2019 Activities Report
to the Environment Agency - Abu Dhabi for the Support
to the IUCN Species Survival Commission Chair’s Office
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Introduction

In 2008, the leadership of the IUCN Species Survival Commission (SSC) met in Abu Dhabi for the first of a series of meetings which transformed species conservation across IUCN. Roughly every four years since we continued to meet there under the generous auspices of Environmental Agency – Abu Dhabi (EAD). The second meeting was in February 2012, the third in September 2015, and the fourth in October 2019. The latest meeting included four productive and intense days of networking, articulation, learning from past experiences as well as improving skills, exploring how best to measure the effectiveness of SSC actions on biodiversity conservation and apply the outcomes of that process to improve and guide our future work, in the context of the IUCN Programme, the post-2020 Global Biodiversity Targets and the Sustainable Development Goals.

Although hosting SSC in Abu Dhabi is surely a major contribution, EAD’s support did not end there. A first three-year framework agreement to support species conservation activities was reached between EAD and SSC in 2011, and followed by a second agreement that spanned 2013-2016. Here, we report on the results of the third of a four-year Memorandum of Agreement signed by EAD, SSC and Global Wildlife Conservation (GWC), concerning Support for the office of the Chair of the IUCN Species Survival Commission for 2017-2020.

This Agreement continues to strengthen the expanding partnership between EAD and SSC, with a view to helping implement key aspects of the 2017-2020 IUCN Species Strategic Plan. Under this Agreement, funds were allocated to particular aspects of work that are of high strategic importance, and which have proven hard to fund from other sources. The funds were assigned directly to SSC Groups, or to the IUCN Global Species Programme (GSP) that supports SSC activities.

We begin with a brief summary of the highlights of the work carried out by the SSC Chair’s Office team in 2019, followed by key achievements of the GSP and the SSC network in the context of the present agreement.
Chair’s Office

During 2019, the Species Conservation Cycle consolidated as the conceptual framework for all SSC activities. It includes five components – Assess, Plan, Act, Communicate and Network – thus our Species Annual Report summarizes the achievement of SSC Groups under this strategic framework.

The cycle initiates with a scientific assessment, such as developing a species account for the IUCN Red List of Threatened Species. Knowledge is compiled and synthesized, and an evaluation of extinction risk follows, leading eventually to publication online. The following stage is to create a conservation action plan, which identifies projects and priorities aimed at reduction of species’ extinction risk. Next, comes conservation action by mobilizing the resources required to implement action plans. The cycle then starts again, as the status of a species may change over time and a new assessment is required. At the center of the Species Conservation Cycle is the SSC Network, and constant communication between all elements is illustrated by an enveloping grey shade.

In the sections below, we present the major achievements of the Chair’s Office team. At the end of this section, we update the structure of our team and summarize the financial allocations made in 2019, thanks to the generous support of EAD.

Assess

Specialist Groups are SSC’s primary contributors to the IUCN Red List of Threatened Species, as this is one of their main activity across the network. An important change, which has expanded in recent years and continues to grow, is to work jointly with partner organizations in red listing. The typical arrangement is that the partner organization hires one or more staff to be devoted mainly to supporting red list assessments in collaboration with SSC specialist groups or the Global Species Programme.

• SSC Chair’s Office has partnerships in place with five organizations, totaling nine red list officers who have contributed with ~3,300 species assessments. All staff will become Red List trainers, learn conservation planning and other IUCN knowledge products. Their investment is equivalent to 1,440 person/hour*red list officer*year. They are:
  » The Deep aquarium, Robert Bullock. Rob serves as SSC Red Listing Partnership Officer, overseeing the work of other red list officers. In the last three and a half years, he has contributed to 1,800 species assessments, largely marine bony fishes but some freshwater fishes, elasmobranchs, marine reptiles and marine mammals.
» Georgia Aquarium, Katelyn Herman, focused on sharks. Since July 2017, ~500 species contributions. Specialized on mapping.


» Albuquerque BioPark, hired three officers. Since July 2018, Tim Lyons, supporting the assessment of fresh water fish, ~400 contributions, and Clayton Meredith, working with medicinal plants, ~250 contributions. Anna Walker recently joined the team working with pollinators.

» Parque das Aves, established a team of three: Fabiana Lopes Rocha, Rosana Subirá –part time– and Eugenia Cordero –part time–. They are working on both red list assessments and conservation planning, with a focus on Brazilian species, contributing endemic species assessments to the global red list. This is a three-way partnership, also including the Conservation Planning Specialist Group.

- Global Wildlife Conservation –SSC partner and fiscal sponsor– and Albuquerque BioPark are in the process of applying to become Red List Partnership members of IUCN.

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**Plan**

SSC’s work in this area is led by the Conservation Planning Specialist Group (CPSG), who has the mandate of designing protocols and tools, as well as scaling them up to the entire network and beyond.

- The SSC Chair’s office has been working together with partners in strengthening their conservation planning capacity. Rob Bullock, Núria Baylina –Oceanário de Lisboa– and the teams at Albuquerque BioPark and Parque das Aves are already on the development pathway of CPSG. Also, the SSC Data process now requests Specialist Groups to propose a planning focal point –in addition to in situ focal points–, in order to catalyze involvement in the network.

- In partnership with the South African National Biodiversity Institute (SANBI) and BirdLife South Africa, we have been working on development of the Biodiversity Assessment for Spatial Prioritization in Africa (BASPA), a project that seeks to support national red lists of threatened species and ecosystems, and their integration to spatial planning processes and identification of key biodiversity areas. During 2019, BASPA advanced red list assessments in Mozambique, initiating work on KBAs. Malawi and Kenya are next on the list, currently initiating red listing. A major priority of the SSC Chairs’ Office is to support IUCN members, particularly governmental members, on the development of national red lists and their application to conservation planning and action.

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**Act**

Two initiatives, both with the National Geographic Society (NGS), have been SSC Chair’s Office focus on conservation action during 2019: Recovery of Species on the Brink of Extinction, and Sumatran Rhino Rescue.

- **Species Recovery request for proposals:** After its second year and with five rounds of applications closed, the balance is encouraging. US$ 2,576,032 disbursed in support of 73 conservation projects, selected among 374 proposals received (20% acceptance rate). Roughly, half of approved projects were from SSC members. Primates, amphibians, vultures, bats, crocodiles, birds, and freshwater fishes are some of the taxa covered by the different award-winning projects. Early 2019, Fondation Segré joined the alliance, further strengthening the capacity to fund proposals.
Summary of results:
Recovery of Species on the Brink of Extinction

<table>
<thead>
<tr>
<th>Rounds</th>
<th>Applications submitted</th>
<th>Proposals funded</th>
<th>Funds allocated</th>
<th>SSC Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st round – April 2018</td>
<td>161</td>
<td>20</td>
<td>$662,795</td>
<td>12</td>
</tr>
<tr>
<td>2nd round – July 2018</td>
<td>62</td>
<td>9</td>
<td>$340,906</td>
<td>3</td>
</tr>
<tr>
<td>3rd round – October 2018</td>
<td>61</td>
<td>11</td>
<td>$375,455</td>
<td>8</td>
</tr>
<tr>
<td>4th round – January 2019</td>
<td>40</td>
<td>14</td>
<td>$512,118</td>
<td>9</td>
</tr>
<tr>
<td>5th round – April 2019</td>
<td>50</td>
<td>19</td>
<td>$684,758</td>
<td>4</td>
</tr>
<tr>
<td>6th round – October 2019</td>
<td>91</td>
<td>17</td>
<td>$640,616</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>465</strong></td>
<td><strong>90</strong></td>
<td><strong>$3,216,648</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

- **Sumatran Rhino Rescue:** This is a multi-partner initiative in which SSC works with international and Indonesian organizations that collaborate to save this species. With a 30-million-dollar budget for five years, the partnership has expanded the ex situ sanctuary in Way Kambas –southern Sumatra– and is planning to build a new one in northern Sumatra. Primary achievements during this year include:
  - Successfully rescued a healthy female rhino –Pahu– relocated to a secure facility in Kalimantan.
  - Completed an expansion of the Way Kambas Sumatran Rhino Sanctuary, providing space for five additional rhinos, and resources approved to build a new Sumatran Rhino Sanctuary in northern Sumatra.
  - Created the first-ever 3D scan of a Sumatran rhino, at the Sumatran Rhino Sanctuary in Way Kambas National Park, Indonesia. The scan is an education and outreach tool to raise public awareness of the species.
  - Created the Sumatran Rhino Husbandry and Propagation Expert Advisory Board to guide the implementation of the Emergency Action Plan.

**Network**

The SSC network is composed of 9,387 experts in 168 countries, representing 59% of all commission members. The number of specialist groups has increased to 161 –5 of which created during this year–. A back-of-the-envelope estimate of the work of specialist groups places it at 89,000 person/days annually, valued at 45 million US dollars.

- As revealed by the second round of SSC Data in 2019, about 70% of 1,590 targets proposed for the quadrennium were either on track, partially achieved or achieved. This is an encouraging result, considering that it marks the mid-point of 2017-2020 quadrennium.
- Among the additional applications of SSC Data is the recognition of the outstanding contributions to any of our Key Species Results established in the **Species Strategic Plan 2017-2020**. Allocation of SSC citations of excellence in 2019 were based on the information provided by SSC Groups through this planning tool and the achievement of the goals that they set for themselves. A second application of SSC Data to strengthen the network was the establishment of the **SSC Internal Grant** for small requests within the Network of SSC Groups. During 2019, two application cycles resulted in 27 proposals funded and more than US$ 85,000 allocated –this topic will be addressed in a special section later in this report.
• Launched the first Global Center for Species Survival (GCSS). This extraordinary announcement took place during the IUCN’s SSC Leaders Meeting in Abu Dhabi, where the official agreement was signed by the Acting Director of IUCN, Grethel Aguilar, the SSC Chair, Jon Paul Rodríguez and the President of Indianapolis Zoo, Rob Shumaker. The center based at the Indianapolis Zoo, aims to collaboratively enhance the scope and effectiveness of species conservation globally. GCSS will involve creating a new team of nine full-time staff employed by the Indianapolis Zoo, dedicated to support the mission of the SSC. The team will provide critical training, capacity and coordination support to further mobilize the species conservation efforts of the SSC’s Network of over 9,000 experts alongside wider partner and stakeholder communities.

• As part of the efforts to increase the engagement of SSC partners in IUCN, SSC Chair’s Office is working together with Council and the Secretariat on the creation of a new category of IUCN Member for venue-based organizations, such as zoos, aquariums, botanic gardens, museums and academic organizations. Preliminary estimates suggest that around 100 zoos and aquariums would join the union under that scheme. In the short term, Indianapolis, Oceanário de Lisboa and Abuquerque BioPark are considering becoming IUCN members.

This has been a new area of work for the SSC Chair’s Office. We have developed the SSC Communication strategy with the aim to recognize, empower and inspire the SSC network as well as our partners and allies on conservation.

• SSC Chair’s Office had presence in social media through its accounts on Twitter, Instagram and Facebook. In September 2018 we had 205 Facebook followers, increasing to 1,895 by the end of 2019 –growth has been steady since February 2019. Our following on Twitter is 45% male and 55% female, most come from United Kingdom (20%), United States (16%), Venezuela (6%), India (6%), Canada (5%) and Mexico (5%). Our first tweet was on 5 June 2019, on World Environment Day.

• SSC communications are implemented in collaboration with the GSP team and IUCN Global Communications, as well as with partners, such as Sumatran Rhino Alliance. In that sense, a major focus of the partnership with the Indianapolis Zoo will be communication, both to visitors to the zoo, as well as to the public and the global audience of SSC. Alliances with media outlets are integral to the design of the GCSS.

