IUCN SPECIES STRATEGIC PLAN 2013 - 2016

SPECIES SURVIVAL COMMISSION (SSC), GLOBAL SPECIES PROGRAMME (GSP) AND SPECIES PARTNER CONTRIBUTIONS TO THE IUCN PROGRAMME 2013-2016

IUCN GLOBAL RESULTS	KEY SPECIES RESULTS	RATIONALE FOR PRIORITIES	SSC / SP - Targets
		What we do -	• **Assessing and monitoring biodiversity** • **Analyzing the threats to biodiversity** • **Facilitating and undertaking action** • **Convening expertise for biodiversity conservation**
		Our aspiration -	To remain the leading global organisation watching and monitoring the status of the world's species and informing the world about their importance To be a leading agent in analysing the factors responsible for the decline of species To deliver solutions for halting biodiversity decline, and be in the forefront of advising and supporting key players in responding to the pressures on biodiversity and facilitating actions to stop species decline
Valuing and conserving nature **The conservation status of species and ecosystems is improved**	**IUCN Red List Goal:** **To provide information and analyses on the status of, trends in and threats to species in order to inform and catalyse action for biodiversity conservation**		

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	1. IUCN Red List taxonomic and geographic coverage is expanded Taxonomic coverage of the Red List is expanded so that it better informs biodiversity conservation	Assessments of terrestrial vertebrates remains incomplete Assessments, through complete or sampled approaches, of taxa representative of particular ecosystems, especially freshwater, marine and arid lands, are grossly insufficient Assessments of plants, fungi and invertebrates need to be substantially increased to represent the diversity of life adequately Representation of species of economic importance and value to human livelihoods is insufficient Many species, including flagship species are in rapid decline, and so it is important that their status is monitored	• Red List Authorities and/or Specialist Groups established for prioritized freshwater, marine, invertebrate and plant taxa that are currently lacking them (ongoing) • Fully documented assessments completed for the following groups: o *Terrestrial vertebrates*: reptiles (2015); o *Freshwater*: freshwater shrimps (2013); freshwater anomuran crabs (Aeglidae) (2014); freshwater fishes (2016); freshwater bivalves (2014); freshwater gastropods (2016); selected families of regionally appropriate aquatic plants (2016); mid-term formal gap analysis completed for freshwater taxa to identify critical groups that should be added to IUCN Red List to address specific conservation/ecology questions not already covered (2015); SRLI – freshwater molluscs (2013); o *Marine*: commercial sea-cucumbers (2013); marine fishes (2016); cone snails (2013); giant clams (2014); cephalopods (2014); marine algae (2016); o *Invertebrates*: dung beetle representative sample (2014); dragonflies (2016); bumblebees (2016); selected taxonomic and/or functional groups and/or habitat specialists among Lepidoptera, either in a widespread geographical context (swallowtails) and/or in specific areas (e.g. South Asia and Brazil) (2016); European grasshoppers, bush crickets and crickets (2016), and South African bush crickets (2015); land crabs (2016); selected terrestrial gastropod groups in particular regions (e.g. Sri Lanka and the Atlantic Forest, Brazil) (2016); South Asian millipedes (2016); selected groups of South Asian spiders (e.g. tarantulas) (2016); infrastructure established to enable future assessments of priority taxa/functional groups/habitat specialists identified in the ICSC priority list (e.g. hoverflies, spiders, millipedes, cave fauna in selected geographical areas) (2015); o *Plants*: Economically important Plants - 1300 priority crop wild relatives (2016), 300 European medicinal plants (2014), WHO monograph species (2016), CITES-listed medicinal plants (2016), 100 FairWild species, Indian and Brazilian priority medicinal species, palms (2016), timber trees (2016); SRLI – 1500 bryophytes (2013), 1500 ferns, 1500 legumes and 1500 monocots (2014); Flagship species – 4000 orchids (2016); carnivorous plants (2015); selected tree groups (magnolias, oaks, maples, ebonies, birches) (ongoing – completed 2016); cacti (2013); Regional subsets - endemic plants in the Eastern Arc Coastal Forests of East Africa and in the

