposed zoo closures in Costa Rica).

Communicating species conservation (The effectiveness of IUCN's species conservation work enhanced through strategic and targeted communications)

Red List Discover: In April 2013 the Discover sub-site was launched on The IUCN Red List website with the objective of engaging the non-scientific user. The second phase of development to improve search functionality is underway.

More than 14 international press releases (including the two IUCN Red List updates) plus regular stories on key species work have been posted on the Species website. All were supported by social media. Network support staff assisted various Specialist Groups with press stories, publications and other types of communication relating to IUCN Red List assessments and conservation work as well as newsletters, Species Programme and Specialist Group websites, etc. Claire Santer compiles and circulates the SSC e-bulletin to all SSC members each month.

Social media presence has strengthened throughout 2013 with more than 31,000 followers on Facebook at the beginning of March 2014 (an increase of 25,000 since end Dec 2012) and more than 19,300 followers on Twitter (an increase of 8,000 since end Dec 2012).

The IUCN Red List celebrates its 50th birthday in 2014. The strategy for communications and fundraising is now being implemented, with the key campaign objectives being to raise awareness of The IUCN Red List and secure additional funding for IUCN Red List work – assessments, re-assessments and core maintenance.

Freshwater biodiversity: Three key FBU publications for the year include: i) Application of The IUCN Red List data (FW fishes) to the world's Zoos and Aquaria; ii) Global patterns of freshwater species diversity, threat and cross-taxon congruence (in collaboration with ZSL); and iii) BioMatrix – METADATA Contemporary distributions of freshwater biodiversity – a report for BioFresh.

Marine Biodiversity Unit (MBU): In 2013, results from two workshops were published in peer-reviewed journals: a summary of the conservation status of bonefishes and tarpons and an exploration of the factors contributing to the extreme marine biodiversity in the Coral Triangle. Two additional manuscripts have been submitted and six more are at various stages of preparation.

Friends of Target 12: Conservation works but conservation effort needs to be scaled up given the fact that current efforts are insufficient to offset the main drivers of biodiversity loss. Friends of Target 12 is an emerging partnership which aims to build synergies to achieve this.

Friends of Target 12 was established at CBD COP11. Its goal is to support CBD Parties and others to achieve Aichi Target 12 by providing practical guidance and raising awareness of initiatives and programmes that contribute to the implementation of the activities needed to stem the tide of species' extinctions. Parties who would like to join this initiative need to:

- 1. summarize how their species conservation work contributes to the achievement of target 12;
- 2. explain how they are supporting their government/s to implement and achieve target 12;
- 3. read and accept the partnership proposal;
- 4. send logo and appoint focal point;

5. make a commitment; and

6. share some success stories on species conservation (not compulsory).

The partnership comprises 25 environmental organizations, conventions, funding organizations and governmental agencies. To know more about Friends of Target 12 please visit this link.

Activities of the partnership, working with the CBD Secretariat and with Parties, may include:

- Synthesize and share experience, initiatives, guidelines and recommendations to enable countries to achieve Target 12
- Promote synergies (at national, regional or global level) between organizations and institutions working on species conservation including governments, NGOs, convention secretariats and business to achieve Target 12
- Promote the integration of species action plans, strategies and activities into National Biodiversity Strategies and Action Plans (NBSAPs)
- Identify important issues related to species conservation that might be addressed via decisions of the CBD or other conventions
- Support the Biodiversity Indicators Partnership (BIP) to develop indicators and methods to monitor progress towards the achievement of Target 12
- Develop shared strategies for collaborative efforts to achieve Target 12 including capacity building and tool development.

Friends of Target 12 is supported by the Convention on Biological Diversity and a response to the convention's call for Biodiversity Champions.

Fostering conservation on land and in water (Conservation supported through existing and novel funding mechanisms)

During 2013, SOS – Save Our Species has continued to support, or has started funding, a total of 54 projects focusing on threatened species conservation in more than 30 countries and more than 30 additional ones expected to be funded by early 2014.

With a total amount of USD 6 million already committed to 54 projects around the world and another USD 3 million expected to be allocated by early 2014, SOS is well on route to meet the expected targets set in the IUCN Species Strategic Plan 2013–2016.

A total of more than 100 threatened species are benefitting from the two types of grant that SOS offers.

Public outreach and marketing activities have proceeded well during 2013 with quarterly issues of the SOS newsletter – "A Call from the Wild" – being sent to about 10,000 subscribers, a new social media campaign being launched and reaching

Hellbender (Cryptobranchus alleganiensis) – Near Threatened. This species has been successfully bred through a project led by the Saint Louis Zoo, the Missouri Department of Conservation, Arkansas Fish & Game Commission and US Fish and Wildlife Service. © Brian Gratwicke



more than 25,000 followers through Facebook and Twitter. A photographic exhibition was organized in Geneva to promote SOS and IUCN.

Fundraising efforts have intensified in order to ensure the SOS fund will continue to operate after 2015 once its initial five-year funding will have been all committed.

While strictly speaking not falling under SOS, a new initiative called the "Integrated Tiger Habitat Conservation Programme" based on the same structure and principles directing SOS, commences in 2014.

Special initiatives to tackle major conservation crises (Focused attention brought to resolving major crises in biodiversity conservation)

GSP worked with the African Elephant Specialist Group on the organization of the African Elephant Summit that was held in Gaborone, Botswana in December 2013.

We have been supporting the Amphibian Survival Alliance, Action Asia (now known as ASAP), bear farming and action on Asian rhinos.

Staff have engaged with the Mangrove SG and work to increase linkages with the ARO Mangroves For the Future.

Understanding and communicating sustainable use (Greater common understanding achieved of the theory and practice of sustainable use of biodiversity, and key linkages to human livelihoods)

GSP has been working with the Sustainable Use and Livelihoods Specialist Group, for example to explore indigenous / local community contributions to IUCN Red List assessments and trade / use information being captured in IUCN Red List assessments.

Staff have been liaising with the International Trade Centre which does joint work with SSC Specialist Groups (e.g. on Asian snake trade).

Enabling and implementing strategies for sustainable use (The use of living natural resources is sustainable and recognized as a positive tool for achieving long-term conservation)

The GSP has engaged considerably with the Sustainable Use and Livelihoods Specialist Group.

Freshwater Biodiversity Unit, HighARCS project: The last year of this EC-funded four-year project is focusing on the implementation and monitoring of action plans at five sites across Asia, which are all aiming to improve the sustainable use and conservation of aquatic resources and biodiversity. The major output of the project is an online Wetland Resources Action Planning (WRAP) toolkit which will provide the practical guidance, processes and tools needed to better understand the issues related to aquatic biodiversity; value

them in terms of biodiversity, livelihoods, ecosystem services and policy, and work with stakeholders to develop and implement action plans. This builds directly on the Integrated Wetland Assessment Toolkit previously developed by the FBU. See this link.

Biodiversity and climate change understanding (Impacts of climate change on species and the response of species to climate change documented, analysed and better understood)

Climate Change Unit (CCU): In 2013 the CCU has successfully developed and applied their new Species Vulnerability to Climate Change Assessment Framework, including to global amphibians, birds and reef-forming corals, as well as to a number of other taxa at a regional level. This marks an important step towards showing how IUCN Red List information and information on species vulnerability to climate change can be mutually informative when developing conservation and adaptation strategies. New assessments have begun in 2013, including consideration of new taxa and application of refined methods, and many more are anticipated for 2014.

Much of the CCU's time in 2013 has been devoted to assisting development of the new SSC Climate Change Specialist Group, whose diverse aims include, among others, development and implementation of best practice guidelines for assessing species vulnerability to climate change.

Biodiversity and climate change policy (Biodiversity considerations taken into account in public and private sector adaptation and mitigation policies and practices at global and regional levels)

CCU: In recognition that species assessments can and should form the biodiversity knowledge-basis of climate change adaptation and mitigation, in 2013 the CCU has also been developing a system to inform national-level stakeholders and decision makers of the ways that our results can be used to inform adaptation policies and practices. To date, this has been trialled at workshops in Sierra Leone and The Gambia, and further workshops considering the species of Mali, Chad and Togo took place in November. CCU has also worked with the SSC Climate Change Specialist Group in engaging with policymakers and planners at multiple levels.

Maintaining genetic diversity of wild relatives of crops and domesticated animals (The long-term supply of food resources secured through the conservation of wild relatives of crops (CWR) and domesticated animals)

Discussions have taken place with the Crop Wild Relative SG with a view to establishing links for in-situ conservation of CWR and on-farm management of crop landraces and IUCN Key Biodiversity Areas.

Other updates:

SSC Membership registration and the IUCN Union Portal:

Claire Santer, SSC Membership, Administrative and Communications Assistant in GSP, has completed registration of all 8,000 SSC members, recording details in the IUCN Constituency Relations Management system (CRM). All Specialist Group Chairs submit details of their members, which must be checked to avoid creating duplicates before uploading to the CRM. This takes a substantial amount of time and effort but we are confident that the SSC records are now in good shape.

The Union Portal enables communication among all members of the IUCN family. Only persons linked within the CRM to an official IUCN group will have access. It allows one to see which groups a person is connected (e.g., Commission Group, IUCN office, IUCN Member organisation) via a directory, and to search for both people and documents according to a set of 100 pre-determined key words.

Other useful functions include:

 Individual members will be able to update personal contact information online

- Group managers (e.g. SSC SG chairs) will be able to communicate with group members
- Group members will be able to post documents for discussion
- Group members will be able to create sub groups on specific topics or tasks
- Content of Group spaces will be visible to all portal users by default, but it will be possible to flag groups, documents or information as private and therefore visible to group members only.

Every SSC Specialist Group, Task Force, RLA, Committee and Sub Committee will have a group space. The roll out to SSC groups is being managed by Claire Santer.

Dr Jane Smart

Global Director, Biodiversity Conservation Group Director, Global Species Programme

Addressing Critical Conservation Issues

The SSC has continued to focus on numerous urgent conservation issues around the world. During this reporting period, much of the focus has been on follow-ups to Resolutions and Recommendations from the IUCN World Conservation Congress in Jeju, in September 2012. There has been follow-up on most of the c. 45 species-related Resolutions and Recommendations, but the SSC Chair's Office has been particularly involved in the following:

Resolution 017 – Enhancing the usefulness of The IUCN Red List of Threatened Species™

The implementation of this resolution is covered in section 3 (Promoting the Biodiversity Assessment Work of the SSC) below. Most notably, the Red List Strategic Plan 2013–2020 has been adopted. Mike Hoffmann, Chair of the Red List Committee, ably led the process to reach agreement on this critically important document.

Resolution 018 – Support for the development and implementation of national and regional red lists

Work is progressing very well on the formation of a National Red List Alliance which will create a new network of national red list practitioners from around the world. Mike Hoffmann and Simon Stuart have been working with Jonathan Baillie and Katherine Secoy from the SSC National Red List Working Group (NRLWG) and ZSL, to finalize the Memorandum of Understanding for the new Alliance. It is expected that the NRLWG, which will become the governing body of the Alliance, will in future be elected by the Alliance members. This promises to be a very exciting new initiative.

Resolution 022 – Supporting regional initiatives to conserve mammal diversity in West and Central Africa

Funding has been secured for the situation analysis called for in this resolution (which has been expanded to include all terrestrial and freshwater vertebrates, not just mammals). A call for tenders has been issued, and 13 were received. After reviewing the tenders, contracts have been issued for four consultants, each with distinctive roles in the project: David Mallon; Phil McGowan; Fabrice Hibert and Nathalie van Vliet. Work is now underway and letters have been sent from the IUCN Director General to all IUCN Members in the region to encourage participation in the situation analysis. Likewise, Simon has written to SSC members about this project. This project is being overseen by Mike Hoffmann and it will be completed during 2014.

Resolution 025 - Conservation of African elephants

Preparations for the IUCN African Elephant Summit (AES) in December 2013 were a major focus during the latter part of the year. Several side meetings were held during CITES COP16 in Bangkok in March to plan the AES and to clarify how it relates to other current initiatives focusing on illegal wildlife trade. Following the CITES COP, the management and decision-making process for the AES were agreed within IUCN. Holly Dublin and Ali Kaka served as the AES Co-Leaders, with Diane Skinner as the AES Coordinator. A Core Coordination Team to

handle day-to-day decisions, and an Internal Accountability Team (of which Simon was a member) to handle more strategic decisions, were formed. Tanzania initially agreed to be the host country and the AES was scheduled for 4-6 November 2013. However, for various reasons it proved impossible to proceed with the meeting in Tanzania, but the Government of Botswana subsequently stepped in and hosted the AES on 2-4 December in Gaborone. Following two days of discussions and negotiations, a set of strong, Urgent Measures (see Appendix 1) were unanimously agreed by delegates representing the 30 countries present at the AES. These countries represented every step along the illegal ivory trade value chain from producer to transit to consumer countries. In effect, the Urgent Measures have secured a higher-level political commitment (generally at the ministerial level) to implementing the CITES COP16 decisions on the African elephant (see section 9 below). Huge thanks are needed for Diane Skinner and Holly Dublin for the work they did to make the AES a success. In addition, to direct work on the AES, much effort has gone into building partnerships with other initiatives addressing illegal wildlife trade. In particular, this has involved partnering with the UK Government and Royal Family in their Illegal Wildlife Trade Initiative (Richard Jenkins and Simon Hedges represented IUCN at the first meeting of this initiative in London on 21 May). The London High Level Conference on Illegal Wildlife Trade took place on 13 February 2014. Consultations also took place with the Government of India on their International Elephant Congress (E: 50-50), which was planned to take place in New Delhi on 14-19 November 2013, but was postponed at short notice. On a closely-related matter, following inputs from the SSC African and Asian Elephant Specialist Groups, the IUCN Director General sent a letter to the Prime Minister of Thailand on 28 February requesting immediate action to close down the loophole which allowed this country to become a major trading route for illegal ivory. Steps taken by the Thai Government subsequently suggest that pressure from IUCN and other conservation groups has been taken seriously, and this has been helped by decisions taken by the CITES Standing Committee regarding ivory trade in Thailand (see section 9 below).

African Elephant ($Loxodonta\ africana$) Vulnerable. © Ian White



Resolution 028 – Conservation of the East Asian-Australasian Flyway and its threatened water birds, with particular reference to the Yellow Sea

Since the adoption of Resolution 28, there have been a number of very positive steps forward. First, plans are progressing well to advance national government-led workshops which will discuss possible steps forward in implementing the Resolution nationally. A national forum on integrated coastal zone planning of the Chinese Yellow Sea, was originally planned to be held in Beijing on 18-19 November, but is now postponed until early 2014. Plans for a meeting in Pyongyang in April (where, among others, it is also hoped to encourage DPRK to join the Ramsar Convention and East Asia Australasia Flyway Partnership) have been postponed due to ongoing political tensions in the region. It is further hoped that a national meeting in the Republic of Korea can be arranged with the new ministerial leadership, and further that the Republic of Korea would take the lead in supporting follow-up of a CBD CoP11 decision on ecosystem restoration. Indeed, the new framework agreement between IUCN and the Republic of Korea has a funding allocation to help support the implementation of this resolution. Meanwhile, Princeton University has initiated a two-year post-doc study focused on providing an economic perspective of where costs are borne and where benefits accrue resulting from land-use change (with study sites in Thailand, China and potentially South Korea). This provides a possible platform on which IUCN could piggy-back the ecosystem services study called for in Resolution 28 (operative paragraph 1a) to investigate "...the benefits of ecosystem services provided by intertidal wetlands, especially tidal flats and associated habitats, in East Asia with particular reference to the Yellow Sea, in relation to the benefits arising from the reclamation (land claim) or conversion of such habitats".

Resolution 041 – Development of objective criteria for a Green List of species, ecosystems and protected areas

On 7 March, Simon Stuart and Mike Hoffmann held a small meeting in the margins of CITES COP16 in Bangkok to start to plan out a process to implement the species component of this Resolution. The meeting in Bangkok also started the work of mapping out funding needs and identifying people to lead the process. On 11 April, Simon held discussions with someone in Cambridge, UK, who, it is hoped, will agree to lead the species side of the Green List initiative. The next step is to clarify if the species, ecosystem and protected area components of the Green List will relate to each other. Tom Brooks, IUCN Head of Science and Knowledge, convened a meeting in Gland to clarify this aspect, and a report was produced, which was discussed at the SSC Steering Committee at its meeting in Mexico on 2–4 November (see Meeting of SSC Steering Committee in this section above). As reported above, the SSC Steering Committee proposed that an IUCN-wide scoping workshop take place on Green Listing, and it has now been agreed to hold this on 23-24 April 2014 in Mexico.

Resolution 137 – Support for a comprehensive scientific review of the impact on global biodiversity of systemic pesticides by the joint task force of the IUCN Species Survival Commission (SSC) and the IUCN Commission on Ecosystem Management (CEM)

The work of the SSC-CEM Task Force on Systemic Pesticides has continued with the objective of producing a definitive, objective integrated assessment of the impacts of these

chemicals on biodiversity, under the leadership of Jeroen van der Sluijs. The aim is to complete the integrated assessment by mid-2014, though time is probably slipping somewhat because of the complex nature of this work. However, work is proceeding well. Meetings of the Task Force to work on the integrated assessment took place in Louvain-la-Neuve, Belgium, on 15–19 April, in Tokyo on 8–12 June, and in Legnaro, Italy, on 4–8 November 2013. Simon Stuart, together with CEM Chair Piet Wit, has been taking part in conversations with the steering committee of the Task Force to agree with peer review process for the integrated assessment.

Recommendation 138 – Conservation of rhinoceros species in Africa and Asia

Numerous activities have taken place to implement this Recommendation, including at CITES COP16 (see section 9 below). The SSC African Rhino Specialist Group held a meeting in Nanyuki, Kenya, on 16-23 February. Following this, new statistics on the status of African rhinos were released. White Rhinos have increased to 20,405 and Black Rhinos to 5,055, but the rate of increase has slowed drastically because of a rapid increase in poaching with at least 745 animals illegally killed in 2012, and animals now being lost at the rate of one every 11 hours. IUCN SSC convened the Sumatran Rhino Crisis Summit, which took place in Singapore on 31 March to 4 April and which was attended by over 100 people, with large representation from the two main range states, Indonesia and Malaysia. A report of the meeting was prepared as well as a two-year Sumatran Rhino Emergency Plan. The Crisis Summit was followed up by the Asian Rhino Range States Meeting, called by the Government of Indonesia, and held in Bandar Lampung on 2–3 October. The Indonesian Minister of Forestry requested IUCN SSC's assistance in organising this meeting and Simon Stuart served as the facilitator. The meeting brought the five Asian range countries (Bhutan, India, Indonesia, Malaysia and Nepal) together and was very successful, concluding in the adoption of the Bandar Lampung Declaration, which includes the Sumatran Rhino Emergency Plan.

Recommendation 139 – Bear farming in Asia, with particular reference to the conservation of wild populations

In September, the Chinese State Forestry Administration (SFA) accepted a proposal from IUCN SSC to hold a planning workshop in Beijing to design the situation analysis, called for in Recommendation 139. Funds were secured for this planning workshop which was held on 21-22 November 2013, chaired by Dr Wang Weishing, Divisional Director, Department of Wildlife Conservation, SFA. The IUCN delegation at the workshop consisted of six people: Dave Garshelis, Co-Chair SSC Bear Specialist Group (BSG); Rosie Cooney, Chair CEESP SSC Sustainable Use and Livelihoods Specialist Group (SULi); Bill McShea, Co-Chair SSC Deer Specialist Group; Alejandro Nadal, Chair CEESP TEMTI; Lorraine Scotson, Co-Chair BSG Sun Bear Expert Team; and Simon Stuart. The meeting agreed that the goal of the situation was: to determine the relationship between bear farming and the status and trends of wild bear populations. Three objectives were agreed: 1) to produce an interim report summarising progress and insights in time for the next IUCN WCC in 2016; 2) to implement a medium-term research initiative to address the central research question; and 3) to establish a framework for



Sun Bear (Helarctos malayanus) Vulnerable. © Michelle Bender

long term monitoring of Chinese black bear populations and poaching impacts on them. It was also agreed that achieving the above goal would require distinguishing between the three possible relationships between the legal and illegal trade: positive, neutral and negative. For each of these, there is one or more hypotheses regarding the way the legal trade affects the illegal trade (and thereby wild bear poaching and conservation) as follows:

- Bear farming is positive for wild bears
 - Availability of legal bile removes a proportion of potential customers from the pool that would buy wild bile at current prices
- Bear farming is neutral for wild bears
 - Consumers of farmed and wild bile are separate market sectors and if farmed sources were not available those consumers would no longer buy bear bile
- · Bear farming is negative for wild bears
 - Legal bile increase risk of laundering wild bile
 - Availability of legal bile makes it easier for sellers of illegal bile to find buyers
 - Availability of legal bile makes buying wild bile more acceptable
 - Availability of legal bile means that legal users, after using legal product, are more likely to be interested in trying wild bile
 - Availability of legal bile enables marketing of legal product, which increases demand for both legal and illegal.

Work is now progressing to establish two Working Groups to implement the situation analysis: 1) Bear Breeding and Bile Product Trade; and 2) Evaluation of the trend of Wild Bear Populations. Each Working Group will be composed of participants nominated by SFA and IUCN. Dave Garshelis is the overall lead for IUCN. In addition to agreeing the composition of the Working Groups, there now needs to be a major push on fund-raising to initiate work on the situation analysis.

Follow-up has taken place on many other Resolutions from the Jeju Congress. For example, the SSC Horseshoe Crab Specialist Group is working with government agencies to prevent the importation of Asian horseshoe crabs as bait to the United States, thus partially addressing Resolution 030 – The Conservation of Asian Horseshoe Crabs. A number of

stakeholders, including Plantlife International and the SSC Cat Specialist Group, working with the IUCN Office South-eastern Europe, have been tracking the implementation of Recommendation 150 – Protecting Mavrovo National Park Macedonia (FYR). This site is still threatened by planned large dams, and there have been meetings with the European Bank for Reconstruction and Development, a potential investor in these dams, on the reasons why it is important to safeguard this remarkable site. The SSC/Wetlands International Crane Specialist Group is continuing to track the implementation of Recommendation 154 – Conservation of Poyang Lake, People's Republic of China.

Work has continued on developing SSC policies and guidelines. The SSC Wildlife Health Specialist Group (WHSG) has led on the development of new IUCN Guidelines for Disease Risk Analysis, working with the Conservation Breeding, Invasive Species and Reintroduction Specialist Groups. The Guidelines were reviewed by the wider SSC, and after the incorporation of changes, the final version was adopted by the SSC Steering Committee in early June 2013. Richard Jakob-Hoff from Auckland Zoo, New Zealand, led the process to develop these Guidelines. Accompanying these Guidelines is a Disease Risk Manual on which the WHSG is also leading. Both the Guidelines and the Manual are being published in collaboration with the World Organisation for Animal Health (OIE), which is generously covering the production costs.

At the same time, the SSC Conservation Breeding Specialist Group is close to completing its work on the new revised Guidelines on Ex-Situ Management. These have now been reviewed by the SSC membership, and the Steering Committee will review and adopt the final version soon. For some time it has been recognized that the IUCN Guidelines for the Placement of Confiscated Animals, which were approved in 2000, need to be updated but until now no-one has come forward to head up this process. However, Neil Madison from Bristol Zoo, UK, has agreed to lead the process to revise the 2000 Guidelines, and work will start on this shortly. A new process has been launched to develop IUCN Guidelines for Minimizing Negative Impacts of Guano Harvesting. This process is being led by Ryan Richards. There are also plans to develop a Policy on Intentional Genetic Manipulations of Wild Species, but these are still at an early stage.

As usual, interventions have been made on pressing conservation issues as they arise, including the following:

- On 28 May, at the request of the SSC Iguana Specialist Group, the Director General wrote to the Minister of Water, Land, Environment and Climate Change in Jamaica to express concern and offer assistance with regard to the illegal collecting of wood for charcoal within the range of the Critically Endangered Jamaican Iguana. Unfortunately this letter does not appear to have had the desired effect, and threats to the site of the Jamaican Iguana are growing, and so consideration is being given to making a high-level intervention on this topic.
- On 25 June, at the request of the SSC Antelope Specialist Group, the Director General wrote to H.E. José Eduardo dos Santos, president of the Republic of Angola, concerning urgent measures to save the Giant Sable (which is the national animal of Angola) from extinction.

- On 17 July, at the request of IUCN NGO Members in the Philippines and BirdLife International, the Director General wrote to the Chairman of the Palawan Council for Sustainable Development concerning the impacts of the proposed Rasa Island Power Plant on the Critically Endangered Philippines Cockatoo. This letter was effective and it was agreed to move the power plant away from the flight path of the cockatoos.
- On 21 August, at the request of the SSC Anoline Lizard, Iguana and Sustainable Use and Livelihood Specialist Groups, Simon Stuart and the Director General wrote to the Ministro de Medio Ambiente y Recursos Naturales in the Dominican Republic concerning the destruction of natural habitat in the Loma Charco Azul Biological Reserve, home to the Critically Endangered Ricord's Rock Iguana, a remarkable new Anolis lizard (recently discovered) and several other important species. This letter was effective. The habitat destruction was stopped and measures are being taken to strengthen the protection of the Loma Charco Azul Biological Reserve.
- On 26 September, at the request of the SSC Anteater, Sloth and Armadillo Specialist Group and the IUCN National Committee in Panama, Simon Stuart and the Director General wrote to the Administrador General of the Autoridad Nacional del Ambiente (ANAM) in Panama concerning the conservation of the Critically Endangered Pygmy Sloth.
- Also on 26 September, at the request of IUCN Members in the Mediterranean and the SSC Shark Specialist Group, Simon Stuart and the Director General wrote to the Ministre de l'Equipement et de l'Environnement and the Ministre de l'Agriculture in Tunisia concerning the conservation of the Endangered Great White Shark on its breeding grounds in Tunisian waters.
- On 16 October, at the request of the emerging SSC Cave Invertebrates Specialist Group, Simon Stuart and the Director General wrote to the Chief Minister of the State of Perak, Malaysia, and to the Chairman and CEO of Lafarge to express strong concerns of plans to quarry the remaining

- part of Gunung Kanthan, Malaysia, the only known site for the Critically Endangered Kanthan Cave Trapdoor Spider. A holding response has been received from Lafarge.
- On 18 November, at the request of local civil society organizations, Simon Stuart, the WCPA Chair for Europe, and the IUCN Regional Director for Southeast Europe wrote to the Prime Minister and Minister of Environment of the Republic of Srpska (Bosnia and Herzogovina) concerning plans to establish micro-hydropower in Sutjeska National Park.

Several more interventions are currently underway, or in preparation, including on: bats and wind turbines in Europe; the European Mink; the proposed Don Sahong Hydropower Project on the Mekong in Laos; and the draft Aceh Spatial Plan in Sumatra, Indonesia. The SSC Vulture Specialist Group and the IUCN Eastern and Southern African Regional Office (ESARO) prepared a joint statement on vulture poisoning in Africa for promotion among the various regional ministerial fora in Africa. This is now being expanded into a broader statement on the impacts of poisons on wildlife in Africa.

Meanwhile, several SSC Specialist Groups have been involved in important intergovernmental meetings. Justin Cooke from the Cetacean SG represented IUCN once again at the annual meeting of the Scientific Committee of the International Whaling Commission in Korea on 3-15 June 2013. The Chair of the South American Camelid SG, Gabriela Lichtenstein, attended the 30th Technical Meeting of the Convention for the Conservation and Management of Vicuña in Ecuador in October 2013. On 3-6 December 2013, Dag Vongraven (Chair of the Polar Bear SG) and Dena Cator from the GSP attended the Meeting of the Conference of the Parties of the International Agreement on Polar Bears in Moscow. In each of these meetings the SSC Specialist Groups played a critical role in advising the governments on scientific and technical issues relating to the conservation and management of these species.

Critically Endangered Philippine Cockatoo (Cacatua haematuropygia). $\ \odot$ Katala Foundation



Expanding the work of the SSC to maximize its impact in reducing biodiversity loss, with a particular focus on addressing extinction crises in large Asian animals (Asian Species Action Partnership) and in amphibians (Amphibian Survival Alliance)

Asian Species Action Partnership

Agreement has now been reached on the name of the initiative to address the extinction crisis in large Asian animals, which up until now has been called "Action Asia" on an interim basis. It is now called the "Asian Species Action Partnership" (ASAP). The implementation of ASAP is very much in fulfilment of Resolution 027 "Conservation of tropical Asia's threatened species", adopted by the IUCN World Conservation Congress in Jeju, Korea, in September 2013. Simon Stuart facilitated a major ASAP planning meeting in Bangkok on 9 March. ASAP's goal and objectives were agreed as follows:

Goal: As a matter of urgency, reverse the declines in the wild of Critically Endangered freshwater and land vertebrates in South-east Asia.

Objectives:

- To identify and catalyse urgent actions to reduce immediate threats causing the decline of ASAP-eligible species;
- To catalyse a range of recovery activities for ASAP-eligible species by strengthening ongoing conservation action and promoting new initiatives;
- To improve the enabling environment for effective conservation of ASAP-eligible species by raising their profile;
- To encourage collection and distribution of information essential to conservation action for ASAP-eligible species.

Governance and Structure

ASAP will be structured as described below and will consist of (the names of each constituent are provisional):

A "Steering Committee", constituted of people each representing member institutions, will represent the primary decision-making body, setting strategic priorities in relation to ASAP's goal and objectives. The SSC Chair (Simon Stuart) will chair this Steering Committee. Member institutions will mostly be non-governmental implementing bodies, for now defined as those present at any of the Jeju, Bangkok, Aceh or Singapore meetings of ASAP. Steering Committee members will also include a representative of (and elected by) the IUCN SSC Specialist Groups and Red List Authorities which contain ASAP-eligible species, and, probably, of the donors that were present at the meetings.

A "Scientific Advisory Committee" consisting of IUCN SSC Specialist Group representatives, and other specialist associations, as appropriate will advise on methodologies, updates to the ASAP-eligible species list, core programmatic priorities, emerging issues, and other aspects of technical guidance as necessary.

A "Friends of ASAP" group has been proposed to be primarily comprized of the organisations implementing conservation action for ASAP-eligible species. Membership to this group will be open to NGOs, government agencies, academic institutions, zoos and all others (for example corporate entities).

The ASAP "Secretariat" will comprize the following positions (current individuals): Technical Coordinator (Will Duckworth), Development Coordinator (Madhu Rao) and SSC Network Coordination Officer (Rachel Roberts).

The main **Programme Areas of Work for ASAP** were identified as follows:

- Developing Species Action Checklists that list concisely (two pages maximum) all the essential and urgent activities for each ASAP-eligible species, led by IUCN SSC Specialist Groups and Red List Authorities, as appropriate.
- Identifying opportunities for actions for each species
 ('bundled' for multiple species where appropriate), typically
 mitigation of threats (such as site-specific habitat protection,
 harvest regulation and other ways of securing critical sites),
 and where this may not be practicable, ex-situ action; and
 supporting actions where necessary such as surveys,
 capacity building as relevant, and gaining higher-level
 political leverage to influence policy and shape interventions.
- Brokering ASAP-eligible species needs with opportunities.
 An important activity for ASAP is to represent a 'match-making' entity to ensure linkages of ASAP-eligible species needs with sources of financial and technical support.
- Generating a monitoring/report card on status of ASAPeligible species providing focused, concrete and current information every two years.
- Developing an internal and external strategy to clarify communication mechanisms internally across the ASAP partnership, and externally to raise awareness with NGOs, donors, research institutions, and making links to relevant Multilateral Environmental Agreements (such as the CBD through the NBSAP revision process). The communications strategy will outline the messages, the recipients of each, and mechanisms of transmission, e.g., press releases as appropriate, use of social media (Facebook page, Twitter, highlighting species on the Amazing Species website).
- Developing web-based access to all relevant written information on ASAP-eligible species, by setting up an ASAP webpage on the IUCN website and assisting in directing interested parties to both written and unwritten information.

The following is a list of ASAP Results and work plan for the first year of operation:

- Development of Species Action Checklists for all ASAPeligible species;
- Identification of priority actions for ASAP-eligible species ('bundled' as groups, where appropriate);
- Plans to match species needs with technical, financial and political opportunities;
- Accessible collation of all relevant written information on ASAP-eligible species;
- Development of a communications strategy;
- Progress towards the installation of paid programme officers in each Specialist Group without one so far, but containing ASAP-eligible species: Deer SG, Asian Wild Cattle SG, Pig SG, Bat SG and Small Mammal SG.

Presently, there are 154 species on The IUCN Red List of Threatened Species™ that meet all the four ASAP criteria for eligibility: (1) Critically Endangered (2) vertebrates occurring regularly throughout their lifecycle in (3) South-east Asia in (4) land or freshwater habitats. The 154 ASAP-eligible species are not split evenly across classes: 49 fish; seven amphibians; 21 reptiles; 42 birds; 35 mammals (note that The IUCN Red List assessments for fish and reptiles are not completed in the region, and so the number of ASAP-eligible species will increase in these two classes). ASAP-eligible species are also spread unevenly across Southeast Asian countries as follows: Indonesia 59; Philippines 41; Vietnam 29; Lao PDR 21; Thailand 21; Malaysia 19; Cambodia 18; Myanmar 14; Brunei Darussalam four; Singapore four; and Timor Leste three. Most of the 154 ASAP-eligible species are confined to South-east Asia (125 species naturally so, a further four by recent extinction of all extralimital populations) and therefore their extinction can be averted only by action in the region. A further 21 of the 154 species also occur elsewhere, but have an important part of their global population in South-east Asia, and four are presently of only marginal occurrence in Southeast Asia. Clearly the priority countries for ASAP are Indonesia, the Philippines and Vietnam.

The SSC's partnership on ASAP with the European Association of Zoos and Aquaria (EAZA) is continuing during 2013. The focus of this partnership is the EAZA–IUCN SSC Southeast Asia Campaign which is an information and fundraising campaign. There has been an excellent response from EAZA zoos to the idea of ASAP and to its urgency. This two-year campaign formally came to a close at the EAZA annual conference on 27 September 2013. As a result of the campaign, in addition to the awareness raised among the European zoo-going public, funds have been raised and allocated to the following projects:

- Saving the Saola and Other Endangered Animals of the Annamite Mountains, Vietnam/Laos
- Protecting the Hukaung Valley Wildlife Sanctuary, Myanmar (including focus on Western Hoolock Gibbon)
- Strengthening Protection and Monitoring of Sumatran Rhinos in Way Kambas National Park, Indonesia
- Biodiversity conservation of the Mekong River Basin, Laos (including focus on Mekong Giant Catfish)
- Rufous-headed hornbill conservation research and management project, Philippines
- Conservation of the Mesangat Wetland, East Kalimantan, Indonesia (including focus on Tomistoma and Siamese Crocodile).

Will Duckworth has led the SSC's input into the campaign, and has worked very closely with EAZA staff, and also with Gary Batters from the Zoological Society of East Anglia.

Amphibian Survival Alliance

The implementation of the Amphibian Survival Alliance (ASA) is very much in fulfilment of Resolution 020 "Further steps to combat the amphibian crisis", adopted by the IUCN World Conservation Congress in Jeju, Korea, in September 2013. As stated in the previous report, large changes are taking place with the ASA. Don Church is now serving as the Executive Director with Jaime Garcia Moreno as the Director of

Conservation Programmes and James Lewis as Operations Director. A planning meeting took place in London on 24 January which was attended by Simon Stuart and several others. Several new organisations are coming into the ASA partnership, including Global Wildlife Conservation, World Land Trust USA, and Synchronicity Earth. Ongoing work consists of completing the strategy, business plan, fundraising and clarifying the partnership between the ASA and the SSC Amphibian Specialist Group. The higher-level parts of the ASA Strategy are nearing completion and are summarized below:

Vision: By 2020, the extinction of known threatened species of amphibians has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Mission: The Amphibian Survival Alliance protects amphibians and their habitats through dynamic partnerships worldwide.

Goals:

- Establish a Broad Set of Community Wide Priorities
- Build Public Support for Amphibian Conservation
- Create a Collaborative Environment for Scientists and Conservationists to Work Towards Common Goals
- Build Capacity across the Community to Better Impact Amphibian Conservation.

Under each of the goals, a set of objectives and progress indicators are being developed. At the same time, Simon has been working extensively with Don Church and James Lewis to prepare a new constitution for the ASA. It is hoped that this will be completed early in 2014. Significant work is also being done to develop a new ASA website and to start innovative fundraising campaigns through the site. This will include fundraising for updating the assessments on The IUCN Red List.

In 2013 the ASA has already raised funds to support the implementation of three new reserves for amphibians (and other species) in Ecuador, Brazil, and Borneo. The announcement of these new reserves will be rolled out in the coming months. The ASA is also at work to develop new projects on Palawan, Philippines, Sumatra and elsewhere.

Craugastor laevissimus (Endangered) from Cusuco National Park, Honduras, Central America. © Andrew Snyder



Report of the IUCN SSC Specialist Groups, Task Forces, Red List Authorities

AFRICAN ELEPHANT SPECIALIST GROUP

The mission of the IUCN SSC African Elephant Specialist Group is to promote the long-term conservation of Africa's elephants throughout their range.

Starting a new quadrennium, AfESG Membership was reviewed. Forty-two Members were reappointed and 11 new Members were added, bringing the total to 53. We continue to update the African Elephant Database with new survey data. In March 2012, a provisional 2013 update was released, and that has been updated this year. Use of the new online *interface* has increased.

The AfESG Chair and Programme Officer participated in CITES CoP16 where they presented the provisional African Elephant Status Update, and launched a report 'Elephants In the Dust', along with partners CITES MIKE and TRAFFIC. A number of new Decisions and Resolutions were adopted at CoP16. The new Resolution on the African Elephant Action Plan and the African Elephant Fund acknowledged AfESG's role in its development, and the AfESG's reporting mandate to the CITES Standing Committee was renewed.

The AfESG is working on digitizing the African Elephant Library (AEL) in order to expand the reach of this important resource that holds over 5,000 references. A short-term Information Management Assistant has been hired to perform this task for the next six months. Two issues of *Pachyderm*, the journal of the African elephant and African and Asian rhino specialist groups were published covering the period July–December 2012 and January–June 2013. AfESG is currently working on the July–December 2013 issue.

As outlined in Resolution WCC-2012-RES-025-EN, adopted at IUCN's World Conservation Congress in 2012 in Jeju, IUCN and the AfESG have been working to convene a high-level meeting on elephant poaching and the illegal ivory trade. The AfESG, together with the Government of Botswana and the IUCN Secretariat, convened the 'African Elephant Summit' from 2–4 December 2013.

The AfESG has received funding from CITES MIKE III to facilitate the development of ivory supply chain analytical methods in 2014. This will bring together the AED, CITES MIKE and ETIS data in an analytical framework that will allow better understanding of the dynamics of the illegal ivory supply chain. The AfESG will continue supporting CITES MIKE's technical meetings and updating the AED, as well as our continued work on the AEL and Pachyderm.

African Elephant. © Hoare and Brown



The AfESG wishes to express its sincere gratitude to the following donors for their continued support. USFWS-African Elephant Conservation Fund, DEFRA, CITES MIKE, Bundesamt für Naturschutz, Tusk Trust and Save The Elephants, International Elephant Fund and the International Elephant Fund for Conservation.

Dr Holly Dublin

Chair, African Elephant Specialist Group

AFRICAN RHINO SPECIALIST GROUP

The mission of the African Rhino Specialist Group (AfRSG) is to promote the development and long-term maintenance of viable populations of the various sub-species of African rhinos in the wild.

A mandated joint AfRSG/AsRSG/TRAFFIC report, as well as an updated AfRSG report was submitted to CITES CoP16 (a number of recommendations were subsequently incorporated as CITES CoP16 Decisions). This report was presented in plenary and formed part of the Secretariat report on rhinos to CoP16. We commented on a draft CITES Rhino Working Group document for COP16, and a background presentation was given at the CITES Rhinoceros Enforcement Task Force meeting. Informed technical comments were provided as part of the joint IUCN/TRAFFIC CoP16 analyses process.

In February, the biennial AfRSG meeting was held in Kenya and was attended by over 50 delegates. The continental status of African rhinos was updated; representations and advice was given to the EAZA rhino Taxon Advisory Group. The AfRSG provided inputs and support to the Asian Rhino Specialist Group (AsRSG) and in March 2013, we participated in the Asian Development Bank 'Combating Wildlife Crime' conference in Thailand. There was participation in the Rhino and Elephant Security Group/INTERPOL ECWG meeting in Swaziland, and a Southern African Wildlife Enforcement Network meeting in Gaborone, Botswana. There was also a roundtable debate with the Under Secretary for Economic Growth, Energy and the Environment, US State Department. We participated in the Sumatran Rhino Crisis Summit in April 2013.

Presentations were given at rhino conferences at Thoiry, France, in April 2013, and at the Symposium of Contemporary Conservation Practice in KwaZulu-Natal, South Africa, in November 2013. The AfRSG co-authored a paper that was presented at the US Rhino conference, and we co-authored two 'Evidence on Demand' documents for the UK Department for International Development (DFID) as well as comments on agenda/outputs of the London Conference on Illegal Wildlife Trade (IWT) meeting in Jan 2014. The AfRSG advised on population estimation and monitoring, and on technical aspects associated with intelligence software/analysis and rhino DNA profiling and its application.

The AfRSG facilitated the revision of South Africa's black (signed by Minister of Environment and gazetted under NEMBA) and white rhino (in progress) conservation plans; Zimbabwe's revised rhino policy and management framework

was also formally approved by the Minister of Environment. The revised Botswana plan is nearing completion. A review of black and white rhino Red Listing status is in progress.

The AfRSG provided support to RESG/Interpol on intelligence databases and analytical tools, and sharing of expert witness arguments and information that can be used in aggravation of sentences. The AfRSG also provided evidence at an International "substance detector" fraud trial at the Old Bailey, London.

Throughout the year, we provided inputs and responses to a huge range of rhino related queries, such as the Dallas trophy hunt issue, as well as promoting International Year of the Rhino. Considerable inputs were made in developing potential wildlife bonds documentation for the pending intergovernment meeting in London in February 2014.