• Howard Hughes Medical Institute, Tangled Bank Studios (HHMI) started to work with us during the Leaders’ Meeting, last October in Abu Dhabi. They attended with a production team to record interviews with SSC group chairs, in order to identify themes for future development of full-length documentaries. They are planning to develop content on conservation success stories and augmented reality experiences for the World Conservation Congress, and have also decided to contribute to the #ReverseTheRed pavilion at Congress.
Financial allocation

During 2019, and through the implementation of this agreement, EAD supported projects developed by the following SSC Groups:

<table>
<thead>
<tr>
<th>Grantees</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSC Chair’s Office</td>
<td>$50,000</td>
</tr>
<tr>
<td>IUCN Global Species Programme (GSP)</td>
<td>$281,915</td>
</tr>
<tr>
<td>Climate Change Specialist Group (CCSG)</td>
<td>$80,000</td>
</tr>
<tr>
<td>Biodiversity Assessment for Spatial Prioritization in Africa (BASPA)</td>
<td>$77,404</td>
</tr>
<tr>
<td>Sustainable Use and Livelihoods Specialist Group (SULi)</td>
<td>$46,000</td>
</tr>
<tr>
<td>Conservation Planning Specialist Group (CPSG)</td>
<td>$40,000</td>
</tr>
<tr>
<td>Invasive Species Specialist Group (ISSG)</td>
<td>$40,000</td>
</tr>
<tr>
<td>Key Biodiversity Areas Standards and Appeal Committee</td>
<td>$37,193</td>
</tr>
<tr>
<td>Asian Species Action Partnership (ASAP)</td>
<td>$20,000</td>
</tr>
<tr>
<td>Post 2020 Task Force</td>
<td>$15,000</td>
</tr>
<tr>
<td>Bear Specialist Group - Bear Bile meeting</td>
<td>$3,305</td>
</tr>
<tr>
<td>Assessing Conservation Success Task Force</td>
<td>$3,000</td>
</tr>
<tr>
<td>SSC Internal Grant Program</td>
<td>$86,365</td>
</tr>
<tr>
<td><strong>Total Funds allocated 2019</strong></td>
<td><strong>$780,182</strong></td>
</tr>
</tbody>
</table>

As expected, our expenses in 2019 were slightly higher than last year, especially due to Strategic Investments in the SSC Network—as specified in our MOU—mainly allocated through the SSC Internal Grant Program. It has allowed us to improve the ability of SSC groups to deliver results under the Species Conservation Cycle.

Finally, we would like to reiterate our sincere gratitude to EAD for your generous grant in support of SSC toward the achievement of our mandate “stimulate, promote and support conservation actions for halting biodiversity decline, preventing species’ extinctions, and restoring and conserving intact habitats and ecosystems, both on the ground and in the water”. We are very grateful for your financial assistance.
Specialist Groups

The Memorandum of Agreement signed by EAD, SSC and Global Wildlife Conservation (GWC), provides support for the IUCN Species Survival Commission, not only for the SSC Chair Office core operations, but also for implementing activities established in our 2017-2020 Species Strategic Plan as well as the IUCN Global Species Programme. In the following sections, we summarize the main achievements of the SSC network supported by EAD fund during 2019.

The Sustainable Use and Livelihoods Specialist Group (SULi)

The main achievements of SULi during last year are presented below.

1. **Exploring the role of communities in combatting wildlife crime and promoting actions to enhance the effectiveness of community-based action in preventing such crime.**

   - Continued to develop and promote the **First Line of Defence (FLoD)** methodology for exploring how best to engage local communities in tackling illegal wildlife trade. Working with the Southern African Wildlife College. These methodological guidelines have started to translate into training materials in order to build local expertise in applying the approach.

   - Collaborated with the International Institute for Environment and Development (IIED) and IUCN East and Southern Africa Regional Office to develop and submit multiple funding proposals for projects to roll out further field-based applications of the FLoD methodology.

   - Continued the development of the online **Learning and Action Platform on Communities and IWT (LEAP)**, especially the case studies database which now includes 80+ case studies in a searchable database as well as key IWT policy documents, reports and events. This database is available within the platform.

   - As well as the online portal another component of the LEAP project is to enhance dialogue about communities and illegal wildlife trade both between communities from different countries and between communities and national governments. To this end a number of events were organized in 2019 including:

     - A workshop in Peru in September 2019, immediately prior to the Latin American regional conference on illegal wildlife trade. The workshop intended to allow community representatives to exchange experiences and develop a community statement presented at the conference. The workshop was a collaboration with IIED and the Center for International Forestry Research (CIFOR), and supported by USAID via the Wildlife TRAPS program implemented by TRAFFIC. IIED provided additional support in the form of the publication of a compilation of Latin American case studies. See the following blog for a summary of the event.

     - A learning exchange in Kenya in November 2019, for community representatives from East and Southern Africa. They shared experiences and prepared for a Global Environment Facility (GEF) consultation with civil society organisations on illegal wildlife trade. The workshop was a collaboration with IUCN ESARO and supported by the German government.
2. Enhancing the conservation and livelihood benefits of legal and sustainable trade.

- Worked with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat to identify and document case studies of the conservation and livelihoods benefits of trade in CITES species. These case studies were produced and presented in a side event at the CITES CoP in August 2019 and are available on the CITES website as follows:
  - Vicuña fibre harvesting and trade in Bolivia (factsheet, full report)
  - Saltwater Crocodile harvest and trade in Australia (factsheet, full report)
  - Pirarucu harvesting and trade in Brazil (factsheet, full report)
  - Inuit harvest and trade of Polar Bear in Canada (factsheet)
  - Snowdrop harvesting and trade in Georgia (factsheet, full report)
  - Harvest and trade of Nile Crocodiles in Kenya (factsheet, full report)
  - Bighorn Sheep hunting and trophy trade in Mexico (factsheet, full report)
  - Yellow-spotted River Turtle harvest and trade in Peru (factsheet, full report)
  - Cape Aloe harvesting and trade in South Africa (factsheet, full report)
  - Ibex and Markhor trophy hunting in Tajikistan (factsheet, full report)

- Provided technical support to community representatives at CITES including an analysis of the proposal regarding the engagement of rural communities—which was submitted as an Information Document—and organizing side events to build community capacity to engage in the negotiation process.

3. Promoting sustainable wildlife management.

- IUCN SULi continues to represent IUCN on the Collaborative Partnership on Sustainable Wildlife Management. In July 2019, SULi co-organised with TRAFFIC a Collaborative Partnership on Sustainable Wildlife (CPW) consultation on sustainable wildlife management in the post 2020 international biodiversity framework. The meeting including preliminary identification of a new targets and indicators, which could address sustainable wildlife management. The meeting report is available here.

- Participated in the Convention on Biological Diversity (CBD) Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) meeting in Montreal in 2019, which included a specific agenda item on sustainable wildlife management.

4. Supporting the integration of Traditional Knowledge into assessment and management of wild species.

- Produced some draft guidance on integrating Traditional Knowledge (TK) into IUCN Red List Assessments. This has been subject to a considerable level of internal review and discussion. A meeting was held with the Red List Committee in May 2019 and plans are underway to organize a workshop to revise the guidance, taking into account experience from integrating TK into the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) processes and small-scale fisheries—as noted below.—

5. Improving sustainable use and livelihood benefits in small-scale and recreational fisheries.

- Drafted guidelines on integrating TK into small scale fisheries policy, led by Winston Cowie of EAD. They are currently undergoing a final revision process following peer review and will be published early in 2020.
6. Contributing to international policy and dialogue on sustainable use and livelihoods.

- As noted above SULi has been active in both CITES and CBD on issues of sustainable wildlife use and management and in relation to local livelihoods. SULi Chair, Dilys Roe is also contributing to the IPBES Sustainable Use Assessment and participated in the second author meeting in Nairobi in November 2019.
- There has been a huge amount of discussion about the role of trophy hunting in conservation strategies—particularly in Africa—and SULi has participated actively in various consultations on this issue organized by the UK and US governments.

7. Building the SULi network and vision.

- Continued encouraging the growth of regional SULi groupings. To this end current and previous Chairs Dilys Roe and Rosie Cooney participated in a national workshop in India in February 2019 hosted by the Keystone Foundation, one outcome of which has been the establishment of an Indian chapter of SULi.
- Similarly, part of the objective of the Latin America workshop held prior to the Peru Conference on Illegal Wildlife Trade was to connect Latin American SULi members and encourage more regional collaboration and growth of the network.
- Following discussions at the SSC Leaders Meeting in Abu Dhabi in October 2019, next year SULi will also look to develop thematic groups including on fisheries and plants.

Red List Training and the IUCN Red List of Threatened Species

The IUCN Red List of Threatened Species has a strong reputation as an objective and reliable source of biodiversity information and used by governments, conservation organizations, the private sector, and regional and national Red Lists to inform their decision making and action planning processes. The following sections contain the results of the Red List Unit (RLU), the Biodiversity Assessment for Spatial Prioritization in Africa (BASPA), and other initiatives led by SSC during 2019.
Red List Training

1. The work on the online Red List training course will continue, with a large focus on building more capacity in the SSC Red List Authorities and in IUCN members, especially State members and national agencies around the world.

- In 2019, The Nature Conservancy (TNC) the host organization for this course updated the ConservationTraining website, which involved all of the courses being migrated to a new platform. This resulted in some changes, including: the web address for the course changed, and the course “home page” no longer exists. The changed address for the course resulted in all direct hyperlinks to the course from other websites –including the Red List website– having to be updated. This was not a major task but given the range of webpages referring to the course, it took several months to identify and update all these links. The Red List Unit has updated the Online Red List Training page on the Red List website to include a section to guide new course users on getting started, and which modules they should focus on for their needs.

- In 2019 the number of new users registering for at least one of the seven modules of the IUCN Red List training course was 1,311. Even with the course being unavailable for a few weeks due to the ConservationTraining website update, this is the highest number of new enrolments within one year since the course began in 2013. The total number of people who have enrolled on the course – over the period 2013-2019, is now 6,372.

- The number of people successfully completing the IUCN Red List training course during 2018 were:
  » 317 people for the Global Assessor course (6 modules).
  » 243 people for the Regional Assessor course (4 modules).
  » 231 people successfully completed the Global & Regional Assessor course (7 modules).

The main priorities identified and addressed for the online course in 2019 were:

- **Minor course update:** In 2019 were reviewed all 23 lessons –in all three languages–. Most of the issues identified related to broken hyperlinks and images that required updating, with very few minor text edits suggested. All comments were passed on to TNC and the course should be updated early in 2020.

- **New modules and lessons:** Still need to develop new lessons to add more content to the course. This will be a major task, requiring a lot of staff time and some additional funding to cover development costs. The RLU is investigating a way forward for this work, starting with development of

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**Online Red List Training course: total new users enrolling each year and successfully completing course modules**

![Graph showing total new enrolments and successful completions](image)

**Figure 1:** Total new enrolments on the online IUCN Red List Training course each year (2015-2019), and number of people successfully completing the Global, Regional and full versions of the course. Figures include people successfully completing all lessons in any of the three language versions of the course but exclude people who went on to take the final exam.
a module or lesson to guide users on how to incorporate climate change into Red List assessments. Also, need to rewrite Module 5 –mapping standards– to bring this part of the course in line with the most recent version of the IUCN mapping standards. This work is scheduled for 2020.

» **Full overhaul of the course:** This links with the need to develop additional modules and lessons, but also to investigate alternative software and tools to bring a more modern look and feel to the course. A full overhaul of the course will require major funding and staff time; ideally 6 months to a year of staff time to focus 100% on the task of completely restructuring the course lessons. In 2020 the RLU will develop an outline of how the course should be changed and will begin to investigate funding opportunities for this work.

- **IUCN Red List Exam:** In 2019, 266 people completed the default level exam –the default minimum pass mark for the exam is 75%–, with 192 people passing the exam. 22 people completed and passed the advanced exam in 2019 –with a minimum pass mark of 90%. This included seven Red List Trainers retaking the exam to keep their trainer certificates up-to-date, and 15 people passing the advanced exam for the first time.

![Number of people passing the online IUCN Red List exam each year](image)

**Figure 2:** Total number of people passing at least one version of the default and advanced level exams each year.

**Default exam passes:** 2014 = 71; 2015 = 101; 2016 = 129; 2017 = 187; 2018 = 188; 2019 = 192.

**Advanced exam passes:** 2014 = 18; 2015 = 9; 2016 = 14; 2017 = 17; 2018 = 10; 2019 = 22.

- A full four-day Red List training and assessment workshop was held by Biodiversity Assessment for Spatial Prioritization in Africa (BASPA) in Nairobi, Kenya, where 25 biologists from the National Museums of Kenya, Kenya Wildlife Service, and Nature Kenya were trained on applying the IUCN’s Categories and Criteria to evaluate the extinction risk of endemic species in different taxonomic groups.

2. **There will be a particular focus on capacity building in the Arabian Peninsula, and providing support to the UAE’s emerging new national Red List programme so that the UAE will have its own red list trainers operating in both Arabic and English.**

- The team of experts from EAD, Provita and SSC continued to work on developing the species accounts and background texts for the The Abu Dhabi Red List of Species, expected to be published in 2020.