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			Caucasus (2013); Pacific island plants (2016); Mediterranean plants (2014); Indochinese plants (2013); North American plants (2015); o *Fungi:* Criteria for selecting fungal groups to assess (2013), set up process and concluded to identify the tractable groups (including: species that are dependent on highly threatened places, habitats or associations, and so are *a priori* likely to face high extinction risk; species for which extinction risk data have already been compiled (e.g. in North America); groups of fungi that are believed to be effective indicators of the impacts of major threatening processes such as nitrification; and well-known, charismatic fungi, including those of high value as food for humans) (2013), and fundraising initiated to do the assessments (2014); an assessment of the impacts of nitrogen deposition on biodiversity is completed, using certain tractable fungal groups as indicators (2016); o *Thematic*: marine by-catch species (fishes and invertebrates) (2014); commercial fisheries species (2014).
	2. More IUCN Red List Assessments are prepared at national and, where appropriate, at regional scales The ongoing development of national and regional Red Lists is catalysed	All countries need to prioritize national red listing in order to contribute to the monitoring of Millennium Development Goal 7, and also the Aichi Biodiversity Targets Consistent use of the IUCN Red List Criteria will enable comparisons between countries in terms of their biodiversity conservation performance	• National and regional Red Lists expanded to cover 70% of countries by 2016, with 75% of countries using the IUCN Red List Categories and Criteria; • By 2013 priority countries identified for new national Red Lists, following a prioritisation to focus on those with high endemism of species (gaps in global IUCN Red List) with existing global species assessment data used to catalyse national assessments; • Large bilateral fund created to provide resources for countries that require financial support to develop and implement National Red Lists (2016); • National Red List indices and planning tools further tested and developed with the publication of a paper outlining methods (2015); • By 2016, five National Red List meetings held bringing experts to share experience and develop national-level Red List tools; • By 2016, 50 individuals trained in the use of the IUCN Red List Category and Criteria capable of assisting with the development of National Red Lists; • National Red List website, linked to the global IUCN Red List website, with a searchable database of all National and Regional Red Lists, as well as training materials including on-line modules and a list of expert trainers (2015); • Software in place to help store, manage and analyse National or Regional Red List assessments (stand-alone SIS) (2014);

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			• An online tool available where countries can add their spatial data and maps can be generated to assist with conservation planning and environmental impact assessments (2016); • Coordination with National Red listing processes leads to the addition of at least 1000 national endemics onto the global IUCN Red List, taking advantage of new initiatives from around the world (e.g. Brazil, China, India), focussing especially on plants (2016); • Regional assessments: o All marine fishes in Oceania, Europe, Caribbean and West Africa assessed regionally (2016) o Regional assessments (Europe): - all European marine fishes (2014) - all European bees (2014) - priority medicinal plants (2014) - assessments of selected invertebrate groups (grasshoppers/orthoptera, water beetles, remaining terrestrial molluscs, marine molluscs, remaining saproxylic beetles, hoverflies and/or corals) and selected plant groups (trees, legumes, bryophytes, charophytes and/or fungi) initiated (2016) - re-assessment of all European mammals started (2016) o Regional assessments (Mediterranean): - 1,500 endemic plant species (incl. all monocots) (2014) - all butterflies (2013) - endemic and selected dung beetles (2014) - selected saproxylic beetles (2014) - selected anthozoa (2014) - assessments of selected invertebrate groups (grasshoppers/orthoptera, water beetles, and/or marine molluscs) and selected plant groups (charophytes, crop wild relatives/legumes) initiated (2016) - re-assessment of all Mediterranean mammals started (2016)
	3. IUCN Red List Index	Indicators are essential	• 1st generation RLIs (i.e. an RLI based on two data points, necessitating either complete reassessments or employing a retrospective evaluation for an earlier