To facilitate the spread of information on rhino related issues amongst range states and civil society, numerous presentations were given to governments (including the South African Parliamentary Portfolio Committee), conservation authorities, NGOs, and scientific forums; there were expert inputs into the SADC Rhino Management Group meeting (RMG) held in November 2013; numerous press releases and interviews were given, and the AfRSG Chair reports in Pachyderm, the Journal of the African Elephant, African Rhino and Asian Rhino Specialist Groups.

The AfRSG wishes to thank the USFWS Rhino and Tiger Fund; Save the Rhino International; International Rhino Fund; DEFRA; WWF-ARP, Endangered Wildlife Trust and WWF-SA.

Dr Michael H. Knight

Chair, African Rhino Specialist Group

White Rhino, Botswana. © Dr Michael H. Knight





Aquatic Tenrec (Limnogale mergulus). © P.J. Stephenson

AFROTHERIA SPECIALIST GROUP

Our mission, which was defined when the group was established in 2001, is to facilitate the conservation of hyraxes, the aardvark, elephant-shrews or sengis, golden-moles, tenrecs, and their habitats by providing sound scientific advice and guidance to conservationists, governments, and other interested groups. We are continually working to raise public awareness of Afrotheria conservation, as well as developing research and conservation programmes. During 2013, we reassembled our membership for the next quadrennium (which now comprises 38 specialists); thanking six members for their past service and welcoming 11 new members, including a new hyrax Section Co-ordinator (we have a co-ordinator for each of our taxonomic groups).

Our Section Co-ordinators have designed a new group logo, which has been used in the update and re-design of our website; including the home page, conservation page, and hyrax section. We promoted the conservation of some of our more threatened species, including a giant sengi (*Rhynchocyon* sp.) in the Zoological Society of London's 'Priceless or Worthless?' initiative, and Juliana's golden mole (*Neamblysomus julianae*) in the Arkive project 'Conservation in action – 10 species on the road to recovery'.

Although much of our efforts have focused on education goals (producing our yearly newsletter, new logo, website updates, nominating threatened species for special attention, etc.), this has not over-shadowed one of our major functions; providing expert advice, including updating The IUCN Red List. Under the guidance of a new Red List Co-ordinator and our five Section Co-ordinators, we expect to meet the 2014 deadline for re-assessing our nearly 80 species of Afrotheria. The results are pending for some research/conservation grants recently submitted and supported by our group.

Galen B. Rathbun

Chair, Afrotheria Specialist Group

AMPHIBIAN SPECIALIST GROUP

The Amphibian Specialist Group (ASG) strives to conserve biological diversity by stimulating, developing, and executing practical programs to conserve amphibians and their habitats around the world.

2013 has been a year of significant change for the ASG, evolving to a group focused on providing scientific advice as well as developing and maintaining priority setting tools. A



Variable Harlequin Frog (Atelopus varius). © Robin Moore

major focus has been on the reassessment of approximately 4,500 amphibians on The IUCN Red List, which were last assessed in 2004.

Working closely with the Amphibian Survival Alliance (ASA) we have been establishing national and regional teams that are responsible for a subset of amphibians. Where possible these teams are based within institutions, thereby receiving institutional support. Through our partnership in the ASA, we are taking steps to build global support for the use of The IUCN Red List as a tool that can be used to plan conservation actions and to assess levels of success.

In addition to the Red List work, the ASG has formed 13 working groups to help develop priority actions to be implemented through the Alliance. The Working Groups cover all strategic elements of the IUCN strategic plan and a range of partners are currently implementing actions based on these priorities. Together with the ASA, we supported Biodiversa first policy brief with recommendations for the EU on the need to monitor wildlife diseases and are actively working towards a number of Aichi Biodiversity Targets.

Communication and education are both key to the ASG and successful amphibian conservation efforts. Over the next three years the ASG will be launching a comprehensive communications strategy in partnership with the Alliance; utilizing a range of tools to deliver the amphibian conservation story. A range of publications, both traditional and digital, along with a variety of online videos and interactive tools will be utilized to communicate this message.

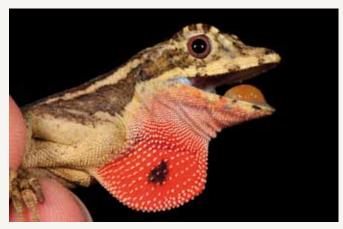
The IUCN SSC ASG wishes to thank all of its members around the world, who donate their time and expertise to furthering the work of the group and the Amphibian Survival Alliance. Their continued support has enabled the smooth operation of the ASG and the successful implementation of critical amphibian conservation, research and education projects around the world.

Dr Phil Bishop and Dr Claude Gascon

Co-chairs, Amphibian Specialist Group

ANOLINE LIZARD SPECIALIST GROUP

The mission of the Anoline Lizard Specialist Group (ALSG) is to assess and monitor the conservation status of all species of anole lizards; to identify factors that place anoles at risk of extinction, and to develop effective strategies to ensure the long-term maintenance of healthy populations of these species in the wild.



Anolis lyra. © Luke Mahler

To date, ALSG activities have focused primarily on conducting and reviewing IUCN Red List assessments for the ~300 species of anoline lizards that had not been assessed prior to the formation of the ALSG. In 2013, our members made progress in assessing species from Central America and South America. For anoline lizard species occurring in Central America, draft assessments were completed for 79 species and re-assessments completed for 11 species. These were assembled during the '2012 Central American Squamate Red List Workshop', organized by NatureServe and IUCN in Costa Rica. Final versions of the assessments will be submitted to The IUCN Red List for publication in 2014; the completion of these will mark the halfway milestone towards our goal of achieving assessments for all of the approximately 400 known anoline lizard species.

Central American assessments resulted in the identification of well over a dozen species of high conservation concern, and diagnosed an urgent need for anoline lizard conservation in Honduras, which has recently suffered extensive deforestation. Also in 2013, the ALSG started to conduct Red List assessments for all un-assessed species from South America. In October, three ALSG members participated in the South American Squamate Red List Workshop held in Medellín, Colombia, and organized by the Asociación Colombiana de Herpetología, NatureServe and IUCN. During this workshop, complete draft assessments were produced for the 75 anole species that occur in Colombia.

While focused primarily on the Red List assessment process, the ALSG, along with SSC Chair, Simon Stuart, Director General, Julia Marton-Lefèvre, and the Iguana and Sustainable Use and Livelihood Specialist Groups, wrote a letter to the Ministro del Medio Ambiente y Recursos Naturales in the Dominican Republic concerning the destruction of habitat within the Loma Charco Azul Biological Reserve, a recently established reserve which contains the only known population of a remarkable new species of giant *Anolis* lizard. The ministry was responsive to this letter and habitat destruction within this reserve has been stopped.

D. Luke Mahler and María del Rosario Castañeda

Co-chairs, Anoline Lizard Specialist Group

ANTEATER, SLOTH AND ARMADILLO SPECIALIST GROUP

The mission of our Specialist Group is to promote the longterm conservation of the 31 extant species of xenarthrans (anteaters, sloths and armadillos) and their habitats. Our active group of committed specialists currently consists of 21 members from eight countries. In 2013 we increased the number of captive care specialists to strengthen the *ex-situ* component of Xenarthra conservation. We have also incorporated two specialists working with the Critically Endangered pygmy sloth (*Bradypus pygmaeus*), one of our priority species.

This year we have re-assessed the conservation status of all 31 species of Xenarthra for the 2015 Global Mammal Reassessment. Although we are still working on this update, we anticipate that the majority of species will remain in the same threat category, with the exception of *Dasypus pilosus* that should be recategorized from Vulnerable to Data Deficient due to the lack of information on this species, and of *Dasypus sabanicola* that should be changed from Least Concern to Near Threatened based on new information.

In coordination with the SSC office and the Director General of IUCN, our Specialist Group has intervened to halt plans for exporting pygmy sloths for a captive breeding program, because of the impact of removing animals from the extremely small wild population on the island of Escudo de Veraguas, Panama. Furthermore, our Specialist Group has played a fundamental role in setting up an independent advisory committee for the conservation of this charismatic species and for including the species in CITES Appendix II.

One of our Vulnerable species, the Brazilian three-banded armadillo (*Tolypeutes tricinctus*), will be the official mascot of the 2014 FIFA World Cup, which will take place in Brazil. Our Specialist Group has teamed up with the Brazilian NGO Associação Caatinga to increase awareness for the conservation problems of three-banded armadillos and coordinate the scientific projects aimed at the long-term conservation of this wonderful species.

We have continued raising public awareness for xenarthrans and their conservation problems through regular updates of our Facebook page and our website www.xenarthrans.org, which is available in English, Spanish and Portuguese. Our peerreviewed Newsletter Edentata is increasingly being recognized as an important means to publish conservation-relevant data on xenarthrans. Our Specialist Group has also provided scientific advice to conservationists, governments, and other interested groups, and has assisted other Specialist Groups with their Red List assessments.

Finally, in April 2013, in collaboration with Green Heritage Fund Suriname, we organized the Second International Sloth

Brazilian Three-banded Armadillo (*Tolypeutes tricinctus*). © Adriana Bocchiglieri



Meeting and held a course on xenarthrans in Suriname. These events allowed us to interact with many people committed to the conservation of sloths and motivate many students to initiate studies on xenarthrans.

We wish to thank Conservation International, the San Antonio Zoological Society, and the Greater Sac AAZK (American Association of Zoo Keepers) Chapter – Sacramento, CA for their generous financial support.

Dr Mariella Superina

Chair, Anteater, Sloth and Armadillo Specialist Group

ANTELOPE SPECIALIST GROUP

The mission of the Antelope Specialist Group (ASG) is to conserve the world's antelope diversity. There is an ongoing review and update of status summaries and threat assessments for all threatened antelopes.

A number of events were facilitated by the ASG, including a Western Giant Eland conservation strategy workshop in Saly Portudal, Senegal, 28–31 January 2013; the restoration of Goitered Gazelle to the Caucasus, Baku Azerbaijan, 2–6 April 2013; a Mountain Bongo conservation workshop in Dubai, UAE on May 2013; a CMS Saiga Antelope technical workshop in Astana, Kazakhstan on 18 June 2013, and a Dama Gazelle conservation workshop in Edinburgh, UK, 19–21 November 2013

We attended a number of high profile meetings including the '16th session of the Conference of the Parties' (CoP16) of CITES in Bangkok, Thailand, 3–14 March 2013; the '13th annual meeting of the Sahelo-Saharan Interest Group' (SSIG) in Agadir, Morocco, 2–3 May 2013, and the 'EAZA Antelope and Giraffe TAG' meeting in Edinburgh, UK, 27–28 September 2013

In September 2013, we advised the Forestry and Wildlife Department in Eritrea, Asmara on Antelope priorities and planning.

In 2013, ASG received a grant for the 'Dama Gazelle Workshop'; from the USFWS 'Ranching for Restoration' programme managed by the US based NGO, Conservation

The latest issue of our newsletter *Gnusletter* (Volume 31 Number 1 May 2013) is available here.

Dr Philippe Chardonnet and Dr David Mallon

Co-chairs, Antelope Specialist Group

More than 100 Giant Elands in a hunting block in northern Cameroon. © Jean-Paul Arabeyre



ARCTIC PLANT SPECIALIST GROUP

The Arctic Plant SG is comprised of members from eight Arctic States (Canada, Denmark [including Greenland and the Faroe Islands], Finland, Iceland, Norway, Russian Federation, Sweden, and United States of America). Our mission is to assess boreal and Arctic floristic and vegetational (plant community) biodiversity. Members worked on the plant components of the Arctic Biodiversity Assessment (ABA) (Meltofte, ed. 2013). The team prepared: 1) an assessment based on a review of over 300 scientific publications in the field of floristics of vascular plants, bryophytes and algae; 2) reviewed status and trends in Arctic biodiversity of these plants; and 3) prepared a list of 20 rare endemic Arctic vascular plant species that may be threatened by extinction.

Another major activity is the development of the Arctic Vegetation Archive (AVA), which will provide a foundation for Pan-Arctic biodiversity studies. This activity will provide a database of all published plot-based Arctic plant communities. We published a concept report on the project and held CAFF Flora Group/International Arctic Vegetation Database meetings on 12-15 April, 2013 in Krakow, Poland. The workshop brought a few key participants from the Arctic countries together to address the issue of assembling the available vegetation plot (relevé) data into a single database. This database is needed to develop a circumpolar Arctic vegetation classification that would be useful and relevant to a wide variety of Arctic issues, including modeling of climate and land-use change, resource management, biodiversity studies, inventorying vegetation at Arctic observatories, and Arctic education. A major goal is to harmonize the North American and European approaches to vegetation classification in the Arctic.

During the Krakow workshop, floristic specialists also made final selections of vascular Arctic plants to be proposed to the IUCN for Red Listing. The final candidate list includes 126 species. Following the publication of the Pan-Arctic checklist of lichens and lichenicolous fungi, we added further information for each lichen species such as the preferential habitat of each species. During 2014 we plan to make the lichen checklist into a searchable database available on the CAFF homepage.

We continued our work on a Circumboreal Vegetation Map (CBVM), and participated in a symposium, 'The East Asian Flora and its role in the formation of the world's vegetation', held in Vladivostok, Russia, in 23–27 September 2012, and held a workshop to: 1) share views of participants regarding the organisation of the legend for the CBVM project (CBVM); and 2) compare concepts and their application between the

Canadian team and the Russian team in order to develop a common legend.

In addition to the Vladivostok workshop, we convened the CBVM North America workshop in Anchorage, Alaska on 27–30 September 2013. This involved a review of North American pilot projects; integrating legends from Alaska and Canada, and a review of the linkage of vegetation classification and the CBVM legend. A summary report of the meeting is being prepared. In February 2014, we will convene a CBVM – Eurasia workshop in Helsinki, Finland.

Stephen S. Talbot

Chair, Arctic Plant Specialist Group

ASIAN ELEPHANT SPECIALIST GROUP

The goals of the Asian Elephant Specialist Group (AsESG) are to promote and facilitate the long-term conservation of the Asian Elephant across its range. Group members work with government and other partners to address the primary threats to Asian Elephants, which are habitat loss, fragmentation, and degradation; human–elephant conflict; illegal killing; and the genetic and demographic problems faced by small isolated populations.

In 2013, AsESG members played a significant role at CITES CoP16 in Bangkok by helping to get the issue of the illegal trade in live elephants onto the CITES agenda and assisting with the national ivory action plans process. We will continue to push for action on live trade as well as the increasing threat posed to Asian Elephants by the illegal ivory trade at the CITES Standing Committee Meeting in July 2014.

AsESG members also helped with preparations for the E-50:50 Congress in India (although unfortunately that Congress was postponed by the Government of India) and the London Conference on Illegal Wildlife Trade, which is to be held in February 2014. AsESG members contributed to the 10-year *National Elephant Conservation Action Plan* (NECAP) for Peninsular Malaysia, which was launched by the Government of Malaysia in late 2013. Significant time was also spent compiling data for the IUCN African/Asian Elephant Database.

We continued to publish the AsESG's journal, *Gajah*, which is available in both hard copy form and as PDFs (both as whole issues and individual articles) from the AsESG website. Production and dissemination of *Gajah* is facilitated by the sterling work of our volunteer Editor, Editorial Board, and Webmaster.

Saxifraga nathorstii. © Kristine Westergaard



Asian Elephant. © Ajay A Desai



In 2014, we hope to complete a *Conservation Strategy for Asian Elephants* and hire a full-time Program Officer. We continue to facilitate and promote the inclusion of range and population data in the IUCN African/Asian Elephant Database, and continue working with the CITES Monitoring the Illegal Killing of Elephants (MIKE) program and the Elephant Trade Information System (ETIS).

Simon Hedges and Ajay Desai

Co-chairs, Asian Elephant Specialist Group

ASIAN RHINO SPECIALIST GROUP (AsRSG)

The mission of the Asian Rhino Specialist Group is to foster conservation and management of three species of Asian rhinos and their habitats. The AsRSG worked closely with TRAFFIC to prepare the document on *African and Asian Rhinoceroses – Status, Conservation and Trade* for the CITES CoP 16 held in Bangkok from 5–14 March 2013. This is a report from the IUCN SSC African and Asian Rhino Specialist Groups and TRAFFIC, to the CITES Secretariat in pursuant to Resolution Conf. 9.14 (Rev. CoP15).

AsRSG assisted the IUCN SSC Chair's office in holding the 'Sumatran Rhino Crisis Summit' in Singapore from 1-4 April 2013, to assess the current state of the Sumatran Rhino in range countries; now only confined to Sumatra in Indonesia and Sabah, Malaysia. Over 100 participants from around the world attended this summit; the Indonesian and Malaysian delegation included high level officials from their respective ministries, including the Sabah Wildlife Department of Malaysia. The meeting expressed concern at the fast decline of Sumatran Rhino populations in range countries, and emphasized the need for time-bound strategies and actions to recover the species from the verge of possible extinction. A group of African rhino experts from South Africa, Zimbabwe, Swaziland and Tanzania also attended this summit and shared African experience with the participants. The IUCN SSC was represented by Mark Stanley Price and Rachel Roberts. An emergency plan for Sumatran Rhinoceros is in preparation, to usher a new era of hope for the dwindling and Critically Endangered Sumatran Rhinoceros in Indonesia and Malaysia.

The AsRSG assisted the Ministry of Forestry of Republic of Indonesia and the IUCN SSC Chair's office in holding the first Rhino Range State Meeting in Lampung, Indonesia on 2–3 October 2013. The populations of the Greater One-horned, Javan, and Sumatran Rhinos will each be managed for an annual growth rate of at least 3%. In other words, maintaining

Greater One-horned Rhino. © Bibhab Talukdar



populations and preventing extinction is not enough, the aim is to bring about the recovery of these species. The governments of Bhutan, India, Indonesia, Malaysia and Nepal recognize the critical situation facing Asian Rhinos; the Sumatran Rhinoceros faces extinction unless decisive and urgent measures are taken, as outlined above. The Javan Rhinoceros could easily be wiped out in a single catastrophe, and the remarkable gains made in the conservation of the Greater One-horned Rhinoceros could easily be lost if the current trend in the illicit trade in high-value wildlife products continues. These species are of remarkable cultural heritage to the people of Asia. The governments of Bhutan, India, Indonesia, Malaysia and Nepal have all agreed to the 2010-2020 Strategic Plan for Biodiversity, and have committed to giving a very high priority to implementing all the actions outlined in the Bandar Lampung Declaration, which includes collaborating with each other and the international community; with the intention that by 2020 at the latest, the populations of all three Asian Rhinoceros species will be growing by at least 3% annually.

The Chair of the AsRSG would like to thank the members of the AsRSG for their support and cooperation in 2013, and donors including the WWF-AREAS Programme, International Rhino Foundation, Aaranyak and Yayasan Badak Indonesia.

Dr Bibhab Kumar Talukdar

Chair, Asian Rhino Specialist Group

ASIAN WILD CATTLE SPECIALIST GROUP (AWCSG)

The mission of the group is the promotion and long-term conservation of the Asian wild cattle species and their habitats by means of information-sharing, identification of conservation priorities and facilitation/delivery of these priority actions through collaborative conservation work.

In September of this year, WWF-Greater Mekong cameratrapped a saola in central Vietnam, the first wild photograph of the species in almost 15 years.

The Saola Working Group held its 3rd meeting titled 'Conservation through Collaboration'. Thirty-four participants from 24 institutions joined the meeting on 3–7 June 2013, in Vientiane, Lao PDR. Topics discussed at the meeting included; information sharing on current Saola status and conservation efforts; improving protection at key Saola sites; detection of Saola and how to do it; captive management of saola.

The Indonesian National Conservation Strategy and Action Plan for Banteng was published by the Ministry of Forestry, following a workshop coordinated by the AWCSG. This ten

Wild Buffalo - Central India. © Kishore-Rithie, Satpuda Foundation



year plan outlines ambitious targets to enhance Banteng populations by 2022, and some actions are already underway.

A Status Review and Recovery Programme for Wild Buffalo in Central India has been drafted by Specialist Group members, following a workshop in Nagpur, Maharashtra, central India, co-facilitated by AWCSG.

Thanks to the following for supporting the Saola workshop: CEPF, Copenhagen Zoo, Leipzig Zoo, San Diego Zoo, Natural History Museum of Denmark, ZGAP, ZooParc Beauval, Global Wildlife Conservation, WCS, Fauna and Flora International. Also, thanks go to these organisations for supporting the Central India Wild buffalo workshop, which resulted in the draft Recovery Plan: Government of Maharashtra, Satpuda Foundation, Wildlife Trust of India, Givskud Zoo, Denmark and IUCN Strategic Conservation Planning Task Force.

Dr James Burton

Chair, Asian Wild Cattle Specialist Group

AUSTRALASIAN MARSUPIAL AND MONOTREME SPECIALIST GROUP

The primary activity of the AMMSG is to provide evaluations of the conservation status of the marsupials and monotremes of Australia, New Guinea and nearby West Pacific islands. The main activity of 2013 was the commencement of a major review of conservation status of all species, as part of the Global Mammal Reassessment scheduled for completion in 2015.

Two members of the AMMSG, John Woinarski and Andrew Burbidge, have been leading the production of a new Action Plan for Australian mammals. This is now in proof stage for publication by CSIRO Publishing, and covers the marsupials and monotremes of the Australian continent and its islands. As a result of this, we have provided an updated taxonomy of Australia's marsupials and monotremes; the Action Plan will also provide the basis for Red List revisions of the Australian species in 2014. Our other main goal for 2014 is to begin the extension of this work to New Guinean species, for completion in 2015.

We note with pleasure that Andrew Burbidge, one of the authors of the Action Plan, was made an Officer of the Order of Australia for his distinguished lifelong service to the environment and conservation biology in Australia.

Professor Chris Johnson

Chair, Australasian Marsupial and Monotreme Specialist Group

Mountain Pygmy Possum. © Dr Linda Broome



BAT SPECIALIST GROUP

The membership of the BSG was updated by webmaster Allyson Walsh, with 190 members of 114 countries, an average of less than two members per country. New Red List Focal Points were appointed during the year; Sergio Solari for the New World and Dan Hargeaves for the Old World.

The main priority of the group remains filling the 'conservation void' – stimulating the formation of bat conservation organisations in countries where none exist and building their capacity where they do. To this end, the Cochairs attended a 'Bat Summit' organized by Bat Conservation International in Naivasha, Kenya in February 2013, with representatives from 22 countries of sub-Saharan Africa; which led to the establishment of Bat Conservation Africa.

RELCOM, a federation of bat conservation NGOs in Central and South America and the Caribbean, established by Rodrigo Medellin in 2007 during the '14th International Bat Research Conference', which he organized in Merida, Mexico, has further increased its membership to 22 countries; updated its website, integrated the network of AICOMs, Areas of Importance for the Conservation of Bats in Latin America, and is preparing its first Latin American Congress on 'Bat Research and Conservation' in August 2014.

In an attempt to accelerate progress in revising *The Old World Fruit Bat Action Plan*, lead authors for species accounts are being identified rather than seeking information from all those who have published on a particular species.

Rodrigo Medellin contributed to a symposium on Global Bat Conservation at the 'International Bat Research Conference' in Costa Rica in August, and questioned the suitability of the current Red List criteria for bats, requiring a review of how and whether the criteria can be applied to bats.

Paul Racey contributed to a workshop organized by The South East Asian Bat Conservation Research Unit (SEABCRU) in Phnom Penh, Cambodia (12–21 October) for students and researchers of flying foxes which involved methods of monitoring large colonies of *Pteropus*.

Paul Racey visited the Seychelles in March to discuss with government officials, legal protection for 'the rarest bat in the world' – the Seychelles sheath-tailed bat *Coleura seychellensis* (about 60 individuals remain), and to teach a workshop on monitoring and conservation of this species, as part of the Darwin Initiative project on EDGE (Evolutionarily Distinct and Globally Endangered) species.

Professor Paul A. Racey and Dr Rodrigo A. Medellin

Co-chairs, Bat Specialist Group

Coleura seychellensis. © Justin Gerlach



BEAR SPECIALIST GROUP

The Bear Specialist Group strives for a world that values and conserves bears in their natural habitats. We have purview over the seven species of terrestrial bears (i.e., all except polar bears), five of which are globally threatened. The seven species live in 61 countries on four continents. We have 190 members representing all but six range countries.

The Bear SG has been working to update species distribution maps for four species; this process is nearing completion. However, in some areas, the presence of bears remains unknown, so we have been starting to investigate these on the ground. Our first survey was for sloth bears (*Melursus ursinus*) in Bhutan. So far, it appears that sloth bears are only occasional vagrants in this country, so we are investigating why that is so (i.e., a recent change or historically rare?).

We are also well along on new red-listings for the bears. Illegal killing of bears combined with habitat conversion and degradation are causing widespread population declines. The steepest losses are for sun bears (*Helarctos malayanus*), which are expected to decline by 40% over the next 30 years. For brown bears (*Ursus arctos*), we are distinguishing population isolates and applying red-listing criteria to these. We are gaining information on population trends from various sources, including "by-catch" camera trapping data (e.g., from tiger surveys) and from sign surveys. We are in the process of writing a sign survey manual for bears.

Our main direct conservation project has been an effort to reduce commercial poaching of Asiatic black bears (U. thibetanus). This species is heavily exploited for gall bladders (bile) and paws. Bear farming was instituted to produce enough bile to flood the market, but it may be drawing in more users that eventually buy wild bile. The Bear SG organized a motion for The IUCN World Conservation Congress, at its 5th session in Jeju, Republic of Korea, which resulted in adoption of Recommendation WCC-2012-Rec-139: Bear farming in Asia, with particular reference to the conservation of wild populations. This document recognized that bear farming significantly increased the availability of bear bile to meet the needs of Traditional Chinese Medicine patients, but observed "that evidence of a cause-and-effect relationship between increased supply and use of farmed bear bile and the exploitation of wild bear populations is lacking." As a followup, the Bear SG joined with other IUCN members to work with the Chinese government to conduct a scientifically rigorous situation analysis to better understand the relationship (if any)

Grizzly Bear. © Ivan Seryodkin



between the market for farmed bear bile and the exploitation of wild bears in China.

Dr David L. Garshelis and Mr Robert Steinmetz

Co-chairs, Bear Specialist Group

BIRD RED LIST AUTHORITY – BIRDLIFE INTERNATIONAL

BirdLife International is the world's largest nature conservation Partnership, currently numbering 120 Partners worldwide. The BirdLife Partnership strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. Our Commitment is to prevent extinctions in the wild; to maintain and where possible improve the conservation status of all bird species; to conserve the sites and habitats important for birds and other biodiversity; to sustain the vital ecological systems that underpin human livelihoods, and enrich the quality of people's lives, and in the process, BirdLife will empower people and contribute to the alleviation of poverty, and strive to ensure sustainability in the use of natural resources.

The latest IUCN Red List update in November 2013 included status changes for 46 birds and updates to c.75 Critically Endangered birds, plus revisions to c.1,000 bird assessments. The number of Critically Endangered birds has hit a new high, but a few notable successes including downlisting of Black-footed and Black-browed Albatrosses to Near Threatened. Extensive revisions to the taxonomy of non-passerine birds are to be implemented in 2014, and major revisions to range maps for non-passerines will also be published in 2014.

12,000 Important Bird and Biodiversity Areas (IBAs) have now been identified, in some 200 countries and territories. The Preventing Extinctions Programme has taken action for over 500 (40%) of the world's threatened bird species since 2008; 46 Species Guardians have so far been appointed to take action for 59 Critically Endangered and 11 Endangered species.

Following a comprehensive assessment in 2012, we have updated the Red List Index for birds, which feeds into several CBD 2020 targets and UNMDG indicators. We continued the co-development of the Species Information Service with IUCN, and continued to participate in Red List Committee and Red List Technical Working Group meetings.

We made a number of contributions to published research on threats, including climate change (Foden *et al.* 2013,

Populations of Black-footed Albatross are now thought to be stable or increasing, resulting in the species being down-listed on The IUCN Red List. © Ben Lascelles



Hannah *et al.* 2013) and crop expansion (Phalan *et al.* 2013); and on solutions including climate change adaptation (Garnett *et al.* 2013) and protected area coverage of key sites (Le Saout *et al.* 2013), plus various others currently in preparation.

BirdLife wishes to acknowledge and thank its Founder Patrons, the Aage V. Jensen Charity Foundation and all BirdLife Species Champions.

Andy Symes

Chair, Bird Red List Authority

BISON SPECIALIST GROUP

The Bison Specialist Group consists of two units, one for European bison and one for North American bison. The European Bison Specialist Group concentrates on feasibility work aimed at expanding the range of the species and improving its conservation status. The purpose of the North American Bison Specialist Group (NABSG) is to contribute to the development of comprehensive and viable strategies and management actions to improve conservation, and achieve ecological restoration of plains bison and wood bison where feasible, throughout the original range of each subspecies.

We renewed the membership list for the North American Bison Specialist Group (NABSG). The NABSG is a network of people involved in bison conservation and recovery, and who are able to contribute scientific knowledge, effectively influence bison conservation, or engage in conservation projects. There are now 80 registered members and numerous collaborators spanning the range of the species from Mexico to Alaska. The NABSG hosted an internet dialogue in August–September about what defines a wild bison. We compiled the input from each of the participants to identify key principles for a definition of 'wild' bison. A discussion about this issue is planned for the next NABSG meeting in Montana in 2015, in conjunction with our biennial American Bison Society Conference. On 26 September 2013, we hosted the first IUCN face to face meeting since the Vermejo meeting in 2005. The meeting was attended by 45 members and a vigorous discussion was held about the definition of 'wild' bison and the pending IUCN Red List assessment for bison. At the IUCN meeting a subgroup was formed to work on The IUCN Red List assessment of North American Bison. The subgroup laid out a process for accomplishing this task. Dr Cormack Gates (Red List Authority) and Keith Aune (NABSG Chair) will lead the effort.

Our annual conference was held in Poland on 5–6 September; a subgroup was formed to work on The IUCN

European Bison. © Piotr Wawrzyniak



Red List assessment of European bison. The subgroup laid out a process for accomplishing this task; Prof. Kajetan Perzanowski and Wanda Olech (Red List Authority) will lead the effort. In Europe, the legal status of the wisent is not universal; in some countries it is a protected species as property of the State, and in other countries all wisents (even from free ranging herds) belong to private owners or other entities and are subject to veterinary regulations for cattle. There is a need to elaborate and propose a more universal legal status of the wisent, which could serve the conservation of the species at the global level. The wisent would maintain its status as an endangered species, and protection measures may include a limitation on commercial use. Funds obtained in this way would be designated for the conservation of wisent populations. More details are under discussion between BSG members and other people involved in species protection and breeding.

Mr Keith Aune (North America) and Dr Wanda Olech (Europe)

Co-chairs, Bison Specialist Group

BOA AND PYTHON SPECIALIST GROUP (BPSG)

The BPSG was established in 2011; its mission is to provide expert opinion and scientific advice applicable to the conservation of boas and pythons to IUCN and other conservation organizations, government and non-government agencies.

2013 was a very active year; the trade in SE Asian python skins continues to hold our attention and occupy much of our time. Different members are contributing to several CITES related initiatives. A significant event was the Sixteenth Meeting of the Conference of the Parties to CITES held in Bangkok during March. Concerning snakes, several Decisions that will influence the python trade in South East Asia were discussed and adopted. Daniel Natusch was appointed to represent the BPSG as part of the IUCN delegation. We participated both at the UNCTAD/CITES Round Table (March, Bangkok) and the UNCTAD/CITES Meeting (October, Geneva) on the Traceability System for Managing International Trade of Python Skins. We provided peer review to the report that will be published by UNCTAD/CITES on the subject. An assessment of large-scale commercial python-breeding systems in Southeast Asia undertaken by the BPSG in 2012 was updated with information from China and it will be published as a Species Survival Commission Occasional Paper in March 2014.

Cuban Boa (Epicrates angulifer). © Peter Tolson



During November, we signed the *Python Conservation Partnership* (PCP) with the luxury brand Kering (owner of Gucci) and the International Trade Centre (ITC). This is a three-year initiative which aims to contribute to the improved sustainability of the python trade and help facilitate industry-wide change. This partnership was the result of a year of conversations with our partners, and two meetings held in Florence (July) and Geneva (October), as well as different missions to visit CITES authorities in China, Indonesia, Malaysia and Vietnam.

Thanks to the initiative of two BPSG members, the Inaugural Meeting of the Caribbean and Latin American Boid Group was held at the Universidad Interamericana de Puerto Rico in Arecibo during early August. As a result of this meeting, the membership of the BPSG will increase to about 90 members and we expect to increase our capacity for future Red List assessments. Red List assessments continue under the monitoring of Mark Auliya, our RLA Coordinator. We continue compiling and editing our newsletter *Serpens* twice a year, and updating the BPSG's Facebook page thanks to Jessica Lyons.

We would like to acknowledge Fundación Biodiversidad – Argentina for providing us with an executive office and to the Office Vétérinaire Federal of Switzerland for funding our year running costs.

Tomás Waller

Chair, Boa and Python Specialist Group

BRAZIL PLANT RED LIST AUTHORITY

During 2013, we concluded the assessment of 4,617 taxa (58 of them are subspecies or varieties of plants). From this total, 2,118 species were assessed as threatened and an official document was delivered to the Ministry of Environment. For The IUCN Red List, it is also relevant to mention that of these 4,617 taxa, 3,341 are global assessments (i.e. endemics) and 1,276 are national assessments (not endemics or unknown if endemic or not). Of the definite endemics, 1,816 are threatened. We are collaborating with the Ministry of Environment in order to improve and discuss some of the existing legal documents regarding flora conservation in Brazil. We have developed a system for flora extinction risk assessment and threatened species data compiling, where specialists can contribute online.

We published the first Brazilian Flora Red Book. This is the first time that Brazil has used the IUCN system to rigorously assess plant species. We launched the CNCFlora website and Facebook page, and started using social media to improve communication with researchers and the public. Working as consultants, we assisted Brazilian states and other countries with the implementation of Red Listing processes and flora conservation strategies. We also organized scientific expeditions to remote places, which involved data gathering for many threatened species. Action plans continue to be developed for threatened species.

Looking forward, we need to improve support among specialists and conservation organizations to assess the extremely high number of Brazilian species. The low budget and lack of consistent support from Brazilian authorities and global organizations prevents us from achieving this task. Laws protecting threatened species, especially the ones with economic value do exist, but are not always enforced, so this



Alstroemeria caryophyllaea jacq. © Marco Octavio O. Pellegrini

needs updating. To date, there are 43,788 plant species in our flora, and according to GSPC's target 2; all species must be assessed, so we have a long way to go! We hope to raise the necessary funds to support more capacity building, research and conservation strategies. We also hope to increase collaboration between conservation organizations and the public. We continue the assessment of flora species; updating previously concluded assessments, planning conservation actions for all threatened species, as well as identifying priority areas for flora conservation in Brazil.

Dr Gustavo Martinelli

Brazil Plant Red List Authority Coordinator

BRYOPHYTE SPECIALIST GROUP

The mission and key objective of our Specialist Group has been to highlight the importance of recognising bryophytes in all areas of nature conservation. This is essential, since bryophytes (mosses, liverworts and

Sorapilla papuana – a moss we suspected to be Extinct in Australia as it had not been seen for 150 years, but it was recently re-discovered in Queensland.

© Bill Malcolm



hornworts) are very often Endangered, however, usually forgotten and neglected. Our Specialist Group currently comprises 26 members in 22 countries.

In March, we had a European Red List workshop in Sweden, where we updated all country distributional information. For the first time, the latest Red Data Book of Brazilian Flora contains bryophytes, it can be downloaded here. Two students in Brazil are working on action planning for the conservation of four endemic species of Sphagnum and other biologists are doing surveys in the Atlantic South East of Brazil. As part of her conservation efforts in Panama, our member Dr Noris Salazar has published and distributed an educational poster on bryophytes (The Mosses. Minute lanterns of the Forest) to schools and universities. This was done with financial support from the Women's Committee of Smithsonian Institution and Phase II of the Panamanian Atlantic Biological Corridor (CBMAP II) of the National Authority of the Environment (ANAM). Our member in Venezuela, Dr Y. León-Vargas, has finished the web page of the Venezuelan Red List of Bryophytes. This includes some important inventories of bryophytes in the Coastal Cordillera and the Parámo region.

At present, Dr J. A. Harpel is preparing summary status reports for two of the rare bryophytes in Canada. She is also working with the Bureau of Land Management, Salem District's botanist to publish a book on the rare bryophytes of Oregon (US). This book will feature short fact sheets on each species, accompanied by a set of colour photos revealing the morphology of each species.

Dr Benito C. Tan (Singapore/USA) attended the ASEAN meeting in the Philippines at the end of November, where he made a suggestion to host a workshop on the biodiversity and conservation of non-flowering plant groups in SE Asia. This workshop will be held in Bogor, Indonesia in 2014, funded by the Japanese Ministry of Environment. He will be the resource person at the workshop, teaching the biodiversity and conservation of bryophytes in SE Asia for a total of 20 representatives of SE Asian countries, who are park officers and biology teachers.

Dr David Meagher (our representative in Australia) reported that for 2013, several species newly recorded in Victoria were added to the advisory list of rare and threatened bryophytes used by land managers for planning purposes in that state. A draft list of nationally Endangered bryophytes has been prepared for discussion and will be published in the next issue of the Australasian Bryological Newsletter (June 2014). Raising the public's awareness of bryophytes continues to be a focus of conservation-related work. An expedition to find *Sorapilla papuana*, one of the rarest bryophytes in Australia, was successful and was widely reported in Australian media. A field guide to the mosses of the dry forests of South-eastern Australia is scheduled to be published in February 2014. This project was undertaken by Friends of Box-Ironbark Forests and was led by Dr Cassia Read.

Tomas Hallingbäck

Chair, Bryophyte Specialist Group

BUMBLEBEE SPECIALIST GROUP

Our aim is to foster the conservation of bumblebees (c. 250 species) and their habitats around the world. The group consists currently of 75 members from 22 countries. Our



Bombus alpinus. © Pierre Rasmont

newsletter *Bumblebee Conservator* was introduced, edited by Ed Spevak (Saint Louis Zoo).

The first regional Red List assessments were completed for Europe with support from IUCN and assessments for 10 species are published on The IUCN Red List: *Bombus alpinus*, *B. inexspectatus*, *B. lapponicus*, *B. magnus*, *B. mendax*, *B. mucidus*, *B. perezi*, *B. pereziellus*, *B. pyrenaeus*, *and B. reinigiellus*. In North America, all draft assessments are nearly ready for review and one species (*B. franklini*) is published on The IUCN Red List. In South America, draft assessments are nearing completion for at least half of the species. In Mesoamerica, intensive field surveys continue.

In Asia, the faunas are larger and their taxonomy and distribution is less well known, so much more remains to be done. In North Asia, bumblebee distributions are being mapped with first versions of maps to go online at the end of the year, although field surveys and quantification of populations continues. In West Asia, field surveys are being extended to new areas in Iran. In East Asia, with half of the world's species, field surveys have extended into remote and rarely visited areas such as the Kunlun mountains, and the first guide with keys and distribution maps to the bumblebees of North China (78 species) has been produced. An international workshop for Regional Coordinators of the BBSG is planned and funding is being sought.

In Russia, the second edition of the *Red Book of Tomsk Oblast* was published, which included four bumblebee species: *B. confusus*, *B. modestus*, *B. muscorum* and *B. patagiatus*.

In Canada, *B. affinis* had previously been listed as Endangered (largely based on IUCN criteria) federally and provincially. Three other species are now under assessment: *B. bohemicus*, *B. occidentalis*, and *B. terricola*. In the US, a petition for protection of *B. affinis* under the ESA has been submitted by the Xerces Society.

Paul Williams

Chair, Bumblebee Specialist Group

BUSTARD SPECIALIST GROUP

The mission of the Bustard Specialist Group is to advise on, support and contribute to the conservation of the three highly threatened bustards in the Indian subcontinent and Cambodia. The Bustard Specialist Group currently comprises 16 members. The size of the group is deliberately kept small at this stage, as the Chair indicated that in the first years of incumbency the focus should be on two Critically Endangered and one Endangered species in tropical/subtropical Asia; namely Great Indian Bustard (*Ardeotis nigriceps*), Bengal Florican (*Houbaropsis bengalensis*) and Lesser Florican (*Sypheotides indicus*), although this region also hosts the severely threatened Asian Houbara (*Chlamydotis macqueenii*). Members selected to date all have experience relevant to these species. Expansion of the group is anticipated in due course.

There are many threats to Asian bustards, including rapid conversion of grassland and traditional farmland to intensive agricultural production, although in some places also agricultural abandonment (landscapes reverting to scrub); overgrazing and increasing habitat fragmentation and disturbance; declines in habitat suitability through the proliferation of fences, wind-turbines and roads; widespread expansion of suspended cabling across landscapes (see photograph below); subsistence off-take of adults, juveniles and eggs; sport-hunting and mismanagement of protected areas.

Throughout the year, informal advice was provided to the Indian government and Indian conservation biologists on bustard-related issues, particularly in the lead-in to a major government meeting to be held in Delhi, where it will be decided whether to proceed with captive breeding for the Great Indian Bustard. Research was conducted by members of the group on the practicalities of this move and a model created for K-selected species, which may prove useful to other groups, seeking to assess the probable outcomes of exsitu intervention. We supported WCS Cambodia and BirdLife Cambodia in the conservation of the Tonle Sap floodplain for the dwindling population of Bengal Florican (subspecies blandini). This included a review of the new action plan for the species and providing evidence on land use change and population decline. Some members of the group also form part of an initiative to assess the status, ecological needs and migration patterns of a population of Asian Houbara, breeding in the Kyzylkum Desert, Uzbekistan, some individuals of which winter in Pakistan. The Chair gave the Second Ravi Sankaran Memorial Lecture at the Bangalore Student Conference on Conservation Science on 25 September 2013, with the subject 'Inglorious Bustards' (a review of bustard biology and conservation).