3. **Other activities.**

- Held one Red List Trainers’ workshop in Cambridge, UK –August 2019– to train nine participants. All participants showed very good understanding of the IUCN Red List Categories and Criteria and demonstrated excellent trainer skills. However, three of the participants have not yet had time to complete the online exam, therefore only six new Red List Trainer were awarded certificates in 2019.
Currently there are 81 certified Red List Trainers –some trainers represent more than one part of the network– including:

» 41 IUCN SSC Specialist Group members.
» 27 staff from Red List Partner organizations.
» 14 IUCN Global Species Programme staff members.
» Four trainers based in IUCN Regional offices, and
» 12 people based in other organisations and IUCN Programmes –many of these people are former IUCN staff.

• Improved access to training resources for the Red List Trainers network. All the training workshop presentations are now available in a password-protected Red List Trainers' section on the website. The workshop case studies and exercises are not yet in place in this resources section of the website, but these will be added in 2020 to provide a complete set of training resources for Red List Trainers.

• Certified Red List Trainers facilitated 50 IUCN Red List Training events in 2019, involving more than 1,150 participants. These included 11 full (3-4 day) training workshops; 18 short (1-2 day) training workshops; 16 Red List sessions –introductory sessions attached to other meetings, workshops and conferences–; and 5 remote training sessions. These remote sessions included a series of webinars aimed at specific audiences: one series for the WWF network; and another for the Integrated Biodiversity Assessment Tool (IBAT) community, a tool used extensively by the private sector. This is the first time the RLU to use webinars for presenting information about the IUCN Red List. It was found as a very useful platform to reach out to a large and diverse audience that would not normally have the opportunity to ask questions about the Red List directly to those working in the core team.

• The review of the online course to identify broken hyperlinks and other minor errors included a review of the French and Spanish versions of the course. Some of the lessons in the non-English versions still used English versions of the images. Translated versions of these images were sent to the TNC team to include in the updated course –which will happen in early 2020–.
Updated the Guidelines for Using the IUCN Red List Categories and Criteria to version 14. Since there were four Red List updates in 2019, there was no time available to arrange updated French and Spanish versions. This work has been prioritised for 2020.

Red List Assessments. Priority will be given to the following assessments as part of the ambitious agenda, called The Barometer of Life, to expand the number of species groups covered on the IUCN Red List to make it more representative of biodiversity as a whole

1. Continued attention will be given to expanding the coverage of plant species on the IUCN Red List, including plants of high economic value.

   • No EAD funds were allocated to this activity in 2019.

2. The assessment of all 10,000+ species of reptiles will be completed.

   • BASPA has assisted the global reptile assessment team to assess 400 reptile species from central and southern Africa.

3. The update of all 7,000+ species of amphibians will be completed.

   • No EAD funds were allocated to this activity in 2019.

4. There will be continued focus on assessment of species in the Arabian Peninsula, in particular on marine species and plants.

   • In collaboration with EAD and Provita, during this year the SSC Chair’s Office advanced in the production The Abu Dhabi Red List of Species, completing assessments of 2 amphibians, 2 arachnids, 69 birds, 1 centipede, 20 insects, 43 mammals, 102 plants and 20 reptilians.

5. Other activities from the Red List Unit.

   • Each year, IUCN aims to publish at least two updates of The IUCN Red List, but with the pressure to meet the Barometer of Life target of having 160,000 species on the Red List by 2020, the RLU has started increasing the number of updates. In 2019, EAD funding helped the RLU to complete three updates, resulting in an increase in the number of assessed species from 96,951 (26,840 threatened) to 112,432 (30,178 threatened). Breaking the 100,000 threshold was a key milestone. Media releases for two of the 2019 IUCN Red List updates are available here:
     » 2019-3 Red List update.
     » The 2019-1 update released in March 2019 was a ‘silent update’ with no media release.

   • Another major focus of The IUCN Red List is to expand taxonomic coverage, particularly for groups identified under Key Result 1 of the Red List Strategic Plan (2017–2020). In 2019, 15,563 species assessments published on The IUCN Red List were new additions (i.e., first-time assessments); more than a three-fold increase on 2018. Most of these new assessments were for plants (11,128 species), reptiles (716 species), freshwater fishes (1,004 species), marine fishes (1,407 species) and invertebrates (811 species).

   • In order to monitor changing status of biodiversity, it is important to reassess species that already
have assessments published on The IUCN Red List; in 2019, 3,227 species were reassessed—similar to the number in 2018.

- Updates of The IUCN Red List in 2019 highlighted a wide range of stories, including:
  - The Rhino Rays (wedgefishes and giant guitarfishes) are the most imperilled marine fish families in the world with all but one of the 16 species assessed as Critically Endangered.
  - West African primates such as the Roloway Monkey are becoming more threatened because of increased hunting for bushmeat and development-related habitat loss.
  - Freshwater fish in Japan and Mexico were shown to be in decline because of the loss of free-flowing rivers and increasing agricultural and urban pollution. More than half of Japan’s endemic freshwater fish and a third of the species found in Mexico are threatened with extinction.
  - An increasing number of deep-sea fish and invertebrates are being assessed for the Red List because of the increasing potential threats to deep-sea habitats from fishing, oil and gas industries and deep seabed mining. The entry of the Scaly-foot Snail on the Red List as Endangered was a clear warning about how quickly species can be impacted by mining activities.
  - The number of fungi species on the Red List increased significantly with a large number of European fungal species being added e.g. the Splendid Waxcap is assessed as Vulnerable. Although this species occurs across north western Europe, it has declined over the last fifty years as its grazed grassland habitat is being converted to intensive agriculture or abandoned; the species is also impacted by the use of nitrogen-based fertilisers.
  - All known eucalypts (826 species) have been assessed for the first time and a quarter are threatened with extinction due to the impacts of agricultural and urban expansion and mining. Eucalypts are keystone species that define the landscapes of Australia and provide food and habitat to many other threatened species such as the Koala.
  - Good news stories highlighted the positive results of ongoing conservation actions, including the recovery of the Guam Rail, a bird previously listed as Extinct in the Wild. The Echo Parakeet in Mauritius continues its recovery thanks to conservation efforts and two freshwater fish species in Australia have likewise improved due to decades of conservation action—there are concerns now that the recent fires may have reversed all these efforts—.
Improved the new IUCN Red List website, with new pages, enhancements and functionality added with each update. New features include:

- New options under the Advanced Search to filter for species tagged as ‘Critically Endangered – Possibly Extinct’ and ‘Critically Endangered – Possibly Extinct in the Wild’.
- New options under the Advanced Search to filter search results using the different ‘Country Legend’ options enabling users to e.g. remove introduced and uncertain occurrences from their search results.
- A new ‘Text Summary’ section was added to the Species Fact Sheets showing all the narrative text fields in one section.
- The distinction between data provided by the Red List and data from external sources on the Species Fact Sheets was improved.
- Linkage to the Conservation Evidence website has been added to the External Data sources section; this enables users to see available evidence on the impacts of various threats and conservation actions for

- The IUCN Red List web site received over 4 million visitors and almost 18 million-page views. Users are able to export the results of any searches they carry out on the website, and in 2019 there were 11,075 downloads of these tabular search results, a significant increase on previous years; the previous highest was in 2015 with 8,300 downloads.
- Along with users being able to download tabular data, they can also download spatial data, for individual species and for sets of species based on specified search criteria or through the Spatial Data Download page where spatial data for multiple species is pre-packaged for download (e.g., spatial data for all mammals). The Red List Unit tracks the spatial data downloads and in 2019 there were 56,820 downloads of spatial data generated through search queries. Each download represents between one and several thousand individual species files; unfortunately, it is not possible to determine from the download data how many individual species files were downloaded by each of the multiple-species requests. However, the RLU does keep track of the number of downloads of the pre-packaged multi-species data sets; for those there were over 40,000 downloads comprising over 47.2 million individual species files.

6. Other activities from the Biodiversity Assessment for Spatial Prioritization in Africa (BASPA).

- Held a Biodiversity Assessment for Spatial Prioritisation in Africa (BASPA) project scoping meeting with officials from the French Development Agency –southern African region–.
- Completed and submitted a French translation of the BASPA project concept note to the north African focal point, for scoping and fund raising to develop national Red Lists in selected north African countries.
- Using the need questionnaire provided by BASPA pilot countries, a country specific budget to implement the BASPA project was developed.
- Prepared and submitted a funding proposal to the JRS Biodiversity Foundation to fund species Red Listing in Kenya –awaiting outcome–.
- Prepared and submitted a funding proposal to the Rainforest Trust to fund species Red Listing in Cameroon and Gabon –application not successful–.
- Prepared and submitted a funding proposal to the Darwin Initiative to support the BASPA project objectives in Cameroon, Ethiopia and Kenya –application not successful–.
- In collaboration with Missouri Botanical Gardens, completed a funding concept note to Franklinia Foundation for ex situ conservation of trees in Gabon, linking this approach to Red Listing –concept note accepted, and full proposal is currently being developed–.
- Supported Mozambique through Red List training and assessment workshops for plants, invertebrates, freshwater fish, birds, mammals, amphibians and reptiles in preparation for KBA identification.
- Supported Malawian biodiversity stakeholders to plan and map a way forward with Red List training
and assessment for multiple taxa using GEF 6 funding.

- Organized and held a stakeholder engagement meeting with staffs from the national herbarium of Cameroon to evaluate the state of data readiness and availability for Red List assessments.

- Organized and held funding and stakeholder engagement meetings with Kenyan USAID officials and staffs from Nature Kenya, Kenya Wildlife Service and the National Museums of Kenya, to identify funding interest and to evaluate the state of data availability and readiness for Red List training and assessments.

- Created working sets in IUCN Species Information Service (SIS) Toolkits for Kenyan endemic plants, small mammals, freshwater fish, invertebrates, amphibians and reptiles. Following this, a data preparation workshop with technical biodiversity experts in Kenya was held to clean species data in preparation for a Red List training and assessment workshop, which took place from the 18-22 November 2019.

- In collaboration with the UN Environment Programme World Conservation Monitoring Centre (UNEP–WCMC) and the South African National Biodiversity Institute, a first version of ecosystem types together with their IUCN Red List status have been produced. Through this project, Ethiopian biodiversity spatial planners were trained on applying the IUCN’s Categories and Criteria for evaluating ecosystems risk of collapse.
The SSC Invasive Species Specialist Group (ISSG)

During 2018 the Invasive Species Specialist Group developed the following activities.

1. Continuing to lead for IUCN in policy intervention on invasive species, including in the Convention on Biological Diversity and in the European Union.
   - Continued to lead IUCN in policy intervention linked to invasive species and related issues, at global fora including the Convention on Biological Diversity (CBD), and other relevant Conventions such as the Ramsar Convention, Convention on Migratory Species (CMS), the European Union and National Governments on request.
   - Attended relevant technical meetings of the Convention of the Biological Diversity.

2. Furthering the development of indicators on invasive species in the context of the Biodiversity Indicators Partnership, thereby guiding governmental decisions relating to invasive species.
   - Worked with partners in the development and measurement of Invasive Species related biodiversity indicators within the framework of the Biodiversity Indicators Partnership (BIP).
   - Updated the following indicators:
     » Trends in numbers of alien and invasive species introduction events.
     » Trends in invasive alien vertebrate species eradications.
     » Trends in policy responses - Legislation for prevention and control of invasive alien species (IAS), encompassing “Trends in policy responses, legislation and management plans to control and prevent spread of invasive alien species” and “proportion of countries adopting relevant national legislation and adequately resourcing the prevention and control of invasive alien species”. The policy response indicator will also measure the Sustainable Development Goal (SDG) indicator 15.8.1.
   - Obtained approval for the new proposed indicator related to ‘Trends in pathways of introduction and spread of invasive alien species’.

3. Completing the development of the IUCN Environmental Impact Classification for Alien Taxa (EICAT), seeking formal adoption by Council, and fully implementing EICAT in the Global Invasive Species Database.
   - Incorporated in the Global Invasive Species Database (GISB) of the reviewed Environmental Impact Classification of Alien Taxa (EICAT) rankings of species on the species profile page.

4. Enhancing the ISSG capacity to provide a rapid advisory service to guide those facing problems from invasive species.
   - Continued operating the online list service known as Aliens-L that has been crucially important to provide advice and information to practitioners in all areas of the world. A referral system is active with requests for information and linkages with requests from experts received regularly. ISSG also operates a Facebook page.
5. Other activities.

- Progressed the development and implementation of a backend database –Invasive Species Informa-
tion Service– that will potentially hold all the data the ISSG generates, including all relevant datasets
held in the ISSG archives in New Zealand. These data and information will feed into the various
interfaces/resources that the ISSG has developed and manages, namely the GISD, the Global Register
of Introduced and Invasive Species (GRIIS), and the planned portal dedicated to protected areas
and other areas of high biodiversity value.