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	is widely used as an effective biodiversity indicator Wide use of the Red List Index (RLI) as an indicator for monitoring trends in the status of species groups is developed and promoted	for assessing progress towards targets addressing biodiversity loss, such as the Aichi Targets in the CBD Strategic Plan on Biodiversity, and the United Nations Millennium Development Goals IUCN developed the Red List Index (RLI) as a biodiversity indicator at the species level, with the index measuring trends in the extinction risk of sets of species The taxonomic breadth of the RLI needs to be expanded in order to make it more representative and existing indices for comprehensively assessed groups need to be updated (Assessments carried out for the purpose of eventually calculating a Red List Index following a later reassessment are covered above under "*IUCN Red List taxonomic and geographic coverage is*	time point alongside an initial assessment) for: o Comprehensively assessed groups: conifers (2013), cartilaginous fishes (2016), freshwater crabs (2016); o Selected species used for food and medicine (bushmeat and medicinal plants) (2016), selected crop wild relatives (2016); o Sampled groups: reptiles, fishes, butterflies, dragonflies, plants (monocots, legumes, bryophytes and ferns) (2016); ● 2nd generation RLIs (i.e. three or more data points), necessitating complete reassessments of all species or employing a retrospective assessment, completed for: o amphibians (2014, 3rd assessment), mammals (2015, 3rd), reef-building corals (2016, 3rd), cycads (2016 3rd); East African freshwater species (2016, 2nd), birds (2016, 7th); ● By 2016, the number of national (and, where appropriate, regional RLIs) expanded, prioritising countries with high levels of endemism and National Red Lists using the IUCN system; ● National RLIs calculated based on disaggregation of global data, where appropriate; ● RLI incorporated into global biodiversity scenario modelling methods by engaging with appropriate research institutions; results published (2016); ● Methods developed and published for calculating uncertainty in RLIs based on uncertainty in underlying parameter estimates (2015); ● RLI incorporated into global biodiversity scenario modelling methods by engaging with appropriate research institutions; results published (2016); ● Methods developed and published for calculating uncertainty in RLIs based on uncertainty in underlying parameter estimates (2015).

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		expanded")	
	4. The IUCN Red List is a scientifically rigorous tool for conservation The Red List contains the necessary information to make it a reliable tool for informing biodiversity conservation	The credibility and scientific rigour of the IUCN Red List assessment requires that all assessments on the IUCN Red List fully comply with the required and recommended supporting information requirements, and that we foster, as far as possible, careful application of the IUCN Red List Categories and Criteria	• *Guidelines for Using the IUCN Red List Categories* are updated and maintained annually to allow users to interpret and apply the Red List Categories and Criteria consistently and appropriately in global assessments; • *Guidelines for Using the IUCN Red List Categories* specifically include guidance on (2014): o Estimating uncertainty in IUCN Red List parameters, o Criteria for determining whether a population can be considered "wild" for the purposes of including in an IUCN Red List assessment, o Incorporating the risk to species of climate change (e.g. using Criterion E), o Using distribution maps to estimate Red List Criteria parameters (EOO and AOO), o Applying the Red List Categories and Criteria to island states and insular species; • *Guidelines for Application of IUCN Red List Criteria at Regional levels* are updated and maintained annually to allow users to interpret and apply the Red List Categories and Criteria consistently and appropriately in sub-global assessments; • Tools to facilitate calculation/estimation of Red List parameters, such as the worksheets for calculating *generation length* and *population reduction under Criterion A*, are maintained and supported; • *Documentation Standards and Consistency Checks for IUCN Red List Assessments and Species Accounts* are maintained and updated annually; • Clear guidance on mapping standards and protocols is incorporated into the *Documentation Standards and Consistency Checks for IUCN Red List Assessments and Species Accounts* (2013); • Clear Terms of Reference in place for IUCN SSC Red List Authorities, including clarification of the roles of Global Species Programme assessment units and IUCN Red List Partners, and a revised Annex outlining the "Required and Recommended" supporting information fields that must accompany all IUCN Red List assessments (2012); • All new assessments feeding onto the IUCN Red List are in full compliance with, at a minimum, the "Required" supporting information fields for IUCN Red List assessments (ongoing), which includes the requirement for all