Professor Nigel Collar

Chair, Bustard Specialist Group

Asian Houbara. © Andy Swash (WorldWildlifeImages.com) / EBBCC



BUTTERFLY SPECIALIST GROUP

Our aim is to foster the conservation of butterflies and moths and their habitats around the world. Our Specialist Group comprises a membership of 150 and a thirteen member steering committee from seven geographic regions.

The Butterfly Specialist Group (BSG) was formed in late 2010; the group developed a survey of butterfly conservation needs, and currently over 161 people from 39 countries have completed the survey (the full survey is accessible here). We then developed a listserv from these participants and there has been good dialogue on a number of butterfly conservation issues and sharing of research ideas and studies. Several countries are working on assessments of their butterfly fauna. The BSG Chair has also focused attention on monarch butterflies and has been engaged at the highest levels with the government in Mexico and the United States to improve policies for habitat conservation. The BSG was also a co-sponsor in the recent workshop on imperiled checkerspot butterflies on the west coast of the US. This workshop included scientists, agency staff from the US and Canada and NGO staff.

The Xerces Society has funded four students since the inception of the BSG through our DeWind Award. Two of these awards went to students of Butterfly SG members. 'Land Use Abandonment in Eastern Mediterranean – effects on butterfly and moth communities' and 'Consequences of selective-herbicide use on butterfly populations: evaluating the magnitude and persistence of negative herbicidal effects on the demography of a lycaenid' (*Glaucopsyche lygdamus* – Columbia).

The progress of the Butterfly SG has been slower than we would like for a variety of reasons; we have yet to develop a coordinated plan for the SG, communications have been difficult as it is across all time zones and all of the participants are busy with their own work. Funding is also a limiting factor in what we can accomplish. We have convened a meeting associated with the Butterfly Conservation Symposium in the UK in April 2014. Most of the steering committee members will be in attendance. The goals of this meeting will be to develop a draft needs and opportunity based plan that will allow us to direct resources and technical assistance to areas with the greatest need and highest potential for our efforts to make a meaningful impact; identify an RLA for the group, and discuss how we might fund activities – including coordination.

Scott Hoffman Black

Chair, Butterfly Specialist Group



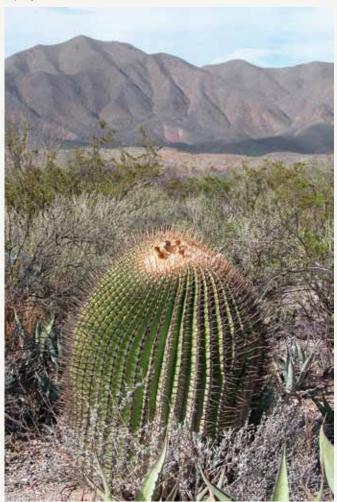


CACTUS AND SUCCULENT PLANT SPECIALIST GROUP

The goals of the Cactus and Succulent Plant Specialist Group (CSSG) are; to support field studies in order to understand the biology and conservation status of succulent plants; to encourage the creation of protected area networks in order to maximize *in-situ* protection for succulent plant species; to support *ex-situ* protection of Critically Endangered species; to support national legislation and effective trade controls for all wild succulent plant species threatened by exploitation for international commerce, and to promote education on the value of succulent plants and the need for their conservation and sustainable use.

Over the past few years, one of our main priorities has been our involvement in the Global Cactus Assessment, a major project with the aim of evaluating all 1,500 species belonging to the cactus family under The IUCN Red List Criteria. The project has now been completed, with the successful participation of many members of our Specialist Group. Several regional workshops were organized in different countries throughout the distribution range of the family. Members of the CSSG, along with a large contingent of regional experts, including professional botanists, ecologists, conservation biologists and plant amateurs, assessed the totality of species in the family. The project counted on the generous support of several governmental and academic institutions; including CONABIO, CONANP, Conservation International, Chester Zoo and the Desert Botanical Garden, INE, Jardin Exotique de Monaco, UNAM, and the University of Sheffield. The results, soon to be published on The IUCN Red

E. platyacanthus - Zacatecas, Mexico. © HMHM



List, confirm the highly threatened conservation status of the Cactaceae

Dr Héctor M. Hernández

Chair, Cactus and Succulent Plant Specialist Group

CANID SPECIALIST GROUP (CSG)

The CSG is the world's chief body of scientific and practical expertise on the status and conservation of all canid species. Our mission is to promote the long-term conservation of all wild Canidae species throughout their ranges. Many wild canids antagonise with human interests, often resulting in persecution. Our challenge is to increase tolerance and mitigate conflict to enable rare and threatened species to survive. The group currently consists of 85 members from 39 countries, and with expertise in many more. All CSG members are actively involved in canid conservation and research, and serve as honorary advisers, bringing with them the experience and the knowledge gained in their professional careers. The CSG is housed by WildCRU at Tubney House, University of Oxford. The Chairs' position at WildCRU is funded by The Born Free Foundation. The Forestry Bureau of the Council of Agriculture, Republic of China (Taiwan), has kindly provided two small grants to support CSG activities.

The main activities of the CSG include the compilation, synthesis and dissemination of canid related information through strategic planning and resulting Action Plans. The most prolific (and satisfying) role of our Specialist Group has been networking people with similar interests in canid conservation and disseminating relevant data and information. The most frustrating has been our inability to raise financial resources to support important projects. Our main dissemination channels include Canid Biology and Conservation, an electronic, peer-reviewed journal, and Canids-L, a mailing list exclusively devoted to Canid biology and conservation with 800+ current members. We maintain a database of current canid research and conservation projects, which will be accessible through our new website shortly.

The CSG continues to oversee the implementation of a conservation strategy for Ethiopian wolves prepared in 2011, one of the first such strategies following the planning guidelines developed by a dedicated SSC Task Force. The Ethiopian Wolf Conservation Programme – established by the CSG in partnership with the Ethiopian government, the University of Oxford and donors, to protect the rarest of all wild

Ethiopian Wolf (Canis simensis). © Brent Huffman / UltimateUngulate



canids – is the main implementing body of this strategy, which includes a 10-year National Action Plan. Jointly with the Cat Specialist Group, the CSG has spearheaded the development of regional conservation strategies for African wild dogs and cheetah, since these two species have similar ecological requirements and face similar threats. Under each regional strategy we support range countries to prepare their own national action plans, ably assisted by regional coordinators recruited by the sponsors of the initiative; the Zoological Society of London and the Wildlife Conservation Society.

We are in the process of reassessing all canid species for The IUCN Red List of Threatened Species™, with a planned completion date of 2015. To facilitate the process for a number of reassessments, we are piloting an online forum prepared by the SSC, onto which the draft reassessments have been posted. During 2014 we plan to undertake assessments on Arctic foxes, dholes, maned wolves and all the South American foxes, with the view to reassess the remaining species in 2015.

Our priority is fine-tuning our global network of canid experts using a working group approach, and promoting the implementation of Canid Action Plan projects and actions. We would like to see more bottom-up initiatives and dynamism amongst the CSG membership.

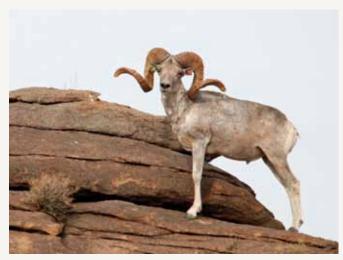
Dr Claudio Sillero-Zubiri

Chair, Canid Specialist Group

CAPRINAE SPECIALIST GROUP

The Caprinae Specialist Group seeks to promote the conservation of mountain ungulates and their habitat. Ongoing concerns include habitat degradation, competition and disease transmission from domestic livestock and poaching. Many of our efforts are focused on Asia, which has both the largest number of species and the greatest conservation problems. For example, several group members participated in workshops that led to an international Argali action plan currently under review. In addition, mountain-adapted species face an increasing threat from global warming; for example, declines in body size in alpine chamois appear related to warming temperatures in the Alps, although data on alpine ibex suggest an opposite relationship between body size and temperature; we clearly still have a lot to learn about the complex effects of climate change.

Our group has also long been interested in the potential biological and economic consequences of trophy hunting. Many caprinae species are highly sought after by trophy hunters. For example, to hunt some species of wild sheep, hunters, often foreigners, are willing to pay several tens of thousands of dollars. This creates both an opportunity to generate funds for conservation and a concern about possible artificial selection. Several of our group members are involved in research on the biological consequences of selective hunting. We also made a substantial contribution to the recent publication IUCN Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives. This publication sets forth the condition required to make a trophy hunting program ecologically and evolutionarily sustainable, as well as a positive contribution to conservation. It builds upon our long-standing position statement on trophy hunting and has already been used by conservation agencies to distinguish trophy hunting operations that do and do not contribute to conservation.



Argali Ram. © Rich Reading

Continuing activities include analyses of long-term data on both live and hunter-harvested animals, and evaluation of the conservation status of different species.

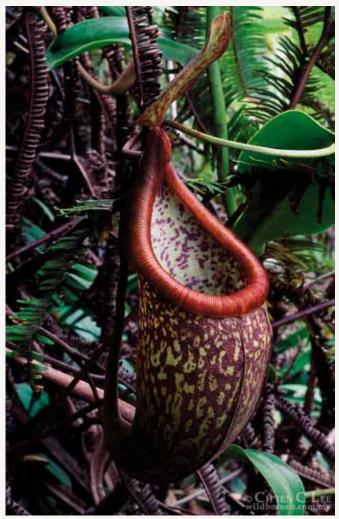
Prof. Marco Festa-Bianchet

Chair, Caprinae Specialist Group

CARNIVOROUS PLANT SPECIALIST GROUP

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

An externally funded project was undertaken by the CPSG in 2013, with the aim of conducting research to gather data to facilitate IUCN Red List assessments of 19 Nepenthes pitcher plant species; all of which were considered threatened in the wild, and for which adequate, up to date information about their conservation status was lacking. Of the 19 species intended for survey, 13 had not been assessed previously. Five field expeditions were undertaken to various parts of Southeast Asia during 2013, including Sumatra (two expeditions), New Guinea, Palawan, Luzon, and Sulawesi. 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 was entered into the Species Information Service, along with distribution maps and supporting documentation and was 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 therefore 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. One unexpected outcome of these survey expeditions was the discovery of one, as yet undescribed species of Nepenthes.



Upper pitcher of Nepenthes rigidifolia. © Chien C. Lee

The 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 to the Environment Agency, Abu Dhabi, without whose generous support, the field surveys necessary for the work undertaken this year would not have been possible.

Robert Cantley

Chair, Carnivorous Plant Specialist Group

CAT SPECIALIST GROUP

The Cat Specialist Group coordinates and supports the activities of currently 203 leading scientists, nature conservation officers and wildlife managers who help to conserve the 37 cat species in 57 countries. The main objectives of the Chair of the group include; maintaining the network of cat experts and partners; assessing continuously the status and conservation needs of the 37 cat species; supporting governments with strategic conservation planning;

developing capacity in felid conservation; providing services to members and partners; assuring the financial resources for the Cat Specialist Group.

2013 was a very busy year; amongst other things, we reconstituted the Cat SG for the quadrennium 2013-16; we finalized reports and prepared publications on leopard surveys in Nakhchivan and north-western Iran, as part of the implementation of the Regional Conservation Strategy for the Leopard in the Caucasus Ecoregion. We assessed the progress of the reintroduction project of Persian Leopards into the Northern Caucasus; the first two litters were born in the conservation breeding centre of Sochi in 2013. We participated in the One Plan workshop for the Arabian Sand Cat that included a status assessment and the development of an in-situ and ex-situ action plan. We facilitated a workshop to develop a National Action Plan for the Critically Endangered Arabian Leopard in Oman. We attended a meeting of the Iberlince Life partners (GOs from Portugal, Andalucia, Extremadura, Castilla la Mancha, and NGOs WWF Spain, CBD Habitat, IberLinx) to discuss future release sites for the Critically Endangered Iberian Lynx. This gave the opportunity to meet the new partners, especial-ly the delegations from the environmental agencies of Portugal and the Spanish provinces. We also attended the third meeting of the Species Conservation Planning Sub-Committee in Oxford, and attended the EAZA Felid TAG Meeting at Zoo Leipzig to strengthen the partnership between the ex-situ and in-situ community for cats. We initiated capacity development on the Balkans for the implementation of the Regional Conservation Strategy for Critically Endangered Balkan Lynx. We are working with the Cat Classification Task Force to revise the current taxonomy of the Felidae.

We are currently working on renewing the Cat Specialist Group website, and we continue to publish two regular issues of Cat News; Special Issues on Non-Panthera felids in southeast Asia and Cats in Iran are underway.

We would like to thank the following individuals and organisations for their partnership and support: Friends of the Cat Group, Wild Cat Club, Panthera, MAVA Foundation, Mohamed bin Zayed Species Conservation Fund, Zoo Leipzig, Forestry Bureau of the Taiwan Council of Agriculture, Parrotia Stiftung, Fondation Gérard Pierre, Nakuso Stiftung, tierschutz. ch-Stiftung, Erlenmeyer Stiftung, Fondation Pierre et Nouky Bataillard, Swiss-Slovak Cooperation Programme, Zoo Al Ain,

Arabian Leopard. © Hadi Al Hikmani



Earth Watch, Innflow AG, Stämpfli Publikationen AG, and especially Patrick Meier, Peter Stämpfli, and Jean-Claude and Annemarie Tschumper.

Dr Christine Breitenmoser and Dr Urs Breitenmoser

Co-chairs, Cat Specialist Group

CAUCASUS PLANT RED LIST AUTHORITY

The mission of the Caucasus Plant RLA is to assess extinction risk of the Caucasus plants and develop strategies for their conservation.

The major achievement of the Caucasus Plant RLA in 2013 was publication of the Regional Plant Conservation Strategy for the Caucasus region Caucasus Plant Initiative by Missouri Botanical Garden's Centre for Conservation and Sustainable Development, in collaboration with BGCI. The Strategy can be downloaded here. The document was developed as a result of the project 'Coordination and Development of Plant Red List Assessments for the Caucasus Biodiversity Hotspot' which was implemented by the IUCN Species Survival Commission in collaboration with Missouri Botanical Garden, USA, the WWF Caucasus Programme Office, and botanists from six countries of the Caucasus (Armenia, Azerbaijan, Georgia, Iran, Russia, and Turkey) from 2006 to 2010. Targets of the Regional Strategy correspond to those of the Global Strategy for Plant Conservation (GSPC) 2011-2020. The document illustrates the relevance of the Caucasus Plant Initiative (CPI) targets to the targets and actions in the revised and updated Ecoregion Conservation Plan (ECP) for the Caucasus. Whenever possible, the CPI should be considered together with ECP in plant conservation and sustainable use planning.

At present the major output of the above project: Schatz, G., Shulkina, T. and Solomon, J. (eds.) *Red List of the Endemic Plants of the Caucasus Region*; Missouri Botanical Garden Press, Saint Louis, USA, is in press. Information on this publication was presented by Prof. Dr George Nakhutsrishvili at the Plant Life of South West Asia conference at the Royal Botanic Garden Edinburgh from 1–5 July 2013.

Prof. Dr George Nakhutsrishvilli

Caucasus Plant Red List Authority Coordinator

Paeonia mlokosewitschii Lomakin. © Sh. Sikharulidze and L. Asieshvili



CAVE INVERTEBRATE SPECIALIST GROUP

Our mission is to stimulate the conservation of all cave invertebrates, focusing on those not yet covered by other Specialist Groups such as millipedes, woodlice, springtails, terrestrial crabs, and spiders which all face very similar threats. Many of the species covered by the Group are currently unknown, undescribed, unprotected, and unassessed for The IUCN Red List. A search of The IUCN Red List 2012 using 'cave' as the keyword, 'Caves and Subterranean Habitats (non-aquatic)' as the habitat, and 'Arthropods' as the taxonomic group resulted in just 10 species – the number of Critically Endangered species we predict will be found in single caves. Being a partially habitat-defined group there is a degree of overlap with a few existing Specialist Groups but we intend to make that a positive influence. Our membership is currently being formed.

Having been established only in December 2013, comprehensive IUCN Red List assessments will not begin until 2014. However, during the period of its establishment, a 'living fossil' spider (*Liphistius kanthan*) which is threatened by a limestone quarry in Malaysia was listed as Critically Endangered. The IUCN Director General wrote to the CEO of Lafarge and the Malaysian State Chief Minister, expressing concern over the threat posed to the spider by their quarrying. Follow-up has been led by the Co-Chair. As yet, no research in the context of the Specialist Group has yet been conducted.

A wide range of outreach activities are planned for 2014; the hash tag #caveinvert has been used on Twitter and will be used by members tweeting their news.

The Co-chairs have been working together for the conservation of cave-adapted fauna for nearly two decades, primarily in SE Asia, Louis from the National Museum of Natural History, and Tony initially from the World Bank and now from Fauna and Flora International.

Tony Whitten and Louis Deharveng

Co-chairs, Cave Invertebrate Specialist Group

CETACEAN SPECIALIST GROUP

The mission of the Cetacean Specialist Group (CSG) has long been and remains to promote and facilitate the conservation of cetaceans (88 species currently recognized) worldwide. It seeks

Kanthan Cave Trapdoor Spider (Liphistius kanthan). © Bjorn Olesen



to be a catalyst, clearinghouse and facilitator for cetacean-related research and conservation action. The advice it provides relates mainly to the status of populations, abundance, trends, current or potential threats, and the efficacy of protection and mitigation. Emphasis is placed on recovery of Critically Endangered and Endangered species, subspecies and subpopulations. Two cetacean species and 16 subpopulations are currently listed as CR; seven species and 10 subspecies or subpopulations, as EN. The CSG also stresses the importance of preventing declines in the first place. Most of the group's work centres on regions where capacity is limited and cetacean populations are either poorly known or not being monitored closely by governments or by the International Whaling Commission (IWC).

A major change over the past year has been the retirement of Bill Perrin after decades of outstanding accomplishment as a scientist and conservationist. Bill chaired the CSG from 1984–1991 and spearheaded the group's Red List assessments until the summer of 2013, when he handed over this responsibility to Barb Taylor, another long time CSG member. We have begun planning and fundraising for the required updating of cetacean species assessments over the next year or so. In the meantime, progress has been made towards assessing newly recognized species such as the Bolivian Dolphin (in progress along with a new assessment of its congener the Amazon dolphin or boto) and the two, rather than one species of Finless Porpoise (both Vulnerable). The Yangtze River subspecies, the world's only freshwater porpoise population, was listed as CR in 2013.

The Critically Endangered Vaquita, a porpoise endemic to the northern Gulf of California, has been a focus of CSG activities for many years. Mexico's new president established an Advisory Commission of the Presidency of Mexico for the Recovery of the Vaquita soon after taking office in December 2012. Four CSG members constitute the scientific component of this commission and they have been deeply involved in its work throughout the past year. A ban on shrimp gillnetting, a major vaquita bycatch threat, along with a shift to vaquita-safe trawling gear is to be implemented within the next three years, but it remains to be seen if this will be effective.

In March 2013 the CSG helped organize and conduct the Third Southeast Asian Marine Mammal Symposium and Workshop in Langkawi, Malaysia. This event provided opportunities to share new information and data on national and regional conservation problems as well as identify gaps and ways to fill them. Workshop sessions on marine protected areas (MPAs), strandings, acoustics, small-scale fishery

Vaquita. © Thomas Jefferson



economics, bycatch and education were intended to improve capacity in the region and better acquaint outside experts with local perspectives.

Several CSG members were involved in the documentation of a mass stranding of melon-headed whales in Madagascar in 2008 and later in the work of an independent panel to review and analyze the possible causes. The widely publicized report of the panel, released in September 2013, concludes that this event was triggered primarily by acoustic stimuli, specifically a multi-beam echosounder system operated by a survey vessel working for an oil and gas company. This finding has major implications because of the common use of high-frequency mapping sonar systems by vessels from the military, the hydrocarbon industry and various other marine industries.

Another important development in 2013 was the creation of an IUCN Joint SSC/WCPA Marine Mammal Protected Area Task Force (MMPATF), co-chaired by two CSG members. The objectives of this Task Force are to promote effective spatial solutions and best practices, bolster capacity in areas of need, disseminate modern tools and methods, assist implementation of global MPA targets and agreements, and enhance opportunities for cooperation.

In recent years, major grants in support of field and lab projects on at-risk cetaceans have been received from the SOS coalition and the International Whaling Commission's Small Cetacean Conservation Research Fund.

More information on these and other activities of the CSG is available here.

Dr Randall Reeves

Chair, Cetacean Specialist Group

CHAMELEON SPECIALIST GROUP

The mission of the Chameleon Specialist Group is to improve the conservation status and sustainable use of wild chameleons. The group has 13 members, based in Cameroon, South Africa, Madagascar, Europe and North America.

IUCN Red List assessments for 64 chameleon species from East Africa have been submitted for review, and assessments of a further seven species from Madagascar are underway. We anticipate completing the Global Chameleon assessment in 2014.

In 2013, we developed a Species Conservation Strategy for the Critically Endangered Belalanda Chameleon in Madagascar, and contributed to the assessments of Chamaeleo, Trioceros and Kinyongia chameleon species

Trioceros cristatus. © Gonwouo Nono L.



included in the Significant Trade Review for the CITES Animals Committee in 2014.

The Chameleon Specialist Group Facebook page has over 700 likes and was used to raise funds for the East African Chameleon IUCN Red List assessment.

We would like to thank Trento Museum and the individuals who generously sponsored our East African Chameleon Assessment via their RocketHub crowd-funding donations.

Dr Richard Jenkins

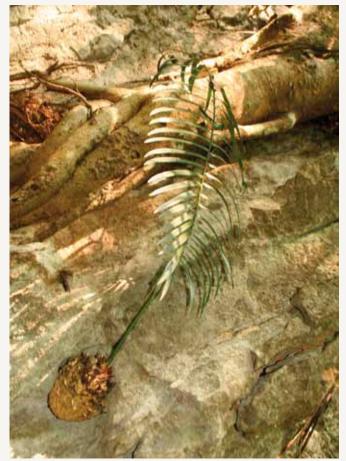
Chair, Chameleon Specialist Group

CHINA PLANT SPECIALIST GROUP

The main objectives of the China Plant Specialist Group (CPSG) are to develop effective mechanisms for the sharing of information, in order to understand the diversity and conservation status of plants in China. We provide advice, expertise and access to decision-makers and stakeholders, in order to improve the effectiveness of conservation actions and the sustainable use of Chinese plants; including *in-situ* and *ex-situ* conservation, and legal protection of threatened species at national and provincial levels. We promote education on the importance of wild plants and the need for conservation and sustainable use, and improving the communication of conservation information within national and international networks.

Over the past year, the CPSG played a key role in the implementation of three national biodiversity projects; Chinese Virtual Herbarium, Species 2000 China Node and The Red List of China Higher Plants. A major milestone was reached in 2013, the completion of Red List assessments for higher

Habitat of Cycas balansae War. © China Plant Specialist Group



plants in China, financially supported by the Ministry of Environmental Protection (MEP). The Red List of China Higher Plants covers 35,610 species (incl. infra-species ranks), 3,767 of these are threatened with extinction. The project was led to its successful conclusion by Dr Haining Qin, in partnership with around 300 experts, many of whom are members of our specialist group.

The first analysis of China's flora was undertaken; these analyses were done at national, biome and provincial levels, and also at the family and genera level. At a national level, the analyses clearly show that loss of natural habitat (as a result of cultivation, urban development and mining, etc.) is the biggest threat to plants. The applications of The IUCN Red List for conservation practitioners is also novel and provides recommendations on how the Red List of China Higher Plants should be used in spatial conservation planning, to contribute to the identification of priority areas for biodiversity conservation.

The Red List of China Higher Plants and the general report were launched in September 2013, and are now available via the website of the Ministry of Environmental Protection (MEP).

Dr Qin Haining and Prof. Liu Quanru

Co-chairs, China Plant Specialist Group

CHYTRID, ZYGOMYCETE, DOWNY MILDEW AND SLIME MOULD SPECIALIST GROUP

Our Specialist Group is focused on increasing wider awareness of the conservation status of chytrids, zygomycetes, downy mildews and slime moulds. We continually develop as a Specialist Group by holding regular meetings and workshops amongst our six members, located in five countries.

During 2013, some changes in the organization of our Specialist Group were proposed, such as separating some of the taxonomic groups that are currently included in this Specialist Group. We compiled necessary information of *Myxomycetes* species and accomplished tentative evaluations applying IUCN Red List Categories and Criteria, as well as increasing the members of *Myxomycetes* and of the other taxonomic groups that are included in this Specialist Group.

We have improved public awareness of fungi conservation by providing information through exhibitions and engaging with people of different ages, including school children; encouraging knowledge and awareness of the importance of fungi conservation. The recognition of fungi as an integral part of biodiversity conservation is still not widely accepted, this is an ongoing challenge which requires a permanent voice from our Specialist Group.

Diacheopsis metallica. © Alain Michaud



We would like to acknowledge the generous support of the Mohamed bin Zayed Species Conservation Fund.

Mayra C. Camino Vilaró

Chair, Chytrid, Zygomycete, Downy Mildew and Slime Mould Specialist Group

Climate Change Specialist Group (CCSG)

The key objectives of this group are to design a strategy to help the 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 coordination of climate change responses between SSC Specialist Groups, SSC partner organizations and other IUCN Programme areas.

For the last five years, the SSC and the IUCN Global Species Programme (GSP) have been developing a new traitbased system to assess the likely impacts of climate change on biodiversity, led by Wendy Foden. The system and the results of it being applied to birds, amphibians and corals, was published in the journal PLoS-ONE on 12 June. This paper is entitled "Identifying the World's Most Climate Change Vulnerable Species: a Systematic Trait-Based Assessment of Birds, Amphibians and Corals", with Wendy as the senior author. Simon Stuart was one of several co-authors. There was considerable media publicity when the results of this paper were announced. The paper reports on the results of one of the biggest studies of its kind, assessing all of the world's birds, amphibians and corals. It draws on the work of more than 100 scientists, most of them SSC members, over a period of five years. Up to 83% of birds, 66% of amphibians and 70% of corals that were identified as highly vulnerable to the impacts of climate change are not currently considered threatened with

extinction on The IUCN Red List of Threatened Species™. The study's novel approach looks at the unique biological and ecological characteristics that make species more or less sensitive or adaptable to climate change. This new method perfectly complements the more conventional ones used to date. Conventional methods have focused largely on measuring the amount of change to which species are likely to be exposed. IUCN will use this new approach and results to ensure The IUCN Red List continues to provide the best possible assessments of extinction risk, including due to climate change.

The first three-day steering committee meeting was held in December 2013; attended by 15 members from academic institutions, non-governmental organisations and government departments. A three-year work plan was developed for the Specialist Group; the highest priority being the development of SSC best practice guidelines for an assessment of species vulnerability. The CCSG has established ten work themes, and leaders for each work theme have been identified from the steering committee and priority tasks established. The CCSG has identified the need for additional steering committee members with expertise on physical climate and climate change impacts on marine biodiversity. Another high priority is for a formal survey to be generated for the SSC membership on their needs of the Climate Change Specialist Group. The new CCSG website can be accessed here.

Associate Professor James Watson and Professor Stephen Williams

Co-chairs, Climate Change Specialist Group

CONIFER SPECIALIST GROUP

The key objective of the Conifer Specialist Group is to provide science based information about the distribution and conservation status of the world's conifers.







Araucaria araucana and Volcan Llaima, P.N. Conquillio, Chile. © Aljos Farjon

The Conifer Specialist Group has achieved a major goal in 2013 in delivering a second full IUCN Red List assessment of all conifer taxa (species and lower ranks). The launch of the new Red List of Conifers on The IUCN Red List of Threatened Species™ took place in July 2013. Of the 615 species assessed, 211 are threatened with extinction on The IUCN Red List of Threatened Species™.

Changes between the two assessments show a downward trend, i.e. more species have moved into higher categories of threat. This is caused by a combination of factors, including the greater accuracy of assessment and more detailed information, and actual deterioration of the ecological situation in other cases. Decline is primarily associated with habitat degradation or destruction; exploitation is another major cause. A more detailed report was presented to the office of the SSC Chair and there was some press coverage around the Red List launch in July.

An indirect achievement of the CSG is the publication by the Chair, Aljos Farjon, and co-author Denis Filer of *An Atlas of the World's Conifers* with the publisher Brill in Leiden. This Atlas is based on 37,000 verified herbarium records of conifers and shows the distribution of all eight families, 70 genera and 615 species and their varieties on geographical maps. The book discusses distribution patterns, endemism, biodiversity hot spots and conservation status. The publication date is November 2013.

Another indirect output of the CSG is a new website of the Conifer Conservation Programme at the Royal Botanic Garden, Edinburgh, which can be accessed here. The Conifer Specialist Group has a close association with the Conifer Conservation Programme of the RBG in Edinburgh, and there was continuous collaboration in 2013 with their staff, who are also key players in the CSG. The results of the Red List of Conifers project, as well as the Atlas, feed directly into that programme providing a link to conservation action.

We acknowledge support from the Framework Grant from the Environment Agency Abu Dhabi to the IUCN Species Survival Commission for the red listing of conifers.

Aljos Farjon

Chair, Conifer Specialist Group

CONSERVATION BREEDING SPECIALIST GROUP

CBSG's mission is to save threatened species by increasing the effectiveness of conservation planning efforts worldwide.

During 2013, CBSG conducted 12 Population and Habitat Viability Assessment (PHVA) or Species Conservation Planning Workshops in 10 countries for species including brown howler monkey, red panda, and Sonoran pronghorn. In addition, we carried out six training workshops and seven planning workshops for conservation organizations. Several of these projects were conducted in collaboration with other SSC Specialist Groups including Reintroduction, South Asian Invertebrates, Polar Bear, Pinniped, Galliformes, and others.

CBSG continues to support integrated conservation planning across the range of captive and wild populations. WAZA Magazine 14 included a number of articles submitted by CBSG members highlighting the One Plan approach and our development of tools to support and promote linkages between conservation efforts across the continuum of management strategies.

The drafting group produced a draft of *IUCN Guidelines for Ex Situ Management* at the end of 2012; this went out for review to a large group of people – including Specialist Group chairs, regional zoo associations, botanical gardens, seed banks, agricultural genome resource banks, NGOs, and other stakeholders. A revised draft is now being finalized and will be

IUCN SSC Conservation Breeding Specialist Group.



presented to the SSC Steering Committee for approval. Next steps include completing the layout and distribution of the guidelines and developing the supporting material (case studies, examples, publications).

In collaboration with a number of colleagues, CBSG is developing a partnership between zoos and the Alliance for Zero Extinction (AZE). This will facilitate the use of zoo resources to safeguard AZE species and their habitats.

The diverse skill-set of CBSG's global network enables us to address the issue of climate change on several levels; we adapt our tools and processes to reflect the reality of current and future changes to climate, habitats, and species; we use meta-modeling tools to provide detailed analysis of multi-species interactions; bringing to the CBSG community a movement that addresses the root cause of human-induced climate change: humanity's dependence on fossil fuels.

At the CBSG Annual Meeting in October, we launched Zoos and Aquariums for 350.

Onnie Byers

Chair, Conservation Breeding Specialist Group

CORAL SPECIALIST GROUP

A logo competition that started in 2012 was concluded in August 2013, with submission of a logo by Pierpaolo Brena. The logo depicts the species (focused on coral) and ecosystem (with fish and other invertebrates, in this case a sponge) perspectives, as well as ocean dynamics and land-based interactions (the wave-line in white, and green coastline), and interactions with people, depicted by the sailing canoe.

We collaborated with the IUCN GMSA and US offices on the proposed listing of 66 corals on the Endangered Species Act, USA. Comments on documentation circulated by NOAA were provided by five members of the group, and the Chair worked closely with the GMSA/US office on the final submission document, March/April 2013-11-25.

We are exploring possibilities of a role for the CSG in support of the Aichi Targets, by aligning the Global Coral Reef Monitoring Network (GCRMN) of the International Coral Reef Initiative (ICRI) with the GEOBON/GOOS global reporting systems, particularly focused on Target 10 (climate-sensitive ecosystems, including coral reefs).

We continued consultations with other IUCN bodies on the following issues: Red-listing of Mediterranean species

(including corals, through the Mediterranean office); Red-listing of deep water corals (through the Brussels office); Red-listing of Jeju island (South Korea) hard and soft corals, and we participated in the Marine Conservation Sub Committee meeting in December 2013.

A funding application was submitted to PEER Science (USAID/NSF) to increase access to online coral identification materials, for example the Corallosphere and CoralHub, new emerging tools such as Coral Geographic, a website on Western Indian Ocean corals, and development of a virtual library including 3D images to facilitate capacity building in coral taxonomy and identification. It was submitted by CORDIO East Africa, but was unsuccessful.

Another funding application was submitted to the Western Indian Ocean Marine Science Association, to update Red Listing of corals for the Western Indian Ocean and calculate a Red List Index, as well as pilot Red List of Ecosystems and coral Species Conservation Plans for the region. Submitted by CORDIO East Africa, but was also unsuccessful.

David Obura

Chair, Coral Specialist Group

CRANE SPECIALIST GROUP

The Crane Specialist Group, with members from over 50 countries, promotes the study and conservation of cranes. We are now preparing a Crane Conservation Plan for the world's crane species, with 11 of 15 species accounts drafted and now being circulated, and intensive discussions undertaken at a two-day workshop.

A Significant Trade Review, conducted under CITES, was completed with trade in Endangered Grey Crowned Cranes suspended for Uganda, Tanzania and Rwanda, and trade in Vulnerable Black Crowned Cranes suspended for Guinea, Sudan, and South Sudan. The trade suspension exists until the country in question can prove that wild caught trade is not having a detrimental effect on wild populations and can show that they can effectively manage and monitor trade through permits. A Single Species Action Plan (SSAP) workshop was conducted for the Grey Crowned Crane.

We have been following up on the motion passed by the 2012 IUCN World Conservation Congress recommending an ecosystem approach to management of Poyang Lake, China; winter home for almost all of the Critically Endangered Siberian

 $\it Mussismilia\ braziliensis\ (DD),\ an\ endemic\ coral to the Southwest Atlantic. <math display="inline">@$ R.L.Moura



Siberian Cranes. © Zheng Zhongijie



Crane. Among other actions, we are assisting with the development of a water management and monitoring plan for the nine sub lakes within Poyang Lake National Nature Reserve.

We co-organized the workshop 'Cranes and Sustainable Agriculture'. The workshop, with over 100 participants, issued *A Call to Action* sent to governments of Northeast Asia. A side event launched a global network aimed at reducing impacts of power lines upon cranes.

The Crane SG is now working on a practical handbook for reducing conflicts between cranes and agriculture.

A website has been established including the posting of Global Crane News.

Mr Jim Harris

Chair, Crane Specialist Group

CROCODILE SPECIALIST GROUP

The mission of the Crocodile Specialist Group (CSG) is to assist IUCN and SSC to meet their missions with regard to the conservation, management and sustainable use of world crocodilians. The CSG has 496 members throughout 62 countries and conducts global working meetings biennially.

Red List assessments were completed for *Crocodylus* siamensis, *Tomistoma schlegelii*, *C. mindorensis* and *C. plaustris*. Of the 23 species of living crocodilians, the Red List assessments now categorize the global populations of six species as Critically Endangered, one as Endangered and three as Vulnerable.

CSG members have been intimately involved in successful reintroductions of two species listed as Critically Endangered on The IUCN Red List; *Alligator sinensis* in China and *Crocodylus mindorensis* in the Philippines. Various proposals are being considered to embark on reintroduction programs for another species listed as Critically Endangered; *Crocodylus siamensis* in both Thailand and Cambodia.

Management programs for the 23 species of crocodilians, across some 100 countries, are highly diverse. All species are listed on the Appendices of CITES, with 12 species involved in regulated international trade, producing either "classic" (A. mississippiensis, Crocodylus acutus, C. moreletii, C. niloticus, C. novaeguineae, C. porosus and C. siamensis), or caiman (Caiman crocodilus, C. yacare, C. latirostris, Melanosuchus niger) skins. The conservation management programs for these commercially valuable species are highly

Saltwater Crocodile. © Grahame Webb



diverse. Production is through captive breeding, ranching (eggs or juveniles), wild harvest, or various combinations of these. The CSG is committed to fostering protection strategies where they are the ones most needed within a national context, and sustainable use strategies where incentives are required to tolerate crocodilians. A key CSG aspiration in countries which trade in crocodilians is that trade is legal, sustainable and verifiable.

Through supporting sustainable use programs, the CSG contributes to economic development within countries managing their crocodilian populations for this purpose. The CSG also assists by making small grants available to graduate students working on crocodilians for their research projects anywhere in the world. In 2013, a further 13 students were granted CSG Student Research Assistance Scheme grants, which makes a total of 65 recipients from 22 countries, since the scheme was initiated in 2009.

Virtually all donations in cash and in-kind received by the CSG come from or through its members. These donations are made to an NGO (International Association of Crocodile Specialists Inc.), whose mission is to support the IUCN SSC Crocodile Specialist Group.

Prof. Grahame Webb

Chair, Crocodile Specialist Group

CROP WILD RELATIVE SPECIALIST GROUP

Our mission is to help ensure that crop wild relatives are adequately conserved and sustainably utilized, to enhance global food security and aid poverty alleviation. The key objectives of our Specialist Group are to develop effective strategies for gathering, documenting and disseminating baseline information on crop wild relatives (CWR); promote the conservation and use of CWR; provide advice, expertise and access to appropriate contacts to enhance the actions of individuals or organizations working on CWR conservation and use, and increase awareness of the importance of CWR diversity to agriculture and the environment among governments, institutions, decision-makers and the general public.

At the request of the FAO Commission on Genetic Resources for Food and Agriculture, the group prepared an

Lepidium turczaninowii Lipsky is a wild relative of cabbage crops and garden cress. Assessed as Critically Endangered on The IUCN Red List, it is endemic to the surroundings of Feodosija in eastern Crimea and has recently only been found in Ilyi Capes. © Victor Melnik



important background document on 'Conservation and sustainable use of plant genetic resources for food and agriculture: a toolkit for national strategy development' (Maxted *et al.* 2013) which targets the conservation of CWR (and landrace) diversity at the national level. This document includes a section on The IUCN Red List emphasizing the importance of using this system and explaining the basic process in threat assessment.

A project to assess the extent to which floristic diversity of home gardens in Benin (Africa) contribute to the conservation of threatened species and CWR was undertaken (Solako *et al.* 2013) by CWRSG members.

The project 'PGR Secure – Novel characterization of crop wild relative and landrace resources as a basis for improved crop breeding' is currently entering its third year. It aims at researching novel characterization techniques and conservation strategies for European CWR (and landrace) diversity, and further to enhance crop improvement by breeders, as a means of underpinning European food security in the face of climate change. This project has driven the development of CWR conservation strategies in several European countries.

Members of the group have also been involved in the project: 'Adapting agriculture to climate change: collecting, protecting and preparing crop wild relatives'. It aims at identifying and collecting CWR diversity for 84 priority crops for ex-situ conservation, and preparing them for use in plant breeding programmes in order to develop new crop varieties adapted to new climates. The project has developed the webbased Harlan and de Wet CWR Inventory.

The CWR Specialist Group continues its Red Listing activities and is in the process of preparing Global Red List assessment for all 1392 species in the Harlan and de Wet CWR Inventory.

Members of the group were also involved in the Global Earth Observation Biodiversity Observation network (GEOBON) to develop essential biodiversity variables for monitoring progress toward the achievement of Target 13 of the Strategic Plan for Biodiversity 2011–2020, which includes CWR.

In addition, funding has been secured for the *in-situ* conservation and use of CWR in three ACP countries of the SADC region (Mauritius, South Africa, and Zambia). The aim of this project is to enhance the link between conservation and use of CWR in the SADC region as a means of underpinning regional food security and mitigating the predicted adverse impact of climate change.

Dr Ehsan Dulloo and Dr Nigel Maxted

Co-chairs, Crop Wild Relative Specialist Group

CUBAN PLANT SPECIALIST GROUP

The Mission of the Cuban Plant Specialist Group (CPSG) is to evaluate the conservation status of Cuban native plants, and to give advice to decision-makers on the necessary measurements for their conservation. The CPSG follows the National Strategy for Conservation of Plants (2011–2020).

The annual meeting of members was held in the National Botanic Garden and was dedicated to threatened genera, endemic to Cuba. This year, it also updated the list of members and presidency for the years 2013–2016.

CPSG members contributed to the publication of the book TOP 50 – the 50 most threatened plants of Cuba, thanks to a

collaboration with the National Centre for Protected Areas. We are also working on an edition of more than 500 pages of taxa, which were re-categorized as a first step towards implementing the Red List of Vascular Flora of Cuba.

The CPSG wants to acknowledge the National Centre for Protected Areas and the Cuban National Botanic Garden for facilitating our work, as well as to all collaborators to the Flora of Cuba, for giving us their advice.

Dr Angela Leiva

Chair, Cuban Plant Specialist Group

CUP FUNGI, TRUFFLES AND ALLIES SPECIALIST GROUP

Fungi are different from animals and plants. They are key players in all major freshwater, marine and terrestrial ecosystems. Plants produce, animals consume, but fungi recycle. Without fungi, animal and plant life on this planet would be unsustainable. Their economic importance is enormous and overwhelmingly positive. Like animals and plants, they are threatened by climate change, habitat destruction, pollution and persecution. Unlike animals and plants, they are generally overlooked by conservationists and usually have no legal protection. On that basis, this IUCN SSC Specialist Group aims to promote conservation of cup fungi, truffles and their allies by raising public awareness about fungi and the need to protect them; developing capacity for fungal conservation; lobbying to have fungi included in national and international conservation legislation; developing a better understanding of what threats exist for fungi; evaluating the conservation status of individual species and groups of species, and exploring how to conserve endangered parasitic fungi, and establishing policy on that issue.