- Progressed the coverage –aiming to cover all countries that are party to the CBD, USA, and EU
Overseas territories in 2020– of Global Register of Introduced and Invasive Species checklists. The
checklists presented in two portals-draft and fully verified lists are on GRIIS, whereas only fully verified
checklists are presented on a dedicated page of ISSG datasets on the Global Biodiversity Infor-
mation Facility (GBIF) portal.

- Based on the outcomes of the EICAT assessments and of the completion of GRIIS append data on
selected known invasive alien species –with evidence of impact– into the GISD including a profile
page for each of the species.

Key Biodiversity Areas Programme

The sections below highlight major achievements carried out by the KBA Standards and Appeals Com-
mittee (SAC) and the Biodiversity Assessment for Spatial Prioritization in Africa (BASPA) on their efforts
for implementing the Key Biodiversity Areas Programme during 2019.

1. Initiating the new KBA Programme, with a particular focus on helping to identify KBAs
in the Arabian Peninsula, and also KBAs for neglected groups of species.

- Penny Langhammer –KBA Technical Working Group (TWG) co-chair– delivered a training workshop
on application the KBA Standard at the Sharjah International Conservation Forum for Arabian Biodi-
versity (SICFAB) on 4-7 February 2019 in Sharjah, UAE. In addition to receiving training in the identifi-
cation and delineation of KBAs, participants worked in small groups to identify sites meeting the KBA
criteria primarily for plants and freshwater biodiversity across the Arabian Peninsula, building on the
KBA identification work initiated at SICFAB in 2018 which focused largely on vertebrates. The initial
KBAs identified through these two workshops are ready to be fed into national processes, where
appropriate, or with some further work to compile all of the required documentation for KBA propos-
als, be submitted for review and inclusion into the World Database of Key Biodiversity Areas as a
regionally-led process.

- The SSC Leaders’ meeting in Abu Dhabi in October 2019 included a well-attend session on integrat-
ing the IUCN Red List and KBA identification, which provided an overview of the data compiled for
both processes and profiled examples of Red List assessment workshops for reptiles and amphib-
ians that have incorporated the review or identification of KBAs for those taxa. The SSC Leaders’
meeting also included a parking lot session on the KBA Standard and KBA Guidelines. This session
provided leaders of a wide range of SSC Specialist Groups and Red List Authorities (RLA) –including
groups responsible for plants, fungi, invertebrates, fishes in freshwater and terrestrial systems– with
an opportunity to ask questions. Much of the discussion focused on the balance between scoping
analysis that may be led by Specialist Groups or RLAs and KBA identification and delineation led by
national constituencies.
2. Developing the new guidelines for the application of the KBA Standard, especially in the context of sites contributing significantly to the global persistence of biodiversity already designated by previous schemes, and disseminating these widely.

- The KBA Guidelines (Ver. 1.0) were published online in January 2019 and are available here. By the end of 2019, this document had been downloaded 1,834 times.
- Version 1.1 of the KBA Guidelines is now out for review –deadline for feedback is end of March 2020–, and it is estimated to be published in advance of the World Conservation Congress in June 2020. Work is well underway on developing sections that were excluded from Ver. 1.0 –i.e. distinct genetic diversity, B3c, and Criterion E–. Some of the activities related to this update were:
  » Facilitated a 2-day workshop to develop guidelines on applying Criterion E in October 2019 by Charlotte Boyd –KBA SAC Chair–. The 15 workshop participants included members of the KBA SAC as well as several members of the KBA TWG and additional experts. Some additional testing work is required before the guidelines can be finalized. This is scheduled for completion in February 2020.
  » Mike Bruford –KBA SAC member and co-chair of the IUCN Conservation Genetics Specialist Group (CGSG)– is coordinating a team drawn from the CGSG to develop guidelines on using distinct genetic diversity to identify KBAs based on a set of case studies from southern and eastern Africa. Charlotte Boyd serves as advisor to this process. Guidelines will be drafted by February 2020.
  » A small ad-hoc working group has drafted guidelines on subcriterion B3c. This working group includes Charlotte Boyd, Eimear Nic Lughadha and Graham Edgar –both members of the KBA SAC–.
- KBA SAC is also working on minor updates to several other sections of the existing KBA Guidelines, based on questions that have arisen over the past year and to ensure consistency with the new World Database of Key Biodiversity Areas.
- Charlotte Boyd is facilitating an online discussion about a possible process for pulling together lessons learned and developing practical guidance on involving indigenous people, customary rights-holders, and local communities in KBA identification and delineation.

3. Implementing the new KBA Standards and Appeals Committee (SAC) to oversee the technical and scientific independence of the KBA Programme.

- New KBA SAC members in 2019 include: Emily Nicholson, who provides ecosystem expertise and a valuable link to the Red List of Ecosystems team; and Virgilio Hermoso, who provides freshwater expertise.
• KBA SAC meetings: The KBA SAC has not met as a group in 2019, as there was no pressing need for an in-person meeting. Members of the KBA SAC have been able to meet opportunistically, in particular at the IUCN SSC Leaders meeting in Abu Dhabi in October 2019 and at the Criterion E workshop in Cambridge in October 2019. Most of the work of the KBA SAC is conducted by email or conference call.

4. Other activities.

• Charlotte Boyd participated in the Inspire4Nature training workshop on the practice of Identifying Globally Important Sites for Biodiversity, in Rhodes (Greece), April 8th-12th.

• Delivered a webinar on “Guidelines for using A Global Standard for the Identification of KBAs” to the KBA Community in July 2019. The webinar recording is available [here](#).

• Charlotte Boyd participated in the SSC Leaders’ meeting in Abu Dhabi in October 2019. In addition to facilitating the KBA sessions mentioned above, the meeting provided an extremely valuable opportunity to meet with the chairs and co-chairs of specialist groups that are interested in moving forward with KBA identification and delineation – including specialist groups for mayflies, corals, sharks and rays –.

• SSC has played an important role in the development of the KBA Programme over the past year. The KBA committee meeting in September 2019 was hosted by the South African National Biodiversity Institute, and Domitilla Raimondo, SSC deputy chair, represented SSC and provided the perspective of the South Africa KBA National Coordination Group, which has been working over the past year to identify a comprehensive KBA network for South Africa. This effort has mobilized entire new datasets at the national level, helping to ensure that sites holding threatened and geographically restricted species of plants and other lesser known taxonomic groups are including in the KBA identification process. Similar work is underway in several other African countries through the Biodiversity Assessment for Spatial Prioritization in Africa (BASPA) project, of which SSC is a core partner.

• BASPA is supporting the initiation of new USAID Key Biodiversity Areas (KBA) programmes in Africa through the following activities:
  » Supported Mozambique through Wildlife Conservation Society and a USAID Key Biodiversity Areas funded project to establish a KBA National Coordination Group and to provide KBA training and identification for multiple taxa including: birds, plants, freshwater fish, insects, amphibians and reptiles.
» Supported Zimbabwe through BirdLife Zimbabwe to kick start KBA planning and mapping a way forward with KBA funding, establishment of a KBA National Coordination Group and KBA identification in Zimbabwe.


» Prepared and submitted a funding proposal to the JRS biodiversity foundation to fund KBA identification in Kenya –awaiting outcome–.

» In collaboration with Nature Kenya, a funding application was prepared and submitted to BIOPAMA to support KBA identification in Kenya –awaiting outcome–.

» In partnership with Global Wildlife Conservation (GWC), Nature Kenya, and the KBA Secretariat, a successful funding proposal was submitted to the Critical Ecosystem Partnership Fund to develop a KBAs training material in Kenya and testing its applicability in the Afromontane biodiversity hotspot.

» Prepared and submitted a funding proposal to the Rainforest Trust to fund KBA identification in Cameroon and Gabon –application not successful–.

» Through the South African KBA National Coordination Group (NCG) and with funding from WWF Nedbank Green Trust, completed the identification of KBAs for multiple taxa in South Africa. The results have been presented to the South African KBA NCG and the KBA Technical Working Group. Plans are underway to delineate these KBAs and submit to the World Database of Key Biodiversity Areas.

» Supported Malawi through the Wildlife and Environmental Society of Malawi (WESM); BirdLife International country partner, Wildlife Action Group (WAG), Environmental Affairs Department (EAD) Malawi, Museums and the Herbarium, IUCN Freshwater Biodiversity Unit, and the KBA Secretariat to establish a KBA NCG and mapping of a way forward with KBA funding, training, identification and delineation in Malawi.
Species Conservation Planning

During 2019 the Conservation Planning Specialist Group (CPSG) as the planning arm of the SSC, carried out the following activities.

1. The SSC will increase the overall planning effort in order to achieve its new vision for planning, so that the effort matches the magnitude of the task. This will involve significant capacity building within SSC specialist Groups.

- Doubled the conservation planning activity. In 2018, CPSG staff and trainees led 25 species conservation planning meetings. In 2019, it was almost doubled this output to nearly 50 species conservation planning meetings. Half of these were led by CPSG training course participants, demonstrating that efforts to build capacity are increasing the use of CPSG best practices exponentially.

- Trained 500 people from 2017 to 2019, including 124 from SSC specialist groups. Between 2017 and 2019 CPSG trained 500 people, including:
  » 124 trainees from 42 SSC specialist groups and 3 other IUCN Commissions.
  » 111 from government institutions.
  » 118 from zoos and aquaria.

- Launched the Development Path Program with 11 mentees: The 18-month program provides formal training as well as mentoring to build conservation planning and facilitation skills. Each mentee is matched with a CPSG mentor. Mentors meet regularly with mentees to provide guidance. Through the program, mentees have the opportunity to engage in planning and facilitation activities. To date, mentees have attended six CPSG workshops and facilitated eight. CPSG has funds in place to support participation in workshops and is recruiting more mentors and mentees to grow the program.

2. The SSC will update and enhance its planning guidelines, “Strategic Planning for Species Conservation”, on a regular basis, and promote these among selected SSC Specialist Groups, governments and NGOs.

- Drafted the ‘Conservation Planning Principles & Steps’. CPSG shared the draft at the SSC Leaders Meeting in Abu Dhabi in October 2019. It is being prepared for broader SSC release.
3. There will be a particular focus on building planning capacity and developing high-priority species conservation plans in the Arabian Peninsula.

- This theme has not been addressed yet. It is a priority for implementation following the publication of The Abu Dhabi Red List of Species.

4. Other activities

- Developed the Assess to Plan (A2P) process to scale up species conservation planning efforts. A2P aims to align conservation strategies that boost survival of multiple species through one planning process. CPSG tested and promoted this process at three workshops during 2019, and a small but growing network of A2P practitioners is in place.

**Climate Change Specialist Group (CCSG)**

This has been a major focus of the Climate Change Specialist Group work in 2019.

1. **The new SSC Guidelines on Assessing Species’ Vulnerability to Climate Change will be published and widely disseminated and promoted, thus making it much easier to incorporated climate change considerations into conservation initiatives.**

   The IUCN SSC Guidelines for Assessing Species’ Vulnerability to Climate Change, published in English in 2016, translated into Spanish to improve inclusivity, expand their usage, and strengthen the fight against climate change in some of the world’s most important biodiversity hotspots.

2. **The SSC’s system for assessing the vulnerability of species to climate change, based on the biological traits of species, will be further enhanced and integrated with the Red List, thus helping to ensure that the impacts of climate change are better included in the IUCN Red List assessment methodology.**

- *Reforesting for the climate of tomorrow*, a study from the CCSG’s Borneo Trees Activity Team was published in February of this year in both English and Indonesian. The report analysed the traits of approximately 250 plant species native to Kutai National Park in Indonesia and identified species resilient to fires and drought, conditions expected to worsen under climate change. Based on this analysis, the study provides recommendations and techniques for climate-resilient reforestation efforts to expand crucial habitat for threatened East Bornean orangutans and other species. The report’s publication was picked up by several major media outlets including the IUCN, Mongabay, Phys.org, EnviroNews Nigeria, Green Report, Doncaster Free Press, and the Indianapolis Zoo.

- Species vulnerability to climate extremes, one of the newest CCSG activities, aims to fill knowledge gaps on how extreme events such as cyclones, droughts, floods and heat waves—can affect species and integrate those findings into climate change vulnerability assessments (CCVAs). The leader of this activity, CCSG member Eric Ameca, published a study early 2019 in Nature Climate Change, *Global assessment of primate vulnerability to extreme climatic events*. He also published a ‘News & Views’ commentary article in Nature Ecology & Evolution, emphasizing the paucity of research investigating how climate extremes influence evolutionary processes and highlighting this line of inquiry as a pressing research avenue.
3. Additional guidelines will be developed to incorporate climate perspectives into species conservation planning.