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			assessments to be reviewed by at least one reviewer; • "Required" supporting information fields completed for all completely assessed groups and all groups assessed through the sampled approach (2016); • Existing classification schemes (and guidance notes on classification schemes) reviewed and revised as required (including any documentation), and new classification schemes developed and documented as appropriate (ongoing). • Options for incorporating indigenous and traditional knowledge into Red List assessments explored (2014)
	5. IUCN Red Listing capacity built through expanded training programmes Capacity developed to ensure that the IUCN Red List Criteria are applied rigorously and consistently to increase the credibility of the Red List	Credibility of the Red List depends on assessors applying the categories and criteria consistently and correctly and this requires building capacity through training	• Training tools produced and necessary support in place to facilitate national Red List programmes (2013); • Certification scheme in place for IUCN Red List trainers (2013) ; • IUCN Red List training materials developed and released, and necessary support in place, for Red List Authority focal points, Red List Partners and Global Species Programme staff (2013); • All IUCN Red List training materials and relevant documents translated into IUCN languages (2014); • Red List trainer online training sources completed and available (2014); • Prioritization of training needs by country developed (2014); • At least 200 IUCN Red List assessors trained and issued with a Red List trainer certificate (2016); • IUCN Red List trainers certified as follows: Red List Partner staff (10 people), SSC members (10), IUCN Regional Office staff (5), and Global Species Programme staff (10) (2016).
	6. The IUCN Red List is underpinned by cutting-edge information management technologies The information technology infrastructure to support Species	It is essential that the information management technologies that underpin the Red List are world class (especially given the rapid development of IT technologies globally)	• Establish a Technological Working Group under the auspices of the Red List Committee to provide advice on the use of technology in support of the Red List information systems, provide mechanisms for mutual sharing of technological solutions among and beyond Red List partnerships, and provide coordination among the Red List partners across bilateral interaction with technology companies regarding support for handling Red List data (2013); • Geographic Information System (GIS) functionality seamlessly integrated into the Species Information Service (SIS) (2014); • Software and functionality developed to optimally allow mapping of species

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	Strategic Plan objectives is enhanced	Improved systems will need to seamlessly integrate an array of different data sources, and to ensure that the Species Information Service (tabular data) and Geographic Information System technologies (spatial data) are mutually compatible	distributions for IUCN Red List assessments; • Fully integrate assessments from external assessment databases into SIS: o Develop and implement an interface/toolkit for importing assessments and supporting data from external database systems (e.g. NatureServe, RBG Kew, SANBI, CNC Flora, etc.) into SIS (2013), o Other non-Red List assessment datasets investigated and integrated where appropriate and resources permit (2016); • Closer integration and linkages between the Red List website with websites managed by IUCN Red List Partners (e.g. eMonocot at RBG Kew, NatureServe's Explorer and InfoNatura web sites, etc.) (ongoing); • Closer integration and linkages between the Red List website with data managed by external sources (e.g. Catalogue of Life, Encyclopedia of Life, GBIF, FishBase, World Register of Marine Species, citizen science initiatives, etc) (ongoing); • Functionality in place for handling taxonomic change and dynamism (new species, conflicting taxonomic treatments) in SIS (2014); • IUCN Red List assessment accounts published as permanently accessible, citable objects (2014); • The integrity checker is implemented, whereby SIS includes software 'safeguards' that assure adherence to all documentation requirements (2012); • Knowledge/information shared using experience of other sectors for rapid communication and peer-review, for presentation of species information (e.g. GSP's existing work with threat mapping; Cochran Collaboration) (ongoing); • Historical IUCN Red List accounts are archived and accessible (2016).
	7. The IUCN Red List is used effectively to inform policy and action The IUCN Red List data and information is increasingly used to inform policy and action in private and public	IUCN Red List data and information are increasingly used to inform policy and action among governments, international agencies, and the private and public sector Many conservation	• The extent to which the IUCN Red List is leading to measurable conservation actions and gains is assessed in 2014 (for GBO4), 2015 (for the MDGs), and 2016 (for WCC6), specifically requiring: o Conservation actions classification populated comprehensively, tracking progress from "required" to "current", o Conservation actions classification linked to WDPA where these involve safeguarding important sites for species, o Conservation actions classification linked to species-specific policy instruments, e.g. Convention on International Trade in Endangered Species