During 2013, the group, which currently has 12 members, were engaged in a number of key activities and outputs. We reviewed the conservation status of desert truffles (a report of the findings is currently being prepared). We are evaluating CBD National Biodiversity Strategies and Action Plans and National Reports for their coverage of fungi; we are contacting all CBD SBSSTA National Focal Points in person to raise awareness of the importance of fungi. We support the International Society for Fungal Conservation, including organizational help and participated in the 'Third International

Escobaria cubensis. © Mikhail S. Romanov





Terfezia arenaria (a desert truffle). © A. Rodríguez / www.trufamania.com

Congress on Fungal Conservation' (Turkey, November 2013); we also support the Arab Society for Fungal Conservation.

We have contributed to the Global Fungal Red List Initiative, and have evaluated the conservation status of 30 ascomycetes (in addition to the desert truffles already mentioned); mostly species associated with ash and elm (trees with rapidly declining populations in Europe and elsewhere). We held two workshops at the Congress in Turkey; on raising awareness of fungi, and on preparing assessments that are compatible with The IUCN Red List (using desert truffles as an example).

In terms of education and outreach, we are adding information about fungi to selected pages in the English language version of Wikipedia, and lobbying to include fungi in the National Curriculum for schools in England.

We would like to acknowledge the Mohamed Bin Zayed Species Conservation Fund for its generous support of our work on desert truffles.

David Minter

Chair, Cup Fungi, Truffles and Allies Specialist Group

CYCAD SPECIALIST GROUP

The Cycad Specialist Group (CSG) made great progress in 2013, and has further important progress planned for 2014 and 2015. Addressing the world's most threatened group of plants, the mission of the CSG is to coordinate worldwide expertise in cycads in order to conserve these living treasures. Recent progress meets this mission strategically and directly.

A major accomplishment of the CSG last year was the launch of the online 'World List of Cycads'. At the most recent CSG meeting (Shenzhen, China, 2011), it was acknowledged that the accelerating scope and intensity of cycad study often outpaces print publication. Thus, the CSG decided to maintain an online World List of valid and accepted species, updated in real time as the science of taxonomy improves. This authoritative classification is essential to all other cycad conservation action.

Other major advancements this year include the publication of the CITES and Cycads: a user's guide, (Kew, 2013), and Building living plant collections for conservation: a guide for public gardens (BGCI, 2014) with Inputs and coauthorship by CSG members.

We have a new structure for the current quadrennium with two co-chairs, John Donaldson and Patrick Griffith; two vice chairs, Cristina Lopez-Gallego and Michael Calonje; and DeWet Bosenberg as the Red List Authority.

Planning for the current and future years is underway; we continue to organize international meetings with the CSG every three years, the next one scheduled for Colombia in 2015. A conference website was launched last year to coordinate the conference. We are completing the Red List Index based on the 2010 assessments and follow up. We are also planning workshops for 2014 in the USA (Montgomery Botanical Center) and Thailand (Nong Nooch Tropical Botanic Garden) to prepare for the next IUCN Red List update in 2015.

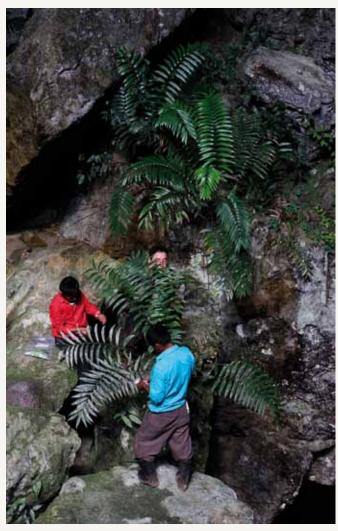
All of this activity supports direct conservation programmes and actions by CSG members. In that area we are excited to report that three current Save Our Species (SOS) funded projects are focused on cycads; in South Africa, Belize, and Colombia. These projects are providing direct help in the areas of enforcement, monitoring, and *ex-situ* propagation techniques.

The CSG gratefully acknowledges SOS – Save Our Species for this project support, and also Shenzhen Fairy Lake Botanic Garden, SANBI, and Montgomery Botanical Center for in-kind support of the activities mentioned above.

Dr John Donaldson and Dr Patrick Griffith

Co-chairs, Cycad Specialist Group

Zamia decumbens – Critically Endangered Cycad known from a limited area in Belize. © Dr Chad Husby



DEER SPECIALIST GROUP

The mission of the Deer Specialist Group is to contribute to biodiversity conservation through the improvement of the welfare and sustainability of deer populations around the world.

One of our main tasks for the next period will be to assess the 71 deer species as part of the Global Mammal Assessment. We started the quadrennium (2013–2016) by appointing our membership and organizing the assessment activities. Two new Red List Authorities have been selected and integrated into the DSG; the RLA for new world species is Dr Eveline Zanetti and the RLA for the old world species is Dr Sarah Brook. We are seeking additional membership expertise to assess all deer species. The last assessment was completed in 2008 and we are certain new analysis will shift the status of some species.

Also in 2013, we attended the International Mammal Congress in Belfast, Ireland, and met with SSC staff and other SG chairs to standardize our selection criteria, species reassessment, discuss taxonomy issues, and establish timelines for our work. We will follow the taxonomy outlined in the cervid chapter of the Handbook of Mammals of the World.

In consultation with our RLAs and SSC staff, we have decided to shorten the Red List assessment process; we will not reassess species whose status has changed significantly in the past five years. We will reassess species who meet the following criteria: a) species that DSG members believe have shown dramatic changes in distribution and numbers over the past five years; b) species where increased knowledge of their populations and distributions might lead to changes in IUCN Red List status; or c) new species as a result of revised taxonomy.

We have selected Dr Patricia Black de Decima as editor of the DSG Newsletter. Our annual newsletter contains articles, abstracts from regional workshops, and news submitted by our members, it is available here.

Other ongoing activities include the regular update of our web page; output of deer related materials to the general public, and the distribution of relevant articles published by our members. Susana Gonzlez took part in a TV documentary in Uruguay 'The Last Pampas Deer', which can be seen here.

Susana González and William McShea

Co-chairs, Deer Specialist Group

Pampas Deer. © Susana González





Great Northern Diver (Gavia immer). © Diver/Loon Specialist Group

DIVER/LOON SPECIALIST GROUP

Our aim is to foster the conservation of the genus Gavia (Divers/Loons) and their habitats around the Northern Hemisphere where they occur. Our primary objective is to facilitate communication among loon researchers worldwide, as well as with the active, established volunteer conservation organizations in the states or provinces where divers/loons occur throughout the world. The Diver/Loon Specialist Group currently has a membership of 40 professionals, and more than 2,000 citizen loon enthusiasts. Several affiliated self-sustaining volunteer loon organizations in North America and Europe (USA 14 states, Canada and Scandinavia, Iceland, UK) are engaged in various activities, such as loon population and breeding success monitoring, public education and fundraising. Each affiliate distributes an annual report on their activities.

Preservation and restoration of breeding loon populations in a large number of lakes where expanding human development (housing, recreation) takes place is a high priority. Public education is an important part of our conservation effort. Research activities include banding of individual birds; following their movements; determining site fidelity, longevity and determination of body burden of toxic substances in loon populations. Scientific workshops are the major medium of communication among members and affiliates of the D/L Specialist Group. Two scientific workshops were held in 2013; a one day workshop in New Hampshire, USA, and a two day workshop in Finland.

Joseph J. Kerekes

Chair, IUCN SSC Diver/Loon Specialist Group

DRAGONFLY SPECIALIST GROUP

Our aim is to foster the conservation of dragonflies (Odonata) and their habitats globally; by assessing their threat status according to The IUCN Red List; education of non-specialists (field guides, workshops, publications etc.) and using dragonflies as a flagship species for monitoring water quality. The group currently consists of 44 members from 28 countries.

Currently, 2,752 dragonflies are listed on The IUCN Red List, which is nearly half of all known species. In 2013, over 150 new or updated dragonfly assessments were published, while 21 species are flagged as 'out-dated'. Most Australian and North American dragonflies are not on The IUCN Red List, but a comprehensive database and all information for assessing the global threat status is available. We are currently searching

for ways to transfer the information without too much doublingup of work.

A meeting of the Dragonfly Specialist Group was held in June in parallel with the World Wide Dragonfly Symposium in Germany. The focus was on South America, where we lack assessments and information; hence a sub-group has formed, chaired by Joachim Hoffmann, which is involved in regional assessments.

A meeting with a focus on African Odonatology was held in November 2013 in Stellenbosch, South Africa, where we discussed all necessary changes, new assessments and updates for the African dragonflies (to be entered in the SIS in 2014).

In February 2013, a project on the Amani Flatwing (Amanipodagrion gilliesi) assessed as Critically Endangered on The IUCN Red List, was started in collaboration with the Tanzanian Forest Conservation Group and the Amani Nature Reserve, and funded by the Mohamed bin Zayed Species Conservation Fund. The project aims to raise awareness of the rarity of the dragonfly and on the connection of biodiversity, environmental quality and human well being.

Another project funded by the Mohamed bin Zayed Species Conservation Fund, focused on the Kauri Redcoat Damselfly (*Xanthocnemis sobrina*), which is endemic to the New Zealand North Island. It is the only representative of its group in the country, assessed as Data Deficient on The IUCN Red List. The project aims to clarify some uncertainties around the taxonomy of the species and to assess its current conservation status.

We are aiming to have all dragonflies on The IUCN Red List by 2016. This requires a lot of work, and involves many meetings (especially with regards to the assessment of South America's dragonflies), this will become difficult without external funding.

The Powder Blue Damselfly (*Arabicnemis caerulea*) was featured as an Amazing Species on The IUCN Red List website, and the Amani Flatwing (*Amanipodagrion gilliesi*) will be featured in '*No More Endlings: saving species one story at a time*' by Allison Hegan. In South Africa, the recently established Dragonfly Biotic Index (DBI) is becoming popular for environmental impact assessments and habitat monitoring.

Viola Clausnitzer

Chair, Dragonfly Specialist Group

Gilded Presba (Syncordulia legator). $\ \odot$ Viola Clausnitzer



DUCK SPECIALIST GROUP

The Duck Specialist Group is a global network of duck specialists working on the monitoring, research, conservation and management of wild duck populations. The DSG strives to facilitate effective communication and transfer of knowledge and best practice between members and others with an interest in duck management and conservation. It works closely with the Threatened Waterfowl Specialist Group (TWSG), whose focus includes globally threatened duck species.

The focus during 2013 was the facilitation of activities supporting European seaduck conservation. To this end, the DSG supported the Secretariat of the African-Eurasian Waterbird Agreement (AEWA) to develop action planning for the Vulnerable Long-tailed Duck, for which a workshop will be held during 2014. A core group was established to develop the European Seaduck Working Group, which will help to coordinate and strategically develop future seaduck monitoring and research in Europe.

A workshop on monitoring needs for breeding duck populations in Europe was held at the European Bird Census Council conference in September. The outcomes of this workshop will be used to take forward more coordinated monitoring of breeding ducks in Europe.

Ongoing support continued to be provided to Wetlands International outputs such as Waterbird Population Estimates and the African-Eurasian Waterbird Monitoring Partnership.

A new logo was finalized, featuring the extinct Labrador Duck (*Camptorhynchus labradorius*).

We would like to gratefully acknowledge the continued financial support of the Federation of Associations for Hunting and Conservation of the EU (FACE).

Richard Hearn

Chair, Duck Specialist Group

EASTERN AFRICAN PLANT RED LIST AUTHORITY

I am a Kenyan based in the National Museums of Kenya, Nairobi, and work throughout Tropical Africa. I am an Honorary Research Associate of the Royal Botanic Gardens, KEW. The Eastern African Plant Red List Authority (EAPRLA) has 19 members from Kenya, Tanzania, Uganda, Burundi, Rwanda, Ethiopia, DRC and South Sudan, plus four expatriate members from UK and US. Since the Group's inception, we have held eight workshops and assessed over 1600 species, mainly from the EArc and EACF hotspot of Kenya and Tanzania. We have refined our assessment process and we are now beginning to include taxa from the rest of Eastern Africa.

Steller's Eider (*Polysticta stelleri*). Background – King Eider (*Somateria spectabilis*). © Jan Pedersen



In March 2013, the 12th Red Listing workshop was held; 218 species were assessed and these assessments were entered into SIS by Dr Henk Beentje, as well as other assessments from workshop number 6, where a total of 366 species were assessed. Older assessments are awaiting further review. Funding received from the Mohamed bin Zayed (MBZ) Species Conservation Fund, allowed us to hold workshop number 8 in early 2014, focusing on the family Acanthaceae. A project proposal for work in South Sudan was approved by the CEPF Afromontane Hotspot program; a project proposal submitted to the MacArthur Foundation was rejected.

Our future aims are to expand the group; to secure funding for workshops and field activities; to improve our Red Listing process, to minimize the delay between assessments and listing; to increase awareness of threatened plants in the region; and to ensure that this leads to action and policy changes within member countries (e.g. the inclusion of all threatened plant species on the schedules of the new Kenyan Wildlife Act).

Quentin Luke

Chair, Eastern African Plant Red List Authority

EQUID SPECIALIST GROUP

The mission of the Equid Specialist Group (ESG) is to conserve biological diversity by developing and executing programs to study, save, restore and wisely manage wild equids and their habitats. Our greatest challenge is improving the conservation status of wild equids, to sustain their ecosystems and to enhance the livelihoods of local communities.

In order to achieve these long-term goals, we work towards the following objectives; to work with scientists, government personnel and local residents in the countries where wild zebras, asses, and horses exist; to help raise funds for equid research and conservation programs; to secure funding for the training of nationals in equid range states, and to collaborate with and assist other IUCN SSC Specialist Groups.

The ESG is a worldwide (23 countries), science-based network of experts on equid behavior, ecology, physiology,

Impatiens cribbii - Endangered on The IUCN Red List. © Quentin Luke



population dynamics, population genetics, management and conservation. The ESG actively initiates and supports programs for research, training, monitoring, management and conservation of the world's seven wild equid species and their habitats. We are responsible for providing species assessments for the IUCN Red list of Threatened Species, facilitating the strategic planning for wild equid conservation, producing action plans and policy guidelines, as well as providing information to CITES.

A critical aspect of conserving wild equids and their ecosystems is capacity building in range states. In Ethiopia, Fanuel Kebede completed his PhD on African wild ass and Grevy's zebra with distinction, and the examiners wrote that it was "an excellent thesis which makes a profound contribution to the conservation of two highly endangered species in Ethiopia." He has resumed his job as a Senior Wildlife Expert in the Ethiopian Wildlife Conservation Authority.

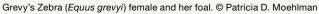
An MSc training program in Wildlife Ecology has been established with Hamelmalo Agricultural College in Eritrea. Training range state nationals in behavioral ecology, population dynamics, and ecosystems ecology is fundamental to improving the conservation status of the Critically Endangered African wild ass and the biodiversity of its arid habitat in Denkelia.

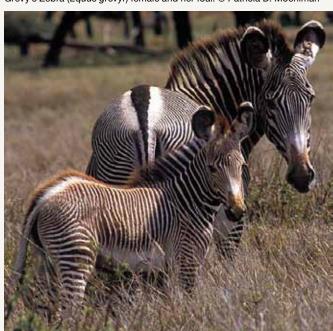
Futsum Hagos has started his two-year MSc program at the University of Nairobi. Dr Albano Beja-Pereira of CIBIO in Portugal is coordinating research on the population genetics of African wild ass in Ethiopia and Eritrea. Preliminary analyses indicate that there is no hybrid breeding between African wild ass and domestic donkey. The Prezwalski's horse was downlisted from CR to EN and the Mountain zebra was down listed from EN to VU.

We are very grateful to our donors who have provided essential support to wild equid research, training and conservation programs; Ecohealth Alliance (formerly Wildlife Trust), Saint Louis Zoological Park, Sea World and Busch Gardens Conservation Fund, Gilman International Conservation Program, Basel Zoo, Liberec Zoo and Plock Zoo.

Dr Patricia D. Moehlman

Chair, Equid Specialist Group





FLAMINGO SPECIALIST GROUP

The Flamingo Specialist Group (FSG) is a global network of flamingo specialists (both scientists and non-scientists) concerned with the study, monitoring, management and conservation of the world's six flamingo species. Its role is to actively promote flamingo research, conservation and education worldwide by encouraging information exchange and cooperation among these specialists. The group is coordinated from the Wildfowl and Wetlands Trust, Slimbridge, UK as part of the IUCN SSC/Wetlands International Waterbird Network. FSG members include experts in both *in-situ* and *ex-situ* flamingo conservation and a wide-range of related fields, including breeding biology, infectious disease, toxicology, movement tracking and data management. There are currently 171 members, representing 138 organisations in 43 countries.

During 2013, the list serve continued to provide an active channel of communication for members, with over 80 messages posted during the year concerning varied subjects such as the ageing of flamingos, the 2013 Red List update, botulism, breeding and ringing reports from around the world, and many other subjects of concern to both *in-situ* and *ex-situ* flamingo conservationists.

The next edition of the FSG Newsletter, *Flamingo 19*, has been compiled and will be ready for printing in spring 2014.

Laurie Conrad, Catherine King and colleagues have been busy organising the 'Third International Flamingo Symposium', which will be held on 5–9 October 2014 at the Bahia Resort and Hotel in San Diego, California. The symposium presentations will cover a range of topics including basic ecological studies, wild population accounts, and zoological behaviour and husbandry studies. Workshops will focus on improving collaborations and *in-situ* conservation. The dedicated symposium website can be accessed here.

An FSG membership database was produced and all contact details of FSG members were verified. The database provides an easy method for identifying members in particular

Newly-ringed Greater Flamingo in Algeria. © Samraoui Boudjema



regions, countries and organisations, allows gaps in membership to be identified, and provides an efficient mechanism for keeping members' details up-to-date. In 2014, members will be surveyed to determine expertise and their recommendations for the future of the FSG.

Thanks to the hard work of FSG member Paul Rose, the FSG's Facebook page is an active source of flamingo news and chat. The page has over 1,000 followers and an average of five posts every week.

Rebecca Lee

Chair, Flamingo Specialist Group

FRESHWATER CRAB AND CRAYFISH SPECIALIST GROUP (FCCSG)

Our aims are to foster the conservation of all freshwater crabs (1,300 species) and crayfish (569 species) worldwide; to act as the Red List Authority for these species; to update their IUCN Red List species assessments, and to educate non-specialists about all aspects of this taxonomic group. The FCCSG currently consists of 25 members from 15 countries. Our website can be accessed here.

We are currently updating a number of freshwater crab conservation assessments. These include Adeleana chapmani from Borneo, two species of Karstama from Bali, Achlidon agrestis from Mexico, Spirocarcinus garthi and Potamocarcinus darienensis from Panama, Hypolobocera caputii from Ecuador and Peru, Valdivia haraldi from Brazil, and four species of Potamon from Greece. The list of newlydescribed species of freshwater crabs from Africa, the Mediterranean, Central and South America, and Asia continues to grow and these are all targeted for initial conservation assessments and inclusion in The IUCN Red List.

We have completed distribution maps for all 298 species of freshwater crabs found in the Neotropcial region, and presented the initial findings at a conference in Costa Rica, and the findings were published in *Zookeys*. The next step is to get these species distribution maps vetted, and to make them available on The IUCN Red List website. We served as Evaluator for the global Red List assessments of over 800 species of freshwater shrimps.

Other initiatives include fostering the global Red List assessments for the 75 species of anomuran freshwater crabs (Aeglidae), and for the 500 species of Branchiopoda (fairy shrimp, clam shrimp, tadpole shrimp and Cladocera). Both groups include species facing immediate threats, and both include species of economic and ecological importance. The long-term goal is to expand the FCCSG to include these

freshwater crustacean groups. We worked on the initiation of SSC Strategic Conservation Plans aimed at conserving Critically Endangered species of crayfish in Tennessee,USA; but this project is currently on hold, pending new research on the status of

Giri Putri Cave Crab (*Karstama balicus*) from a Cave in Bali, Indonesia. © Tony Whitten



the target species. Threatened species of freshwater crabs in Singapore and Borneo are also being considered as possible subjects of species conservation planning projects.

Neil Cumberlidge

Chair, Freshwater Crab and Crayfish Specialist Group

FRESHWATER FISH SPECIALIST GROUP (FFSG)

After nine years leading the FFSG, Professor Gordon McGregor Reid stepped down as its Global Chair. Dr Richard Sneider (CEO of One World Apparel LLC and Unger Fabrik LLC, member of the Chairman's Council of Conservation International) took on the role of Global Chair in December 2013.

The mission of the FFSG is to achieve conservation and sustainable use of freshwater fishes and their habitats through generating and disseminating sound scientific knowledge; creating widespread awareness of their values, and influencing decision-making processes at all levels. FFSG members are very active in the field of ichthyology; ranging from studies on reducing fishing pressure on Labeobarbus species in Ethiopia to strengthening food security and biodiversity in the face of dams and climate change impacts in the greater Mekong Basin. Members are also focusing their efforts on finding sustainable harvesting methods for aquatic resources, tackling invasive species, freshwater fish systematics and *ex-situ* management, just to name a few key areas of activity.

The FFSG have been busy preparing two new initiatives to be launched in 2014. The 'Global Freshwater Fish BioBlitz', a citizen science project, which involves the public in wildlife monitoring by submitting their observations (photographs of specimens and location) of freshwater fish in their natural habitat. The FFSG are also partners for World Fish Migration Day 2014 (24 May). The aim is to improve the publics' understanding of the importance of migratory fish and their needs, as well as healthy rivers. A new website was launched to raise the profile of the FFSG and improve awareness of freshwater fish conservation. The website covers the scope of FFSG's work and key activities as well as providing a range of resources.

FFSG members participated in The IUCN Red List freshwater biodiversity assessment workshops; part of the 'Freshwater Biodiversity Assessment and Conservation Priorities for the Mediterranean Basin Hotspot' project. As Iran is inhabited by characteristically European species, with some South and Central Asian ichthyofauna, it was included in the

Celestial Pearl Danio (Danio margaritatus). © Dr Tyson R. Robert



assessments. In total, 322 freshwater fish species have been reassessed or assessed for the first time and the information presented will assist with the identification of Key Biodiversity Areas. The FishBase for Africa team (Royal Museum for Central Africa, Belgium) has carried out IUCN Red List assessments for 94 species inhabiting the Lake Tanganyika basin; including species assessed for the first time as well as reassessments. The Chico Mendes Institute (ICMBio for its acronym in Portuguese) is the Brazilian governmental organization in charge of National Red List Assessments. In 2010, ICMBio signed a collaboration agreement with IUCN to assess 10,000 species of Brazilian fauna by 2014 using The IUCN Red List Categories and Criteria. The Anguillid Specialist Sub-Group held a workshop, hosted by the Zoological Society of London, to assess 15 of the 19 anguillid species and sub-species under The IUCN Red List Criteria. Prior to the workshop only five anguillid species had been globally assessed and it was widely agreed that there was a need for a full assessment of these fishes. The group is now focussed on completing the draft assessments for peer review and submission to The IUCN Red List Unit.

Over the last twelve months, the FFSG South Asia office has initiated several programmes including setting up the Freshwater Fish Conservation Network of South Asia; organizing workshops and meetings on freshwater fish conservation, Alliance for Zero Extinction sites and Aichi 2020 targets, and carrying out India's first alien fish eradication programme. The office has also developed and disseminated a number of education and awareness materials including posters, t-shirts and CDs. The first issue of their quarterly newsletter, MIN, was released in September 2013.

FFSG has been generously supported by Chester Zoo, UK (North of England Zoological Society) since 2004. As well as providing office space, a salary for the Programme Officer and logistical support, funds have been allocated each year for running the FFSG's projects. The FFSG would like to take this opportunity to say a big thank you to Chester Zoo for all their support to date.

Dr Richard Sneider

Chair, Freshwater Fish Specialist Group

FRESHWATER PLANT SPECIALIST GROUP (FPSG)

The FPSG exists to promote and further the conservation of wetland-dependent plants and the habitats upon which they depend. To do this, we need to identify which species (estimated to be at least 20,000 worldwide) are truly dependent upon wetlands; review their status against The IUCN Red List Criteria and then address their conservation needs. At the time of writing, the FPSG has 88 members in 46 countries.

The FPSG was formally established in 2012, with the support of the Fondation Tour du Valat and Plantlife. Activities to-date have mainly involved setting in place the processes and structures necessary for the group to be able to work effectively. A hosting agreement has been signed with the Wildlife and Wetlands Trust, which will enable the FPSG to apply for core funding, as well as benefitting both organisations in their everyday operation. Melanie Bilz has taken on the role of Red List Authority for the group. Dr Hossein Akhani has agreed to coordinate a subgroup within the FPSG, concentrating on the conservation of halophytes,



Isoetes fluitans – Endangered and endemic to a small area in Galicia in north-west Spain. © Klaus van de Weyer

particularly those of inland wetlands. Nick Stewart has agreed to coordinate a link between the FPSG and specialists working on the conservation of charophytes. Under a project funded by Biofresh, an initial global list of wetland-dependent vascular plants, bryophytes and algae has been established. The process of conversion of this tool into a relational database is being developed with support from the Centre for Ecology and Hydrology in the UK.

Richard Lansdown

Chair, Freshwater Plant Specialist Group

GALAPAGOS PLANT SPECIALIST GROUP (GPSG)

The GPSG is a discussion group for people interested in the conservation of the Galapagos flora whose members consist of the world's experts in the field of Galapagos plant conservation, and is therefore in a good position to formulate explicit views on conservation policy. The group develops conservation priorities for Galapagos plants, including those for applied research, survey and management, and communicates these priorities in the form of advice to the relevant research and conservation institutions on the islands. Research is carried out by GPSG members employed in Galapagos and by others as visiting scientists. GPSG

Justicia galapagana. © Alan Tye



members who are at academic institutions also encourage their research students to undertake Galapagos projects.

The entire endemic vascular plant flora of the Galapagos has been red-listed, as have the marine algae. Following five years of field work, the known lichen flora of the islands has more than doubled; IUCN Red List assessments of lichens are now under way, and plans are being made for a re-evaluation of the endemic vascular flora.

Dr Alan Tye

Chair, Galapagos Plant Specialist Group

GALLIFORMES SPECIALIST GROUP (GSG)

In early 2013, this Specialist Group became a full amalgamation of five previous ones, with the inclusion of the Cracids of South and Meso-America. This brings together global concerns about all the 286 galliformes species, and a worldwide community of about 280 people actively working on their conservation and sustainable use.

The focus of the GSG must be the 25% of our c.280 species that are currently listed as threatened on The IUCN Red List. Galliformes' habitats, especially forests, are being disrupted and many species are also over-hunted. Whilst our tropical and subtropical species of Asia and the Americas remain under-researched, there is a wealth of knowledge and expertise available on the hunted grouse and introduced pheasant species of the Northern Hemisphere. So the GSG remains dedicated to making up this deficit through capacity-building, using its network to transfer knowledge and expertise: recently, for instance, from India to Nepal and Pakistan, and from China and Thailand to Myanmar.

To spread the word about galliformes conservation more generally, the GSG produces a main newsletter *G@llinformed* as well as *Grouse News* and the *Cracid Bulletin*, all of which include project reports, technical pieces and alerts to recent literature. The GSG website contains an archive of all past issues. Papers from the most recent International Grouse Symposium (Japan 2012) have now been published in the journal *Wildlife Biology*.

A major concern in 2013 has been to seek information and promote action on the plight of Edwards's Pheasant (*Lophura edwardsi*), which is Critically Endangered and endemic to a small and heavily impacted area of central Vietnam. Matt Grainger (Newcastle University, UK) is moderating an email consortium for the GSG, designed to bring together key

Edwards's Pheasant (Lophura edwardsi). © Niti Sukumal



experts including breeders of this species in Europe, Japan and North America. Their aim is to establish the purity and diversity of captives through DNA screening, thereby enabling Chris Holmes (Houston Zoo, USA), as the new International Studbook Keeper, to manage the global captive population to best effect in case re-introductions are necessary in future. Philip McGowan (Newcastle University, UK) has recently led a CEPF-funded workshop under the auspices of the GSG for many different stakeholders in Vietnam. An agreed Strategic Conservation Plan, to be managed by a Vietnam-based Working Group, is imminent. As no wild birds have been recorded since 2000, GIS modelling is being used to identify priority areas for future field surveys.

Peter Garson and Ilse Storch

Co-chairs, Galliformes Specialist Group

GIRAFFE AND OKAPI SPECIALIST GROUP

The Giraffe and Okapi Specialist Group (GOSG) seeks to understand and provide technical support to conservation issues facing giraffe and okapi worldwide. The GOSG was formerly approved in March 2013, since then a flurry of activity has resulted. Dr Noëlle Kümpel (okapi) and Dr Julian Fennessy (giraffe) have been appointed as the Co-Chairs of the GOSG, and the Zoological Society of London (okapi) and Giraffe Conservation Foundation (giraffe) have been appointed as host organisations for the respective species.

The GOSG, ZSL and the Institut Congolais pour la Conservation de la Nature (ICCN), under the patronage of the Governor of Orientale Province, co-hosted a multi-stakeholder workshop from 22-25 May 2013 in Kisangani, central Democratic Republic of Congo (DRC), to develop the first-ever conservation strategy for the okapi, within the framework of the ICCN national strategy for biodiversity conservation in protected areas, and following the IUCN guidelines for strategic planning. Around 30 participants from across the range, government representatives (including site directors and key field workers from all main protected areas), scientists, NGO workers and community chiefs, reviewed the okapi status review that had been drafted by ZSL, carried out a Red List assessment of the species and drafted the strategy. The group reassessed the okapi as Endangered based on an observed population size reduction of ≥50% over the last three generations and this was officially announced in November.

The GOSG co-hosted (with the GCF and the Government of Kenya) the second Giraffe Indaba in Nairobi, Kenya during September. Attended by 45 people from across thirteen nations, the Indaba provides a platform for researchers, managers, governments and students to present and discuss giraffe and okapi conservation and management issues, whilst planning for future opportunities over the coming years.

The first two GOSG members meetings were held in Kisangani (okapi) and Nairobi (giraffe) respectively. The ability to bring together many of the new members to discuss all aspects of operations to plan out the quadrennium was invaluable. Activities included planning the Red List assessments for giraffe in 2014, and the species conservation status report, to name but a few. In addition, an evening of public talks on okapi conservation was hosted by ZSL in London in November, to highlight the decline of arguably DRC's most iconic species. A new joint 'Giraffid' newsletter is taking shape, and the GOSG website is nearly complete.



Okapi camera-trapped in Virunga National Park, DRC. © ZSL

We would like to thank IUCN's Simon Stuart, Mike Hoffmann and Rachel Roberts for their support in establishing this new and exciting Specialist Group! The Group's activities are generously funded by a host of organisations, to whom we are very grateful.

Dr Noelle Kumpel and Dr Julian Fennessy

Co-chairs, Giraffe and Okapi Specialist Group

GLOBAL TREE SPECIALIST GROUP

The Secretariat of the IUCN SSC Global Tree Specialist Group (GTSG) is hosted by Botanic Gardens Conservation International (BGCI), a member of The IUCN Red List Partnership. Membership of the GTSG was renewed in 2013 and there are now 57 active members of the Group. New web pages for the Group were developed in 2013, and can be accessed here.

In collaboration with the Royal Botanic Gardens, Kew (RBGKew), the University of Bournemouth and other partners, GTSG continues to build a working list of the world's woody plant species as a basis for evaluation of their conservation status by 2020. Fundraising to undertake this comprehensive assessment is ongoing.

Data collection and analysis of the conservation status of trees of the Northern Andes was completed in 2013, with publication of *The Red List of trees of montane forests of the northern Andes* in preparation following extensive review. The work was undertaken by Natalia Tejedor as part of a PhD thesis at the University of Bournemouth. Natalia, working with a network of botanists in Latin America, has mapped all the species as a basis for IUCN Red List assessments and the impacts of climate change.

The *Red List of Betulaceae* will also be published in 2014, following assessments carried out by BGCI during 2013, in association with members of the GTSG. Kirsty Shaw has managed this work.

BGCI also continues to work with the University of Ghent Botanical Garden on the Hydrangeaceae Red List.

During 2013, BGCI has endeavoured to ensure that all conservation assessments of tree species undertaken by the



A Madagascan Ebony species – Dr George Schatz, a member of the GTSG, is assessing the conservation status of ebonies worldwide. © Richard Randrianaivo

GTSG are fully compliant with the data requirements for inclusion on The IUCN Red List. An initial step is to enter data into the IUCN Species Information Service (SIS) database. This was undertaken for all species of *Magnoliaceae* and *Betulaceae* in 2013.

As a further development of the recent Red List assessment of tree species in the cloud forests of Mexico, a major mapping effort has been completed for Mexican tree species. This has been undertaken by staff of ECOSUR, Chiapas, Mexico, in a project funded by CONABIO. This mapping data will be used to refine IUCN Red List assessments of Mexican tree species.

In March 2013, Sara Oldfield formed part of the IUCN Delegation to the CITES COP in Thailand. The GTSG took part in the development of IUCN's Plants for People project in 2013,

working alongside the Medicinal Plant Specialist Group and Crop Wild Relative Specialist Group. A selection was made of 1,500 timber tree species to be assessed as part of this IUCN priority project.

In October 2013, a PhD studentship was initiated at the University of Bournemouth, jointly supervised by Adrian Newton and Sara Oldfield, Co-chairs of the GTSG. The title of Jennifer Mark's PhD thesis is *Evaluating Extinction Risk of the World's Timber Tree Species*. Jennifer will reassess the conservation status of the commercially valuable timber species that were included in the 1998 publication *The World List of Threatened Trees* and subsequently added to The IUCN Red List. She will also assess the ecosystem services provided by these species.

Ms Sara Oldfield and Adrian Newton

Co-chairs, Global Trees Specialist Group

GOOSE SPECIALIST GROUP

The Goose Specialist Group of IUCN SSC and Wetlands International seeks to strengthen contacts between all researchers on migratory goose populations in the northern hemisphere. The group currently consists of 601 members from 54 countries. Our website can be accessed here.

The 15th meeting of the Goose Specialist Group was held in the Palace of Congress of Arcachon, France, from 8–11 January 2013, and focused on *Branta* species: Brent Geese, Barnacle Geese and Red-breasted Geese. In the Bassin d' Arcachon, several tens of thousands of Brent geese (*Branta b.bernicla*) overwinter. The meeting was attended by 66 participants from 17 different countries. The proceedings of this meeting were printed as a special issue of the British journal Wildfowl. In 2013 two issues of the Goose Bulletin were produced; Nr. 16 appeared in May and Nr. 17 in November, they can be downloaded here.

The 16th meeting of the Goose Specialist Group will be held in Beijing, China from 22–28 November 2014, and will be hosted by the Research Centre for Eco-Environmental

© Gilles Leray



Sciences of the Chinese Academy of Sciences. The meeting will include a field visit to Poyang Lake National Nature Reserve within the Yangtze River floodplain.

Barwolt S. Ebbinge

Chair, Goose Specialist Group

GRASSHOPPER SPECIALIST GROUP

The mission of our group is to foster the conservation of Orthopteroid insects (grasshoppers, katydids, crickets, mantids, stick insects) and their habitats around the world. The group currently consists of 71 members from 31 countries. Our website can be accessed here.

The first Red List workshop took place from 11 to 14 April 2013 in Leiden (The Netherlands). In 2013, 60 new assessments were published. Most of these were for European Orthoptera and some Tanzanian endemics. Currently, our IUCN Red List assessments focus on European Orthoptera (we aim to complete these by 2016), South African bushcrickets (aiming for completion in 2015), and East African endemic grasshoppers.

The Crau Plain Grasshopper was recently assessed as Critically Endangered on The IUCN Red List. A conservation project (coordinated by Laurent Tatin and Antoine Foucart) conducted a mapping programme in 2012 and 2013, which indicated that only four subpopulations of this species remain in the wild. In 2013, three students from Trier University (Andreas Schuld, Tobias Seibel, Jens Schmitt) studied the population ecology and habitat preferences of this species. The plans of the French Army to construct new weapon storage buildings on the site of the most important subpopulation has been prevented by an intervention of our Specialist Group and the IUCN French Committee, but it is possible that another part of this amazing landscape will be affected. A Strategic Planning Workshop is planned for June 2014, in cooperation with the IUCN SSC Species Conservation Planning Sub-Committee. The status report is currently being written and a population monitoring programme will be developed.

Two students from Trier University (Svenja Krone, Sabrina Legner) have studied the habitat preferences of threatened Orthoptera on Mahé (Seychelles), to provide information for their conservation in cooperation with the Island Conservation Society of the Seychelles and supported by the Mohamed bin Zayed Species Conservation Fund. Two other students (Hagen Seeboth, Laura Darimont) started an inventory of the

Seselphisis visenda. © Axel Hochkirch



grasshoppers in the Caucasus Wildlife Refuge, in cooperation with the Foundation for the Preservation of Wildlife and Cultural Assets in the Republic of Armenia. A student from Bangor University (Arthur Miller) performed a comprehensive mapping of the Endangered *Calliphona alluaudi* on Gran Canaria, and its response to recent wildfires.

The Bozdagh Grasshopper (Chorthippus bozdaghi) was profiled as an Amazing Species on The IUCN Red List website. The Lord Howe Island Stick Insect (Dryococelus australis) has been chosen as one of ten species on the road to recovery by ARKive. Our newsletter (Newshopper) will now be edited by Mark Bushell (Bristol Zoo).

Axel Hochkirch

Chair, Grasshopper Specialist Group

GROUPER AND WRASSE SPECIALIST GROUP (GWSG)

With more than 40 members from 20 countries, the GWSG seeks to promote the conservation, management and wise use of groupers and their relatives (*Serranidae* and *Epinephelidae*) and wrasses (*Labridae*). Our goal is to enhance awareness of the vulnerability of this group of 1,000 or so fishes, and to use good science to enable decisions and actions to sustain their populations.

2013 was a busy year for us. A key event was the publication of the outcomes and implications of our global IUCN Red List assessment of groupers. This publication received good press coverage. In October, we chaired a joint FAO/Caribbean Fishery Management Council workshop on spawning aggregations, paying special attention to the Endangered Nassau grouper (*Epinephelus striatus*). We also contributed to the US government consultation on this species in relation to its consideration under the Endangered Species Act. As part of this work, we produced an undated review on the species' global status. In January we conducted a study in the Bahamas, which sadly confirmed the extirpation of the first-ever scientific record of a spawning aggregation for the species.

On other groupers, a long study on the reproductive biology of the goliath grouper (*E. itajara*) showed among other novel findings, movements to aggregation sites of up to 500 km and patterns of new moon spawning in relation to night-time noise production, or 'booming'. Work continues by members on the brown grouper (*Epinephelus marginatus*), along the French Mediterranean coast, with further moratoria sought for this and other groupers, while a study on a small

Epinepheus coioides (Grouper). © Luiz Rocha



marine protected area in Australia showed that a large grouper can be worth much more alive, from tourist dollars, than dead.

In the Pacific and Southeast Asia, aggregating groupers in Palau, western Pacific, and the Endangered Napoleon wrasse (*Cheilinus undulatus*), were featured in documentaries on their conservation plight and our work to conserve them. We joined the IUCN delegation at the 16th CITES CoP in Bangkok in March 2013, and highlighted the illegal, unmonitored, and unregulated trade of the Napoleon wrasse under its CITES Appendix II listing. Relating to this, we conducted two field surveys in Indonesia, the major exporter of the species, which contributed to quota-setting under the CITES non-detriment finding requirement, and showed positive changes in population status in several areas after the listing.

One member of the GWSG was a major contributor to the WWF Seafood Guide 2013, released in Hong Kong and was able to promote a 'green' sustainable grouper food option supplied by Hong Kong's first indoor farmed giant grouper (*E. lanceolatus*). For further details please see our website.

The work of the GWSG was supported by NOAA (Napoleon wrasse) Science and Conservation of Fish Aggregations (SCRFA) and IUCN.

Yvonne Sadovy de Mitcheson and Matthew Craig

Co-chairs, Grouper and Wrasse Specialist Group

HAWAIIAN PLANT SPECIALIST GROUP

The Hawaiin Plant Specialist Group's (HPSG) mission is to prevent the extinction of native Hawaiian plants and provide for their recovery through a cooperatively administered off-site plant conservation system. This is done in collaboration with on-site management partners to sample, propagate, and reintroduce rare plants, and to advance the preservation of native plants and their habitats through effective communication and public education. Locally, the group is referred to as the Hawaii Rare Plant Restoration Group, which later became the HPSG.

The group has discussed actions needed for *ex-situ* collections for the past two years, resulting in the ranking of the following topics as high priority:

- to identify stored seeds at high risk of decreased viability;
- to identify seeds that need to come out of storage as soon as possible because they are losing viability;
- to identify taxa with seeds difficult to store; and
- to establish a single entity coordinating collections and storage for each taxon of concern.

Volunteer committees were established in 2013 for each topic. In 2013, the Plant Extinction Prevention (PEP) program initiated by HPSG, implemented recovery actions for a total of 128 PEP species (50 individuals or less remaining in the wild). These actions include population surveys and monitoring, propagule (seeds, cuttings, air-layers) collections, *in-situ* management, and reintroductions within protected natural habitats. The PEP program focused on propagule collections for species with no *ex-situ* representation over the the past 12 months. The PEP program is currently comprised of 11 staff (including program management staff), based on Kauai, Oahu, Maui Nui, Molokai, and Hawaii Island.

Public education efforts include the establishment of the Hawaii Rare Plant Restoration Group website, as well as oral



Hibiscadelphus giffardianus, one of the PEP species, is now extinct in the wild. @ Marie M. Bruegmann

history videos of four individuals important in Hawaii plant conservation. The video can be seen here, and features Bob Hobdy, retired Maui District Manager of the Hawaii Division of Forestry and Wildlife, Dieter Mueller-Dumbois, retired professor of ecology from University of Hawaii at Manoa, Steve Perlman, field botanist at National Tropical Botanical Garden, and Sheila Conant, retired professor of the University of Hawaii.