- Bruce Stein, co-leader of the CCSG’s work on adaptation, organized a well-attended symposium in April 2019 as part of the US National Adaptation Forum. The symposium explored new advances in understanding and the application of adaptive capacity in vulnerability assessments and adaptation planning. After introducing and reviewing key concepts in adaptive capacity, the symposium highlighted new research and emerging findings of the nature of adaptive capacity and how these developments are translated into real-world applications.

- In his capacity as Chief Scientist and Associate Vice President of the National Wildlife Federation (NWF), Bruce Stein also led the development of a new adaptation guide for US Department of Defense (DoD) Natural Resource Managers. The DoD owns or manages more than 25 million acres of land that support numerous rare and endangered species. Climate adaptation for DoD natural resources managers provides an overview of how climatic changes may impact these lands and resources and offers managers detailed adaptation planning guidance and worksheets.

4. Other activities.

- In 2017, CCSG members Bruce Stein, Bruce Young and Wendy Foden were invited to serve on a US Geological Survey (USGS) working group investigating adaptive capacity to climate change. This collaboration progressed into a multi-year partnership, formally adopted as the new CCSG activity Assessing Species’ Adaptive Capacity. The team developed a new framework and enhanced guidance on adaptation, and recently submitted a paper to Frontiers in Ecology and Evolution, which will hopefully be published early in 2020.

- Alternatives to genetic affinity as a context for within-species response to climate change, co-authored by three CCSG members, was featured on the cover of the October issue of Nature Climate Change. The paper examines spatio-temporal coherency in responses of pikas to climate and finds that landscape context—i.e., local effects such as the availability of boulders and plants—may influence pika response more than inherited traits. The findings have important management implications, suggesting that locally tailored adaptation strategies may not only be more successful, but help pikas thrive in unlikely places.

- The CCSG worked collaboratively to help develop three resolutions that were submitted to the IUCN for next year’s World Conservation Congress. In total, over 220 resolutions were submitted including 95 related to climate change and 18 specifically focused on climate change. The CCSG will continue its extensive engagement with this process to monitor the development of resolutions and offer feedback as necessary. We are also contributing ideas and feedback for a possible target on climate change for the post-2020 global biodiversity framework.
• Served in its advisory role to provide feedback, input and advice to other specialist groups, task forces, and the broader IUCN network:
  » CCSG Chair, Wendy Foden, continued her service as SSC liaison on the IUCN Council Climate Change Task Force, providing key guidance and feedback to its members.
  » CCSG Deputy Chair, Bruce Young is currently serving on the IUCN Post 2020 Agenda Task Force, serving as a liaison between the task force and the CCSG to provide a climate perspective on IUCN input into the agenda of the Convention on Biological Diversity (CBD) after the conclusion of the current Strategic Plan for Biodiversity 2011-2020.

• CCSG member Brian Huntley hosted our first online webinar: ‘Biodiversity Conservation and Climatic Change: What can and cannot be learned from Quaternary and earlier palaeoecological records’.

• In October, the CCSG held a special meet and greet information session for current and prospective members at Species on the Move, an interdisciplinary climate change conference held in Kruger National Park, South Africa.

• CCSG members Wendy Foden, Resit Akçakaya, and Tom Lacher hosted a well-attended workshop during the Leaders’ Meeting on how to better integrate climate change vulnerability data into Red List Assessments. Additional meetings and conversations during the Leaders’ meeting laid the groundwork for potential collaborations with multiple SSC Specialist Groups including: African Elephant, Snapper, Seabream, Grunt, Polar Bear, Corals.

• CCSG new website –hosted by Yorkshire Wildlife Park–, Facebook and Twitter accounts have greatly expanded our outreach and interaction with members.

Addressing Major Conservation Crises

The Asian Species Action Partnership (ASAP) is also an initiative supported under the umbrella of EAD Funds. On the following sections are the more highlighted activities carried out by this group during 2019.

1. The SSC is heavily engaged in addressing major conservation crises, for example through the Amphibian Survival Alliance (ASA), and the Asian Species Action Partnership (ASAP). These initiatives will be continued.

• There are now 226 ASAP species –based on the IUCN Red List of Threatened Species, December 2019 update–, increasing from 195 at the end of 2018.

• Officially launched the ASAP 2018-2023 strategy in March 2019. The strategy focuses on four key strategic interventions to address the species extinction crisis in Southeast Asia.
  » Create an environment to catalyse effective conservation action for ASAP species.
  » Increase financial resources available for conservation of ASAP species.
  » Strengthen regional conservation capacity and leadership for ASAP species conservation.
  » Raise the profile of ASAP species to promote their conservation.

• Developed an ASAP Communication and Partnerships (C&P) Strategy to support and strengthen delivery of the overall ASAP strategy. The C&P strategy outlines how the ASAP secretariat will engage with stakeholders and how communications will help to achieve the overall ASAP goal to ensure greater conservation action for ASAP species. Initial roll-out of the C&P strategy began in 2019 including the launch of a quarterly ASAP newsletter for ASAP Partners and other stakeholders to facilitate information sharing and offer visibility to the work of ASAP Partners.

• Co-organised a Red Listing working for Freshwater fishes in the Sunda region with IUCN Freshwater Biodiversity Unit (FBU) and Wildlife Reserves Singapore (WRS) at the end of January 2019. Twenty-eight experts gathered at WRS River Safari to review draft red list assessments, many for species which had never previously been assessed for the Red List. During the workshop, 400 assessment reviews were completed. IUCN SSC Conservation Planning Specialist Group (CPSG) led on trialling
a new Assess to Plan process to identify conservation action priorities for the threatened species. Following this workshop, Freshwater fishes now make up by far the largest group of ASAP species.

- Undertaken a wide-ranging and in-depth review of capacity building needs and opportunities in Southeast Asia. The subsequent report ‘Building capacity for species conservation: an assessment of needs and opportunities for ASAP’ was used to develop a roadmap for how ASAP can build capacity for species conservation outlining short-, medium- and long-term actions. It summarises:
  » Development of a competence framework for species conservation in Southeast Asia.
  » Results from a mapping exercise of individual competences against available training opportunities to identify broad patterns of overlap and gaps.
  » Results of a self-assessment capacity needs survey implemented with a subset of ASAP Partners to understand their perceived strengths and needs for improvement in capacity.
Key opportunities currently available to support individual conservationists:
- Example approaches and tools to assess organisational capacity.

- ASAP has been involved in strengthening resolutions and decisions for the conservation of the Helmeted Hornbill at CITES to bring urgent attention and stronger conservation measures to protect this species, especially to address the demand and illegal trade for its casque.

- We are also engaging with Association of Southeast Asian Nations (ASEAN) through the ASEAN Centre for Biodiversity with the aim to raise the profile of ASAP species and needs for their conservation.

New priorities will emerge during 2017-2020, many of which cannot be predicted at the present time, but could include reviewing the impact of threats such as nitrification, ocean acidification, and emerging infectious diseases.

No new priorities were pursued in 2019.

Measuring Conservation Success

During 2019 the SSC Chair's Office supported the IUCN Task Force on Assessing Conservation Success through the EAD fund. The work they carried out during this year is outlined below.

The SSC is developing new Green List standards for measuring and monitoring the overall effectiveness of conservation initiatives at the species level. This will be an important priority for 2017-2020. The development IUCN Green List Criteria to categorize species according to the effectiveness of the conservation action will be completed.

- Held three sessions at the IUCN SSC Leaders Meeting in October 2019, Abu Dhabi, UAE with the aim to review the adapted framework, feedback on input from all the SSC Specialist Group testing, and discuss integration with other knowledge products.

- Held a Task Force meeting in Oxford, UK, November 2019 to integrate the recommendations from the working groups into the draft Standards document and guideline document.

- After Green List of Species framework was published, various responses followed that publication and were published within the Conservation Biology platform:
  - Defining the indigenous ranges of species to account for geographic and taxonomic variation in the history of human impacts: reply to Sanderson 2019.

- The results of discussions from the Viability and Functionality Working Group have been published in Conservation Biology, in October 2019: Assessing ecological function in the context of species recovery. Conservation Biology.

- A paper from one part of the discussions within the Counterfactuals and Scenarios Working group has been accepted for publication, in November 2019: Using historical and paleoecological data to inform ambitious species recovery targets.

- Completed two grey literature reports:
  - Incentivizing Tree Conservation: Making the IUCN Green List of Species Work for Trees. Species Conservation Success Task Force and Fondation Franklinia.
2. Once this development is completed, it will be implemented within the overall Red List programme and database.

- The published framework has been extensively tested for scientific robustness, and for ease of use. Feedback from the testing process was fed into the working group discussions to iteratively improve the framework and ensure it works for all taxa. To date the system has been tested with over 90 IUCN SSC specialist groups from across the taxonomic spectrum with 191 species assessed.
- As well as the taxonomic focus, it has also looked to test the framework with key end users. It has been testing with English Nature to investigate how their investments over the past decade have benefited a host of species which they have been funding.
- Worked with National Geographic Society and US Fish and Wildlife Service (USFWS) to test the applicability of the Green List of Species framework on the impact of project-level support to species conservation.
- Held two workshops in September 2019, Cambridge, UK: one with BirdLife International and Fauna and Flora International (FFI) discussing the details of the Green List approach for birds, trees, and reptiles, and one with the tree conservation community looking at how the framework needed to be adapted to take into consideration the conservation and ecological needs of trees. Significant testing on these groups resulted and subsequent changes to the Standards document made.

3. Other activities.

- Contacted Nigel Dudley of Equilibrium Research to conduct an independent end user survey. Nigel Dudley led the end user survey for the Key Biodiversity Area Partnership. The final version of this report is in preparation currently.

Strategic Investments in the SSC Network

The SSC Specialist Groups, Red List Authorities, Task Forces and Sub-Committees are all carrying out very important components of work that collectively add up to the overall impressive conservation contribution that the SSC makes. Most of this is done with very limited funding, and often in-kind support. Under this Agreement, SSC Chair Office provided small grants for supporting important initiatives of some SSC Groups, the activities supported during 2019 are listed below.


Since 2016, tremendous progress has been made towards achieving the actions listed in IUCN Recommendation 139 on “Bear farming in Asia, with particular reference to the conservation of wild populations” after a small delegation from IUCN met with China’s then State Forestry Administration –now the National Forest and Grassland Administration, NFGA– and Chinese Traditional Medicine Association in Beijing. This delegation carried out a final in-person meeting in Beijing, November 2019 to agree the interpretation of the main findings collected so far.

- To date, field surveys have been undertaken in Sichuan and Jilin provinces, with those from Sichuan in particular replicating a study conducted 12-14 years earlier. Given the sensitivity of bear bile use,
these surveys involved the use of a specialised questioning method called the Unmatched Count Technique (UCT) to ask questions about illegal or socially undesirable behaviours. All survey techniques and questions were approved by NFGA and involved their participation.

- The group also carried out short semi-structured key-informant interviews with doctors and pharmacy workers in each study province as results suggest demand is medicated by practitioners. Then it was undertook an anonymous online survey targeted at actual bear bile consumers, which used a choice experiment to further understand how consumers make decisions about what to buy. In particular, it was included realistic scenarios that varied the source of bile (wild, farmed, synthetic), the form of the product, place of purchase, price, and the type and severity of ailment being treated.

- Additional data are being sourced relating to the supply side –including information on numbers of bear farms, numbers of bears on farms, production, etc.– as well as information on law enforcement –confiscations– all towards answering various aspects of Recommendation 139.

- Following this meeting, partners are now working to conclude the analysis and write up of results, with the intention of publishing as much of these results in the peer-reviewed literature as possible, and a summary report prepared for the World Conservation Congress in Marseilles.

2. Support to the Post 2020 Task Force.

The aim of the SSC Post-2020 Biodiversity Targets Task Force is to increase the input of scientific information on species from SSC into global discussions on the post-2020 biodiversity agenda. The progress of the group’s objectives and activities during 2019 are:

- Worked in collaboration with the IUCN Secretariat to provide scientific and technical guidance to Parties on species conservation planning and implementation. It has been made a range of contributions to CBD meetings: Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), Conference of the Parties and Open-ended Working Group (OEWG). The formal contribution during 2019 has been: meeting document CBD SBSTTA November 2019 and a side event co-hosted with CBD Secretariat and Norway.
Developed a document that contains ‘Potential elements, indicators and milestones for a new species-focused target; this is proposed without prejudice to IUCN’s final position on the Post2020 Global Biodiversity Framework’. An earlier version of this was contributed to the call for contributions to the structure of the post 2020 framework in mid-September and then discussed further at the SSC Leaders’ meeting in Abu Dhabi in early October 2019.