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	sector	conventions (notably CITES, CBD, Ramsar, CMS, UNCLOS, World Heritage, and the various taxa-based conventions) are drawing on these data to help guide policies Funding agencies, such as GEF, foundations, and international non-governmental organizations, are also using the IUCN Red List to determine policies on conservation investments IUCN Red List information can help inform and guide corporate biodiversity responsibility, and can enable the incorporation of biodiversity into Environmental Impact Assessments and other processes	(CITES), Convention on Migratory Species (CMS), Ramsar Convention, Regional Fisheries Management Organizations (RFMOs) both analytically and by survey of relevant policy-makers, o Conservation actions classification linked to the IUCN Red List Index, to measure impacts of conservation action and allow comparison to trends for species lacking such actions; • Maintaining the "*Guidelines for Appropriate Uses of IUCN Red List Data, incorporating the Guidelines for Reporting on Proportion Threatened and the Guidelines on Scientific Collecting of Threatened Species*", and specifically: o Developing guidance on collection and harvest of threatened species as an annex to these, in order to help ensure that Red List data are used appropriately to guide regulation and management decisions (2013); • The Terms and Conditions of Use for IUCN Red List data, including both non-commercial and commercial uses, maintained and reviewed as necessary (ongoing), and: o Systems to monitor use of the IUCN Red List data developed and implemented (2012); • The IUCN Red List information is adequately and appropriately used in international policy agreements, including IPBES, and this use is acknowledged (2013 and thereafter), specifically: o IUCN Red List Index used as a standard indicator for monitoring biodiversity trends for the Aichi Targets, the Multilateral Environmental Agreements generally, the Millennium Development Goals and other sustainability targets and development processes, IPBES, and equivalent sub-global mechanisms, o IUCN Red List information is appropriately incorporated into the CBD's Global Strategy for Plant Conservation, especially Target 2, CITES, Ramsar, CMS, and IWC, o Jurisdiction of RFMOs relative to distribution of threatened marine species of fishes and invertebrates examined in order to identify gaps and opportunities for action and input by IUCN into the management discussions (2013), o IUCN Red List information is appropriately used in regional policy agreements, including the EU Habitats Directive, Bern Convention, and

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			ASEAN Convention, and this use is acknowledged; • Environmental Impact Assessments incorporate IUCN Red List data into planning on a routine basis (by 2016), specifically: o International financial institutions (IFC, World Bank, etc.) incorporate IUCN Red List data into safeguard policies, especially within the context of the mitigation hierarchy and as reflected through key biodiversity areas because so many such policies operate at site levels, o Processes for use of IUCN Red List data by private consulting companies working for corporations and governments to conduct environmental impact assessments and ensure adherence to safeguard policies are strengthened, with consideration given to establishing certification for consulting companies following best practice; • Businesses incentivized to seek economic advantage by reducing threats to species listed as threatened on the IUCN Red List (by 2016), specifically: o Commitments, and mechanisms to verify these, established to cause no increase in extinction risk at a minimum, and ideally net positive impact on biodiversity, from corporations with whom IUCN and Red List partner organizations have existing relationships, o Engagement established with certification industries involved in sustainable use of species and their habitats (Forest Stewardship Council, Marine Stewardship Council), to incorporate no negative loss/net positive impact as requirements for certification; • Integration of the IUCN Red List into national economic development projects and policies sought, highlighting “win-wins” (by 2016), specifically: o Incorporation of IUCN Red List data into national policies, e.g. National Biodiversity Strategies and Action Plans, strengthened to support the achievement of Aichi Target 12, amongst others, o Better examples and documentation provided of how IUCN Red List data can be used by and are valuable to a range of sectors (e.g. climate change, agricultural management, food security) at the national level, o Provide examples for framing the IUCN Red List in the context of urban planning, o Incorporation of IUCN Red List data are integrated into assessments of national green accounts or natural capital;