Marie M. Bruegmann

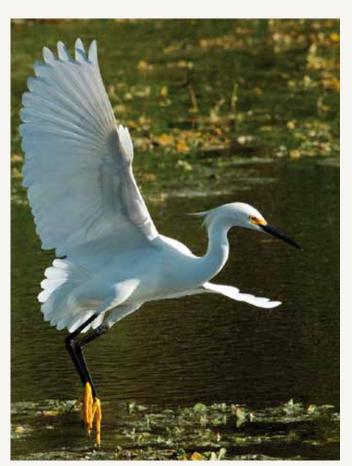
Chair, Hawaiian Plants Specialist Group

HERON SPECIALIST GROUP

The Heron Specialist Group's goal is to encourage engagement with heron conservation through communication, guidance and research. The Group, also known as HeronConservation, is nearing its 30th year of activity. The group provides a communication network for its members through its website and other media. It offers guidance by encouraging conservation planning, use of standardized methodology and synthesis. As a research group, its members advance the knowledge of the biology of herons through their research.

In 2013, the Group reorganized itself, reducing its membership and increasing expectations for participation. The Group's website launched in 2011, continues to provide the principal means of transmitting technical and biological information globally.

The HeronConservation website delivers information on species biology and ranges, heron conservation news, bibliography, formal action plans, and conservation tools. Real time information is made available on its Facebook and Flickr pages.



Snowy Egret. © Kirsten Hines

Conserving Herons: A Conservation Action Plan for the Herons of the World, continues to be the guiding document for the Group. Opportunity exists for continuous update. The Global Heron Count Data base archives census information world-wide. In the past, the Group has led the development of biological and conservation syntheses of herons. Presently it hosts an on-line journal to encourage publication of new findings.

The Group's priorities remain the same. The conservation of the White-Bellied Heron (Ardea insignis) in Bhutan is its highest priority. The International Crane Foundation and San Diego Zoo are advising on developing a captive propagation effort for this highly endangered species. The Reddish Egret (Egretta rufescens) Conservation Plan has been completed and the Executive Summary is available. The listing status of the White-eared Night Heron (Gorsachius magnificus) was reviewed; there is a need for additional information on documented observations of its occurrence. Further documentation is needed of the systematic position of what is now considered to be the white phase of the Great Blue Heron (Ardea Herodias). Studies of the biology of the Agami Heron (Agamia agami) and ZigZag Herons (Zebrilus undulates) continue to be a high priority. Priority areas remain Bhutan, China, coastal Asia, Caribbean, Madagascar, New Zealand, Cape Verde, and East Africa. The Group continues to place emphasis on encouraging studies of conservation genetics and migration patterns.

Dr James A. KushlanChair, Heron Specialist Group

HIPPO SPECIALIST GROUP

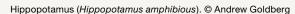
2013 was a year of exciting developments for hippo conservation in certain regions and some deterioration of conservation status in others. A revised Red List Assessment is underway for both pygmy and common hippopotamus (called hippos hereafter).

Our Pygmy Hippo SubGroup continues to strengthen the multi-national network of scientists and field groups that are engaged in pygmy hippo projects. Flora and Fauna International and the Liberian Forestry Development Authority spearheaded an effort to create a National Action Plan (NAP) for pygmy hippo conservation in Liberia and this plan was released in 2013. This NAP followed the recommendations of a Regional Conservation Strategy for Pygmy Hippos that was released in December 2011. The Regional Conservation strategy is an excellent resource that documents the current knowledge of pygmy hippo ecology, conservation threats and conservation efforts and activities in the four countries where this species is still extant: Liberia, Côte d'Ivoire, Guinea and Sierra Leone. Camera traps have, for the first time, been deployed in a number of field sites and are being used to improve highly uncertain population estimates.

Research and conservation projects on common hippos have received far less attention and our Common Hippo SubGroup is in need of more members. The relative lack of attention to common hippos reflects, in part, the difference in species status: common hippos are classified as Vulnerable whereas pygmy hippos are Endangered. However, the local abundance aggregations of common hippos belie the rangewide habitat loss and declines in populations that have occurred. Common hippo / human conflicts are widespread and increasing. One exciting development regarding common hippo conservation and research was the first deployment of a GPS tag on a wild hippo. The tag was on for around 14 hours, GPS fixes were taken at 10 minute intervals, except for periods when the hippo was under water in the river. Having a clearer understanding of short and long scale movements for this species will begin to address the substantial knowledge gaps in hippo ecology, as well as support the development of mitigation strategies to alleviate hippo / human conflict.

Dr Rebecca Lewison

Chair, Hippo Specialist Group





HORSESHOE CRAB SPECIALIST GROUP

In 2013, 17 additional experts were accepted as members of the Horseshoe Crab SG. Our working groups are making significant progress toward our goal of updating The IUCN Red List status for horseshoe crabs, focusing initially on the American horseshoe crab (*Limulus polyphemus*) and the Chinese or Japanese species (*Tachypleus tridentatus*).

The SSG responded to the potential ecological and human health threats caused by the importation of Asian horseshoe crabs into the US by submitting a letter of concern to the US Fish and Wildlife Service, Atlantic States Marine Fisheries Commission (ASMFC), and other Federal and State agencies with jurisdiction. Our efforts were influential in ASMFC's ruling that now prohibits this practice and we were extremely gratified to receive recognition from IUCN for our efforts.

Conferences: SSG members Mark Botton, Paul Shin, Siu Gin Cheung, and Ruth Carmichael organized a special session entitled 'Comparative Approaches to Horseshoe Crab Ecology and Conservation in North America and Southeast Asia' at the recent Coastal and Estuarine Research Federation meeting in San Diego, CA. A total of 25 papers on horseshoe crabs were presented, with contributions from the U.S., Hong Kong, Taiwan, Malaysia, and Japan. Titles and abstracts may be found here.

Summaries of our recent activities were published in *Marine Species News* (vol. 4 – June 2013) and in *SULiNews* (issue 4, March 2013.) Mark L. Botton, Paul K. S. Shin, and Kevin Laurie co-authored a chapter entitled, 'Horseshoe crabs: A tale of two species' to be published in the forthcoming book entitled *40 Strands of the Web*, edited by Alison Hegan. This chapter highlights the significant conservation issues facing horseshoe crabs in Asia and North America, and highlights the work of our Specialist Group.

Dr Paul Shin and Dr Mark Botton

Co-chairs, Horseshoe Crab Specialist Group

Hyaena Specialist Group

The key objectives of the Hyaena Specialist Group (HSG) are to enhance public education about the members of this fascinating family of carnivores, to monitor populations of each hyaena species and their critical resource bases. This is so that we can take action when we determine that specific populations are declining.

Towards the first objective of the HSG, in 2013 we updated portions of the educational website which can be accessed here. We published various reports and newsletters for public use and assisted several film crews to produce documentaries

Horseshoe Crab ($Carcinoscorpius\ rotundicauda$). © Kevin Laurie





Striped Hyena (Hyena hyena). © Aimee Cockayne

explaining why members of the family Hyaenidae are worth conserving. We added some new members to the HSG, including scientists collecting data on poorly understood hyaena populations such as those in western and central Africa and in Asia. We redressed a problem in South Africa, where a farming magazine published material we perceived as threatening to the welfare of brown hyenas. We initiated a project inquiring whether spotted hyenas might be used in a novel way as a sentinel or indicator species of declining biodiversity in African ecosystems. Finally, we deployed GPS collars and camera traps at various African and Asian sites in order to learn more about the resource requirements of extant bone-cracking hyenas.

We thank the following organizations for their support of our work: Kenya Wildlife Trust, Leibniz Institute for Zoo and Wildlife Research, Government of India, US National Science Foundation, Nedbank Go Green Fund, and the SAVE Wildlife Conservation Fund.

Dr Kay E. Holekamp

Chair, Hyaena Specialist Group

IGUANA SPECIALIST GROUP

The mission of the Iguana Specialist Group is to prioritize and facilitate conservation, science, and awareness programs that help to ensure the survival of wild iguanas and their habitats. To achieve these goals we implement, provide advice, and fundraise for programs that include population surveys, protected area management, invasive species control, field research, genetic studies, education, and captive breeding and headstarting initiatives.

In 2013, we launched our new website, now an easily updatable information center for those interested in learning about the work we are doing and current iguana topics around the world. We have completed 17 IUCN Red List Assessments and 19 are currently being drafted. We also drafted a position statement on invasive iguanas, now a growing problem in many areas of the world. The goal of this piece was to aid incountry managers and decision makers on policy and planning actions. Throughout the year, we worked closely with the SSC office to prepare and send two letters to the Environmental Ministries of the Dominican Republic and Jamaica, addressing potentially threatening actions to endangered iguana species. Our letter to the Dominican Republic in particular, was pivotal in getting destructive actions halted on site and raising



Jamaican Iguana (Cyclura collei). © Joseph Burgess

awareness globally, about Ricord's and the Rhinoceros Rock Iguanas (*Cyclura ricordii* and *C. cornuta*).

This year was particularly important for our Specialist Group as it marked the 20th anniversary of the PHVA meeting that sparked the creation of our group, after the rediscovery of the Jamaican Iguana. In celebrating this, we held our annual meeting in Kingston, Jamaica. Preceding our standard meeting, we held a workshop focusing specifically on the Jamaican Iguana project, one of the most well-known conservation success stories. The workshop was especially important, given that the Jamaican Iguana's existence has recently become threatened by a proposed trans-shipment port. To address this, we brought concerned organizations together to discuss the situation, and share ideas for advocacy against this development. Pertaining to this, we published our Species Recovery Plan for the Jamaican Iguana through the IUCN portal, and articles appeared in the Huffington Post and Scientific American addressing this long-term project and its current obstacles.

We wish to thank the International Iguana Foundation for their financial support of numerous projects this year, totaling \$42,200 focused on iguana conservation across the Caribbean and Fiji, as well as those who made donations in order to offset meeting travel costs to those in need, and those who donated field equipment to the Jamaican Iguana project.

Stesha Pasachnik and Charles Knapp

Co-chairs, Iguana Specialist Group

INVASIVE SPECIES SPECIALIST GROUP

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. Established in 1994, the ISSG currently has 200 core members from over 40 countries and a wide informal global network of over 2,000 conservation practitioners and experts who contribute to its work. ISSG maintains a webpage and publishes a bi-annual newsletter *Aliens*. The Chair of the ISSG is Dr Piero Genovesi, of the Institute for Environmental Protection and Research in Italy. 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 and technical advice, and

information exchange through our online resources and tools and through networking.

The main goal of the ISSG during 2013 was to support efforts to achieve Aichi Target 9 of the Convention on Biological Diversity (CBD), including developing tools to prioritize species and pathways for response. Key activities of the ISSG in 2013 included:

- Working with global conventions like the CBD, CMS, Ramsar, OIE and IPPC, mainstreaming invasive alien species issues
- Supporting the development of a European Legislation on Invasive Alien Species
- Development of voluntary Codes of Conduct on hunting and invasive species, botanical gardens, zoos and aquaria
- Development of guidelines on the management of invasive species in protected areas
- Participation in the Inter agency Liaison group on invasive species with CBD, World Trade Organization, FAO, CITES and OIE.

On 21 February, IUCN and BirdLife, with the support of the European Habitats Forum, organised a high-level debate at the European Parliament in Brussels to discuss the issue of invasive alien species in Europe and the development of an EU policy instrument to tackle them. Speaking at the event, amongst others were Julia Marton-Lefèvre, Director-General of IUCN, and the ISSG Chair. The event coincided with the launch of a report finalized in 2011 for the European Environment Agency. The ISSG Chair attended a conference on invasive alien predators held in Luleo (Sweden) on 16–19 June, organized by the LIFE+ Project "Management of the Invasive Raccoon Dog in the North European countries". Piero opened the conference with a presentation on "Toward a coordinated policy to prevent and manage biological invasions – an analysis of the global, European and national contexts".

Our information exchange and networking activities included the redesign of the ISSG flagship product the Global Invasive Species Database (GISD) with improved functionality and additional information components. We are a key partner in the CBD supported initiative – the Global Invasive Alien Species Information Partnership (GIASI Partnership). The Global Register of Introduced and Invasive Species (GRIIS) and the Invasive Alien Species Pathway Management Resource are being developed within this framework. We are the lead agency in the

Ivy Gourd (Coccinia grandis) – a noxious vine that smothers native vegetation forming a dense canopy. © Kim and Forest Starr



development of the Invasive Species indicator within the Biodiversity Indicators Partnership. The ISSG is a partner in the IUCN Biodiversity and Protected Area Management (BIOPAMA) project, and the Island Biodiversity and Invasive Species Database (IBIS) will be a key contribution to the planned Regional Observatories. On 6 June 2013, the journal *Nature* published an article on the ISSG's list of "100 of the worst invasive species", co-authored by the ISSG Chair and several ISSG members; the results reported in the article were used by ISSG and IUCN to post a story on the IUCN website.

Dr Piero Genovesi

Chair, Invasive Species Specialist Group

KOREAN PLANT SPECIALIST GROUP

The goal of the Korean Plant Specialist Group (KPSG) is to be an authoritative source of information on the conservation of Korea's plants, to play an influential and valued role in national biodiversity planning and development, to develop national capacity in plant conservation, to be a mechanism by which IUCN SSC material and protocols may be introduced to the Korean conservation community. We pursue all of the above through active collaboration with relevant partners.

Over the last couple of years, activities of the KPSG have been limited, as we deliberated over some important points for The IUCN Red List process. Some KPSG members actively participated in the National IUCN Red Listing of plant species in Korea. IUCN Red List projects in Korea have mainly been supported by the Korea National Arboretum and the National Institute of Biological Resources under the Ministry of Environment. The KPSG contributed to the Korean translation of the IUCN SSC's Reintroduction Guidelines, which will allow the wide circulation of this publication to relevant Korean readers.

Dr Kim Yong-Shik

Chair, Korean Plant Specialist Group

LAGOMORPH SPECIALIST GROUP

The mission of the Lagomorph Specialist Group (LSG) is to conduct the best possible conservation science on lagomorphs and translate this into active management initiatives. We also aim to educate the public about the important roles played by lagomorphs in ecosystems, as well as the precarious nature of some of our highly threatened species.

We are a very diverse and widely distributed Specialist Group, simply because lagomorphs are found throughout the

Abies koreana. © Kim Yong-Shik





Pygmy Rabbit (Brachylagus idahoensis). © Janet Rachlow

world. Many of our activities are local, such as the pioneering work conducted by the Pika Fan Club in Japan and the Riverine Rabbit Programme (now broadened and expanded as the Drylands Conservation Programme) in the Karoo of South Africa. In Washington State an active reintroduction program of the Columbia Basin Pygmy Rabbit has been highly successful. Other LSG members are tackling issues of how climate change affects lagomorph populations, and the role played by wildlife diseases, many of which exert profound influence on lagomorphs.

A key activity is currently the compilation of materials for an overarching book: *Lagomorphs: The Pikas, Rabbits and Hares of the World* to be published by Johns Hopkins University Press. Accounts of species for this treatment will also inform updated IUCN Red List assessments of all lagomorphs. A precursor step for these activities is our attempt to revisit and refresh the currently accepted systematics of the Lagomorpha. New information, including molecular analyses, have informed us of many potential changes to the traditional systematics of the taxon. Many of our members are actively engaged in this systematic work.

Andrew Smith

Chair, Lagomorph Specialist Group

LARGE CARNIVORE INITIATIVE FOR EUROPE

The Large Carnivore Initiative for Europe (LCIE) is a Thematic Specialist Group with an ambitious vision "To maintain and restore, in coexistence with people, viable populations of large carnivores as an integral part of ecosystems and landscapes across Europe". After its chair was confirmed at the end of 2012, we proceeded to integrate several new members representing all European countries: the group now has 40 members. Our key objectives are to integrate a human-

Large Carnivore Initiative for Europe. © John Linnell



dimension approach with solid ecology, to bring both science and management experience to bear on the issues of large carnivore conservation, and to transfer this expertise into the policy arena at European level.

In 2013 we updated the information on number, distribution, trends and status of the European bear, wolf, lynx and wolverine populations, and produced new detailed distribution maps by country and by population, more details here. We held our annual group meeting in Italy in March 2013, and we approved a Manifesto for large carnivore conservation in Europe. This is a manifesto of how the LCIE think large carnivore conservation could look in a European context. It is intended to inspire, by outlining some long term objectives and stretch goals which will often go beyond the minimum standards required by international legal instruments. It states some principles and recommendations of the measures needed to achieve these objectives. Perhaps most importantly it is intended to explore in greater detail the potential relationship between people and large carnivores in the landscapes that they share.

We continued our fruitful close collaboration with the European Commission and we are now engaged on three key tasks to be completed by the end of 2014:

- a) to design and implement an EU-wide communication strategy on large carnivores that will include website material, press articles in all major EU languages, support to the Commission on communicating a new EU platform on carnivore conservation.
- b) to produce a list of the most important conservation actions to be implemented in each of the EU carnivore populations (10 lynx populations, 10 for wolves, 10 for bears and one for wolverines),
- c) design and implement four pilot conservation actions (one for each species) at the level of transboundary populations: these pilot actions will demonstrate the feasibility of transboundary collaboration in Iberia, the Alps, Fennoscandia and the Carpathian mountains.

As part of our engagement with the European Commission, in December 2013, we supported the Commission in managing the second European Stakeholder meeting on human-carnivore coexistence.

Luigi Boitani

Chair, Large Carnivore Initiative for Europe

LICHEN SPECIALIST GROUP

The mission of the Lichen Specialist Group is to promote the study of lichen diversity, population dynamics and conservation genetics, in order to evaluate the conservation status of lichen species according to IUCN Red List criteria. We have established a group of 23 members, who are specialists in either regional floras (Europe, Asia, Africa, Australia, North and South America), or in ecological and taxonomic groups of lichens (like tropical lichens, arid lichens in steppe ecosystems, European deciduous forest lichens, Caucasian lichens, or lichens of the family Parmeliaceae).

In 2013, we contributed to the Global Fungal Red List Initiative, which was kindly supported by IUCN and the Mohammad bin Zayed Species Conservation Fund. We have started IUCN Red List assessments for a considerable number of lichen species from various parts of the world, using the



Lobaria pulmonaria. © C. Scheidegger

Global Fungal Red List website. A project on population biology and conservation measures of the model lichen species *Lobaria pulmonaria* in Tanzania has been initiated, and is being supported by a Rufford Foundation Small Grant.

We gratefully acknowledge the support of the Mohammad bin Zayed Species Conservation Fund and the Rufford Foundation.

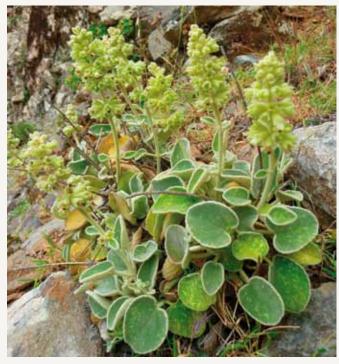
Christoph Scheidegger and Olga Nadyeina

Co-chairs, Lichen Specialist Group

MACARONESIAN ISLAND PLANTS SPECIALIST GROUP

Our main objective is to make conservation biology tools widely available; encouraging good diagnostic studies to correctly catalogue Endangered species (including information on taxonomy), and promoting recovery actions through Recovery Plans for macaronesian plants. In this sense, some members of the Specialist Group have been implementing several ways of diffusing this knowledge; through contributing to Symposia; preparing Red List assessments (focusing on Habitats Directive species) and assisting the administration to encourage the monitoring of plant species.

 $\it Sideritis\ marmoreal$ – an endemic of the island of La Gomera (Canary Islands). @ Ricardo Mesa



In 2013, the Specialist Group has been rigorously working on The IUCN Red List Index as a plant indicator in Macaronesia together with mainland Spain. 2013 has been an important year for the promotion of knowledge on selected species (actually recognized as threatened species) of the Canary Islands, by monitoring their population dynamics on the seven islands.

Ángel Bañares Baudet

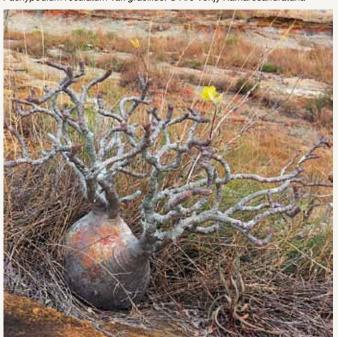
Chair, Macaronesian Island Plants Specialist Group

MADAGASCAR PLANT SPECIALIST GROUP (MPSG)

In 2013, Prof. Vololoniaina Jeannoda was elected as the new chair of the MPSG, in replacement of Prof. Charlotte Rajeriarison, who retired from a task that she has carried out since the creation of the group in 2002. Prof. Jeannoda has also now been appointed as a member of the SSC steering committee, and attended the steering committee meeting in Mexico in November 2013. The goals of the MPSG are the same as those of the SSC. One of them is to guarantee the rational use of natural resources in a fair and sustainable way. In order to achieve that goal, the MPSG is also acting as a member of the CITES Flora Scientific Authority and is strongly involved in national CITES activities.

In 2013, the MPSG has contributed to the inscription of a number of succulents, as well as all Madagascar endemic rosewood and ebony wood species, in CITES appendix II. The MPSG chair and two other members of the group, one of which is the chair of the Madagascar Flora Scientific Authority for CITES, were part of the Madagascar delegation to CITES COP 16 in Bangkok, and successfully presented the relevant documents to the CITES general assembly. Following that, 30 MPSG members benefited from five days training on Non Detrimental Finding (NDF – which was funded and carried out by the CITES General Secretariat in Switzerland). Lastly, in keeping with the Madagascar CITES action plan, NDF fieldwork was carried out on various species of succulents and precious woods by other members of the MPSG, which also

Pachypodium rosulatum var. gracilius. © Aro Vonjy Ramarosandratana



led to the identification of The IUCN Red List conservation status for these species.

Vololoniaina Jeannoda

Chair, Madagascar Plant Specialist Group

MANGROVE SPECIALIST GROUP (MSG)

The continual worldwide destruction of mangroves resulting from urban development, aquaculture and agriculture is the main impetus for the establishment of this Specialist Group. While most species of mangroves have relatively large geographic ranges, some species and habitats are subject to dire threats of extinction. The formation of a Mangrove Specialist Group was initially discussed at the July 2012 MMM3 Meeting on Mangrove Ecology in Sri Lanka. Following various exchanges, the MSG was finally established in early 2013 with a current membership of 47, mostly from South Asia, East Asia and 17 from Europe (South America and Africa are underrepresented). The Zoological Society of London (ZSL) provides administrative support to the MSG.

The first MSG meeting held on 15 October 2013 was attended by 18 MSG members. Among the topics presented were; aligning the MSG work with the IUCN 2013-2016 programme; defining the roles and responsibilities of MSG members, and outlining the current state of global projects and research. Subsequent discussions came up with actions to be taken by the Group; flag mangrove-related species for The IUCN Red List; link with other ecologists within other Specialist Groups; contact current mangrove projects such as Mangroves for the Future, and to establish synergies and avoid duplication. An open symposium the next day featured 12 papers on Mangrove Ecology, Climate Change, Blue Carbon, Payment Ecosystem Services, and Mangrove Rehabilitation and Restoration with 29 participants from various international organizations. A visit to the Royal Botanic Gardens Kew ended the day. A symposium entitled 'Turning the Tide on Mangroves' (plus a two-day workshop for MSG members) is scheduled for 6–7 November 2014, at the Zoological Society of London.

Dr Jurgenne Primavera and Professor Joe Lee

Co-chairs, Mangrove Specialist Group

MSG Group Photo (15 October 2013).



MARINE MAMMAL PROTECTED AREAS TASK FORCE (MMPATF)

The IUCN Joint SSC/WCPA Marine Mammal Protected Areas Task Force (MMPATF) was formally established in Marseille, France, on 24 October 2013 during IMPAC3. The MMPATF is comprised of 20 members and is chaired by Erich Hoyt and Giuseppe Notarbartolo di Sciara.

The objectives of the MMPATF include: a) facilitating mechanisms by which a "community of practice" consisting of professionals dedicated to place-based conservation of marine mammals can collaborate and share, access and disseminate knowledge and tools for establishing, monitoring, and managing effective spatial solutions mainly in the form of marine mammal protected areas (MMPAs); b) bolstering capacity within the MMPA community by exposing it to state-of-the-art tools from the wider MPA and place-based conservation world; c) enabling the implementation of global MPA targets and agreements; and d) enhancing opportunities for cooperation, communication, exposure of related products and expertise to a far wider audience.

The MMPATF's first initiative consisted in the development of the concept of *Important Marine Mammal Areas* (IMMAs). This working term describes discrete portions of habitat, important to marine mammal species that have the potential to be delineated and managed for conservation. It is hoped that IMMAs will provide the basis for future MPAs, MPA networks, marine spatial planning and marine biodiversity conservation in general through marine mammal flagship, umbrella and indicator properties. By linking IMMAs to the larger world of the Convention on Biological Diversity's *Ecologically or Biologically*

Baird's Beaked Whales (*Berardius bairdii*) in the Commander Islands State Biosphere Reserve. © Russian Cetacean Habitat Project, WDC/Whale and Dolphin Conservation.



Significant Areas (CBD EBSAs), IUCN's Key Biodiversity Areas (KBAs), and Convention on Migratory Species (CMS) work, IMMAs can accelerate the process of habitat protection for marine mammals and the ecosystems that support them. IMMAs will thus support the integration of IUCN Knowledge Products such as The IUCN Red List and KBAs in the identification and conservation of sites of global biodiversity significance.

To accomplish the integration of IMMAs into IUCN conservation work, the MMPATF organized in Marseille on 22 October 2013, a dedicated workshop with the participation of specialists familiar with the main marine mammal taxa, as well as those working in the CBD EBSA and IUCN KBA arenas, and those who had worked on devising the original criteria descriptions for these approaches. A background document was prepared and a route map chosen for the selection and implementation of IMMA criteria with further activities to come in 2014.

Funding for the Marseille workshop was provided by the Animal Welfare Institute and The Pacific Life Foundation, with the help of The Ocean Foundation and Whale and Dolphin Conservation.

Erich Hoyt and Giuseppe Notarbartolo di Sciara Co-chairs, Marine Mammal Protected Areas Task Force

MARINE TURTLE SPECIALIST GROUP

2013 was the year of focussing on The IUCN Red List assessments, which required review or were due to be updated. Globally, a force of literally thousands of people continues to push the turtle conservation agenda, many of them driven by priority-setting processes developed by the Marine Turtle Specialist Group. Our 230 or so strong membership reflects this commitment to conservation by being spread over just about every corner of the globe where one would encounter a turtle, and leading many innovative approaches to conservation dealing with bycatch, climate change, habitat loss and the quest for the best knowledge upon which to base sound management decisions.

The biggest news flash for the MTSG in 2013 was the very recent publication of the new Leatherback assessments on The IUCN Red List of Threatened Species™. This is the first time ever for a sea turtle species that the IUCN has published all subpopulation listings simultaneously, alongside a global

A Leatherback Turtle (*Dermochelys coriacea*) makes its way back to the ocean after nesting on Tetepare in the Solomon Islands, one of the last refuges for the species in the Western Pacific. © Nicholas J. Pilcher



listing as the official status of the species. As such, this marks a significant advancement and an important breakthrough in the long-running debate about the utility of IUCN Red List criteria for widely distributed, long-lived species such as marine turtles. The subpopulation listing comes after the careful development by the MTSG of two key processes: The delineation of Regional Management Units for sea turtles (Wallace et al. 2010) which was recognized by IUCN as proxy for IUCN Red List subpopulations, and the subsequent prioritisation exercise to focus conservation where it is most urgently needed (Wallace et al. 2011). These new listings provide an invaluable tool for prioritizing sea turtle conservation at all scales, by more accurately reflecting the wide variation in the risk of extinction faced by sea turtles in different parts of the planet; particularly in distinct ocean regions where there is no interaction with other subpopulations. We are now working on updated assessments for the other species using this approach, and are making other improvements to how we interpret and apply IUCN Red List criteria to marine turtles in general. The loggerhead assessment is currently undergoing a data collection process, and the green turtle assessment is also underway. The flatback assessment is pending final review, and the Kemp's ridley assessment is planned for 2014.

We are grateful to the hundreds of data providers and the MTSG Assessment Committee, along with the assessors themselves for their dedication to sea turtle conservation at a global scale.

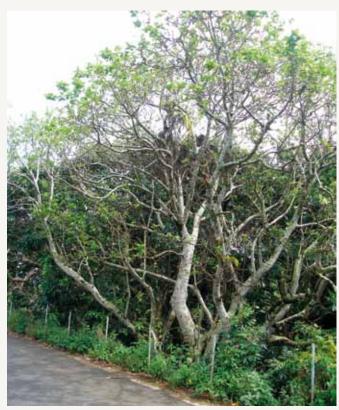
Rod Mast and Nicolas Pilcher

Co-chairs, Marine Turtle Specialist Group

MASCARENE ISLANDS PLANT SPECIALIST GROUP

Mauritius: Rare plant searches were regularly carried out in 2013 by members of the MIPSG as part of their duties both individually and in partnership. Field prospection included the following national conservation institutions; Forestry Service, Mauritian Wildlife Foundation, Mauritius Herbarium, National Parks and Conservation Service, University of Mauritius, and amateur botanists.

Several new populations of Critically Endangered species were found including Carissa spinarum, Chassalia boryana, Chionanthus boutonii, Gouania tiliifolia, and Secamone dilapidans. One new species was described: Eugenia alletiana. This new species is Critically Endangered and is known from less than 30 adults, in three localities. Dozens of Dictyosperma album var. conjugatum were propagated for the first time in nearly 20 years. There is therefore new hope for this variety, which has been reduced to one individual in the wild. Forty seedlings are now growing in the nursery on Round Island, from plants produced some twenty years ago and growing on Mauritius. The closure and relocation of The Mauritius Herbarium has been averted, at least for the time being. However, one of its collections has been taken away. The realignment and enlargement of the Holyrood Road and bridge has been averted. This would have destroyed one of 10 remaining wild Ficus laterifolia, and one of 25 remaining Gouania tiliifolia. The National Invasive Alien Species Committee was rarely invited to advise on plant introductions to Mauritius, despite the general feeling that many species are arriving illegally or accidentally. However, two projects for plant introductions were examined by the committee - the creation of a Bamboo Garden, and commercial plantation of Arundo



Ficus Laterifolia, Mauritius. © Vikash Tatayah

donax. In spite of negative views expressed by several members relating to invasiveness, and additionally views submitted by the IUCN in the case of the Bamboo Garden, both projects appear to be going ahead.

Rodrigues (Mauritius): Botanical Gardens Conservation International has conducted a feasibility study for the setting up of the Mourouk Botanical Gardens in Rodrigues. Restoration of the Grande Montagne and Anse Quitor Nature Reserves undertaken by the Mauritian Wildlife Foundation and the Forestry Services continued. At Grande Montagne the dozens of planted *Ramosmania rodriguesii* continued to be monitored and were doing well. An agreement was reached between the Rodrigues Regional Assembly and the Mauritian Wildlife Foundation, for the development of ecotourism at Grande Montagne Nature Reserve.

Mascarenes: The Critical Ecosystems Partnership Fund (CEPF) initiated an ecosystem profiling study for the Madagascar and Western Indian Ocean Islands Hotspot through Conservation International (Madagascar). This study will also cover the Mascarenes, and the profile will identify key projects to fund in the region.

La Réunion: Major collaboration to protect and conserve threatened wild plant populations involving the national botanical garden (Conservatoire Botanique National de Mascarin CBNM), the forestry services (Office National des Forets ONF and the natural areas conservatory CEN-GCEIP), the French coastal protection agency (conservatoire du littoral), the National Park of La Réunion, the municipalities, NGOs funded by the French Ministry of Environment, the Regional and General Councils, and the Europe funds. The Reunion Island IUCN Red List of Threatened Species has now been published (UICN France, CBNM, FCBN and MNHN 2013) and is available here.

Dr Vikash Tatayah and Dr Stéphane Baret

Co-chairs, Mascarene Islands Plant Specialist Group

MEDICINAL PLANT SPECIALIST GROUP

The mission of the Medicinal Plant Specialist Group is to increase global awareness of threats to the survival of medicinal plant species, and to promote sustainable use and conservation action.

In 2013, members of the group contributed to pursue several on-going and new IUCN Red List assessment initiatives; including regional assessments of European medicinal plants (funded by the European Union), and national assessments of medicinal plants in Lebanon (with funding from the United Nations Development Programme) and India (in collaboration with the Institute of Trans-Disciplinary Health Sciences and Technology). We enlarged our Global Checklist of Medicinal Plants to include nearly 30,000 taxa, and used it to define a priority list of 1,500 species for global assessments under a new IUCN Plants for People project partially funded by the MAVA Foundation.

Group members also provided risk analyses of wild-harvested plant species and populations for private sector companies as a service to the FairWild Foundation to support implementation of the FairWild Standard for sustainable wild collection. Members of the group continued to serve as founding members of the FairWild Foundation's Board of Trustees and as members of the Foundation's technical, license, and communications committees. Much of this work has been undertaken in collaboration with the TRAFFIC Medicinal and aromatic plants trade programme.

The risk analysis methodology developed by MPSG members has been included as one of nine steps in new guidance for Parties to CITES, undertaking non-detriment findings for perennial plants listed on Appendix II. Version 1.0 of this guidance, produced through a TRAFFIC/WWF Germany project funded by the German Federal Agency for Nature Conservation (BfN), published in 2014.

Danna J. Leaman

Chair, Medicinal Plant Specialist Group

MEDITERRANEAN PLANT SPECIALIST GROUP

2013 has been a very special year for our Specialist Group as its extent of occurrence expanded from the Mediterranean Islands (we were the Mediterranean Islands Plant Specialist Group) to the whole Mediterranean area. This is quite a large quantitative jump, with a very large number of taxa: 25,000 species, half of them being endemics to the area. We now have 55 members, representing 21 countries. We are about to

Etlingera elatior (Jack) R.M.Sm. © D.J. Leaman





Ebenus cretica from Crete, Greece. © Bertrand de Montmollin

form a new thematic and geographic sub-group, The Moroccan Plant and Livelihoods Sub-Group, with about 20 members, with the aim of developing species conservation in Morocco, together with supporting community development initiatives. A new and independent Red List Authority for the Mediterranean Plants was created and chaired by Errol Vela, based in Montpellier, France. It will validate IUCN Red List assessments carried out in the Mediterranean, and as this number increases, this will be a real challenge.

In 2013, we prepared, together with Plantlife and the IUCN's Centre for Mediterranean Cooperation, a project called "Conserving wild plants and habitats for people in the south and east Mediterranean". This project, submitted to the MAVA Foundation for funding, will strengthen the significance of Important Plant Areas as tools for biodiversity conservation involving plant species and habitats; directly contributing to regional and national decision-making. Our members were also involved in the programme "Ensuring the survival of Endangered plants in the Mediterranean Islands" (also funded by MAVA) and we plan to prepare, together with the existing team managed by Kew Gardens, a second phase for this project.

In our strategy, we plan to prepare the 'TOP 100 Mediterranean Plants', continuing our work with 'The Top 50 Mediterranean Island Plants', and to contribute to the implementation of IUCN Knowledge Products, specifically The IUCN Red List and hopefully The Red List of Ecosystems. We are also excited to be associated with the defining criteria of a 'Key Biodiversity Area'; we believe this will drive significant support for plant conservation, as Important Plant Areas did.

We are very concerned by the difficulties faced by our members and colleagues in several South and East Mediterranean countries, and hope that it will soon be easier for them to work in the field.

Bertrand de Montmollin

Chair, Mediterranean Plant Specialist Group

MOLLUSC SPECIALIST GROUP

Our mission is to conserve the diversity of Mollusca and their habitats globally. We achieve this by assessing their threat status according to The IUCN Red List, communicating through newsletters, species profiles, workshops, and social media, developing conservation plans and promoting sustainable use of harvested species. The group has 62 members from 31 countries. Following meetings of the Mollusc Specialist Group at the World Malacological Congress (Azores, July 2013), four RLA subgroups have been established with coordinators appointed by the SSC Chair, Simon Stuart.

In 2013 over 650 new Mollusc assessments were published. The latest IUCN Red List update (2013.2) shows assessments for a total of 6,809 Molluscs. This equates to 12.7% of all assessed animals on The IUCN Red List, but less than 10% of all known Molluscs. We have prioritized Global Assessment of Freshwater Molluscs (c. 6000 species) and this year we worked with the IUCN Freshwater Biodiversity Unit on IUCN Red List assessments for the Eastern Mediterranean region. The Freshwater Bivalves Red List Authority subgroup was established under the coordination of Manuel Lopes-Lima covering c. 1,000 species of this keystone group for freshwater systems. The Sample Red List Index Freshwater Mollusc assessment of 1500 species co-ordinated by Monika Böhm (ZSL) is nearing completion. We have now achieved 55% of the Global Freshwater Mollusc Assessment.

Working In the marine realm, there are c. 35,000 species and two new subgroups are undertaking Global assessments. The Conus Red List Authority, led by Howard Peters completed the first comprehensive study of a marine gastropod genus (632 species) for The IUCN Red List, showing 9% threatened with extinction. The Cephalopoda Red List Authority subgroup (c. 800 species), led by Louise Alcock, met to discuss taxonomic issues relating to ongoing Red List assessments. The IUCN Global Marine Species Assessment Unit conducted an assessment of the reef-forming bivalves, and these species should be added to The IUCN Red List in 2014.

On land, we have over 25,000 species, with 2490 on The IUCN Red List. Regional projects with subgroups are being formed to contribute IUCN Red List assessments. The European Landsnail Red List Authority subgroup led by Eike Neubert completed 1,200 assessments in 2012, but 800 species remain un-assessed. A new group specialising in African Non-marine Molluscs met in the Azores to develop plans for 2014 including discussions about IUCN Red List assessments in Kenya, Tanzania and South Africa. An Oceania

Kaputar Pink Slug (Triboniophorus sp. nov. "Kaputar"). © Michael Murphy



subgroup recently completed IUCN Red List assessments for 140 species, with further assessments planned.

Conservation actions are underway in some regions. The iconic Partula species are currently in active management programmes to protect reintroduced populations in Tahiti, with funding from various donors and assistance from the French Polynesian ministry. A large landsnail from Viet Nam, Bertia cambodjiensis, the latest rediscovery of a possibly extinct species, is now part of a conservation breeding programme. Viet Nam state agencies and organisations, Natural History Museum (London) and London Zoo are collaborating on this programme. In freshwater systems, a project has been developed for four Threatened species of Freshwater Bivalves in Morocco. The aim of this project is to raise awareness of the role of freshwater bivalves in cleaning water within river catchments. In Australia, the first threatened community listing was made to conserve landsnails threatened by climate change (see picture).

Our annual newsletter *Tentacle* is available here. One issue was produced in March 2013, with the next one planned in 2014. Three posters on the work of the SSC Mollusc Specialist Group were presented at the World Malacological Congress 2013. This provided much media coverage for the amazing endemic species found on the islands of the Azores and the surrounding oceans.

We would like to thank the many zoos, snail farms, aquariums, aquaculture and fish farms around the world for their work in conserving populations of threatened landsnails, marine molluscs, and freshwater bivalves. Thanks also go to the many sponsors of the varied activities of members of the MSG.

Mary Seddon

Chair, Mollusc Specialist Group

MUSHROOM, BRACKET, AND PUFFBALL SPECIALIST GROUP

The primary objective of the Mushroom, Bracket, and Puffball Specialist Group is to bring these ecologically and economically important fungi into the conservation conversation and agenda.

Efforts in 2013 focused on:

 Developing the Global Fungal Red List Initiative, creating a website to facilitate nominations for Red Listing and organizing a workshop on the initiative at the International Fungal Conservation Congress in November 2013.

Boletus regius. © M. Mikšík



- Working to further integrate fungi into various IUCN initiatives, including the Key Biodiversity Areas Programme and the Measuring Successful Forest Landscape Restoration Initiative.
- 3. Building communication tools to facilitate the work of the Specialist Group and to communicate the importance of fungi and the need to conserve them.
- 4. Increasing the size of the Specialist Group from 14 to 31 members to enhance geographic and taxonomic coverage.

The International Fungal Conservation Congress brought together nearly 90 mycologists from over 30 countries. The Congress covered topics ranging from developing international collaborations to updates on country and regional conservation initiatives, to successful education and communication activities. The Mohamed bin Zayed Species Conservation Fund is acknowledged for critical support of the Global Fungal Red List Initiative and for providing travel support to mycologists from economically challenged countries to participate in the International Fungal Conservation Congress.

Dr Greg Mueller

Chair, Mushroom, Bracket, and Puffball Specialist Group

NEW WORLD MARSUPIALS SPECIALIST GROUP

The goal of the SSC New World Marsupials Specialist Group (NWMSG) is to agree on a framework that will aid in the conservation of American marsupials, and evaluate the different aspects threatening them.

Our Specialist Group activities have focused on creating a unified taxonomic list, which has settled the number of species as 108, grouped in 22 genera within three orders, exclusive to the Americas; *Didelphimorphia, Microbiotheria* and *Paucituberculata*. We have recently incorporated two new species to this list, but ongoing studies will probably increase this number.

In this context, we have been gathering ecological and distributional information that will allow us to identify the hotspots of New World marsupial richness at different categories (i.e., Species, Genera, Sufamily, Order) and try to identify the main threats to their conservation. A significant amount of information is being published yearly on several aspects of New World marsupial ecology.

Our specialist group, comprised of 20 members, is working on the integration of the critical data to evaluate the

Lutreolina massoia (recently described). © P. Jayat and R. Gonzalez



conservation status of all species of marsupials found throughout the New World under The IUCN Red List Criteria.

Dr Gabriel Martin

Chair, New World Marsupials Specialist Group

NORTH AMERICAN PLANT RED LIST AUTHORITY

The mission of the North American Plant Red List Authority is to facilitate IUCN Red List assessments for North American Plants. The RLA also works to coordinate the use of NatureServe information on plant conservation status to inform Red List assessments.