Worked with the IUCN Secretariat to support the development of a short policy position paper framing and outlining what is needed for species conservation for the next decade. In this sense, the Task Force worked heavily in drafting of the Abu Dhabi Call for Global Species Conservation Action.

3. SSC Internal Grant Program.

Early this year the SSC Chair’s Office launched a grant opportunity for funding small requests within the IUCN SSC network: the SSC Internal Grant, thanks to the generous support of EAD. This funding mechanism has three main goals:

- **Support SSC groups in achieving their targets as established in their respective SSC Data and our Species Strategic Plan 2017-2020, in alignment with our strategic framework: the Species Conservation Cycle.**

- **Encourage all SSC Groups to carry out their annual planning process using the SSC Data file, the monitoring and evaluation tool developed by the SSC Chair’s Office. Having delivered their SSC Data is a requirement for accepting proposals from SSC groups.**

- **Motivate the SSC network to get more familiar with our strategic framework: the Species Conservation Cycle, and their components: Network–Assess–Plan–Act–Communicate.**

The first round of applications, focused on Assess and Network, closed on 7 February, while the second round, focused on Plan, Act and Communicate, closed on 30 June 2019 — 27 Specialist Groups received grants for a total of US$ 86,365 during 2019. The successful SSC groups are presented below.

<table>
<thead>
<tr>
<th>SSC Internal Grant</th>
<th>First round winner SSC Groups</th>
<th>Amount of money</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUCN SSC Colombian Plant Specialist Group</td>
<td>$3,500.00</td>
<td></td>
</tr>
<tr>
<td>IUCN SSC Mushroom, Bracket, and Puffball Specialist Group</td>
<td>$3,440.00</td>
<td></td>
</tr>
<tr>
<td>IUCN SSC Bryophyte Specialist Group</td>
<td>$3,500.00</td>
<td></td>
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<tr>
<td>IUCN SSC Temperate South American Plant Specialist Group</td>
<td>$3,000.00</td>
<td></td>
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<tr>
<td>IUCN SSC Freshwater Fish Specialist Group</td>
<td>$3,500.00</td>
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<tr>
<td>IUCN SSC Dragonfly Specialist Group</td>
<td>$3,448.00</td>
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<tr>
<td>IUCN SSC Wild Pig Specialist Group</td>
<td>$2,780.00</td>
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<tr>
<td>IUCN SSC Spider and Scorpion Specialist Group</td>
<td>$3,000.00</td>
<td></td>
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<tr>
<td>IUCN SSC Macaronesian Island Plant Specialist Group</td>
<td>$3,500.00</td>
<td></td>
</tr>
<tr>
<td>IUCN SSC Horseshoe Crab Specialist Group</td>
<td>$3,500.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$33,168.00</strong></td>
<td></td>
</tr>
</tbody>
</table>
### SSC Internal Grant

#### Second round winner SSC Groups

<table>
<thead>
<tr>
<th>SSC Group</th>
<th>Amount of money</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUCN SSC Cat Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Mid Atlantic Island Invertebrate Specialist Group</td>
<td>$3,400.00</td>
</tr>
<tr>
<td>IUCN SSC Afrotheria Specialist Group</td>
<td>$1,800.00</td>
</tr>
<tr>
<td>IUCN SSC Asian Wild Cattle Specialist Group</td>
<td>$3,020.00</td>
</tr>
<tr>
<td>IUCN SSC Amphibian Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Small Mammal Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Anteater, Sloth and Armadillo Specialist Group</td>
<td>$2,150.00</td>
</tr>
<tr>
<td>IUCN SSC Antelope Specialist Group</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>IUCN SSC Hornbill Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Equid Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Vulture Specialist Group</td>
<td>$3,285.00</td>
</tr>
<tr>
<td>IUCN SSC Sustainable Use and Livelihoods Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Pangolin Specialist Group</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>IUCN SSC Otter Specialist Group</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>IUCN SSC Orchid Specialist Group</td>
<td>$2,592.00</td>
</tr>
<tr>
<td>IUCN SSC Lagomorph Specialist Group</td>
<td>$3,450.00</td>
</tr>
<tr>
<td>IUCN SSC Skink Specialist Group</td>
<td>$3,500.00</td>
</tr>
</tbody>
</table>

$53,197.00

Regarding the types of activities supported, as is shown in figure 3, during this year the main activities funded were communication efforts and training workshops, comprising 52% of the total of activities. A sizable proportion is related to red list assessments (22%) while the remaining 24% is composed by conferences/meetings and planning activities.

![Figure 3. SSC Internal Grant. Results by activities funded](image)

In the following sections we will present the main outcomes obtained as a result of these allocations, detailing the achievements form each SSC Specialist Groups on regards of their projects. It is important to highlight that by the time this report was completed, some of the projects were still ongoing and the groups were not able to present their results. To get the most updated version of the SSC Internal Grant Report for 2019, please visit [here](#).
Colombian Plant Specialist Group  
– Red List assessment for 300 endemic plant species of Colombia

The project was formulated to support a national workshop –within the agenda of the X Colombian Botany Meeting– with the objectives of reviewing information by botanical experts for 300 assessments for species of dry-forest and páramo ecosystems, while promoting capacity building and discussion among the botanical academic community for the final goal of completing the Red List of all Colombian Plants. A meticulous methodology conducted the process following the Red List V.3.1 and “SIS connect” Guidelines, using R codes to perform spatial analysis and the GIS -geographical information system software, among other resources. These assessments will be submitted to the Global Red List –through the “SIS connect” platform– and to the national committee on threatened species early in 2020. The main outcomes of the assessment process were:

- Of the 300 species selected, six presented taxonomic difficulties that precluded their assessment. Of the 294 species evaluated, 32% –94 species– were not in a threat category (LC or NT). The rest of the species were in a threat category: 11% were VU, 24% were EN, and 33% were CR. See Figure 4 for the total number of species in each Red List category per each ecosystem type.

- The Dry-forests in Colombia are highly threatened, and in these ecosystems, 77% of their endemic species are threatened. The Páramos in Colombia are much better represented in the protected-area systems of the country; nevertheless, 66% of their endemic species –that we evaluated– are threatened with extinction.

- For most of these species, biological information is quite scarce, and all these assessments were carried out based on geographical distribution parameters –obtained using herbarium specimens– and spatial analysis of habitat quantity and quality. Ecological research and monitoring for all these rare endemic species is vital to better understand their conservation status and to propose adequate actions for their conservation.
The Mesoamerican and Neotropical Mushroom Red List Assessment workshop took place in Mexico City last 22-24 May, 2019 at Instituto de Biología, UNAM (IBUNAM) –which represented an incredible ally to accomplish this goal–. In total 13 mycologists participated as advisors or attendees and assessed a total of 34 mushroom species according to IUCN Red List criteria. The results are presented below.

- Attendees learned the process of IUCN Red List assessment of mushrooms and proposed at least two species to be evaluated. Everybody conducted preliminary assessments of one or two species during the workshop. Attendees finished preliminary assessments in the June-September period; this shows their commitment with the Global Fungal Red List Initiative. Workshop advisors edited assessments during September-October, then the 34 final assessments were included on the Global Fungal Red List Initiative web page. Thanks to this workshop 10 mycologists were trained on the Red List assessment process.

- Developed training materials in Spanish, included presentations for teaching and training in the IUCN method, as well as detailed example templates on finished assessments, complemented with all the previous information needed to produce those assessments. Also provided the attendees with a list of necessary web page links, and prepared YouTube tutorials on how to produce AAO and EOO distribution maps, from raw distributional data, find them here and here.

- Provided Red list assessments with different academic, geographic and conservation scopes. Half of the assessed species (17) were endemic to Mesoamerica, and seven of this species also have been recently assessed under Mexican protocol for local Red listing. The assessments and experiences obtained in this initiative will provide a basis to promote fungal conservation in Mexico, and the region. Half of the assessed species have Neotropical distributions. The focus was on species with conspicuous vulnerabilities, as those associated to Coccoloba uvifera in the Caribbean, to Nothofagus in Chile and Argentina, and species associated to Dycimbe in Guyana. Thus, the workshop will also contribute to fungal conservation in the Neotropical region, and is intended to constitute a starting point for further initiatives in the region.
Bryophyte Specialist Group – Red List Assessor Training Workshop

On the 7th and 8th of July 2019, 29 bryologists hailing from 21 countries in North America, South America, Europe, Asia, Australia, and New Zealand gathered for a two-day IUCN Red List Assessor Training Workshop at the Real Jardín Botánico, Madrid. This capacity building training initiative was organized by the Steering Committee of the IUCN Species Survival Commission’s Bryophyte Specialist Group (BSG). The workshop was led by IUCN Certified Red List trainers Janet Scott –IUCN Global Species Red List Unit in Cambridge, England– and Catherine Numa –IUCN-Centre for Mediterranean Cooperation, Málaga–. The major achievements of this activity were:

- In advance of arriving in Spain, participants prepared for the workshop by completing 13 hours of online training in the rules and standards used in IUCN Red List assessments.
- Reviewed key components of the online training and ensured that participants had a sound understanding of Red List assessment methodologies by overseeing multiple practice exercises. On the final day, participants worked in groups to practice regional and/or global assessments of rare and endangered bryophytes using previously compiled data. Thanks to the help of Richard Lansdown, a peat moss from Brazil was even fully evaluated during the workshop and is now included in the IUCN Red List of Threatened Species.
- In addition to the formal training, a presentation on the now completed European Bryophyte Red List Project (Hodgetts et al. 2019) was given by Nick Hodgetts. Nick was the scientific lead of this project, which was managed by IUCN’s European Regional Office in Brussels. During the course of this project, the definitions of three critical terms necessary for IUCN red-listing – ‘mature individual’, ‘generation length’, ‘severefragmentation’ – were refined in a pragmatic way to be applicable to largely clonal organisms. These definitions were presented and considered helpful for bryophyte red-listing by the extra-European bryologists, which will lead to a wider use of them, and thus make bryophyte Red Lists more easily comparable across regions.
- At the end of the workshop, participants were also able to draw up a plan for re-activating species assessments at the global scale, and will start with implementing this plan shortly.
Temperate South American Plants Specialist Group – Assessment of 66 species of trees of Northwestern Argentina

The meeting took place at National University of Catamarca during July 1-2, 2019. Seven of the 16 experts initially involved participated, counting with the presence and help of two assistants from the Botany Area of the Faculty of Agricultural Sciences of the University of Catamarca: Gabriel Reinoso and Elena Arévalo. The meeting was also an important event in the University, as it was reported here. The main achievements of the workshop are listed below.

- Pre-assigned each species to a Red List category. This process took place between March 2019 and June 2019 with a first round of conversations via social media with local specialists, in order to provide information about Red List process, IUCN categories and criteria, and to systematize the information necessary to evaluate each species.

- From an initial list of 66 species, were performed the full assessment process of 56 species, which represents having achieved the goal of the by 85%. Some species were not evaluated because, although they were not published in the Red List, they were in the process of assessment while the project was written.

- Discussed about each of the species to be evaluated, using data of AOO and EOO previously obtained with GeoCAT and various local sources referred to uses, changes in ecosystems and other threats.

- After the workshop, data and conclusions obtained for each species began to be uploaded to the IUCN Species Information Service (SIS), a process that is still ongoing.
Freshwater Fish Specialist Group  
– Red List workshop on freshwater fishes of the southern Caucasus

The Red Listing workshop on the freshwater fishes in the Southern Caucasus was held at the WWF office in Tbilisi, Georgia at the 14th and 15th, December 2019. Eight regional experts and the regional FFSG chair attended the workshop in Tbilisi over two days. For this Caucasus workshop, participants selected fish species which are endemic to the region or which have the majority of their distribution area in the region—Armenia, Azerbaijan and Georgia—. The outcomes obtained were:

- The workshop participants assessed the population trends and threats for all the regionally restricted native species of freshwater fishes known from the area, and completed the draft Red List assessments prepared before the workshop.
- Attendees found one of the fish species to be extinct and 30% of the species to be threatened. As the species list was selected to cover especially regionally endemics and species having large parts of their populations in the area, the general threat level of freshwater fish in the area is much lower and might be around 10-15% of all species.
- Three species are endemic to the region: *Rutilus atropatenus*, *Rutilus sojuchbulagi*, and *Salmo ischchan*. One of these is extinct and the two others are threatened. *Salmo ischchan* might be extinct in the wild and completely dependent on stocking. This species might represent a species complex of four different species, two of them extinct, a puzzle to resolve after the workshop.
- The most surprising result of the new Red List is the assessment of several quite widespread species as *Luciobarbus mursa*, *Acanthobrama microlepis* and *Romanogobio macropterus* as threatened. All these qualify with the criterion A—population decline— and experts blame hydropower development, pollution and overfishing as the major drivers of decline. Three of the threatened species—*Luciobarbus brachycephalus*, *L. comizo*, *L. mursa*—have considerable parts of their range in Iran and in Central Asia and need to be re-considered in later workshops in Iran and Central Asia to confirm or reject the findings from the Caucasus workshop.
- This review of 34 species is a small but relevant step forward toward developing the IUCN Red List into a true ‘Barometer of Life,’ as called for by leading experts in the magazine Science in 2010. All information was directly worked into SIS and the new red List Assessments of the species, are ready to be published with the next IUCN Red List.

Workshop participants  
© FFSG

*Mursa (Luciobarbus mursa)*  
© FFSG
The first expert meeting on African Wild Pig Species took place in the Makerere University Biological Field Station located inside Kibale National Park in South-western Uganda. It was a two full days event that involved 30 people who brought expertise from a good group of African countries. The meeting was composed by 9 talks, one mapping exercise, two general-discussion sessions, one walk on the Kibale forest, among other activities. The main results are presented below.

• Five recognized species of African wild pigs were discussed –Giant forest hog, Red river hog, Bush-pig, Desert warthog, Common warthog–, concluding they have been neglected by scientific community in the last decades and there are enormous gaps in the information known about their populations dynamics, current status in the wild, the main threats and their basic movements patterns. These findings in conjunction with the fact that there is a population declining trend for at least four of these species –all African pigs except common Warthog *Phacochoerus africanus*– pose a risky situation for them as they have been eradicated from large portions of their original distribution range.

• The meeting also provided the right arena for the creation –or revitalizing– of specialist group members advocated to African Wild Pigs conservation and research. It was created a working group that is currently updating the distribution range of the species, has created a wild pigs database with the most information published on the species, is organizing the next meeting and is encouraging new (and young) scientists to focus their research on these interesting species.

• A declaration in favour of African Wild Pigs Conservation was written during the meeting to express the concern about the populations and conservation status of these species across their whole distribution range, and the commitment from the working group on continuing for several years to work in favour of the conservation of this interesting group of wildlife.
Macaronesian Island Plant Specialist Group
– Ponta Delgada Workshop

The Ponta Delgada Workshop held 20-22 May 2019 brought together in the island of São Miguel in the Azores archipelago, thirteen group members. Of those, ten travelled from all the Macaronesian archipelagos and one from the Portuguese mainland. The aim of the meeting was to provide group members the opportunity to update their knowledge and practical skills on the application of the IUCN criteria for the evaluation of species conservation status.

- Contributed in a fundamental way to implement the primary group objective directed to species assessments and allowed to establish common work guidelines and routines that hopefully will contribute to accelerate the workflow within the group.
- The meeting included a series of presentations by the group RLA Coordinator on IUCN criteria and the guidelines for their application, four presentations by the group chairs and vice-chairs on the state of the art of plant species assessments in the different archipelagos of Macaronesia, and a hands on approach done by all participants to apply the IUCN red list criteria to a set of selected target Macaronesian species.
- The opening session had the presence of the Azores Regional Secretary of Energy, Environment and Tourism and the Universidade dos Açores Vice-Rector for Science and Technology. A press release was issued to the local and national media and banners were produced and placed in areas of the campus to advertise the event.

1. Mónica Moura - State of the art of plant species assessments in the Azores © MIPSG
2. Juli Caujapé-Castells - State of the art of plant species assessment © MIPSG
3. Maria Romeiras - State of the art of plant species assessments in Cabo Verde © MIPSG

Horseshoe Crab Specialist Group
– International Workshop on the Science and Conservation of Horseshoe Crabs

Funds were used to provide partial travel support for attendees to the 4th International Workshop on the Science and Conservation of Horseshoe Crabs, which was held in Guangxi Province, P.R. China, from June 15-20, 2019. There were 129 participants at the conference from 16 nations. Six people –from developing countries, especially from areas that horseshoe crab data are urgently needed– were invited thanks to this grant. All of them presented their research and/or conservation activities at the workshop. A summary of this activity is presented below.
• In addition to a plenary session and contributed oral and poster presentations, participants held workshops with two specific objectives defined by the Horseshoe Crab Specialist Group’s current priorities: (1) completing the Red List Assessment for two species of horseshoe crabs in Asia that are currently Data Deficient, namely the coastal horseshoe crab *Tachypleus gigas* and the mangrove horseshoe crab *Carcinoscorpius rotundicauda*, and (2) working on the Green List Assessments for horseshoe crabs, beginning with the American horseshoe crab *Limulus polyphemus* –Vulnerable– and tri-spine horseshoe crab *T. tridentatus* –Endangered–.

• A field excursion to the Beihai Binhai National Wetland Park on 19 June gave participants a first-hand look at a protected mud flat and mangrove area where both *C. rotundicauda* and *T. tridentatus* can be found, and a field trip on 20 June showed participants an aquaculture laboratory which is providing hatchling horseshoe crabs for release back to the natural environment. The program also included a stakeholder workshop, a horseshoe crab art show, and a horseshoe crab-themed dance performance by local school children.

• During the workshop, participants began the process of assembling the necessary documentation to enable the group to update the Red List Assessments for *T. gigas* and *C. rotundicauda*, with a target date of 2020. They also had a workshop about the Green List process, which will initially focus on *L. polyphemus* and *T. tridentatus*, for which the updated Red List Assessments have recently been published.

• The conference concluded with the approval of the Beibu Gulf Declaration on Global Horseshoe Crab Conservation, a message of support for the protection of horseshoe crabs worldwide and the establishment of International Horseshoe Crab Day on June 20 of every year.
San Diego Zoo Global and the IUCN SSC Cat Specialist Group invited jaguar specialists from South America for a conservation planning workshop in the zoo’s Institute for Conservation Research from 19–22 November 2019. The response was great; all South American jaguar range countries were represented, as well as important international NGOs working on Jaguars such as Panthera, WCS, or WWF.

- This workshop took advantage of a time when the largest New World cat also received more attention from the UN conventions: At the CITES CoP 18 in August 2019, several decisions addressed to the Secretariat concerning the jaguar were taken: (a) commission a study on illegal trade on jaguar, (b) present the findings and recommendations to the Standing Committee, and (c) seeking input from Parties, in particular exporting, re-exporting and importing countries affected by illegal trade in jaguar. In February 2020, the CMS –Convention on Migratory Species– will decide on a listing proposal for the jaguar submitted by Costa Rica, Argentina, Bolivia, Paraguay, Peru, and Uruguay.

- During the workshop was presented the existing frameworks for the jaguar: A regional strategic framework for conservation of the jaguar in the Americas by 2030 and the Jaguar 2030 Roadmap. It was also discussed the distribution and status assessment of the jaguar within several regions –Guyana Shield, NW South America, SW South America–.

- The session to develop the conservation strategy of the jaguar started discussing topics such as illegal trade in jaguars, human-wildlife conflicts and solutions, challenges in cross-border cooperation and ex-situ conservation of jaguars. After, the participants developed the vision and goal of the plan, carried out a threat analysis, and developed the objectives and the specific activities around those threats.

- Finally, a stakeholder analysis was made to determine and add to the strategy actors, indicators, timeline and costs, as well as, prioritize activities on country and regional levels.

Workshop participants form ten South American countries and international NGOs © CSG
Mid Atlantic Island Invertebrate Specialist Group
– Conservation planning for Azorean invertebrates

After 6 months of preparation the workshop was held on Santa Maria on 28 and 29th February 2020 with 37 participants, engaging a broad cross section of stakeholders from farmers and tour guides to academics and government officials. The efforts were made to deliver a conservation planning exercise for endemic Azorean invertebrates –Mollusca and Arthropoda–. The total of endemic invertebrates covered by this project increased from 19 to 43 to include endemic molluscs, as well as arthropods. The main successes of the project are:

• The high number of endemic and threatened species that were covered by the planning exercise integrating 43 species and so will have a big impact in recovering a global important hotspot for endemic invertebrates.

• A successful collaboration between CPSG and the Mid-Atlantic Island Invertebrate Specialist (MAISG) Group, that saw MAISG lead with support from CPSG, allowing development of MAISG members in conservation planning for species, including the two co-chairs and the Red List Authority Coordinator.

• Using red listing data and information to guide and shape the process through collating into a knowledge review and utilising the Assess to Plan ‘threat matrix’.

• Engagement of a broad stakeholder base, that saw a wide range of interested parties engaging with the process, for a very small island there was good engagement from those with power and influence as well as land managers/owner and service providers that use the natural environment, such as tourism businesses.

• The workshop facilitated development of key plan sections by stakeholders to form the plans: threat analysis, vision, goals and action tables; as well as a knowledge review that outlined the species and island context.

• The workshops success resulted in immediate government commitment to implement the plan through funding bids and wider engagement in day-to-day delivery, such as extension of protected areas.

Anteater, Sloth and Armadillo Specialist Group
– Enhance and strengthen the Communication Strategy

The Anteater, Sloth and Armadillo Specialist Group (ASASG) applied to this grant program to enhance and strengthen their communication strategies. The group aimed at addressing two of the targets set in their SSC Data under the “communicate” component of the Species Conservation Cycle: renew the website and publish the 2019 issue of Edentata. Their achievements were:

• The new website was designed and programmed, and is available at two domains: www.asasg.org and www.xenartrans.org. It contains the same sections as the previous version, but all texts have been revised and updated by Specialist Group members to reflect, among others, recent taxonomic changes. All contents are available in English, Spanish, and Portuguese to reach a wider audience in the main range countries.

• One of the most significant changes in terms of website content was to completely re-structure the species descriptions, as this is one of the sections that is most frequently visited by the general public. It included icons that were specially designed for the website to separate the different sections of each species description and make them more attractive and easier to navigate. In addition to information on pictures, range maps, and data on the conservation status and threats of each species, the new descriptions include basic information on their morphology and biology, as well as a link to
their Red List assessment.

- The project also included the costs of website maintenance which allowed hiring a developer to help the group upload all news, pending species descriptions, and “in press” articles of Edentata, as well as perform regular maintenance duties during 12 months.

- Edentata 20, the newsletter of the ASASG, was published in December 2019. It includes one full article, four short communications, two field notes, and a News section. It was added an automatic subscription system for Edentata on the ASASG website, and the announcements of new issues are done via Mailchimp.

Hornbill Specialist Group
– Support the Communication Strategy

The funds were requested to support the communications portfolio for the IUCN SSC Hornbill Specialist Group (HSG). Guarantee the website server, domain name and its development and maintenance costs, to enhance the HSG social media through the development of the communication strategy, creation of targeted and engaging social media content were the activities carried out under the scope of this project.

- The HSG website site is now fully functional with the members all submitting material. However more content needs to be added and continuously updated, in that sense, Rekam Nusantara Foundation has been given the task of improving the website, adding content and maintenance.

- The Facebook group for Hornbills created and moderated by the IUCN Hornbill Specialist Group, is being used for sharing updates, announcements, news, information related to both in-situ and ex-situ hornbill research and conservation in Asia and Africa. It is aimed at increasing public awareness, knowledge, interest and love for hornbills. HSG has now developed a communications plan/strategy for external communications and conservation messaging with their partner Rangkong Indonesia –Rekam Nusantara Foundation–. Other social media accounts on Twitter and Instagram will be announced and opened soon.

- Helmeted Hornbill cartoon series for social media communications: As part of the HSG communications, one cartoon series on the Critically Endangered Helmeted Hornbill was created by
engaging Rohan Chakravarty, well-known wildlife cartoonist to depict the uniqueness and the ecological importance of the Helmeted hornbill for the public. Very often, the focus of media attention has been on the monetary value of its casque that is traded and the reason that it is threatened. The group wanted to communicate the intrinsic value and the beauty of the species in the wild. This series has now also been translated into Bahasa Melayu by Malaysian Nature Society. It will be used by them for awareness/outreach with schools/nature clubs. It is also being translated into other regional languages.

Equid Specialist Group
– Support for the Second International Wild Equid Conference

The Equid Specialist group (ESG) co-organized the Second International Wild Equid Conference (IWEC), which took place in Prague, Czechia, 1-5 September, 2019, including almost half of all ESG members with 120 registrants. The funds granted were used to contribute to organization costs, and to support travel costs of ESG members from developing countries. The conference included the first formal meeting of the members in 10 years. The meeting encouraged increased capacity of ESG members and the wider equid conservation and researching community through networking, learning new information, and development of collaborations.