The North American Plant RLA engaged in four principal activities in 2013. Firstly, after having provided data and helping fund and facilitate cactus IUCN Red List workshops in previous years, we assisted in the final stages of the Global Cactus Assessment by reviewing and editing numerous draft assessments. Secondly, with support from the US Fish and Wildlife Service, we completed an in-depth assessment of Goldenseal (Hydrastis canadensis), a North American native plant that is increasingly being used in the herbal products industry. Thirdly, we collaborated with Texas Tech University, the Orchid Specialist Group, the North American Region Orchid Specialist Group, and The IUCN Red List Unit to secure funding to initiate IUCN Red List Assessments of priority US orchid species. The project will also generate public awareness of the threats to North American orchids. Finally, we provided reviews of draft monocot assessments for a Sampled IUCN Red List Index project being carried out by the Royal Botanic Gardens, Kew.

Bruce Young

Chair, North American Plant Red List Authority

Carnegiea gigantean. © Bruce Young



ORCHID SPECIALIST GROUP

The Orchid Specialist Group (OSG) is a global network of experts working together to build a scientific and practical foundation for the conservation of orchids (*Orchidaceae*).

The most important activity in 2013 was the organisation and successful running of the Fifth International Orchid Conservation Congress (IOCC5) in early December on La Réunion. Entitled 'Making the Links', the congress focused on the complex interactions of orchids with pollinators, mycorrhizas and other organisms. Attended by more than 120 delegates from 27 countries, the meeting was also a chance for OSG members to connect with each other, establishing connections between the various regional and thematic groups of OSG and discussing collaborations. A formal meeting of OSG took place during the congress, with the main item being an introduction to IUCN Red Listing (led by Hassan Rankou, the OSG IUCN Red List Coordinator). The local organising committee led by Thierry Pailler produced a book on orchids of La Réunion, including IUCN Red List assessments, which was presented at the congress. A major outcome of the congress is that Hassan has been invited to run IUCN Red List workshops in China and Australia in 2014. We hope that this will lead to an increase in the number of species of orchids assessed for The IUCN Red List.

Other key activities in 2013 have been The IUCN Red Listing of all *Cypripedium* species as part of a project to add all slipper orchids to The IUCN Red List, publication and distribution to members of three issues of the OSG Newsletter (edited by Marilyn Light), and reconstitution of the Group for the 2013–2016 quadrennium.

Cypripedium acaule. © Michael MacConaill



We acknowledge support from the Framework Grant from the Environment Agency Abu Dhabi to the IUCN Species Survival Commission for the Red Listing of slipper orchids.

Dr Mike Fay

Chair, Orchid Specialist Group

OTTER SPECIALIST GROUP (OSG)

2013 was a busy year for the OSG. In March, we held the OSG Management Team meeting and co-organized the Wild Musteloid Conference in Oxford, UK; in April we attended the European Otter Workshop in Kinsale, Co. Cork, Ireland, and in August at the 11th International Mammal Congress in Belfast, Northern Ireland, we held a joint-meeting with the Small Carnivore Specialist Group to explore possible cooperative joint ventures. In November, in Bangalore, India, we held a workshop on 'Asian Otter Conservation: Methods for research and conservation planning'. We are currently planning the 12th International Otter Congress, to be held 10–15 August, 2014 in Rio de Janeiro, Brazil. The OSG Bulletin published three issues in 2012–2013. A total of 376 articles are now online and can be accessed here. The work of OSG Co-Deputy Chair Lesley Wright is highly appreciated.

The OSG has held 12 otter field methodology and conservation workshops since 2000 to train students and researchers; four workshops in Asia, three in South America, and five in Europe. We are now developing an online otter field methodology and conservation course with Oregon State University which students will be able to access online or by using a DVD. We will reach out to many more potential students and this online approach will be much cheaper than a workshop.

Populations of the **North American river otter** appear to be doing well. Range expansion has been noted in both native and reintroduced populations in the United States. The status of **sea otter populations** is variable throughout its range; there is still active population range expansion occurring in SE Alaska and Washington, in Canada, and in Japan (northern Hokkaido). Populations in SW Alaska and the Southern Sea Otter in California are not recovering, but no further recent population declines have been documented. In Canada, sea otters have been down-listed to a 'Species of Special Concern'.

In Asia, otter population trends are mixed. The **Smooth** and **Short-clawed otter** have been virtually extirpated from Lao PDR, Myanmar, Vietnam, and northern Cambodia due to

Smooth Otter (Lutrogale perspicillata). © Carol Bennetto



intense trapping efforts while local populations in Malaysia, Thailand, Pakistan and India are declining but still extant. The **Hairy-nosed otter**, the rarest and most elusive Southeast Asian otter has been sighted recently with camera traps and as road kills in Borneo, Malaysia, Cambodia, and Thailand and persists in small isolated populations.

In South America, otter populations are declining in some areas and increasing in others. **Giant otters** are doing well overall in Brazil but are decreasing in Ecuador, Peru and Bolivia, for instance, often due to local conflicts with fishermen. The endangered **Southern river otter** *Lontra provocax* continues to decline as its habitat shrinks further.

The **Eurasian otter** populations are increasing overall in the western portion of its range in the EU and declining in Asia. The **three sub-Saharan African otter species** are stable or declining, particularly in central Africa.

Dr Nicole Duplaix

Chair, Otter Specialist Group

PALM SPECIALIST GROUP

The Palm Specialist Group's primary objective is to conduct a global assessment of all ca. 2600 species of palms. Global taxonomic and spatial resources continue to be developed by group members to provide essential data for this process.

The biodiversity information portal Palmweb.org, led by the Royal Botanic Gardens, Kew and recently funded by the EU FP7 Palms project, now consolidates rich taxonomic content for around half of all species of palm, with basic content available for the remainder. These data have been delivered to the UK NERC-funded portal eMonocot.org, a global biodiversity data resource for monocot plants, and also to a new smartphone and tablet app accessible to a broad audience (see Palmworld.org).

Masato Motoki (MSc student at Imperial College London) has developed a triage methodology during his dissertation project at the Royal Botanic Gardens, Kew. The triage approach exploited distributional data in Kew's World Checklist of Palms and used published assessments from palms and the Sampled Red List Index for Plants project, to develop a model. The primary results were the method itself (in preparation for publication) and a ranking of palm species according to predictions of threatened status to guide assessment priorities.

Dypsis decipiens, Itremo, Madagascar. © Mijoro Rakotoarinivo, RBG Kew



The five-year EU Framework Programme 7-funded Palms project reaches its conclusion in December 2013. This project has explored the impact of exploitation of palms in NW South America from a broad range of perspectives, from basic diversity and ethnobotanical research, through to trade and policy. The project has been led by specialist group members at the University of Aarhus and involves six European partner institutions and four South American institutions in Bolivia, Colombia, Ecuador and Peru. The results of the project are far-reaching and can be explored in full here.

Rodrigo Bernal, a Colombian member of the PSG, has proposed the creation of a National Sanctuary for the Wax Palm, *Ceroxylon quindiuense* (VU), Colombia's National Tree. This sanctuary, which would comprise around 1000 hectares, would include some of the most spectacular stands of this species, including the world's tallest palms, many of them over 45 m tall, and at least one individual over 50 m tall. In the coming months, concerted work with the Ministry of Environment and local environmental authorities is expected to lead to the creation of this sanctuary adjacent to an existing national park.

Mijoro Rakotoarinivo of the Kew Madagascar Conservation Centre led a palm conservation project in Itremo protected area, Madagascar, from July 2012 to June 2013, funded by the Conservation Leadership Programme. The two target species, *Dypsis ambositrae* (CR) and *D. decipiens* (VU), endemic to the central high plateau, are under considerable pressure in the wild. The project aimed to make Itremo a safer place for maintaining the palm populations and their habitats by generating baseline data for monitoring and for the creation of a management plan for long-term conservation in the wild.

As part of a collaboration between the Conservatoire et Jardin botaniques de la Ville de Genève and Nangui Abrogoua University, Abidjan, Côte d'Ivoire, the conservation status of native palms of Ghana have been assessed. The immediate threats observed are essentially anthropogenic, mainly due to loss of natural habitats, unsustainable harvesting, illegal logging and the destruction of seedlings and juveniles in agroecosystems. The creation of new protected areas is necessary for the survival of many palms. Special efforts are needed to raise awareness and promote agroforestry techniques, allowing the survival of juveniles in agroecosystems. In the particular case of the rattans, the establishment of forestry and agroforestry research is urgently required to ensure the sustainability of these intensively exploited non-timber forest products.

Dr William Baker

Chair, Palm Specialist Group

PANGOLIN SPECIALIST GROUP

The Pangolin Specialist Group is hosted by the Zoological Society of London (ZSL) UK. We have 72 members from 24 countries worldwide, and our mission is to "be a global voice for pangolins by working to advance knowledge and understanding of pangolins worldwide, their conservation, natural history and ecology and to catalyze action to meet these needs."

The group has had a very productive 2013 and we worked towards our mission by conducting key activities, such as holding the 1st IUCN SSC Pangolin Specialist Group



Sunda Pangolin (Manis javanica). © Dan Challender

Conservation Conference, held at Wildlife Reserves Singapore in June*. This three-day event, themed 'Scaling up pangolin conservation' was attended by over 40 participants from 14 countries and included sessions on understanding the threats to pangolins, ecological research and the scope for conservation breeding. Our attendance at CITES CoP16 included a side event on the trade in pangolins and making an intervention on enforcement matters in Committee II.

Also in 2013, we revised assessments for all pangolins for The IUCN Red List of Threatened Species™; developed a detailed conservation strategy; held a public seminar in Singapore on pangolins and their conservation predicament and developed a monograph to celebrate and raise awareness of the species. These activities contributed to the IUCN's Strategic Plan, particularly key species results: (15) Species Conservation Strategies, Actions Plans and tools, (20) Conservation Breeding, and links to ex-situ community, (21) Global and regional policy for biodiversity conservation and (23) Communicating species conservation.

We extend our thanks to the Wildlife Reserves Singapore Group who co-organized this event and the Wildlife Reserves Singapore Conservation Fund, the Zoological Society of London, Ocean Park Conservation Foundation Hong Kong, San Antonio Zoo, the Houston Zoo and TRAFFIC for financial support and sponsorship of the event.

Prof. Jonathan E. M. Baillie and Daniel W. S. Challender

Co-chairs, Pangolin Specialist Group

PECCARY SPECIALIST GROUP

The overall aim of the Peccary Specialist Group is to promote the long-term conservation of peccaries and their natural habitats, and the recovery or restoration of peccary species, populations, and communities.

During 2013 the Peccary Specialist Group worked on three major projects. We re-assessed White-lipped peccary, changing its status from Near Threatened to Vulnerable. We updated the assessment of the Chacoan peccary, including new information coming from recent field studies. The group has also been working on organizing a Chacoan Peccary Workshop. This will be a collaborative effort between members of the group and an NGO from Paraguay, Guyra. The proposal has been written and logistics have been



White-lipped Peccary (Tayassu pecari). © Luzia Souza Teixeira Cunha

finalized. We are now looking for funding. The purpose of this meeting is to provide the arena for the creation of a trinational conservation plan, involving Paraguay, Bolivia and Argentina.

Another group-wide initiative, led by Arnaud Desbiez, has been a collection of GPS points of known locations of Chacoan peccary presence and some details for each location to run a habitat suitability analysis. This information will help us to evaluate possible distribution and priority areas. This is an important step towards establishing a conservation action plan for the species.

Many members of our group participated in an email conversation lasting several months, regarding information gathering and discussing the amount of evidence of local extinctions and population crashes of White-lipped peccary. The group has been discussing a hypothesis to explain these mysterious disappearances. Jose Fragoso and others have taken the lead in compiling this important information. An article will be published, drawing attention to this phenomenon and a discussion of possible causes.

Alexine Keuroghlian has created a Facebook Page for the Specialist Group, which has been very successful, now with over 700 followers. The number of people who saw and interacted with content on our page since it was created in March 2013, totals 26,200. This page has helped to disseminate information, interact with the public, and provides a good place to post photos and videos of our species. We are currently working on launching a new website.

Harald Beck and Mariana Altrichter

Co-chairs, Peccary Specialist Group

PELICAN SPECIALIST GROUP (PSG)

The PELECANUS GROUP mailing-list, which is a forum for exchanging information about pelicans, now has 38 members. Members of the PSG have participated, within the scope of their organisation's activities, in the preparation and submission of a project proposal made by the French NGO 'NOÉ conservation'. The project will enhance conservation efforts for the Dalmatian pelican nesting colonies in Lake Skadar (Montenegro + Albania), Karavasta Lagoon (Albania) and Kerkini Reservoir (Greece). The project has received adequate funding and project activities are now being

implemented. Members of the PSG are participating by offering expert advice and training.

The participants of the 1st workshop on pelican research and conservation in SE Europe which was held in Prespa on 1–2 May 2012, prepared an article based on the main results of the workshop. The article is about the current status (2011–2012) of Dalmatian and Great White Pelicans in the Black Sea / Mediterranean flyway and has now been submitted for publication.

A joint initiative was launched by the Society for the Protection of Prespa and the Hellenic Ornithological Society, to provide training and guidance to management bodies of protected areas in Greece, which host Dalmatian pelican nesting colonies (Amvrakikos, Messolonghi and Karla); focusing on identification, ageing, surveying and monitoring of breeding performance in these colonies. Training commenced in 2012, with two on-site visits at Amvrakikos, and more visits are scheduled for 2014. In April 2013, the Society for the Protection of Prespa and the Hellenic Ornithological Society organized the first simultaneous census of Dalmatian and Great White Pelicans throughout Greece; i.e. on all wetlands where pelicans regularly occur. This data has allowed us to make the first-ever approximation of birds present in the country during the breeding season. The census targeted all birds (adult and immature) regardless of breeding status.

Twelve Dalmatian pelicans of various ages were caught and tagged with GPS transmitters in 2012 and 2013, by the Society for the Protection of Prespa (SPP) within its permanent Pelican conservation program. In this context, a member of SPP's Conservation and Research Team visited Israel in October 2012, following an invitation by pelican experts from The Israel Nature and Parks Authority (INPA) with the objective of gaining experience and training in capture and marking techniques. Six of the pelicans are still being tracked during post-breeding migration and wintering. All SPP actions for pelicans were funded by the MAVA Foundation (Switzerland) and the Green Fund (Greek State).

A project called 'Investigation of Population Size and Trend, Breeding Biology, Migration and Gene Flow Patterns of Dalmatian Pelican (*Pelecanus crispus*) in Turkey in a Conservation Perspective' which started in 2011, continues to be successful. This project is funded by TUBITAK. Some of the activities included in this project are ringing, (ongoing in

Dalmation pelicans – adults, immatures and juveniles in the Evros Delta, Greece. © Giorgos Catsadorakis



four wetlands – more than 150 juveniles were ringed in 2013), tagging and tracking (four juveniles were wing tagged with transmitters for the first time in Lake Aktas, Turkey, and are being tracked regularly).

Giorgos Catsadorakis

Chair, Pelican Specialist Group

PINNIPED SPECIALIST GROUP

The activities of the Pinniped Specialist Group in 2013 included; extensive interface with and participation in the newly formed Climate Change Specialist Group; serving as a contact point for the IUCN Marine and Polar Programme, various regional offices and the SSC / CEESP Sustainable Use and Livelihoods Specialist Group on seal-related issues, and preparing to undertake the upcoming re-assessment of pinniped species on The IUCN Red List.

The latter activity included expanding our group, with two new members to improve the coverage of available knowledge on pinnipeds globally and to deal with taxonomic reassessments. Critically Endangered species and populations remain a focal point for the group, but members of the PSG are also heavily engaged with local threats to pinniped populations presented by fisheries operations, industrial development and in some cases, unsustainable harvesting of the pinnipeds themselves.

Dr Kit Kovacs

Chair, Pinniped Specialist Group

POLAR BEAR SPECIALIST GROUP (PBSG)

The PBSG is unlike the majority of other Specialist Groups as it not only focusses on a single species, but centers its work around a regional single-species conservation agreement. This is the 'Agreement on the conservation of polar bears' of 1973, which was negotiated by the group in its infancy, and taken care of by the group for a long period while the Parties to the agreement were inactive between 1981 and 2007. The PBSG has taken a conservative approach to this very important task and has therefore reserved group membership for active expertise in the field of polar bear research and management.

Atlantic Walrus. © Kit M. Kovacs and Christian Lydersen, Norwegian Polar Institute



The Parties to the original Agreement decided to reactivate their active engagement in 2007, and since 2009 they have held biennial meetings. The PBSG has served as independent advisor to the Parties in these meetings. Recognizing its new role, and the release from a perceived formal responsibility towards the agreement, the PBSG met under extraordinary circumstances in October 2012 in Oslo, to discuss internal matters in order to address the significant global public attention that polar bears and the effects of global warming now receive on a daily basis. The new guidelines developed at this meeting can be found on the group website.

The PBSG agrees that its main and most important function is to compile and communicate best available science about polar bears and their habitat, and to facilitate collaboration among members of the group. The number of tasks related to the advisory role is ever increasing, and the group will discuss how to deal with the work load at its next regular meeting in June 2014.

2013 has been an active year and the group has devoted time and resources to several issues. We have updated the status assessments for all 19 subpopulations, delivered factual input to provide a basis for the analysis of the proposal to move polar bears from Annex II to Annex I of CITES, prepared for an update of The IUCN Red List assessment before 2015, delivered statements in hearings of harvest quota in Canadian subpopulations, delivered inputs to the Parties work towards a circumpolar action plan for polar bears, and finally participating in the Meeting of the Parties to the 1973 Agreement in Moscow in December 2013 with two official delegates.

Dag Vongraven

Chair, Polar Bear Specialist Group

Pair of Polar Bears. © Andrew E Derocher



PRIMATE SPECIALIST GROUP

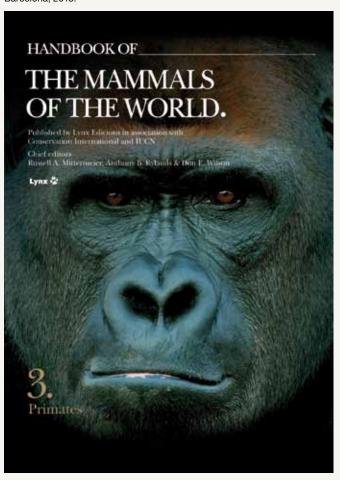
The mission of the Primate Specialist Group (PSG) is to maintain the current diversity of the Order Primates by ensuring the survival of threatened species wherever they occur and providing effective protection for large numbers of primates in areas of high primate diversity and abundance.

2013 saw the publication of the primate volume (3) of the series *Handbook of the Mammals of the World*; an encyclopaedic treatise with essays on each primate family and accounts and illustrations of all the species and subspecies – a collaboration between the PSG and Lynx Edicions, Barcelona.

A concurrent review of the primate taxonomy resulted in the recognition of 488 species and 690 species and subspecies. Seven primates were described in 2013: a slow loris, a squirrel galago, two mouse lemurs, a dwarf lemur, and two woolly monkeys. A Section on Small Apes was formed; headed up by Benjamin M. Rawson (FFI). He is organizing a Gibbon Rehabilitation, Reintroduction and Translocation Workshop to be held in Cambodia in 2014. An IUCN action plan: Lemurs of Madagascar: A Strategy for their Conservation 2013–2016 was published and launched in Madagascar in July, 2013; a meeting about its implementation was convened at the International Prosimian Congress in Ranomafana, Madagascar in August.

The Section on Great Apes (SGA) published guidelines for great ape conservation in Forestry Stewardship Council-certified concessions, and two IUCN conservation action plans for great apes in the DR Congo; one for the bonobo, the other for Grauer's gorilla and eastern chimpanzees. Together with WCS Congo and WWF's African Great Apes Programme, the

Handbook of the Mammals of the World Volume 3. Primates. Lynx Edicions Barcelona, 2013.



SGA organized a workshop in Brazzaville, Republic of Congo, to review and update the regional conservation strategy for great apes in western equatorial Africa. The workshop was sponsored by the Arcus Foundation's Great Apes Programme, the United States Fish and Wildlife Service Great Ape Conservation Fund, and the United Nations Great Ape Survival Partnership (GRASP).

Working groups were formed to write statements on: 1) the rapidly expanding oil palm industry in Africa; and 2) a proposal to install a cable car system in Rwanda's Volcanoes National Park, home to the Critically Endangered mountain gorilla. Great apes were the focus of an international media event in Wyoming in September - the Great Ape Summit was convened by the organizers of the Jackson Hole Wildlife Film Festival, the Arcus Foundation and GRASP. Delegates to the summit issued a public statement on oil palm. The Steering Committee of the SSC is preparing a statement on oil palm, drawing largely on the SGA and Great Ape Summit statements. Issues of the PSG newsletters and journals, Primate Conservation, Neotropical Primates, Lemur News and the Asian Primates Journal were published and placed for open access on the PSG website. The Margot Marsh Biodiversity Foundation (MMBF) continued to provide significant funding for primate research and conservation worldwide, and the Primate Action Fund, managed by Conservation International, awarded 35 small grants in 2013.

The work of the Red List Authority Coordinators was mainly 'behind the scenes' in 2013. All 105 lemur reassessments from the 2012 workshop in Madagascar were finalized and sent out for review. We started planning the Red Listing workshops for Neotropical and Asian primates, which will be held in 2014 as part of the GMA process. We also dealt with incoming external assessments (e.g., for the Javan slow loris and the Angolan colobus).

Russell A. Mittermeier, Chair, Anthony B. Rylands, Deputy Chair, Liz Williamson, Vice Chair – Section on Great Apes. Primate Specialist Group.

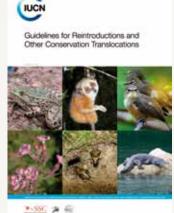
RE-INTRODUCTION SPECIALIST GROUP

The Re-introduction Specialist Group (RSG) is a network of specialists whose aim is to combat the ongoing and massive loss of biodiversity by using re-introductions and other conservation translocations as a responsible tool for the management and restoration of biodiversity. It does this by actively developing and promoting sound inter-disciplinary scientific information, policy,

and practice to re-enforce, reintroduce, or establish populations in suitable habitat for conservation outcomes.

In 2013, the RSG finalized the IUCN Guidelines for Reintroductions and Other Conservation Translocations, which were developed as an initiative to update the 1995 IUCN Guidelines for Re-

Guidelines for Reintroductions and Other Conservation Translocations (2013).



introductions. These new guidelines were developed by an RSG Task Force which comprised mainly of the Reintroduction and Invasive Species Specialist Groups. These new guidelines are now addressing issues such as Assisted Colonization which are being conducted as a response to issues such as climate change. These guidelines can be downloaded here. The RSG has also published the 4th issue of the Global Re-introduction Perspectives: further casestudies from around the globe, which can be downloaded here. This present issue has a total of 52 case-studies from around the world.

The RSG would like to thank the following main donors; Environment Agency-ABU DHABI, UAE, Denver Zoological Foundation, USA, and Calgary Zoo.

Dr Frédéric Launay and Dr Axel Moehrenschlager

Co-chairs, Re-introduction Specialist Group

RUSTS AND SMUTS SPECIALIST GROUP

The primary objective of the Rusts and Smuts Specialist Group is to build awareness that microscopic fungi also need to be included in conservation documents and actions. The most serious problem for assessment of the conservation status of species of these groups of fungi, is connected with a gap in knowledge on the distribution of species (a limited number of distribution records from almost all non-European regions). Our efforts in 2013 were focused on (i) taxonomic revisions (e.g., a monograph of *Anthracoidea* in Japan, the Kuriles, Korean Peninsula, and Sakhalin), (ii) accumulation of distribution records, and (iii) preparation of a proposal aiming at assessing the conservation status of smut fungi in East Asia. The Rusts and Smuts Specialist Group continued

Tilletia filisora - Thailand. © R.G. Shivas



seeking funds for this project in 2013 and will look for other funding opportunities in 2014. Our Specialist Group has nine members.

Prof. Cvetomir M. Denchev

Chair, Rusts and Smuts Specialist Group

SALMONID SPECIALIST GROUP

We continue to develop as a Specialist Group, and have expanded our membership to include a number of specialists working on Atlantic salmon (*Salmo salar*) to complement our expertise on Pacific salmonids.

We completed IUCN Red List assessments for the remaining members of the genus *Hucho*, a group of giant salmonids in Eurasia. We completed assessments of Siberian taimen (*Hucho taimen*) VU, Sichuan taimen (*Hucho bleekeri*) CR, and Korean taimen (*Hucho ishikawae*) DD, and published a summary paper on their status, highlighting the urgent need to take action to conserve them. We made progress during 2013 on reviewing and adding to IUCN Red List status assessments of North American salmonids. The SSG Chair was asked to be part of an international team evaluating species and ecosystemlevel impacts of a proposed hydroelectric dam in Mongolia that would represent a substantial threat to Siberian taimen. We worked with the IUCN SSC to write a letter to the Austrian government to raise issues related to a hydroelectric dam that would impact Danube salmon (*Hucho hucho*) EN.

We have also recently reached out to the Cat Specialist Group and the Sturgeon Specialist Group to discuss combining efforts on a multi-species conservation project in the Sikhote-Alin mountain range in the Russian Far East, focusing on a set of charismatic species including Siberian tiger EN, Blakiston's Fish Owl EN, Sakhalin taimen (*Parahucho perryi*) CR and Sakhalin sturgeon CR. The SSG Chair spent three months in Japan during 2013 on a research fellowship, and worked with Japanese partners on a new monitoring effort to estimate the size of the adult population of Sakhalin taimen in a special river protected area in Hokkaido.

We, in cooperation with the Wild Salmon Center and Russian conservation partners, continue to pursue opportunities to create new protected areas for salmonids in the Russian Federation. It was announced late in 2013 that a new protected area was established in the Russian Far East, the Shantar Islands National Park. This represents the culmination of over 10 years of effort. This park encompasses an entire island archipelago and its surrounding marine waters, amounting to a

Shantar Islands National Park, Russia. $\ \ \, \ \ \,$ Misha Skopets



total of 515,500 hectares under permanent protection. The island is home to a rich diversity of plants and animals, including the only known population of rainbow trout (*Oncorhynchus mykiss*) in the Russian Federation outside the Kamchatka Peninsula. A great conservation milestone to reach right at the end of 2013!

Peter S. Rand

Chair, Salmonid Specialist Group

SCIAENIDAE RED LIST AUTHORITY

The goals of the Sciaenidae Red List Authority are to complete the global IUCN Red List assessment of approximately 300 species of sciaenid fishes; create networks for solving taxonomic problems of local species (e.g. recent emphasis in China and Southeast Asia); support *in-situ* protection of coastal habitats associated with other threatened or more 'charismatic' species, e.g. hump back dolphin (*Sousa chinensis*) in Taiwan strait; encourage collaborative study on the impact of escaped exotic aquaculture sciaenid species (e.g. Red Drum *Sciaenops ocellatus*) along the China and Vietnam coast, and build a Global Sciaenidae Conservation Network based in the National Museum of Marine Biology in Pingtung, Taiwan, to host a worldwide Sciaenidae specimens collection (so far, a total of 120 species of fishes, otoliths, and tissue samples have been catalogued).

The Sciaenidae Red List Authority has over 50 specialist members worldwide. Over 90% of the 300 species of Sciaenidae have been assessed and are currently under the final stages of review, before submission to IUCN. New World, West Africa and European Sciaenidae assessments are almost complete; draft assessments of Indo-Pacific species (undertaken in 2009 at the Manaus workshop) need further review.

For 2012–13, local workshops and training sessions on Chinese Sciaenidae were made in Mazhu, Kaoxiong, Shanghai and Xiamen, to help resolve identification difficulties. To complete the Indo-Pacific Sciaenidae Red List, a consulting trip to visit local experts in Malaysia and Thailand is planned for the first half of 2014. The chairs and members of the group continue to participate in Red List assessment workshops when necessary and we continue to seek funds for our work with local specialists, in order to deal with local conservation issues.

Ning Labbish Chao and Ming Liu

Co-chairs, Sciaenidae Red List Authority

Jackknife Fish (Equetus lanceolatus). © Labbish Chao

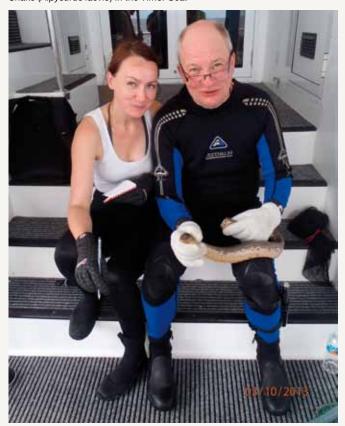


SEA SNAKE SPECIALIST GROUP

The Sea Snake Specialist Group (SSSG) aims to promote the conservation of the world's sea snakes by identifying, documenting and developing practical strategies for mitigating threats to their long-term survival and promoting, where necessary, the recovery of sustainable wild populations. We also work to advance knowledge and raise awareness of sea snakes and their habitats. Our focal species are the marine and coastal hydrophiines, and marine and freshwater homalopsids and acrochordids. Arne R. Rasmussen was appointed as Co-chair of the SSSG in mid-2013, replacing Vimoksalehi Lukoshek, who stepped down from this role in early 2013. Our group continues to expand, now with 35 members in 20 countries.

A major focus of 2013 was the severe decline of sea snakes on the Timor Sea reefs of Northwestern Australia. Nine sea snake species were previously resident at the Ashmore Reef Marine Reserve, with high population densities in coral, sea grass and lagoon habitats. However, following unexplained declines over the last ~15 years, all of these species have now disappeared. The Critically Endangered and endemic shortnosed and leaf-scaled sea snakes, Aipysurus apraefrontalis and A. foliosquama, were previously known only from Ashmore and neighbouring Hibernia Reef, but have not been sighted at either reef since 1998 despite intensive survey efforts. Members of the SSSG brought attention to this overlooked conservation crisis in 2013, via articles in international journals and the popular press. A three-week survey of the Timor Sea reefs in March 2013 further documented the decline of sea snakes in this region, and revealed a collapse of reproductive barriers ('reverse speciation') between A. laevis and Endangered A. fuscus at tiny Hibernia Reef. Declines in sea snake abundance over that last nine years in New Caledonia were also documented and publicized by SSSG members in

Kate Sanders (left) and Arne Rasmussen (right) examining an Olive Sea Snake (*Aipysurus laevis*) in the Timor Sea.



2013. Continued monitoring of these threatened sea snake populations, and understanding the causal factors underlying their declines, are key priorities for the SSSG.

Kate L. Sanders and Arne R. Rasmussen

Co-chairs, Sea Snake Specialist Group

SEAGRASS SPECIALIST GROUP

The 72 species of seagrasses worldwide were assessed and listed on The IUCN Red List in 2011. The Seagrass Specialist Group had a preliminary meeting at the International Seagrass Biology Workshop in Buzios, Brazil, 2012. Scientists from around the world reported on some encouraging efforts to restore and conserve seagrasses, along with a growing recognition of the importance of seagrass habitat to the ecology of the coastal oceans. Seagrasses are food for manatee and dugongs as well as sea turtles, habitat for numerous organisms including sea horses, and nursery areas for temperate and tropical fishes. The next specialist group meeting will be held on Hainan Island, China in 2014.

Halophila beccarii is a small oval-bladed seagrass which is listed as Vulnerable on The IUCN Red List. This delicate species has suffered extensive destruction in Southeast Asia as a result of mangrove deforestation and creation of shrimp aquaculture ponds. Working in southern China with the Guangxi Mangrove Research Center, we have initiated a project to restore H. beccarii to newly created mangrove reserves. Additionally, we are growing this species in culture to assess the growth patterns and determine expansion and turnover rates.

The species status of the genus *Halophila* in the Pacific is under investigation through genetic analysis and barcoding, to determine the degree of genetic similarity between numerous species. A southwest Australian research team is using genetic analysis to examine the validity of species identifications that have been based on morphological characteristics. The analysis will help to create a better assessment of these species found throughout the Indo-Pacific. Investigations of the conservation status and genetics of *Z. chilensis* are underway by a group based in southeast Australia to assess this Endangered species. *Zostera chilensis* is one of the most threatened seagrasses, and little is known about the species. Growing on the Pacific coast of Chile, it has been documented for many years but the extent and genetic characteristics of this species needs further study.

Manatee eating Syringodium filiforme in Belize. © Hoslo Jiwa



An invasive seagrass, *Halophila stipulacea*, was first discovered in the Caribbean in 2005, arriving from either the Mediterranean or the Indian Ocean. Since 2005, it has spread to 15 islands extending across the Caribbean from Aruba to St John. Although seagrasses are not generally considered to be invasive, there is evidence that *Halophila stipulacea* is displacing one of the native Caribbean species, *Syringodium filiforme*; and there is concern for its potential impact on two other threatened species, *Halophila baillonii* (Vulnerable) and *Halophila engelmanni* (Near Threatened).

Frederick T. Short

Chair, Seagrass Specialist Group

SEAHORSE, PIPEFISH AND STICKLEBACK SPECIALIST GROUP

Project Seahorse, acting as the IUCN SSC Seahorse, Pipefish and Stickleback Specialist Group, continued to make measurable strides toward an improved conservation status for seahorses, in particular. We held a consultative discussion meeting on the formation of the Specialist Group at the Syngnathid Biology International Symposium in Faro, Portugal in March 2013, with about 30 experts on syngnathid biology attending.

We carried out a rapid assessment of seahorses in Thailand, as well as studies of seahorse fisheries and research on seahorse life history in Malaysia. We provided expertise in a shoreline development project in Hong Kong, and developed regional identification guides for seahorses in trade for Southeast Asia which were translated into Thai and Vietnamese. We collated and synthesized all known material on seahorse biology, life history, habitats, fisheries, trade, management, and conservation action for *Hippocampus kelloggi, H. kuda,* and *H. spinosissimus* in Thailand and Vietnam. Technical advice was provided to scientists, resource managers, aquarium professionals, aquaculture technicians, and school children.

IUCN Red List assessments have been completed for eight sticklebacks (Gasterosteidae – only one of which had previously been assessed). Both pegasids (*Pegasidae*, sea moths) were re-assessed and are now awaiting submission, while assessments for two seahorse species are currently

H. Histrix - Indonesia. © Rudi Rombouts-GuyLian SOTW



under review. We also contributed to the European Red Listing effort, which includes two sticklebacks (Gasterosteidae) and 19 Syngnathiformes. We conducted Red List training for 20 participants at the SyngBio Symposium in Portugal.

We formally collaborated with CITES Authorities in Thailand and Vietnam, as they work to implement CITES recommendations issued under the first Review of Significant Trade (RST) for any fully marine fish (in this case, for the three seahorse species mentioned above). This became particularly important as the Standing Committee banned Vietnam in March from exporting H. kuda - the first export ban under CITES for any fully marine fish. We have developed a framework for making Non-Detriment Findings for Seahorses, which was reviewed and improved by colleagues in Thailand, Vietnam and internationally. We also provided information to UNEP-WCMC during its review of four seahorse species recently brought under the RST: Hippocampus algiricus, H. barbouri, H. histrix, and H. trimaculatus. We co-authored (along with the Chair of the Grouper and Wrasse SG, ex-co-Chair of the Shark SG and Chair of the SC Policy Subcommittee) a substantial review paper about CITES and marine fishes in Fish and Fisheries. Field surveys were conducted in Senegal to provide trade analysis and biological data on the heavily exploited species, H. algiricus.

Powered by iNaturalist, we launched iSeahorse, a new citizen science web-based tool and iPhone app. This venture allows citizens to upload all seahorse sightings, in a bid to map distributions and address the Data Deficient status of far too many seahorse species. We also initiated a national iSeahorse programme in the Philippines; this will serve as a pilot study for broader global development. We have created a trends toolkit for iSeahorse, which will allow users to engage in repeat monitoring of the same seahorse populations, and therefore contribute longitudinal data of direct conservation utility. There were training workshops for potential monitoring teams on the upcoming trends elements of iSeahorse in Singapore and at the John G. Shedd Aquarium in Chicago. We frequently share seahorse information and images via Facebook (3,600 users) and Twitter (1,600 followers) and we produced 37 blogs; including stories in National Geographic Newswatch and Huffington Post.

We gratefully thank a wonderful set of generous and hugely valued donors and partners for supporting Project Seahorse and, through us, our SSC work.

Amanda Vincent

Chair, Seahorse, Pipefish and Stickleback Specialist Group

SHARK SPECIALIST GROUP (SSG)

Our vision is for a world where sharks, rays, skates, and chimaeras are valued and managed for sustainability. Our mission is to secure the conservation, management and where necessary, the recovery of the world's sharks, rays and chimaeras by mobilizing global technical and scientific expertise to provide the knowledge that enables action.

In 2013, the SSG completed a strategic planning exercise and now has a refreshed vision, mission, guiding principles and core activities. Co-chairs, Nick Dulvy and Colin Simpfendorfer, and Program Officer Lucy Harrison attended CITES as part of the IUCN delegation. Lucy Harrison worked on the IUCN/TRAFFIC review of the proposals, soliciting SSG



Giant Guitarfish (Rhynchobatus djiddensis). © Matt D. Potenski

members to determine whether proposals meet the criteria for listing. Other SSG members were involved in the FAO ad hoc technical working group that reviews the proposals. The full IUCN/TRAFFIC analysis can be found here. Details of the FAO Assessment of the CITES Proposals are available here.

Seven species of shark and ray were listed on CITES Appendices: Oceanic Whitetip Shark, three Hammerhead species, two Manta Rays, and with the uplisting of *Pristis microdon*, all sawfishes are now listed in Appendix I. With the EU Red List Office, the SSG began re-assessing all 143 European sharks and rays. We published the North American regional Red List report which received considerable media uptake, particularly in North and South America.

Nick Dulvy was invited to contribute to a Calgary Shark Fin Task Force, co-chaired by Aldermen Farrell and Pincott, including Shark Fin Free Calgary, the Calgary Zoo, and representatives from the community; with the goal of achieving meaningful civic action on the issue of shark finning. Both Chairs reviewed all Save Our Species applications for the "Sharks and Rays" call. Nick Dulvy won funds to undertake a scoping project to start developing a global Conservation Strategy for Manta and Devil Rays. A follow-on proposal was submitted to Save Our Seas Foundation. Colin Simpfendorfer won funds to develop national Shark and Ray report cards for Australia; this process will enable us to reassess the Australian and Oceania species. Simpfendorfer participated in a meeting of Pacific nations to build capacity to deal with sharks listed by CITES. This included training on the development of NDFs and cooperative arrangements between nations.

The influence of the SSG continues to grow; we now have 5,129 Facebook and 2,297 Twitter followers. Our work was made possible through the generous support of the Save Our Seas Foundation, the US State Department, the Fisheries Headquarters Program Office, US Department of Commerce and the Mohammed bin Zayed Foundation Species Conservation Fund.

Nick Dulvy and Colin Simpfendorfer

Co-chairs, Shark Specialist Group

SIRENIA SPECIALIST GROUP

The overarching goal of the Sirenia Specialist Group is to promote effective conservation of all four species of sirenians



Trichechus senegalensis. © Tomas Diagne / Oceanium Dakar

throughout their ranges, especially in developing range states. To lead the development of regional goals and objectives, the Sirenia Specialist Group has been re-organized into six regions; South American Regional Group, Meso-America Regional Group, United States Regional Group, West African Regional Group, Indian Ocean Region Members, Pacific Regional Group.

The Specialist Group hosted the sixth International Sirenian Workshop at the 20th Biennial Meeting of the Society of Marine Mammalogy in Dunedin, New Zealand in December 2013. The group newsletter Sirenews continues to be published bi-annually. In March 2013, CITES approved the transfer of the West African manatee from Appendix II to Appendix I. Experts from the Sirenia Specialist Group strengthened the final proposal. Twenty-five range states have now signed the UNEP/CMS Dugong MOU. Co-chair Helene Marsh attended the Second Signatory State Meeting (SS2) of the Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range in Manila, Philippines, in February 2013. The GEF Dugong and Seagrass Conservation Project Document has successfully undergone the UNEP Panel Review and is ready for submission to the GEF Secretariat for GEF review and endorsement.

One of the goals of the Sirenia Specialist Group is to promote regional conservation actions of the Amazonian manatee. In August 2013, Co-chair Benjamin Morales visited the Centro de Rescate Amazónico (Rescue Amazonian Center) (ACOBIA-DWAZOO) in Iquitos, Peru, to learn of their Amazonian manatee recovery program and educational programs. This visit provided an opportunity to talk with the Centre Director Javier Velásquez, about developing regional strategies to improve the regional coordination between different institutions and NGOs, working on the conservation of the Amazonian manatee and its habitat along the Amazonian River. Morales also travelled to Puerto Narino in Colombia, to talk with Sarita Kendall at the Natütama Center and to learn about their educational programs. There was widespread enthusiasm for a regional workshop to encourage new collaborations between organizations. In November of 2013, Javier Velásquez and Juan Sánchez from ACOBIA and Fabia Luna from the National Center of Aquatic Mammal from Brazil came to Mexico to share their experiences in manatee conservation in captivity and reintroduction programs with Mexican experts.

The major task for the group in 2014 is the re-assessment of the conservation status of the four species of sirenia for The IUCN Red List of Threatened Species $^{\text{TM}}$.

Helene Marsh, Benjamin Morales

Co-chairs, Sirenia Specialist Group

SMALL CARNIVORE SPECIALIST GROUP (SCSG)

Small carnivores represent over half of all species in the order Carnivora. This diverse group includes over 150 species in nine families (Ailuridae, Eupleridae, Herpestidae, Mephitidae, Mustelidae, Nandiniidae, Prionodontidae, Procyonidae, and Viverridae). A central theme of the SCSG is to improve the dissemination of information on this incredible group of species. The goals of the SCSG, as established by IUCN, are to: 1) Provide leadership for the conservation of all small carnivore species, 2) Determine and review on a continuing basis the status and needs of small carnivores, and support effective research, conservation, and management programs, and 3) Make known the status and conservation needs of small carnivores, and promote their wise management.

Two issues of the journal Small Carnivore Conservation (SCC) were produced; one dedicated to African species (volume 48) and another focusing globally (volume 47). Both can be accessed via the journal website. In addition, group members were convened at a symposium during the 11th International Mammalogical Congress 2013 (Belfast, Ireland), entitled "Small Carnivores in Space and Time". Group members have been working to produce two published proceedings; a book resulting from the collection of chapters presented at the IMC2013 Congress and another proceeding of the 'Borneo Conservation Symposium' from an earlier conference. Additionally, the SCSG was among the sponsors of 'A conference on the biology and conservation of wild mustelids, skunks, procyonids and Red Panda' held at the Department of Zoology, University of Oxford. Finally, several group members were involved in the description of a new small carnivore species, the olinguito (Bassaricyon neblina), the first new mammal species in the order Carnivora described in the Americas in 35 years.

We are thankful to a great number of donors and sponsoring organizations, as well as the group itself and to the journal specifically. We are indebted to the Nature Conservation Foundation for maintaining the group and journal website, to the Zoological Society of Southern Africa,

Olinguito (Bassaricyon neblina). © Miguel Pinto



University of Fort Hare and Southern African Wildlife Management Association for contributions to the Africa Special Edition of the SCC journal, and to the Houston Zoo, Greenville Zoo and Missisippi State University (MSU) for contributions towards the previous SCC issue. We are also grateful to MSU, Arizona State University, Universidad Nacional Autónoma de México, and the Sierra to Sea Institute for their in-kind sponsorship of SCSG chairs.

Jan Schipper and José F. González-Maya

Chair, Small Carnivore Specialist Group

SMALL MAMMAL SPECIALIST GROUP

Formed in 2011, the Small Mammal Specialist Group (SMSG) is an expanding global network of scientists and conservationists who specialize in the world's rodents, shrews, moles, solenodons, hedgehogs and tree-shrews. Our mission is to serve as the "global authority on the world's small mammals through developing a greater scientific understanding of their diversity, status and threats, and by promoting effective conservation action to secure their future". Our volunteer members conduct fieldwork and lab research to improve the world's scientific understanding of the taxonomy, ecology and conservation status of over 2,800 of these often poorly known species. We promote conservation actions on the ground for species of conservation concern, and develop strategies to enable more effective conservation of small mammals.

In 2013, we conducted a global analysis of small mammal distributions to pinpoint sites and regions around the world that support globally important small mammal assemblages. This underpinned a conservation prioritisation process to guide membership recruitment, and focus our knowledge gathering for Red Listing and action-planning for conservation. With Dr Kris Helgen, we completed a rapid taxonomic review of the rodents, tree-shrews and eulipotyphlan insectivores, listing around 120 or so species that have been described since 2008 with many other sub-species taxonomic revisions. With the Global Mammal Assessment Team of Rome's Sapienza University, we launched a major project to assess or reassess the 2,800 small mammal species for The IUCN Red List by end of 2015. So far, we have completed 50 assessments of new small mammal species - now on the Global Mammal Forum and will have completed roughly 200 species reassessments by the end of the year. In October, we launched our new website

Hispaniolan Solenodon (Solenodon paradoxus). © Jose Nunez-Mino



and associated Facebook pages and Twitter accounts as networking and information-sharing tools. The website serves as an information hub for researchers, conservation professionals and keen naturalists interested in the status of the world's small mammals. It promotes the work of some of our global expert members investigating small mammal diversity and working in remote places around the world to save the most endangered species of small mammal. We started recruitment of 10 Regional Chairs who will help drive the development of the SMSG and ensure greater regional representation at the senior levels of the group.

Finally, we are very grateful to the Durrell Wildlife Conservation Trust, the Texas A&M University and the Zoological Society of London for their generous support of the SMSG.

Dr Richard Young and Dr Thomas E. Lacher, Jr

Co-chairs, Small Mammal Specialist Group

SNAKE AND LIZARD RED LIST AUTHORITY

In 2013, the Snake and Lizard Red List Authority focused on reviewing IUCN Red List assessments resulting from Global Reptile Assessment (GRA) workshops, and on submitting species assessments with completed reviews, to The IUCN Red List. A key element of IUCN's strategic plan is to increase the coverage of different taxonomic groups on The IUCN Red List

Just over 600 reptile species (including reassessments and a small number of corrected assessments) were added to The IUCN Red List in 2013, bringing the total number of reptiles on The IUCN Red List to over 4,000 (over 40% of the global total) for the first time. The majority of these species were included in the first IUCN Red List update in 2013, and included the majority of regional endemics from the 2012 GRA workshops on the reptiles of Central America and West Africa.

Additionally, a number of recently-recognized, highly threatened skinks from the Caribbean were both assessed and reviewed through the RLA membership, and a moderate number of species with outstanding queries following 2011's Western Ghats and Oceania workshops, were also added to The IUCN Red List; completing these regions for the GRA (with the exception of only individual species which remain under review).

Philip Bowles

Chair, Snake and Lizard Red List Authority

Mexican Parrot Snake (Leptophis mexicanus). © Philip Bowles





Lane Snapper (Lutjanus synagris). © D. Synder

SNAPPER, SEABREAM, GRUNT SPECIALIST GROUP (SSG SG)

Our mission is to achieve sustainable use and global conservation of snapper, seabream, grunt, and associated species through improved scientific knowledge, public awareness, and optimized management decision-making. The SSG SG is focused on completing IUCN Red List assessments of over 500 species, as well as diverse conservation needs and regional issues.

IUCN Red List assessments are now being conducted for all snappers and grunts of the Mediterranean, East and West Atlantic, and Arabian (Persian) Gulf (Lutjanidae and Haemulidae, >80 species), as well as seabreams worldwide (Sparidae, 136 species) and smaller families. Our group members are currently working on Marine Protected Area (MPA) and regulatory initiatives in some regions, with a focus on conserving spawning aggregations using available data and traditional ecological knowledge from fishers. Regional Red Listing work includes European region (Mediterranean and Atlantic coast of Europe and E Atlantic islands of Spain and Portugal) - 30 species of Centracanthidae, Haemulidae, Sparidae, (drafts completed in 2013); Northwest Atlantic (Bahamas workshop in 2012); Eastern Atlantic (Ghana workshop in 2013) and Arabian (Persian) Gulf (Qatar workshop in 2013).

Dr Barry Russell and Dr Ken Lindeman

Co-chairs, Snapper, Seabream, Grunt Specialist Group

SOUTH AMERICAN CAMELID SPECIALIST GROUP (GECS)

Our mission is to promote the conservation and sustainable use of (wild) South American Camelids in their area of geographic distribution.

During 2013 we took part in several activities from the international to the national level. At the international level, we reviewed an IUCN/Traffic report on the transfer of the Ecuadorian population of Vicuña (Vicugna vicugna) from Appendix I to Appendix II. We participated at the IPBES meeting on Contribution of Indigenous and Local Knowledge Systems to IPBES: Building synergies with science. We participated at the XXX Meeting of the Vicuña Convention, held in Ecuador and contributed to the elaboration of resolutions. After the meeting, we maintained collaborations with the Pro-

Témpore Secretariat by providing technical information and concerns with regards to pacovicuña breeding in USA. In November, we participated at the First Board Meeting of the Vicuña Managing Communities Association and provided advice. At the national level, several of our members participated in the first and second workshop to develop a national census for the guanaco in Argentina, and we took part in the Preparatory Worksop for the development of a Vicuña Management Plan. Several of our members were involved in the development of sustainable use initiatives for vicuñas and guanacos. At present, we are assessing a law proposal that wants to put the management of guanaco on the same basis as sheep in Argentinean Patagonia.

Red List Authority members started working on the reassessment of vicuñas and guanacos at the species level which will be finished in April 2014. This assessment will be followed by an assessment at the subspecies level, to be undertaken during 2014. We have developed new quantitative guidelines for the admission of new group members; the new assessments will be based on research and academic experience on South American wild camelids, dissemination activities, articulation with the public sector, priority areas, and present engagement with camelid research. In our visit to Ecuador, IUCN-Sur filmed an interview where we promoted the work of our group and discussed the conservation challenges for vicuñas and guanacos.

We would like to thank the Copenhagen Zoo for their support, which enabled us to attend the Vicuña Convention.

Dr Gabriela Lichtenstein

Chair, South American Camelid Specialist Group

SOUTH ASIAN INVERTEBRATE SPECIALIST GROUP

The objective of the South Asian Invertebrate Specialist Group

Vicuñas en los Andes. © Dr Gabriela Lichtenstein



(SAsISG) is to influence, encourage, and assist societies in South Asia (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) to conserve invertebrate diversity; to achieve it through knowledge, empowerment, governance and operations.

We collated and created baseline information on butterflies of South Asia; for 750 species of butterflies from six families. The objective of the project is to assess and to develop a conservation action plan for this region. We initiated a project to collate species information on millipedes of India, for species assessment at a later date. We conducted an invertebrate pollinator conservation training and education workshop in India, in collaboration with international and local partners. This exercise will be repeated to cover the rest of the region. We designed and published educational materials on invertebrate pollinator conservation. Recommendations of the Western Ghats freshwater biodiversity assessment report were implemented, and wide awareness was created through training and outreach.

We greatly acknowledge the following donors for their generous support – Zoological Society of London, Mohamed bin Zyed Conservation Fund, Chester Zoo, Xerces Society, Columbus Zoo and the Critical Ecosystem Partnership Fund.

Dr Bexell Ayyachamy Daniel and Dr Muhammad Ather Rafi

Co-chairs, South Asian Invertebrate Specialist Group

SOUTHERN AFRICAN PLANT SPECIALIST GROUP

The Southern African Plant Specialist Group (SAPSG) consists of 20 botanists working in Southern African countries (South Africa, Lesotho, Swaziland, Mozambique, Zimbabwe, Botswana and Namibia). The main aim of this group is to conduct conservation assessments of plant species endemic to the region, and to ensure the effective monitoring and conservation of plant species of conservation concern.

During 2013, extensive work on surveying the woody flora of northern Mozambique was undertaken by members of the SAPSG. This area has been found to contain high numbers of endemic woody species (85) and it also shares many restricted range species with the Lindi region of southern Tanzania. As a result of this work, a new centre of endemism shared between northern Mozambique and southern Tanzania called the Rovuma centre will be published. The rich forests of

Pill millipede, Agumbe rainforest, Karnataka. © Blnu Priya



northern Mozambique are under severe threat from gas and oil drilling and associated development; rural expansion of the Mozambican population with associated deforestation and planting of agricultural crops, logging for timber and too frequent fires. During 2014, the SAPSG will conduct IUCN Red List assessments on the endemic and near endemic species of the Rovuma centre.

In South Africa, 760 IUCN Red List assessments for threatened plant species were updated and have been included on the South African National Red List website. A network of over 500 citizen scientists take part in plant conservation work as part of the Custodians of Rare and Endangered Wildflowers (CREW) programme. During 2013, 800 populations of plant species of conservation concern were monitored by CREW volunteers. This data is now being used to update The IUCN Red List status of threatened plants. The CREW programme, established in 2003, celebrated its 10 year anniversary last year, and to mark this milestone a publication highlighting the plight of threatened plants in South Africa, and celebrating the excellent work done by this network of volunteers was published. The publication 'Plants in Peril' features 100 of South Africa's highly threatened plant species and the people protecting them.

Ms Domitilla Raimondo

Chair, Southern African Plant Specialist Group

STURGEON SPECIALIST GROUP

The Sturgeon Specialist Group (SSG) is a global network of over 60 experts contributing to the conservation and sustainable use of sturgeon. In 2013, Dr Phaedra Doukakis of the USA was added as Co-chair of the group. She will serve along with Prof. Mohammad Pourkazemi of Iran, who has served as Chair of the group since 1999. In 2013, Dr Joern Gessner of Germany, a long-time SSG member, was appointed as the Red List Authority Coordinator. This year, the composition of SSG members was also significantly restructured, with members from additional countries invited to join, thereby increasing the international reach of the SSG. The group currently includes experts from 17 countries, spanning the range of sturgeon species.

At the 7th International Symposium on Sturgeons (ISS7), held 21–25 July 2013 in Nanaimo, BC, Canada, a meeting was organized to prepare for an update of The IUCN Red List

The Rovuma centre of endemism, shared between northern Mozambique and southern Tanzania.



assessments of North American sturgeons. 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, therefore to ensure a 10 year interval in the updates of the species assessments the North American members of the SSG and selected experts convened a preparatory meeting on July 20, 2013 in the facilities of the Vancouver Island University. Due to the composition of the updated membership, the workshop focused on devising the assessment process as well as on its technical prerequisites. Given financial constraints, the meeting participants agreed to carry out the assessments by the end of 2014, via a series of web-based meetings and surveys. The main challenges in completing the assessment will be the recognition and evaluation of distinct population segments and how this translates into overall, species-level Red List status. Timely completion of the North American assessments will result in the availability of new rankings in 2015.

Dr Mohammad Pourkazemi and Dr Phaedra Doukakis Co-chairs, Sturgeon Specialist Group

SUSTAINABLE USE AND LIVELIHOODS SPECIALIST GROUP (SULi)

The mission of SULi is to promote both conservation and local livelihoods through enhancing equitable and sustainable use of wild species and their associated ecosystems.

In 2013, SULi, working with IIED and TRAFFIC and supported by the International Trade Centre, developed an 'Analytical Framework' (currently in draft), to guide the analysis of wildlife trade chains to better understand how they interact (positively and negatively) with conservation and local livelihoods, SULi initiated and helped develop and fund an ongoing FAO-led study examining the contribution of wild meat to food security in southern Africa. This is linked to an ongoing process in southern Africa to tackle widespread illegal use of wild meat and support food security and sustainable management (led by WCS/ZSL Rangewide Program for Cheetah and Wild Dog and Panthera). SULi has helped develop the new 12 member international Collaborative Partnership on Wildlife, launched in the margins of CITES CoP 16 in April 2013 and currently focused on wild meat. SULi has helped develop thinking across the SSC on integrating

North American Green Sturgeon (*Acipenser medirostris*). © Thomas B. Dunklin



traditional knowledge with science, particularly with respect to Red List assessments. SULi members are part of the Convention on Migratory Species' Saker Falcon Task Force, and were contracted to provide analysis on current Saker Falcon populations, trends in trapping, and advice on how the Task Force can best engage with trappers to improve monitoring of populations and sustainability of harvest and trade. At the request of the Bern Convention, under the Council of Europe, SULi developed a draft Charter on Fungigathering and Biodiversity which was adopted in December 2013.

SULi is playing a leading role in development of learning products on sustainable use in protected areas for the World Parks Congress (in collaboration with WCPA). At the World Parks Congress, SULi will lead a workshop session in stream 4 on sustainable use and food security, and a workshop session in stream 6 on governance. SULi has linked with IUCN CEM Fisheries Expert Group (FEG) and the International Collective in Support of Fishworkers to work with FAO on small scale fisheries, focused on implementation of their forthcoming Small Scale Fisheries Guidelines. An initial Panel Discussion was held at the MARE Conference in Amsterdam in May 2013. SULi provided input into many IUCN and other policy processes, including CITES CoP 16 and relevant positions of the European Union. In November 2013, SULi was consulted and assisted in organizing the agenda for the United for Wildlife Symposium on Illegal Wildlife Trafficking. SULi has also been asked to lead a global study on seal management in 2014.

Mike Murphree

Chair, Sustainable Use and Livelihoods Specialist Group

SWAN SPECIALIST GROUP

The mission of the Swan SG is to facilitate communication between swan researchers and conservationists world-wide, in order to improve links for cooperative research, identify gaps in knowledge and provide a forum for addressing swan conservation issues, especially at an international level. The Swan SG currently consists of over 400 members from 38 countries. Our website (currently in review) can be accessed here.

International Swan Symposia have been held at approximately 10-year intervals since the first meeting was convened at Slimbridge, UK, in December 1971. Early in 2013, the Trumpeter Swan Society (TTSS) kindly offered to host the 5th International Swan Symposium in conjunction with the

Bewick's Swans in flight. © Paul Marshall



23rd Conference of the TTSS. A total of 50 oral presentations and 10 posters reviewed by the Scientific Committee were accepted for the symposium, which was held at Easton, Maryland, USA from 3–6 February 2014. Four workshops were also included in the schedule, on: (i) avian interactions with electric power lines, (ii) implantation of the AEWA Bewick's Swan Species Action Plan, (iii) future organisation/management of the Swan Specialist Group, and (iv) estimating population viability by applying stochastic growth models to annual counts of swan populations.

Most swan populations are considered to be of low conservation concern, but the Northwest European Bewick's Swan population is in rapid decline. To address this issue, a Bewick's Swan Species Action Plan was developed, which was adopted by AEWA in May 2012. Data from the January 2010 Bewick's Swan census were collated during 2013; results indicated a further decline to c. 18,000 individuals, 16% fewer than the 21,500 recorded in January 2005. Range states are taking forward priority actions identified within the Action Plan, including the development of a National Bewick's Swan Action Plan for Estonia, a key staging area for the population in both autumn and spring. Updated population estimates were published for the Icelandic Whooper Swan population and for Western and Eastern Tundra Swan populations.

Eileen Rees

Chair, Swan Specialist Group

TAPIR SPECIALIST GROUP

The Tapir Specialist Group (TSG) is a global group of biologists, zoo professionals, researchers and advocates dedicated to conserving tapirs and their habitat through strategic action-planning in countries where tapirs live. By sharing information and educational outreach, we show the importance of the tapir to local ecosystems and to the world at large.

The major goal of the TSG is to conserve biological diversity by stimulating, developing, and executing practical programs to study, save, restore and manage the four species of tapir and their remaining habitats in Central and South America and Southeast Asia. The TSG strives to achieve this goal through the implementation of the following strategies; frequent review, status determination, and publicizing of tapirs and their needs, promoting and supporting tapir research and conservation, promoting the implementation of strategic action plans by appropriate organizations and governments,

Tapir. © Patrícia Medici



and establishing strong and effective relationships among tapir conservationists to stimulate communication and cooperation.

In 2013, the TSG continued to make steady progress in developing National Action Plans for Tapirs in each tapir range country in South and Central America and Southeast Asia. TSG country coordinators and committees are working tirelessly towards implementing the priority actions and goals developed for each plan. The TSG is well on its way to the implementation of the TSG Strategic Plan 2012–2014. A new three-year Strategic Plan will be developed during the Sixth International Tapir Symposium to be held in Brazil in November 2014. The TSG has completely revamped the TSG Conservation Fund (TSGCF); increasing its donor basis and running a successful 2013 funding cycle. Five proposals were selected for funding, including projects in Belize, Colombia, Ecuador, Myanmar and Nicaragua. The TSG made significant progress on the review and update of several of its publications including the TSG Veterinary Manual, TSG Protocols for Genetic Studies and TSG Guidelines for Reintroductions and Translocations. Tapirs continued to have significant exposure in the media and the tapir conservation cause has received a lot of attention from the general public, particularly in Brazil.

The TSG would like to acknowledge the generous support of the Association of Zoos and Aquariums (AZA) Tapir Taxon Advisory Group (TAG), Copenhagen Zoo, European Association of Zoos and Aquariums (EAZA) Tapir Taxon Advisory Group (TAG), Houston Zoo, and hundreds of other zoos worldwide!

Patrícia Medici

Chair, Tapir Specialist Group

TASK FORCE ON SYSTEMIC PESTICIDES (TFSP)

In recognition of the fact that the rapidly growing global use of highly persistent systemic pesticides, unprecedentedly toxic to

Bumblebee. © D.A.Noome



invertebrates (including pollinators), poses a major threat to biodiversity and ecosystem services, a number of independent scientists established a Task Force on Systemic Pesticides in 2009. This Task Force now resides under the IUCN Species Survival (SSC) and Ecosystem Management (CEM) Commissions. At present, the group consists of 49 experts and scientists from 15 countries, in addition to a number of correspondents in other countries. Dr.Maarten Bijleveld van Lexmond, of Neuchâtel, Switzerland, former Executive Officer of the IUCN Commission on Ecology, has been asked to be its Chairman, while Dr J.P. van der Sluijs of the University of Utrecht, Netherlands, agreed to become its Science Coordinator.

The Task Force aims to describe clearly the ever-increasing risks to ecosystems and biodiversity; to demonstrate the imbalance in present knowledge; to determine the consequences for public health; to look for alternatives and to inform the public at large. In order to achieve the goals of the this Task Force, a strategy with its objectives and phases of execution was developed through working meetings in Paris, France (2010), Bath, UK (2011), Cambridge, UK (2012), Padua, Italy (2012), Louvain-la-Neuve, Belgium (2013) and Tokyo, Japan (2013), with financial support of twelve European organizations and foundations in Germany, Japan and The Netherlands. The Task Force reviews its progress at biannual meetings and has entered into a formal partnership with Utrecht University, Netherlands.

This year, two scientific papers were published concerning the impact of systemic pesticides on macro-invertebrates in surface water, as well as the impact on bees and pollinator ecosystem services.

In Asia, a public symposium was organized in Tokyo on 2–3 September 2012, which involved leading Japanese experts and NGO's, in collaboration with the Act Beyond Trust and Japan Endocrine-Disruptor Preventive Action, JEPA. This was followed by symposia on "Human Health Effects of Neonicotinoid Pesticides" and on "Impacts on Honey Bees, Aquatic Ecosystems and Rice Cultivation" in Tokyo, 9–11 June 2013.

The Task Force's 7th international working meeting took place in Legnaro, Italy on 4–8 November 2013, incorporating a Phytoiatric Forum organized by Veneto Agricoltura. During the forum, the Task Force examined the final version of its extensive synthesis report on the ecological risks of systemic pesticides.

Maarten Bijleveld van Lexmond

Chair, Task Force on Systemic Pesticides

TEMPERATE SOUTH AMERICAN PLANTS SPECIALIST GROUP

There are more than 19,800 species of plants under the scope of the Temperate South American Plants Specialist Group; evaluating such a large number of species is an extraordinary challenge. Considering that the SSC Strategic Plan indicates that the assessment of plants needs to be substantially enlarged to represent adequately the diversity of life, we are focusing our efforts on endemic species, with the objective to assess at least 1,000 endemic species in the period 2013–2016. Our key strategy is to involve local provincial governments in financing assessment workshops; such meetings provide excellent opportunities to interact with officials of local administrations in charge of conservation



Ramorinoa girolae, an endemic species of Western Argentina (distributed in the Provinces of La Rioja, San Luis and San Juan), provisionally assessed as Endangered. © Pablo Demaio

policies.

In 2013 we began contacting Provincial officials in Argentina. As a result of this enterprise, we completed the first workshop in July 2013, in the province of San Juan, assessing 53 endemic species with the participation of local experts and the counseling of Dr Mariella Superina, Chair of the Anteater, Sloth and Armadillo Specialist Group, to whom we are very thankful. There is another workshop arranged for 2014 in the Province of San Luis, in which we plan to evaluate another 25 species.

In parallel, we are interacting with local scientific institutions, trying to include the assessment of endemic species in scientific projects. The Specialist Group is formally involved in the project 'Native plants of the centre of Argentina: diversity, uses and conservation', led by staff scientists of the Botanical Museum of Córdoba (Herbarium acronym CORD). In this project, we plan to evaluate 269 endemic species distributed in the Provinces of Córdoba, Santiago del Estero and La Pampa.

We would like to thank the government of the Province of San Juan for their generous financial support.

Dr Pablo Demaio

Chair, Temperate South American Plant Specialist Group

TERRESTRIAL AND FRESHWATER INVERTEBRATE RED LIST AUTHORITY

The Terrestrial and Freshwater Invertebrate Red List Authority (TIRLA) has the remit of managing the Red Listing of all non-marine invertebrates not covered by any Specialist Group. TIRLA's remit covers at least a million described species and it currently has 73 members.

In 2013 a new Cave Invertebrate Specialist Group was



Seychellonema gerlachi. © Justin Gerlach

established. Discussions with hoverfly experts failed to result in any progress in forming a hoverfly group, but Red List groups within TIRLA were established for centipedes and millipedes, ants and South American tarantulas. It is hoped that in time these may develop into full Specialist Groups. These are only limited achievements and fall far from establishing the infrastructure needed. The failure to develop the necessary infrastructure is not due to a lack of experts or interest, but reflects the impossibility of allocating sufficient time to the task on a purely voluntary basis.

Similarly, there has been progress in increasing the number of invertebrate assessments on The IUCN Red List, but this is mainly the result of a small number of highly focussed initiatives and does little to improve the diversity of invertebrate species on The IUCN Red List. Of the total of 454 TIRLA species added to the list, 315 were dung beetles assessed for the Dung Beetle Sampled Red List Index (SRLI), making good progress towards the 2014 target for that group. This is largely due to the great efforts of Monika Bohm in coordinating and checking these assessments. One cave spider and a single species of psyllid bug were also assessed. This represents a 34% increase in assessed species since 2012, but is far from a representative sample.

A major initiative for 2013 was the reassessment of 415 species of non-marine invertebrate assessments dating from 1996, almost all of which were assessed without data to support the allocated category. At the start of 2013 these represented just over 50% of non-marine invertebrate species on The IUCN Red List, making the accuracy of invertebrate data on the list highly questionable. These reassessments have proved challenging, in many cases no rationale for the 1996 listing was ever provided and there is limited expertise available (and lack of interest) to reassess these taxa Following the development of the new Cave Invertebrate SG and plans to expand the scope of the Crab and Freshwater Crayfish SG some of the remaining species will no longer fall within TIRLA's remit and will be reallocated. Of the species left in TIRLA's remit, 23% have been reassessed.

Progress towards making The IUCN Red List representative of biodiversity as described in the SSC strategic plan is currently extremely slow, and seems unlikely to be achieved on current rates of progress. At present a significant proportion of invertebrates on The Red List are individual assessments of species thought to be of concern, rather than comprehensive or sampled assessments, thus any data

analysis is questionable. In 2013 TIRLA tried to encourage assessors of individual species to move towards assessing larger groups (taxonomic or geographic) but positive responses to this have been limited to date. Ideas for new approaches are being raised and three main options would seem to be available: restricting acceptance of individual assessments until a more representative list has been achieved, massively expanding the sampled assessments (with a corresponding cost), or finding a way of opening out the listing process into a new form of something akin to 'citizen science'. Each of these options pose major challenges, funding and data management, but all need to be considered.

Dr Justin Gerlach

Chair, Terrestrial and Freshwater Invertebrate Red List Authority

THREATENED WATERFOWL SPECIALIST GROUP

The overarching aims of the Threatened Waterfowl Specialist Group (TWSG) are the identification of globally threatened waterfowl taxa, and monitoring their status, facilitating effective communication, transfer of knowledge, and best practice between our members. The TWSG also focuses on producing and implementing species action plans as well as on-theground action. The TWSG membership and forum mailing list has been updated and we now have 255 members from 69 countries.

In January 2013, members of the TWSG conducted a winter survey of key sites for the Critically Endangered Baer's Pochard (Aythya baeri). Unfortunately this found a total of only 45 birds compared to around 1,000 birds two years previously. It appears that the species is rapidly approaching extinction in the wild and we have therefore initiated the production of an emergency action plan for the species.

We produced a paper on the global population size (c. 1,940 pairs or c. 4,660 birds prior to reproduction) and breeding range of the Endangered Scaly-sided Merganser (*Mergus squamatus*). We also published the AEWA guidelines for the translocation of waterbirds for conservation purposes, complementing the IUCN guidelines.

There has been a fourfold increase in the world population of the Critically Endangered Madagascar Pochard (Aythya innotata) and a possible release site was identified for their reintroduction. This project is led by Durrell Wildlife

Male Madgascar Pochard. © Dubi Shapiro



Conservation Trust and WWT, in partnership with The Peregrine Fund and the Government of Madagascar, and is funded by the UK Government's Darwin Initiative, the Mitsubishi Corporation Fund for Europe and Africa, Fota Wildlife Park and Synchronicity Earth.

We continued the 2.7M LIFE+ Project "Safe Grounds for Redbreasts" led by the Bulgarian Society for the Protection of Birds. Project achievements to date include two successful catches of Red-breasted Geese (Branta ruficollis), with 99 geese caught and ringed; GPS loggers with accelerometers were fitted to 13 birds, revealing details of local movements and behaviour patterns around wintering areas. A draft agrienvironmental measure was developed and is now being trialled by local farmers; this measure has been submitted to the Bulgarian Ministry of Agriculture and Food, as an optional sub-measure for the region. A schools-based education programme was produced, with the aim of developing an understanding of the biodiversity, cultural and social importance of the Red-breasted Goose and its protected habitats. The scheme is now being followed by schools across the region. A field station was built in Durankulak village and is now operational, serving as a base for goose research and

The latest edition of TWSG News is available here.

Dr Baz Hughes

Chair, Threatened Waterfowl Specialist Group

TORTOISE AND FRESHWATER TURTLE SPECIALIST GROUP

The Tortoise and Freshwater Turtle Specialist Group (TFTSG) currently has 294 members based in 51 countries and working in nearly all countries where turtles are native. The mission of the TFTSG is to identify and document threats to the survival of all species and subspecies of tortoises and freshwater turtles, and to help catalyze conservation action to ensure that none become extinct and that self-sustaining populations of all species persist in the wild.

In 2013, we organized and hosted a three-day red list assessment and conservation strategy planning workshop on the tortoises and freshwater turtles of Sub-Saharan Africa in Lomé, Togo. There were 22 participants attending from across the continent and beyond and with input from additional

Home's Hinge-back Tortoise. © Peter Paul van Dijk / Conservation International



TFTSG members by email. 43 assessments will move from draft format onto the SIS website within months, followed by the backlog of drafted assessments subsequently. We worked with CITES parties and others to ensure that CITES proposals for the inclusion of freshwater turtle species in, and transfer of tortoises and turtles between the Appendices, were based on the best available biological and conservation status information. We updated the annual Checklist of Turtles of the World, freely downloadable here. We were able to support TFTSG members and others to carry out conservation and research activities through a variety of means, including through the Turtle Conservation Fund, through supporting applications for turtle projects to other potential donors, and through assistance and support for member's initiatives.

The TFTSG listserv experienced technical complications during the past year, but these now appear to have been resolved, and the listserv continues its vital role of enabling TFTSG members to inform others of their progress and to pose questions to help solve conservation and research challenges.

The activities of the TFTSG over the past year were made possible through support from Conservation International and the Wildlife Conservation Society, the Frankel Family Foundation, George Meyer and Maria Semple, the Mohamed bin Zayed Species Conservation Fund, the Panaphil Foundation, the Andrew Sabin Family Foundation, Walter Sedgwick, SOS – Save Our Species, the Turtle Conservancy, the Turtle Conservation Fund, the US FWS Wildlife Without Borders program and members contributing their time and expertise. Moreover, gatherings of turtle conservationists, including TFTSG leadership and members are greatly facilitated by the Turtle Survival Alliance and the Turtle Conservancy, for which we are most grateful.

Dr Peter Paul van Dijk and Brian D. Horne

Co-chairs, Tortoise and Freshwater Turtle Specialist Group

TUNA AND BILLFISH SPECIALIST GROUP

The Tuna and Billfish Specialist Group was formed in 2009 with the initial goal of evaluating the conservation status of the 61 species of mackerels, tunas, and billfishes. This goal was successfully achieved through a series of workshops in Peru, Taiwan, Brazil, and the United States. After completing our analyses and publishing the results in *Science* in 2011 (vol. 333:291-292), edited versions of all 61 species accounts were added to The IUCN Red List. This was the first evaluation of an important commercial group of marine fishes under IUCN Red

Pacific bluefin tuna (Thunnus orientalis). © Monterey Bay Aquarium/Randy Wilder



List criteria. So far, we have 22 members from 13 countries but we also receive valuable information from many other experts, who are not formally associated with the group.

Initial efforts for the current quadrennium were to invite specialists to join the group; Dr Beth Polidoro was selected as the Red List Authority Coordinator for the group. In reviewing the results of our previous analyses, it became clear from a new stock assessment, that our evaluation of the Pacific Bluefin Tuna (*Thunnus orientalis*) as Least Concern was too optimistic. We are reviewing all available data to reclassify the conservation status of this overfished species. Our next task will be to determine whether enough new information is available to properly evaluate the 11 species that we were forced to classify as Data Deficient. We will also continue to evaluate the status of stocks rated in Threatened and Near Threatened categories.

Bruce B. Collette, Ph.D.

Chair, IUCN SSC Tuna and Billfish Specialist Group

VIPER SPECIALIST GROUP

The mission of the IUCN Viper Specialist Group (VSG) is to build and coordinate a network of viper experts across the globe, and to use the collective expertise of this group to conserve the world's vipers.

In 2013, the current VSG board delineated seven regions across the world where vipers occur and designated individuals to act as regional coordinators for these areas. These are catalyst positions. Regional Coordinators fill the role of building a network of experts within their region and promoting VSG membership. In addition, the board also identified a Red List Authority Coordinator, who is currently in the process of expanding the membership of the Red List Authority.

We have secured funding to continue our work conserving Black-headed Bushmasters (*Lachesis melanocephala*). Specifically, the funding will be used to develop an appropriate survey protocol, an extremely important component in any conservation effort to assess population status and conduct ecological studies to understand the threats to these species. In addition, we are collecting information for and writing a Conservation Action Plan for Eastern Diamondback Rattlesnakes within the United States. We are now conducting standardized surveys for this species and working on collecting observations from scientists and the general public in an attempt to get a better idea of overall distribution in Florida and Georgia, USA, as well as areas with a high density

Bushmaster - Peru. © Marisa Ishimatsu



of observations within these states.

The VSG would like to thank the Mohammed Bin Zayed Species Conservation Fund for their generous donation towards the conservation of the Black-headed Bushmaster. If you are interested in participating in the VSG, please contact the Regional Coordinator in your area. Contact information can be found here.

Christopher L. Jenkins

Chair, Viper Specialist Group

VULTURE SPECIALIST GROUP

The Vulture Specialist Group (VSG) was formally established in April 2011 and aims to advocate and create awareness of the plight of these birds and to help coordinate conservation activities to their benefit. The VSG currently has around 80 members, spread over five continents and includes expertise on both Old and New World vulture species. In addition to the two Co-Chairs, regional representatives from Europe and Africa have been appointed to serve on the Steering Committee of the VSG. The journal *Vulture News* is the official mouthpiece of the VSG and is currently edited by Campbell Murn.

In Africa, the mass-poisoning of vultures in southern Africa during 2013 was a great cause for concern with more than 1,500 birds known to have been killed in the second half of the year alone. Of even greater concern is the clear link that exists between these poisonings and the poaching of elephants. The African Region of the VSG is planning a Summit, which will take place in Namibia in May 2014; involving key-players from the region. The objective is to implement plans to more effectively manage and contain such incidents and to improve the high level enforcement of legislation across the region.

In Asia, the results of large scale road-transect and other surveys were published; showing clear signs that declines in vulture populations have slowed and may even have stopped in some areas, and that this is clearly linked to the reduction in diclofenac levels in cattle carcasses. However, even though there's a clear reduction in the use of diclofenac, it remains a serious threat due to the illegal veterinary use of human formulations of the drug; and worryingly, there are other legal veterinary drugs being used that are similarly toxic to vultures. The Saving Asia's Vultures from Extinction (SAVE) consortium has grown in stature, and continues to advocate for the cessation of large 'multi-dose' vials of human formulations, which are the main and cheap source of the drug used by vets. Both SAVE and the newly established Government-led

The poisoning of Vultures in South Africa has devastated populations of Cape Griffon Vulture and African White-backed Vulture, as this photograph shows from an incident in July 2013. © The Endangered Wildlife Trust



Regional Steering Committee (RSC) which is chaired by IUCN, met this year and they are working towards the implementation of a ban on the use of multi-dose human diclofenac vials, as well as establishing a vulture safety-testing mechanism for other veterinary drugs entering the market. Both of these issues require concerted efforts to ensure they happen quickly, and further work will be needed to make sure that unsafe drugs are not licensed for veterinary use. Also in 2013, National Vulture Recovery Committees were established for each of the four South Asian countries covered by the RSC, and at least two of these have already met.

The VSG also supports the International Vulture Awareness Day which was established in 2009 and has become an annual event observed in 57 countries and by 163 organisations globally in 2013. The event aims to promote awareness and to educate the public about the plight and environmental value of vultures and the pressing need to conserve them.

Andre Botha and Chris Bowden

Co-chairs, Vulture Specialist Group

WCPA/SSC JOINT TASK FORCE ON BIODIVERSITY AND PROTECTED AREAS

The WCPA/SSC Joint Task Force on Biodiversity and Protected Areas has two main objectives. Objective 1 is focused on understanding the factors that make protected areas successful in conserving biodiversity. For 2013, the Task Force has completed the following:

- The global analysis of the best predictors of success for protected areas (PA) is complete. We collated 1902 population abundance time series from 447 protected areas and calculated population changes as a metric of PA effectiveness. We used linear mixed effect models to explore correlates of population change in PAs, comparing a wide range of management, ecological, social and economic predictor variables. The paper is drafted and will be submitted to a major journal.
- Task Force member Megan Barnes completed her PhD at the University of Queensland, working directly on the above project.
- A Task Force authored, peer-reviewed paper was published in Biological Conservation titled "Effectiveness of terrestrial protected areas in reducing habitat loss and population declines"
- Task Force Member Jonas Geldmann submitted his PhD at the University of Copenhagen. He has worked on correlating

KBA Governance workshop, Nov 2013, Brasilia, Brazil.



the Management Effectiveness Tracking Tool (METT) to biodiversity outcomes, examining the management elements that result in positive biodiversity outcomes.

- The Task Force has partnered with a new group of marine scientists with funding under the SESYNC program (National Socio-Environmental Synthesis Centre) at the University of Maryland. We held two global meetings in 2013 to develop a model of effectiveness of marine protected areas. The SESYNC group has become a part of the Task Force and we are aiming at producing results in time for the World Parks Congress.
- The Task Force is working with the evaluation units of the Global Environmental Facility and the United Nations Development Program. We were funded to assist with an initial analysis of the effectiveness of GEF/UNDF supported protected areas in conserving biodiversity. We are currently negotiating a significantly larger analysis of projects.

Objective 2 links directly to Species Strategic Plan Target 16: Setting global standards for the identification of sites of biodiversity conservation significance. Following the recommendations from the Framing workshop in Cambridge last year, we organized several technical workshops and regional consultations this year:

- The Criteria and Delineation workshop (March 2013, Front Royal, USA) defined the criteria of the new Key Biodiversity Area (KBA) standard and agreed on key considerations for delineating KBAs.
- Interviews were conducted with various stakeholders and end-users (e.g. donors, NGOs, Indigenous people, local communities) on their needs and potential use of the KBA methodology.
- A Joint Marine Working Group was created with the Global Ocean Biodiversity Initiative (GOBI) to strengthen synergies between the identification of Ecologically and Biologically Significant Areas (EBSAs) and the KBA process. A workshop was held during the International Marine Protected Areas Congress 3 (October 2013, Marseilles) to discuss how KBAs could provide a list of potential sites to be considered for EBSAs adopted by the Convention on Biological Diversity.
- The Governance workshop (Nov 2013, Brasilia) focused on the governance mechanisms of 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.
- The Thresholds workshop (Dec 2013, Rome) established thresholds for measures of biodiversity significance, in other words, for defining how "key" a site needs to be for it to be considered a "Key Biodiversity Area".
- A number of presentations and consultations were organized during existing regional meetings.

The results of these technical workshops will be integrated into a draft methodology available for comment, before publication and launch in November 2014 at the World Parks Congress.

The Joint Task Force on Biodiversity and Protected Areas would like to thank Environment Agency Abu Dhabi, Cambridge Conservation Fund, MAVA Foundation, John D. and Catherine T. MacArthur Foundation, Ministério do Meio Ambiente do Brasil, Rio Tinto and Shell.

Penny Langhammer and Stephen Woodley

Co-chairs, WCPA/SSC Joint Task Force on Biodiversity and Protected Areas

WILD PIG SPECIALIST GROUP

The Wild Pig Specialist Group (WPSG) is concerned with the survival in the wild of all 17 presently recognized species as well as threatened subspecies of wild pig. Wild pigs play important ecological as well as socio-economic and cultural roles in many countries in Asia and Africa. Some taxa are highly threatened; especially those in Indonesia, the Philippines and India being of conservation concern.

The WPSG uses a combination of strategies to try and reverse population declines. Our work includes: 1) research on taxonomy and distribution; 2) management of captive and wild populations to prevent the extinction of the most endangered species; and 3) facilitation of any conservation actions that benefit threatened wild pig populations.

We have made some excellent progress in 2013; a workshop was held in Indonesia in November, which focused on the south and southeast Asian pig species, this was a great opportunity to update our conservation strategies and plan our next moves. Important decisions were made about the *in-situ* and *ex-situ* management of Javan Warty Pig (*Sus verrucosus*). We agreed to implement studies of the little known Bawean Pig and small island populations of babirusas, and also to address hunting and wildlife trade on Sulawesi. Furthermore, the workshop has improved the coordination between the breeding programs for Pygmy Hog, Visayan Warty Pig, and Javan Warty Pig.

Further updates about our work on wild pigs can be found in the twice-yearly Suiform Soundings, the newsletter for the IUCN SSC Specialist Groups for Wild Pigs, Peccaries and Hippos. You can also find us on our website.

Dr Erik Meijaard

Chair, Wild Pig Specialist Group

Javan Warty Pig (Sus verrucosus). © Florian Richter



WILDLIFE HEALTH SPECIALIST GROUP

The Wildlife Health Specialist Group (WHSG) was commissioned by the IUCN Species Survival Commission to serve as a first response for wildlife health concerns around the world. This requires a focused network of regional experts primarily conducting wildlife health work in the areas of health surveillance, reporting and response, wildlife disease management, disease ecology, diagnostics, epidemiology, pathology, toxicology, health policy, and related health disciplines.

Although our mandate is not in the field of disease control for livestock and/or human health per se, contributions to these sectors are made through a better understanding of wildlife disease and its role in multispecies infections or other disease syndromes. The primary responsibility of WHSG members is to provide advice and to access regional information and expert resources to be able to respond to local issues related to wildlife health in support of conservation.