• **International Wild Equid Conference**: The conference allowed participants to present scientific research and new technologies and tools for conservation and management; provided opportunities for international networking; allowed participants to share knowledge on the ecology and conservation of equid species; and promoted international collaboration. There were symposia covering: equid population dynamics, population viability, and population estimation, behavioral ecology, genetics, taxonomy, disease, and conservation.

• **Closed Equid Specialist Group meeting**: Thirty one ESG members attended the closed meeting. The group planned to review the taxonomy of equids, so invited Dr. Andrew Kitchener to give a presentation on the need for this and how it should be done, based on the approach used by the Cat Specialist Group. Thanks to this meeting:
  » A document was created by EAZA on diseases in captive equids —we now need a similar review for the rest of the captive population, and to review and compile all information on wild, captive and feral equid disease and parasites.
  » Presented the results of the most recent Red List assessments and their implications. This was followed by introduction of all species coordinators present and an informative discussion of current conservation activities and threats to equid species.
  » Member engagement was an important discussion at the meeting. There was wide support for setting up a newsgroup/listserv by which members could share information, news, and publications.

Vulture Specialist Group
– Global Workshop: Developing Best Practice Methods and Guidelines for Attaching Tracking Tags to Vultures and Condors

The workshop took place from 20-22nd August 2019 at the International Centre for Birds of Prey (ICBP), Newent, England. Attendees of the workshop came from England, Scotland, France, Spain, Bulgaria, Lithuania, Poland, Argentina, USA, South Africa, Bangladesh, India, and Nepal. 14 of these were harnessing experts who were invited to demonstrate their methods to the wider group of 33 attendees. The main activities and results are listed below.
• Over the three days each of the experts/expert groups provided a detailed practical demonstration of their harnessing technique, demonstrated on dead and live vultures. The demonstrations included information about the pros and cons of the technique, the materials and tools needed, the key steps involved in measurements and preparations, considerations for restraint and hooding, and a step-by-step guide to fitting to the bird.

• During the demonstrations a vet was on hand to record the temperatures of the birds used—which was used as an indicator of stress–. All details of each method were recorded including notes, photos and videos. After each 1 or 2 demonstrations participants discussed the methods presented and any other general themes. Detailed notes were also collated on products including source and manufacturer. On Day 2, participants had six tag manufacturers in attendance who presented and displayed their products. This provided useful discussions between the designers and manufacturers and those experience in fitting devices to birds.

• During the workshop were collated a vast amount of information on the different techniques and continue to work with the participants in the development of a set of step-by-step guides. VSG will ensure these outputs will be completed and shared on an accessible platform this year –e.g. VSG website or publication ‘Vulture News’–. The sharing of knowledge has already become useful in practice even ahead of the production of official guides.

Sustainable Use and Livelihoods Specialist Group
– Support the SULi Communications plan

The grant requested was used to review the existing draft communication strategy of SULi, review and update their website, develop and piloting of a bi-monthly SULi newsletter and to start the implementation of theirs social media strategy. The activities and the progress made are detailed below.

• An initial review of the draft communication strategy and discussions related to the limited capacity to implement detailed communications activities have resulted in a scaling back on comms ambitions for the remainder of the quadrennium to focus on two achievable outlets: social media and a more accessible website.

• The revision of the SULi website has been the major focus of this grant, it included key communications materials –SULi strategy, membership criteria, Steering Committee information, sub-group information, links to relevant projects and publications–. The new website is available, and it is undergoing final testing that will shortly be linked to the main IUCN site.
• The group has ended up developing two newsletters. After successfully piloting prior to this grant, SULi Digest has now become a regular bi-monthly output and provides a synthesis of new publications on sustainable use, covering each of SULi’s key themes. In addition, the first issue of SULi News—a newsletter for SULi members only—was produced at the start of 2020 to provide a recap on SULi achievements over the previous year. Planning has started for a special issue of the journal Frontiers with a focus on sustainable wildlife management, included preliminary discussions with the Frontiers editorial team and agreement on the theme. This work will unfold over the course of 2020.

• SULi Twitter has been reactivated and started a new Twitter account with a specific focus on communities and Illegal Wildlife Trade —@CommunitiesIWT—. They have also resurrected their Facebook account.

• Developed a flyer and had this designed and printed in time for the SSC Leaders meeting in October 2019 where it was widely distributed to all participants. The flyer will be available to download from the new website as soon as it is live.

Orchid Specialist Group
– Strengthening the Orchid Specialist Group’s new Global Trade Programme

In late 2016 the Orchid Specialist Group (OSG) established its Global Trade Programme in which the group recognised that trade-related issues are, in many respects, distinct from the core work of the OSG, and presented an opportunity to channel the interests of a growing group of early-career OSG members. A key quadrennium target for the OSG involves strengthening this Global Trade Programme, in that sense, since September 2019 the SSC Internal Grant has supported an early-career conservationist, to work 1 day per week with the aim of actively engaging the OSG new membership in a series of outward-facing communications. Here are presented the results so far.

• The group has successfully engaged several OSG members to contribute a blog to the website, which focuses on their research and expertise of orchid trade in different regions of the world. By identifying interesting recent research by OSG members and uploading it in the form of accessible blogs, the group has created an online hub filled with resources about orchid trade that are shared within our community on their Twitter and Facebook pages.

• OSG has also used this opportunity to recruit new members to the group, increasing the geographic coverage –e.g., China– and areas of expertise represented in the group –e.g., terrestrial orchid ecology—. From December 27, 2019 to March 26, 2020 the Global Trade Programme website welcomed 664 unique visits—the number of different people visiting the website—, an increase of 545% from the previous period.

New online content for the website
© OSG
Along with sharing the blogs on OSG social media platforms, it has increased our following and engagement rates by sharing stories, infographics and photographs from across our network, filling public online space and raising awareness of plant conservation. This is an important tool for tackling “plant blindness”. The group has also contacted the Twitter account ‘In Defense of Plants’ about the potential for a collaboration with the OSG.

Lagomorph Specialist Group
– The disappearing striped rabbits of Southeast Asia:
Creating a conservation action plan for the Sumatran striped rabbit and the Annamite striped rabbit

Owing to the serious threats facing the SSR and the ASR, the IUCN Lagomorph Specialist Group proposed the formation of a Striped Rabbit Working Group to guide the development and implementation of comprehensive conservation action plans for both Nesolagus species. The first planning session of the group was held December 11–14, 2019 in Bogor, Indonesia. The scope of this meeting was relatively small –7 attendees–, with the general goal being to bring together key researchers on each species. This meeting was planned as a foundational meeting, from which the working group would gradually increase in scope. Below are the main results of the meeting.

• The first day of meetings, started with introductions of all attendees and a charge from the Co-Chairs on the purpose and goals of the meeting. The Co-Chairs then each gave synopsis presentations of the current knowledge of each Nesolagus species. After each presentation, the attendees then broke into species-specific groups to further discuss specific current information for both species –range, habitat use, recent reports–, as well as to characterize and prioritize threats for each species. The group then reconvened and the information from each sub-group was presented. The activities conducted on the first day of meetings were designed to inform the entire working group on the current status of both species and create a general foundational knowledge for the group.

• The second day of meetings began with a recap of the previous day and the statement of the objectives for the current day. As a group, the attendees developed a vision and goal for the Striped Rabbit Working Group, and then once again broke into species-specific groups to discuss conservation priorities and implementation plans for both Nesolagus species. These plans were presented to the overall group as they reconvened, and discussion centered around developing an overall implementation plan and the next steps in the conservation planning for each species. The final act of the attendees was to identify additional candidates for invitation to the IUCN Striped Rabbit Working Group.

• The working group developed a series of analysis and recommendations around the conservation plan needed for each species, it included: revision of the distribution, illegal trade and population; priorities for additional information; the threats identified for each species; to finally outline the conservation actions required and the communication strategy needed to increase awareness. An action plan for the working group was agreed with specific tasks for the attendees.
Interventions

High-level interventions address conservation issues of serious concern, through letters to governments or companies which highlight species and habitats under threat, and propose actions on their behalf. Each letter provides the necessary background and technical information, and a thorough review process led by the SSC Chair’s Office, engaging the appropriate Specialist Groups, experts across the network, the IUCN regional offices and IUCN programmes.

The interventions led by the SSC during 2019 were:

• **Conservation status of the Termit and Tin-Toumma National Natural Reserve.**
  On 14 May 2019, Inger Andersen –IUCN Director General–, Kathy MacKinnon –Chair, IUCN World Commission on Protected Areas– and Jon Paul Rodríguez, sent a letter to E. H. Monsieur Almoustapha Garba, Minister of the Environment, Urban Sanitation and Sustainable Development regarding the of Niger, National Nature Reserve of Termit and Tin-Toumma (RNNTT), particularly with regard to concerns of the long-term integrity of the reserve and the survival of its residual population of Addax antelopes (Addax nasomaculatus). According to our information, the institutional arrangements and partnerships under way for the management of the Reserve could be an obstacle maintaining the integrity of the protected area, and to prevent any negative impact on its remarkable biodiversity. The Addax in the RNNTT are likely to be the last remaining wild individuals of the species on a global scale. This alarming situation requires the development and implementation of an emergency rescue plan, in accordance with the Plan d’action régional pour l’addax et la gazelle dama 2018-2022. There may be a need to refocus management on the survival of the remaining Addax, both through in situ and ex situ measures. These include but are not limited to a programme for rescuing and relocating some individuals to ensure that the genetic stock is not lost. The letter expressed IUCN’s willingness to organize a mission, with the support of the Ministry and other relevant authorities, to evaluate the various possible options and propose recommendations. This mission would include experts from the World Commission on Protected Areas regarding the global status of the reserve, its governance, management and security, as well as scientists from the SSC Antelope Specialist Group.

• **Concern and Support on the Conservation of the last population of the Loa water frog, Telmatobius dankoi, in Chile.**
  On August 8th 2019, Jon Paul Rodríguez, Chair of the IUCN Species Survival Commission, sent a letter to Carolina Schmidt Zaldívar, Minister of Environment of Chile, expressing concern for the survival of the Loa water frog. With the participation of Chilean members of the Amphibian Specialist Group, an unprecedented and swift rescue mission, led by a team of conservationists and government officials evacuated what may be the last remaining individuals in the wild of Loa water frogs (*Telmatobius dankoi*), a species considered Critically Endangered by the IUCN Red List of Threatened SpeciesTM and found only in a single stream in Chile, just before their habitat dries up almost completely from the illegal extraction of water. The frogs were moved to the National Zoo of Chile, where the specialists are trying to nurse them back to health and are talking to water frog experts around the world for tips on how best to care for and eventually breed them. The final objective is to restore the population in the wild, and assure its habitat protection. SSC respectfully requested the Minister that these multi-institutional efforts continue with the same collaborative spirit, and that consideration
be given to the development of an emergency plan for the protection and recovery of *Telmatobios dankoi*’s habitat. For this reason, JPR called for the establishment of a technical working group, to assist the work in this matter, and offered the assistance of the Conservation Translocation Specialist Group. The letter was readily answered by the Minister, stating that the rescue of the population and the corresponding restoration of both the population and its habitat are Ministry’s priorities. Subsequently she accepted the assistance offered by SSC. Chilean members of the SSC as well as the Amphibian and Conservation Translocation Specialist Groups will continue monitoring the situation.
Concluding Remarks

The work of SSC is possible due to the generous financial contributions of our 32 supporting organizations. In 2019, the Commission Operational Fund provided by IUCN to SSC was CHF 235,000, representing 16% of our total annual income (including CHF 300,000 allocated to the IUCN Global Species Programme). SSC’s supporting organizations, of which EAD is the largest contributor, allow us to mobilize our 9,387 experts in 168 countries, and build a team that would otherwise be out of our reach. More importantly, the support provided by EAD enables us to focus on our vision of a just world that values and conserves nature through positive action to reduce the loss of diversity of life on earth.

As we strengthen our network, the delivery of our vision becomes real. An active and empowered network attracts additional talent and grows in areas where it was absent. The number of specialist groups has increased to 161, 10 of which created during the last year. Species addressed range from micrometers in length of a chytrid fungus to a 25-meter-long blue whale (Balaenoptera musculus) – spanning about eight orders of magnitude! However, if one recognizes clonal organisms as a single organism, a colony of the humongous fungus (Armillaria ostoyae) occupied 8.9 km2 and weighed 605 tons – four times heavier than a blue whale! Your support to SSC gives us added confidence that we have the resources to reverse the trends of biodiversity decline.