Key activities in 2013 – currently in the process of publication are the IUCN and World Organisation for Animal Health (OIE) Guidelines for Wildlife Disease Risk Analysis – a briefing document and primer for the comprehensive *Manual of Procedures for Wildlife Disease Risk Analysis*. This was compiled in concert with the Conservation Breeding, Reintroduction, and Invasive Species Specialist Groups.

On the new avian influenza (H7N9) strain identified in China, WHSG provided regular updates through the Wildlife Health Specialist Group website, regular email alerts to members, as well as summaries to IUCN, OIE, UNEP and WHO.

WildHealthNet (WHN) – an online network launched in 2011 to complement *WILD* training programs in Africa – grew from 78 members in 2012 to 134 members in 2013 (representing 23 African nations). WHN provides valuable resources such as training manuals and scientific papers in addition to providing a forum for members to discuss current topics on wildlife disease and conservation in their region.

We increased our social media presence (Facebook and Twitter) outreach to highlight conservation-based wildlife health issues and resources, and links with other Specialist Groups.

Through the distribution of *Gibbon and orangutan re-introduction guidelines*, the WHSG is helping to coordinate wildlife and human health professionals to re-evaluate testing

protocols for primates considered for re-introduction.

WHSG would like to express appreciation to the United States Agency for International Development's (USAID) Emerging Pandemic Threats PREDICT and RESPOND programs, which provided personnel and website funding for the WHSG.

Dr Richard Kock and Dr William Karesh

Co-chairs, Wildlife Health Specialist Group

WOODCOCK AND SNIPE SPECIALIST GROUP

The Woodcock and Snipe Specialist Group (WSSG) is a network of specialists (both scientists and non-scientists) concerned with the study, monitoring, management, and conservation of the woodcock and snipe species populations. Its main aim is to provide up-to-date knowledge on eight woodcock and 18 snipe species, to encourage new research and to facilitate contacts between researchers. As these are games species, the final objective is to ensure the sustainable use of the populations. The publication of the Proceedings of the 7th Woodcock and Snipe Workshop which was held in Saint-Petersburg (Russia) in May 2011 was one of the major events in 2013. This document contains 27 papers and abstracts covering a wide range of topics on biology, monitoring, and management, focusing primarily on Woodcock (Scolopax rusticola) and Common Snipe (Gallinago gallinago). It is available on the WSSG website.

Among several current research projects, two are emphasized. Firstly, a large study on European Woodcock migration based on satellite tags is being carrying out in Great Britain where more than 20 birds have already been tagged. Secondly, a project monitoring Common Snipe during the breeding season in European Russia has been launched. The results will provide the scientific basis for the future estimation of the conservation status of this species

Discussion and direction within the membership of the WSSG is ensured by the publication of an annual newsletter and by the online availability of the complete WSSG Newsletters collection.

Finally, we thank the French ONCFS agency for its constant financial support of the WSSG.

Dr Yves Ferrand

Chair, Woodcock and Snipe Specialist Group





Common Snipe. © Yves Ferrand



Report of the IUCN SSC Steering Committee

Introduction

The IUCN Species Survival Commission is governed by a Steering Committee which is headed by the Commission Chair, Simon Stuart. The Steering Committee represents a balance of regional and thematic perspectives, and provides strategic vision and direction to the work of the Commission.

Composition

Steering Committee members are appointed by the Council of IUCN on the advice of the Commission Chair. At its meeting in Jeju on 15 September 2012, the Council appointed Jon Paul Rodríguez as Deputy Chair, together with 19 Steering Committee members as follows: Luigi Boitani, Onnie Byers, Claudio Campagna, Topiltzin Contreras MacBeath, Rosie Cooney, John Donaldson, Brahim Haddane, Michael Hoffmann, Hans de longh. Mirza Kusrini, Frédéric Launay, Susan Lieberman, Jeffrey McNeely, Patrícia Medici, Russell Mittermeier, Yvonne Sadovy, Michael Samways, Mark Stanley Price and Xie Yan. Since then, Michael Samways has resigned due to other pressing commitments, but in early November the Council appointed the following new Steering Committee members: Piero Genovesi, Axel Hochkirch, Vololoniaina Jeannoda, Olga Krever, Greg Mueller, Jean Michel Onana and Nunia Thomas.

The following observers also attend Steering Committee meetings: Stuart Butchart (BirdLife International); Gregory Stone (Conservation International); Jonathan Hutton (UNEP-WCMC); Taej Mundkur (Wetlands International); Elizabeth Bennett (Wildlife Conservation Society); Carlos Drews (WWF) and Jonathan Baillie (Zoological Society of London). IUCN Secretariat observers are Jane Smart, Jean-Christophe Vié and Richard Jenkins (IUCN Global Species Programme – GSP), Thomas Brooks (Head of Science and Knowledge), and Steven Broad (TRAFFIC International).

2013 Key activities

In 2013, the Steering Committee reviewed and approved the following:

- IUCN Guidelines for Wildlife Disease Risk Analysis
 Four SSC Specialist Groups (Conservation Breeding, Wildlife
 Health, Re-introductions, and Invasive Species) collaborated
 on the development of these guidelines, led by Richard
 Jakob-Hoff at Auckland Zoo, New Zealand. The consultation
 process also sought (and later included) comments from the
 wider SSC network.
- Manifesto on Large Carnivores in Europe
 The Large Carnivore Initiative for Europe (LCIE) covers the
 two species of lynx, wolverine, grey wolf and brown bear. In
 2013, the LCIE developed a manifesto outlining its vision of
 large carnivore conservation in Europe which brought
 together very divergent views on protection, conservation

and utilisation. The Steering Committee was asked to comment on the document and finally adopt it following a wider consultation from the relevant SSC Specialist Groups.

Establishment of new Specialist Groups and Red List Authorities

Three new Specialist Groups were approved: Giraffe and Okapi; Cave Invertebrates; and Access and Benefit-Sharing (shared with the IUCN World Commission on Environmental Law). A new Marine Fish Red List Authority was also approved.

 Appointment of Specialist Group (SG) Chairs and Red List Authority (RLA) Coordinators

A total of 15 new SG Chairs and 17 new RLA Coordinators were appointed during 2013.

Meeting of SSC Steering Committee, 2–4 November, Cuernavaca, Mexico

The 2013 meeting was attended by 23 Steering Committee members, four institutional observers, and five members of IUCN Secretariat staff (including Grethel Aguilar, IUCN Regional Director for Mesoamerica and the Caribbean). Shane Mahoney stood in for Rosie Cooney, and Barney Long stood in for Carlos Drews. In addition, three guest attendees took part: Ernesto Enkerlin (Chair of WCPA); Alejandro Nadal (Chair of the IUCN Commission on Environmental, Economic and Social Policy (CEESP), and Theme on Environment, Macroeconomics, Trade and Investment (TEMTI)); and Ramón Perez Gil (IUCN Regional Councillor for Mesoamerica and former SSC Steering Committee member). The meeting was generously sponsored by the Secretaría de Desarrollo Sustentable in the Government of the State of Morelos which covered all of the local costs of the meeting. SSC is extremely grateful to Steering Committee member Topiltzin Contreras MacBeath, the current Secretario de Desarrollo Sustentable in Morelos State, who kindly arranged this support.

The meeting had an extremely full agenda. In addition to the usual report which covered a very broad sweep of the SSC's activities, progress was made on the following issues:

- It was agreed that the Species Conservation Planning Sub-Committee (SCPSC) would endorse action planning processes rather than contents, contrary to what has been agreed previously in the Steering Committee. This change was made because the process of endorsing action plan contents had proven to be difficult to implement and was sometimes contentious.
- A Co-Chair will be found for the Policy Sub-Committee (PSC) to join Sue Lieberman in the leadership of the PSC.
 The membership of the PSC will be expanded, and a prioritization will be made of the different policy fora in which the SSC might choose to engage.
- The SSC will make a strong statement on the expansion of oil palm plantations with a particular focus on impacts on species, loss of natural habitats, and the effects on the livelihoods of local people.



Wolverine (Gulo gulo). © Tambako The Jaguar

- A formal request will be submitted to the Environment Agency Abu Dhabi (EAD) to hold a third SSC Chairs' Meeting, probably in late 2015.
- Instead of holding a World Species Congress as originally planned, the SSC will look at the possibility of holding a much smaller and more focused Global Species Symposium to develop a few key strategic issues that will be critical in forging a new agenda for species conservation.
- Plans were advanced for the SSC's participation in the World Parks Congress in November 2014.
- It was agreed that the SSC would develop a new policy or guiding principles on the topic of de-extinction (using the techniques of synthetic biology to bring species back from extinction).
- The SSC will propose to the IUCN Council Programme and Policy Committee that a new initiative will be started to develop an IUCN policy on the broader aspects of synthetic biology, as they relate to the achievement of the IUCN's mission.
- The SSC will propose that an IUCN-wide Green List framing workshop will be held as soon as possible, including participation from the SSC, the Commission on Ecosystem Management (CEM), the WCPA, and others with the aim of achieving an as consistent as possible approach to Green Listing within IUCN across species, ecosystems and protected areas.

 Extensive discussions were held on knowledge product integration within IUCN, including on: the impacts that this would have on The IUCN Red List of Threatened Species™; the need for IUCN to strengthen collaboration with, and recognition of, its partners as knowledge product integration proceeds; and the importance of understanding the purpose of integration in order to achieve conservation objectives.

Towards 2014

In addition to the activities (listed above) discussed at the Steering Committee meeting and planned as part of the 2014 SSC work programme, the Steering Committee will be asked to comment on and approve a position statement or guidelines on, including but not limited to:

- the unregulated use of poisons in Africa and the threats this poses to biodiversity, ecosystems and human health;
- the impacts of guano harvesting on biodiversity;
- the conservation of limestone-restricted biodiversity;
- the use of ex-situ management for species conservation; and
- SSC Specialist Group engagement with CITES.

The Steering Committee will meet in August 2014 at the Environmental Education Centre, Tallinn Zoo, Estonia.

Report of the IUCN SSC Sub-Committees

FRESHWATER CONSERVATION SUB-COMMITTEE (FCSC)

Our mission is to raise the profile of freshwater biodiversity. The group has 11 steering members: Topiltzin Contreras MacBeath, Chair FCSC, Universidad Autónoma del Estado de Morelos, México; Will Darwall, Manager, IUCN SSC Freshwater Biodiversity Unit, UK; Robin Abell, World Wildlife Fund, USA; Carmen Revenga, The Nature Conservancy, USA; Ian Harrison, CI/CABS and IUCN SSC Biodiversity Assessment Unit, UK and USA; Raul Pineda-López, Manejo Integrado de Cuencas, Universidad Autónoma de Querétaro, México; Nicolas Tubbs, Birdlife International UK; Harmony Patricio, FISHBIO, USA; Gordon McGregor Reid, NEZS, UK; Richard Lansdown, Chair, IUCN Freshwater Plant Specialist Group, UK; John P. Simaika, Senckenberg Research Institute and Natural History Museum Frankfurt.

Astyanax aeneus – from Agua Salada Spring, Central Mexico. © Topiltzin Contreras



After two workshops carried out in Queretaro, Mexico, 2011, and Abu Dhabi, 2012, our mission, vision, and three main goals were developed: 1) to be a major player in issues related to freshwater biodiversity conservation; 2) to enhance the work of the SSC and of the freshwater related Specialist Groups; and 3) relate to other initiatives related to freshwater species use and conservation. During 2013, a strategy document was produced (in Spanish) and an alliance established with the IUCN Mesoamerica Regional office in order to translate this document, so that it can be circulated through the network to collect comments. The Gonzalo Rio Arronte Foundation is kindly funding this publication.

With funding from the Mexican Commission for Cooperation with Central America, a Mesoamerican working group was formed which initiated the process for developing an evaluation on the regional knowledge on macroinvertebrates and their use as indicator species for freshwater ecosystems. The group is coordinated by Raul Pineda-López, and has members from the different Mesoamerican countries: Perla Edith Alonso Eguía Lis and Ricardo Miguel Pérez Mungia (Mexico); Edward Boles (Belize); Silvia Echeverria Saenz, Fatima Reyes, Bernald Pacheco Chaves, Fresia Villalobos and Anny Chaves (Costa Rica); Dagoberto Pérez and José Miguel Sermeño Chicas (El Salvador); Anna Cristina Bailey (Guatemala); Lucia Isabel López Umaña (Honduras); and Ernesto García, Aydee Cornejo and Juan Bernal (Panama). Work to date has produced the first version of a book that is expected to be published in 2014.

Topiltzin Contreras MacBeath Chair, Freshwater Conservation Sub-Committee



INVERTEBRATE CONSERVATION SUB-COMMITTEE (ICSC)

Our aim is to tackle the enormous challenge of how to manage conservation action for the most species rich taxonomic groups on Earth. Michael Samways (S. Africa) stepped down as chair of the group in 2013; Axel Hochkirch (Germany) was appointed as the new chair in November 2013.

Currently, there are 10 invertebrate Specialist Groups (SG) in place (Bumblebee SG, Butterfly SG, Cave Invertebrate SG, Coral SG, Dragonfly SG, Freshwater Crab and Crayfish SG, Grasshopper SG, Horseshoe Crab SG, Mollusc SG and South Asian Invertebrate SG). The Terrestrial Invertebrate Red List Authority (TIRLA) coordinates assessments for all other taxa. The creation of new SGs will depend on the identification of potential leadership. A Spider SG is currently being planned.

A total of 2,442 invertebrate species have been assessed in 2013; including 631 mollusc species, 371 sea cucumber species and 1,440 arthropods. These assessments mainly reflect the activities of the existing Specialist Groups. We currently instigate assessments for other taxa (ice crawlers, abalones) to broaden the scope of The IUCN Red List. Strategic conservation planning has been started for a crayfish species, molluscs and a grasshopper species. Three publications were submitted to scientific journals in 2013. The first one deals with prioritization of taxa for future Red List assessments and the second one with the problem of data deficiency for many invertebrate species (27% of all mollusc species, 36% of all crustaceans and 30% of all dragonflies have been assessed as DD). A commentary stating the necessity to conduct invertebrate species inventories in protected areas has been published in Science.

We will be attending the World Parks Congress, to foster invertebrate conservation in protected areas. A new ICSC strategy will be developed in 2014, and the next meeting of the ICSC will take place in April 2014. Our website can be accessed here and you can follow us on Facebook here.

Dr Axel Hochkirch Chair, Invertebrate Conservation Sub-Committee

Metioche bolivari from Mahé (Seychelles). © Axel Hochkirch





Cycas papuana. © J. Donaldson

PLANT CONSERVATION SUB-COMMITTEE (PCSC)

Our aim is to mobilize and guide plant assessments and conservation action within IUCN, and to work with the network of IUCN SSC Plant Specialist Groups to stem the loss of global plant diversity. Currently, the PCSC comprises 13 members made up of ten plant specialist group chairs, and three representatives of organisations involved in plant conservation assessments and/or plant conservation. This represents a subset of the broader plant community within IUCN, where there are 26 plant specialist groups and three Red List Authorities.

There is a considerable amount of Red Listing activity within the plant Specialist Groups. The PCSC does not undertake Red Listing, but we have been active in trying to smooth the processes for undertaking and publishing plant assessments, raising awareness of plant assessment issues with the IUCN SSC Red List Committee, and prioritizing assessments in order to understand the global status of plants.

Plants for People is a major new initiative to assess the conservation status of at least 1,500 priority species from four plant Specialist Groups (6,000 species in total). Members of the PCSC have been working with the Global Species Programme (GSP), the SSC, and the four relevant SSC Specialist Groups (Crop Wild Relatives, Medicinal Plants, Global Trees and Palms) to mobilize funding and get the project up and running.

For Save Our Species (SOS) funded plant projects, the PCSC has been working with the working group to include assessed plant groups in the strategic direction for funding. Cycads were included in 2012 and both cycads and conifers were included in 2013, leading to the funding of eight conservation projects involving cycads and conifers ranging from 25,000 to 64,000 CHF per project.

The next meeting of the PCSC will probably take place in September 2014, linked to the Botanists of the 21st Century conference being organized by UNESCO in Paris. We are also planning to participate in the World Parks Congress, to raise the profile of plant conservation in protected areas. Our website can be accessed here.

John Donaldson Chair, Plant Conservation Sub-Committee

MARINE CONSERVATION SUB-COMMITTEE (MCSC)

The core purpose of the MCSC is to connect and facilitate on marine and ocean matters across IUCN; including regional offices, focal points and with IUCN partners.

During 2013, we convened several meetings and advanced priority areas of the MCSC. At the Specialist Group (SG) Chairs meeting in the United Arab Emirates in early 2013, we convened fish-related marine SGs as well as all marine SGs, to strengthen connections between groups and to identify key concerns and issues. In December we met with MCSC membership, reconstituted for the new quadrennium. Our focus was to advance our core areas of communication, bycatch, trade, wildlife spectacles and positive change for threatened marine species.

Areas being developed further include better engagement with Regional Fishery Management Organizations for threatened species of commercial importance; support for the ongoing IUCN SSC Global Marine Species Assessment, especially building on the outcomes of assessments, and integrating species into spatial planning, and encouraging collection of trade data for commercial species. Ongoing work involves

The Marine Conservation Sub-Committee at IUCN HQ, December 2013.



various engagements with other marine SGs and SSC sub-committees, especially those of Conservation Planning, Invertebrates, Invasive Species and Sustainable Livelihoods. We also contribute to KBA (Key Biodiversity Areas) discussions in relation to marine species. Specific projects address bycatch species, building on three reviews already completed and considering a number of IUCN Resolutions on the issue. We would like to see a more integrated—One IUCN—marine programme during the current quadrennium.

We produce, with the support of the Global Species Programme, a Marine Species Newsletter and this will be shared via the new Union Portal.

Yvonne Sadovy de Mitcheson and Claudio Campagna Co-Chairs, Marine Conservation Sub-Committee

IUCN RED LIST COMMITTEE (RLC)

Introduction

The IUCN Red List Committee is the key decision-making body that provides oversight and guidance for The IUCN Red List of Threatened Species™. The IUCN Red List Committee sets the standards of scientific quality for the Union's work on biodiversity assessments, develops guidelines on the application of these standards, develops a strategy for effectively expanding taxonomic and geographic coverage, advises and assists uptake of IUCN Red List data in decision-making, and builds collaboration with other organizations working on biodiversity assessments. The IUCN Red List Committee meets in-person once per year; inter-sessionally, much of the work is conducted via email, virtual meetings, or in separate meetings of its working groups.

Composition and structure

The IUCN Red List Committee is designed to include representatives of the three pillars of IUCN: the IUCN Species Survival Commission, the IUCN Secretariat (especially the Global Species Programme), and The IUCN Red List Partnership (many of whom are also IUCN Members). Current IUCN Red List Partners are: BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Microsoft; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; Wildscreen; and Zoological Society of London. The IUCN Red List Committee continues to seek expressions of interest from new Partners, and has held preliminary discussions with prospective Partners during 2013.

Much of the active work of The IUCN Red List Committee is conducted within its working groups. The Red List Technical Working Group (RLTWG) is the key technical body that strives to ensure consistency and rigour in the assessment process. The National Red List Working Group (NRLWG) works to build linkages between the global IUCN Red List and assessments done at the national level. In 2013, The IUCN Red List Committee established two new Working Groups: a Data Access Working Group (DAWG), to advise on use of IUCN Red List data in accordance with the Terms and Conditions of Use, and a Red List Informatics Working Group (RLIWG) to facilitate better coordination among IUCN Red List Partners and others on overcoming major technological stumbling blocks.

Stuart Butchart has indicated his intentions to step down as Chair of the Red List Technical Working Group at the end of 2013, a position he has held since 2009. A replacement Chair remains to be found for this critical position; a Chair is also sought for the newly established Data Access Working Group (which has been operating informally since its establishment in early 2013), failing which the functions will be absorbed into the RLC. Appointment of a Chair to replace Ben Collen on the National Red List Working Group is expected soon, but awaits further development of the National Red List Alliance (see below).

Finally, Jeff McNeely stepped down as Chair of The IUCN Red List Committee at the end of 2012 after serving for the 2009-2012 quadrennium; Mike Hoffmann took over as Chair in 2013. A number of institutional and personal changes in circumstances have necessitated a few changes in membership on the Committee: Barbara Goettsch (SSC plants representative), Bruce Beehler (formerly with CI), Richard Edwards (formerly with Wildscreen), and Piero Genovesi (coopted; Global Invasive Species Database) all stepped down in 2013, and Rajeev Raghavan (as SSC freshwater representative), Russ Mittermeier (with Peter Paul van Dijk as alternatve) as the CI representative, and Domitilla Raimondo (as SSC plants representative) joined; the Wildscreen representative will be clarified once a new CEO is recruited. One co-opted slot will be filled in early 2014 to bring on additional expertise in dealing with and advising the investment and development banks.

Further details on membership, structure and the Terms of Reference governing both the RLC and its individual Working Groups may be found here: www.iucn.org/redlistcommittee

2013 key activities

The IUCN Red List Strategic Plan: 2013-2020
In 2012, IUCN Members passed Congress Resolution 5.017, which provides general guidance to the activities of the RLC over the coming quadrennium. Key among these was a directive to "... complete the preparation of the Red List Strategic Plan that would clarify agreed strategic priorities for The IUCN Red List to the year 2020". The Strategic Plan puts the goals of The IUCN Red List into action, and forms a component of the IUCN Species Strategic Plan 2013–2016. However, The IUCN Red List Strategic Plan extends to 2020, reflecting the need for a longer-term perspective, especially because the Convention on Biological Diversity has agreed a Strategic Plan for Biodiversity 2011–2020, including the Aichi Biodiversity Targets. The Strategic Plan sets forth ten key Results (each encompassing a suite of targets) as measures of success.

Red List Technical Working Group

The Red List Technical Working Group met in-person 4–6 December 2013, with part of the meeting jointly held with the Standards and Petitions Sub-committee. The two major items on the agenda were: 1) follow-up to the mapping workshop held in November 2011 and ensuing research, specifically to finalize recommendations on how to calculate EOO from distribution maps (for assessing species using the B1 criterion); and 2) providing clarity on how to define what is "wild", specifically as concerns managed populations and conservation translocations. The outcomes of these discussions will be reflected in future revisions of The IUCN Red List User

Guidelines, as well as the "IUCN Red List Mapping Standards and protocols" which are in development.

Data Access Working Group

An informal meeting of the Data Access Working Group took place mid-2013 to discuss matters relating to: i) agreeing conditions under which reposting of IUCN Red List data on external websites for non-commercial uses is permissible; ii) discussing any needed revisions to the Terms and Conditions of Use; and iii) establishing a mechanism for tracking permission waivers granted for use of IUCN Red List data. The outcomes of this meeting have been endorsed by The IUCN Red List Committee and will be implemented over the coming months.

Informatics Working Group

Still in its infancy, the RLIWG will have its first meeting on 27 January 2014. Under the Chairmanship of Lucas Joppa, the preliminary membership of the working group has been constituted, including representatives of IUCN Red List Partners as well as external collaborators. One of the first priorities of the RLIWG will be proposing an agreed set of priority technology needs for resolution.

National Red List Working Group

Following the adoption of IUCN Congress Resolution 5.018, a number of IUCN Members came together to propose the establishment of a partnership of organizations convened around promoting national Red Listing. This National Red List Alliance will be governed by an overarching Memorandum of Understanding, and strategic oversight of the Alliance will be provided by a Coordinating Body, which itself will be subject to an agreed set of Terms of Reference. This Coordinating Body will serve as the NRLWG into the future.

Other

In addition to the above, The IUCN Red List Committee has been advising on, among others: the development of The IUCN Red List training course and materials; protocols for regional Red Listing; and implementing a mechanism for making all IUCN Red List species accounts permanently archived, searchable and traceable via making all available as downloadable PDFs with attached DOIs.

Towards 2014

The IUCN Red List Committee will meet sometime in the first half of 2014, in the 50th anniversary year of The IUCN Red List of Threatened Species™. Key agenda items include, among others: strategic use of IUCN Red List updates for media outreach and publicity; better engaging with finance institutions on the efficient use of IUCN Red List data in decision-making (EIAs, offsetting purposes etc); the need for a formal taxonomic policy (e.g., a protocol or criteria or some such that groups are encouraged or compelled to apply to ensure some critical appraisal of proposed splits, mergers new species designations and so forth); strategically targeting and supporting countries with high diversity and endemism for increasing the number of species on The IUCN Red List; and considerations for allowing assessments in other languages. Needless to say, there will also be considerable activity around The IUCN Red List 50th anniversary.

Mike Hoffmann
Chair, IUCN Red List Committee

SPECIES CONSERVATION PLANNING SUB-COMMITTEE (SCPSC)

The SCPSC has existed since 2010. Its main purposes are to introduce and develop the SSC approach to developing species conservation strategies and to encourage Specialist Groups as the primary audience to develop conservation strategies for their priority species.

In 2013, SCPSC members played significant roles, usually as facilitators, in a variety of planning events, covering species such as the brown howler monkey, the western Derby eland, Edward's pheasant, the okapi in the Democratic Republic of Congo, dama gazelle in the Sahara, the Caucasus goitred gazelle, and the Eastern bongo workshop on an inter-regional basis. Our Conservation Breeding Specialist Group (CBSG) members ran further planning events. We also provided input to a programme of training for species conservation planning in the Maghreb, through participation in workshops in Tunisia and Algeria, run by the IUCN Centre for Mediterranean Cooperation.

During the year, SCPSC membership was expanded with representatives of the other SSC Sub-Committees; the full SCPSC met in August 2013, and laid out a schedule of actions. These are being progressed by a series of small working groups. The Chair participated in the first meeting of the Climate Change Specialist Group (CCSG) in December, which will lead to a comprehensive approach to including climate change in species conservation planning. He is also on a working group of the Amphibian Specialist Group (ASG) as part of a push to implement the Amphibian Conservation Action Plan.

Activities in 2013 contributed to the current IUCN Species Strategic Plan's specific targets through introducing planning to, and assisting, more Specialist Groups; the planning methodology is being developed to handle the diverse conservation situations in which planning is needed, further ensuring climate change receives adequate attention; with CBSG, we are well on the way to having 40 species conservation strategies completed and endorsed by the end of the quadrennium. A major focus for 2014 will be to stimulate planning for invertebrate animals, plants and aquatic species.

Our core work has been possible through the generosity of the Environment Agency of Abu Dhabi, through the SSC Chair's

Western Giant Eland (*Tragelaphus derbianus* ssp. *derbianus*) Critically Endangered on The IUCN Red List. © Derbianus CSAW/Tom Junek



Office, and the Karl Mayer Foundation, for which we are most grateful.

Mark R. Stanley Price Chair, Species Conservation Planning Sub-Committee

STANDARDS AND PETITIONS SUB-COMMITTEE

We are responsible for ensuring the quality and standards of The IUCN Red List, developing guidelines for the application of The IUCN Red List Categories and Criteria, and ruling on petitions against the listings of species on The IUCN Red List.

Guidelines: The Standards and Petitions Sub-Committee (SPSC) released version 10 of Red List Guidelines in February and another version (10.1) with minor changes in September. The SPSC then met in December 2013, to discuss a number of major issues, including:

- Managed and introduced populations ("What is Wild?"), involving conditions under which subpopulations that are managed or those resulting from conservation translocations (assisted migration) can be included in an IUCN Red List assessment.
- 2. Attitude settings, involving appropriate default settings for risk tolerance and dispute tolerance, which are particularly relevant for assessments based on uncertain data.
- 3. The proper use of habitat models for estimating AOO and EOO; and dealing with discontinuities in species distributions when estimating EOO.
- 4. Clarification of the use of the "severe fragmentation" for insular species, and the use of pre-disturbance generation length for exploited populations.

The results of these discussions have been incorporated into version 11 of The IUCN Red List Guidelines, which is now under review by the Red List Committee and the Red List Technical Working Group.

Consultations: SPSC provided comments on various issues, including those related to polar bears, marine species, insular species, amphibians, and IUCN Red List training materials.

Misconceptions: SPSC is contributing to a general paper on common misconceptions about The IUCN Red List criteria, categories, and process.

Uncertainty: SPSC is coordinating a review of methods for calculating uncertainties for parameters used in IUCN Red List assessments.

Climate change: SPSC is involved in ongoing work for quantifying the impact of climate change on species extinction risks, and is contributing to activities of the Climate Change Specialist Group (CCSG).

H. Resit Akçakaya Chair, Standards and Petitions Sub-Committee

Publications Summary

2013

Lemurs of Madagascar: a strategy for their conservation 2013-2016 English: https://portals.iucn. org/library/efiles/ documents/2013-020.pdf



Elephants in the Dust: The

African Elephant Crisis *English:* https://portals.iucn. org/library/sites/library/files/ documents/2013-002.pdf

Global re-introduction perspectives: 2013: further case-studies from around the globe

English: https://portals.iucn. org/library/sites/library/files/ documents/2013-039.pdf



Great apes and FSC: implementing 'ape friendly' practices in Central Africa's logging concessions

English: https://portals.iucn. org/library/sites/library/files/ documents/SSC-OP-049.pdf French: https://portals.iucn.

org/library/sites/library/files/documents/SSC-OP-049-Fr.pdf

Guidelines for reintroductions and other conservation translocations English: https://portals.iucn. org/library/sites/library/files/

documents/2013-009.pdf

Invasive alien species: the urban dimension: case studies on strengthening local action in Europe English: https://portals.iucn.

documents/2013-027.pdf



Jamaican Iguana: species recovery plan, 2006-2013

English: https://portals. iucn.org/library/sites/ library/files/ documents/2013-028.pdf



Vital but vulnerable: climate change vulnerability and human use of wildlife in **Africa's Albertine Rift** English: http://www.iucn.org/ dbtw-wpd/edocs/SSC-

OP-048.pdf

Assessment of the socioeconomic value of freshwater species for the northern African region English: https://portals.iucn.

documents/2012-042.pdf French: https://portals.iucn.

org/library/sites/library/files/

org/library/sites/library/files/documents/2012-042-Fr.pdf

Bonobo (Pan paniscus): conservation strategy 2012-2022

English: https://portals.iucn. org/library/sites/library/files/ documents/2012-083.pdf *French:* https://portals.iucn. org/library/sites/library/files/ documents/2012-083-Fr.pdf





2012 published since Species 54

IUCN Red List categories and criteria, version 3.1. second edition

English: http://jr.iucnredlist. org/documents/redlist_cats_ crit_en.pdf French: http://www. iucnredlist.org/documents/ redlist_cats_crit_fr.pdf

Spanish: http://www.iucnredlist.org/ documents/redlist_cats_crit_sp.pdf

Guidelines for application of IUCN Red List criteria at regional and national levels: version 4.0

English: http://www. iucnredlist.org/documents/ reg_guidelines_en.pdf



French: http://www.iucnredlist.org/documents/

reg_guidelines_fr.pdf

Spanish: http://www.iucnredlist.org/ documents/reg_guidelines_sp.pdf

Arabic: http://www.iucnredlist.org/documents/

RL-2011-001-Ar.pdf

Grauer's gorillas and chimpanzees in eastern **Democratic Republic of** Congo (Kahuzi-Biega, Maiko, Tayna and Itombwe landscape: conservation action plan 2012-2022

English: https://portals.iucn. org/library/sites/library/files/ documents/2012-080.pdf



IUCN situation analysis on **East and Southeast Asian** intertidal habitats, with particular reference to the Yellow Sea (including the **Bohai Sea**)

English: https://portals.iucn. org/library/sites/library/files/ documents/SSC-OP-047.pdf

Chinese: http://www.iucn.org/dbtw-wpd/ edocs/SSC-OP-047-Zh.pdf

Korean: https://cmsdata.iucn.org/ downloads/47_mackinnon_etal_2012_ intertidal_report_web_korean.pdf

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The conservation status and distribution of reptiles of the **Arabian Peninsula**

English: https://portals.iucn. org/library/sites/library/files/ documents/RL-53-002.pdf



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SAVE OUR SPECIES



>>PRIMARY ACTIVITIES

By the end of 2013, SOS was funding 48 Threatened Species Grants and an additional two Rapid Action Grants. It had also begun work to reach the broader global community of those who love nature through the power of social media, events and storytelling. These 48 projects are implemented by 38 grantees including local NGOs, regional and international operators too. In total, SOS had either allocated or disbursed almost \$6 million in small and medium sized grants between its inception in 2010 and the end of 2013, supporting projects that help protect mammals, amphibians, birds, plants, fish and reptiles in 50 countries, including the marine and freshwater environments.

SOS' primary activity is funding either new or established conservation projects that fulfill our selection criteria, are shortlisted following evaluation by members of the Species Survival Commission (SSC) and representatives of donors, and are finally approved by the SOS Donor Council. This primary activity is done through the Threatened Species Grant (TSG) programme which funds projects for one to two years in keeping with strategic directions publicised through an annual Call for Proposals. The Council met in May 2013 to review and approve shortlisted grant candidates from the Second Call for Proposals announced by SOS in late 2012. The directions in these Calls are informed by The IUCN Red List of Threatened Species[™] which explains why, in our communications, SOS is presented as the actionable answer to the challenges and issues identified by The IUCN Red List.

The Second Call for Proposals allowed SOS to extend funding in 2013 into four new strategic directions for its TSG programme; threatened tropical terrestrial Asian vertebrates, threatened small marine mammals, threatened cycads and threatened freshwater African animals.

The Third Call for Proposals which closed in August 2013 was, as expected, over-subscribed. Again it extended the range and reach of SOS funding to eligible projects under the strategic directions of; threatened cycads and conifers, threatened sharks and rays and threatened central and western African vertebrates. These new projects will begin in 2014.



>>EMERGENCY CONSERVATION ACTION

In 2013, SOS also funded two Rapid Action Grants (RAGs), which are designed to fund shorter term, more immediate conservation work. The first of these supported the LEO Foundation by training and equipping ecoguards in Cameroon's Bouba-Ndjida National Park, tackling the increased threat of poaching to lions and elephants. Bouba-Ndjida was the site where, between January and March 2012, poachers killed around 450 elephants - one of the largest single slaughters of elephants on record in Africa in recent times. This event was a chilling reminder of the challenge facing the men and women who work on the frontlines to protect our wild heritage; fortunately SOS was in a position to support LEO Foundation's ongoing work in the area.

Also tackling wildlife crime, the second RAG funded the training and support of rangers, protecting Siamese Rosewood from poaching in Than Lap National Park in Thailand. By investing in the park's rangers and by developing park-based monitoring as well as reporting mechanisms, the project will rapidly improve the effectiveness and safety of patrolling as well as increasing their frequency.

>> CONSERVATION SUCCESSES

2013 was another year of conservation successes for SOS. A selection of notable highlights begins with a project funding grantee Wildfowl and Wetlands Trust which involved a daring and innovative headstarting programme that reaped rewards for the Critically Endangered Spoon-billed Sandpiper. Project staff managed to hatch 20 eggs in Russia's far eastern Chukotka region; a fantastic achievement which is essential to the future stability of the species.

In Baja California's Sierra San Pedro Martír, grantee San Diego Zoo Global reported identifying its third California condor chick born in the wild to captive reared parents. Decimated by lead-poisoning, the California condor's return to the skies over the Pacific American seaboard is a remarkable tale of passionate people, dedication and hope. The excitement surrounding the discovery of these wild-born chicks was tempered in July with confirmation the third chick had not survived a rock fall which had smothered its nesting area. The incident served to remind us all that nature truly is a wild and unpredictable force, and one to be respected not least for its inimitable ways.

Half a world away in Africa, Save the Rhino Trust Namibia had proudly reported 357 consecutive poaching free days in the Kunene region, thanks to a highly effective patrolling and monitoring programme whose roots run deep in the region's conservancy system which actively involves community members in conservation initiatives. In July 2013, in Ishaqbini Province, north eastern Kenya, grantee Northern Rangelands Trust announced the birth of eight Hirola in a specially built sanctuary managed by local community members. The fact that all eight babies survived is an indication of the value of sanctuaries in securing a future for one of the most threatened antelopes in Africa, as well as benefiting the eco-tourism plans of communities in north eastern Kenya.

>> COMMUNICATIONS AND OUTREACH

In 2013 we increased our public engagement efforts by reaching out to supporters through social media and events as well as through our existing network of colleagues. As part of its strategy to attract new donors, SOS aims to communicate these positive messages about wildlife conservation beyond the conservation community.

The first major development was the enhancement and expansion of the SOS website, launching a DONATE button as well as improving the user experience with an interactive map and making news content more "shareable" on the web. Also, in early 2013, SOS launched its social media presence, steadily building a community of supporters. In December we passed the 30,000 friends milestone on Facebook and approached 1,000 followers on Twitter.

In June, SOS nature – a photographic exhibition and series of free public talks in the heart of Geneva – celebrated the charismatic power of nature and wildlife in an effort to raise awareness among the wider public. Taking place in La Cité du

Temps on an island in the Rhone, SOS nature ran for one month, reaching several thousand visitors in that time.

In August, SOS discovered the power of crowd-funding by helping to coordinate the IUCN annual 'Big Swim' fundraising event. The annual swim across Lac Léman from France to Switzerland was a perfect fit to raise money for a project by SOS grantee, the Endangered Wildlife Trust, to improve protection measures for the Vulnerable Dugongs of Bazaruto Archipelago National Park, Mozambique. With just three weeks of fundraising activity, the team managed to raise \$21,000 for this project.

>> GROWING THE PARTNERSHIP

In 2012, Fondation Segré joined the SOS partnership, selecting two projects to be supported under the Second Call for Proposals. Its decision to fund two more projects under the Third Call for Proposals issued in July 2013, was an encouraging sign that SOS can offer a valuable service to foundations looking for guidance on biodiversity funding decisions. SOS continues to target other foundations in this vein.

SOS graciously received a bequest from Dr Susan Mainka upon her passing. Sue was Director of the IUCN Global Species Programme from 2000 to 2004 and was a passionate supporter of action-oriented initiatives like SOS. The team and in particular, Jean-Christophe Vié, who Sue had originally hired, were touched deeply by this generosity. Like all donations, this money will be channelled into projects to maximise impact.

>>SUMMARY

SOS is delivering conservation successes. While our ultimate goal is to help protect threatened species, SOS must communicate and attempt to grow the partnership, inviting new donors to secure the necessary support that will fund more projects. SOS is a dynamic instrument in the IUCN toolkit that can help transform Red List knowledge into action on the ground and connect partners with the global conservation community. As such we continue to work to profile SOS and its grantees' success stories, while improving SOS integration with relevant initiatives that have been implemented by our colleagues across IUCN and the Global Species Programme, especially.

Mission to Kenya. © Michel Gunther



Finally, SOS would like to express a big and warm thanks to SSC members who have contributed time and expertise to SOS as well as to our partners and donors. Truly, without all these individual efforts we really could not achieve so much. The challenge remains to attract new partners in order to fill the funding gap and support more projects, leveraging our combined talents, knowledge and expertise. Let us continue to do so.







Geographical range

Knowledge Action Get Involved



Amazing Species: Giant River Prawn

The <u>Giant River Prawn</u>, *Macrobrachium rosenbergii*, is listed as 'Least Concern' on the IUCN Red List of Threatened Species ™. It inhabits coastal rivers and estuaries, with a connection to the sea, and its natural range extends eastwards from eastern Pakistan up to Borneo and Java. While considered a freshwater species, the larval stage of this prawn depends on brackish water.

Commercial aquaculture of the Giant River Prawn began in the 1960s in Hawaii, and it now has major economic value as a food source in subtropical and tropical regions. Although this freshwater prawn is extensively fished, it is not thought that this represents a threat to the population due to its wide natural occurrence.

There are no specific conservation actions in place for the Giant River Prawn, although many parts of its range are likely to occur in protected areas. There have been widespread reports of frequent aquaculture escapees, some of which have successfully established as breeding populations. It is not currently known if there have been any negative impacts of this invasion, but in general it is considered to be a "harmless nonindigenous species".









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AFRICAN ELEPHANT

AFRICAN RHINO

AFROTHERIA

AMPHIBIAN

ANOLINE LIZARD

ANTEATER, SLOTH
AND ARMADILLO

ANTELOPE

ASIAN RHINO

ASIAN WILD CATTLI

BEAR

NOSIB

ARSG "Salar Salar Salar

ASG





BUMBLEBEE

BUSTARD

BUTTERFLY

CACTUS AND SUCCULENT

CARNIVOROUS PLANT

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CAVE INVERTEBRATI

CETACEAN

CHAMELEON

Chameleon Specialist Group

CAT SPECIALIST GROUP

moran

Crane Specialist Group

Section!

CWRSG

Sectally dead

BUTTERFLY Specialist Group

CSSG ®

Canid Specialist Group







CLIMATE CHANGE

CONSERVATION BREEDING

CORMORANT

CRANE

CROCODILE

CROP WILD RELATIVE

CYCAD

3

DIVER AND LOOK

Dragonfly Specialist Group

CYCAD



CONSERVATION
BREEDING
SPECIALIST GROUP





















SEA SNAKE

SIRENIA

SMALL CARNIVORE

SMALL MAMMAL

SOUTH AMERICAN CAMELID

SOUTH ASIAN
INVERTEBRATE

STURGEON

SUSTAINABLE USE AND

SUL

Small Carnivore Specialist Group

SIYSG



























IGUANA

INVASIVE SPECIES

LAGOMORPH

LARGE CARNIVORE INITIATIVE FOR EUROPE

E E E E E E E E

MACARONESIAN ISLAND PLANT THE STREET

MANGROVE

MARINE TURTLE

MEDICINAL PLANT

Lichen Specialist Group

Mangrove Specialist Group

Palm Specialist Group

IUCN SSC PANGOLIN

Proces Secure Group

PANGOLIN

PECCARY

POLAR BEAR

RE-INTRODUCTIO







FLAMINGO





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FRESHWATER CRAB AND CRAYFISH













GALAPAGOS PLANT

GALLIFORMES

GIRAFFE & OKAPI

GRASSHOPPER

GROUPER AND WRASSE

HAWAII PLAN



FRESHWATER PLANT















































Medicinal Prairie Coop Coop



