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			• Standards for the identification of key biodiversity areas are formalized through IUCN, building from IUCN Red List data (by 2014), specifically: o Technical working groups convened, and supported by working papers, to address key themes (criteria, thresholds, delineation, governance, marine, and application), o Regional consultations worldwide convened to seek input from specific national contexts, in collaboration with IUCN/JRC BioPama Project, and other institutions, with a global synthesis workshop to conclude the process, o Results published and disseminated as i) a guidelines booklet, including hyperlinked electronic version; ii) recommendations as to the implications of proposed governance for informatics infrastructure development; and iii) case study factsheets on applications; • IUCN Red List and WDPA functionally integrated, ensuring that both are fundamental components of IBAT and other decision-support tools (by 2014), specifically: o Two-way linkage between the IUCN Red List and WDPA established, such that potential occurrence of a species can be derived for any given protected area, and that all potential occurrences in protected areas can be derived for any given species, o Three-way linkage between the IUCN Red List, the World Biodiversity Database, and WDPA established, such that actual occurrence of a species can be derived for any given protected area, and that all actual occurrences in protected areas can be derived for any given species, o Role of IBAT consolidated as a partnership platform to facilitate these linkages, support data use, and provide a mechanism for financing into the IUCN Red List process; • IUCN Red List data incorporated into ongoing initiatives, such as the Essential Biodiversity Variables being developed by GEO BON (2014) and Ramsar's Global Wetland Observation System (2014); • A 'Wildlife in a Changing World Revisited' publication – with a science to policy focus; highlighting successful applications and recommending future action (i.e. really directed at highlighting practical outcomes for conservation management and policy (2016)

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	8. The IUCN Red List is recognized as a global brand The Red List developed as a global brand	Making the IUCN Red List a more recognized global brand will increase the visibility of the extinction crisis, build public support, and open new possibilities for making the IUCN Red List financially sustainable	• Regular (at least biannual) updates of *The IUCN Red List of Threatened Species*, including a coordinated strategy on public outreach based on the results of each update to maximize on publicity and fund-raising potential (ongoing); • Exposure of the Red List increased in professional and international fora, including by: o Organizing meetings of the IUCN Red List Committee in tandem with special, open invitation, events or sessions, o Organizing symposia at the regular meetings of the Society for Conservation Biology, Ecological Society of America, fisheries societies and other annual meetings, o Presentations, side events, and workshops organized at relevant policy events (and see Result 7); • PowerPoint presentation highlighting the value of the Red List developed for all to adapt and use as needed; • A 'national species conservation award' established, presented at the IUCN World Conservation Congress, to be presented to the country which has best improved species conservation status (2016); • A presence in the peer-review academic literature maintained, and this literature widely disseminated and made available, including: o A general paper on common misconceptions about the Red List criteria, categories, and process (2013), o A database of all publications that utilize or analyse IUCN Red List data for conservation purposes developed and maintained (2016), o Journal publishers contacted to request open access to Red List material (ongoing), o Expand efforts to ensure that Red List assessments are included as part of published species descriptions (e.g. as recommended to Journals by the EC-funded BioFresh project) (ongoing); • Red List website presence enhanced and maintained through: o Main Red List website developed to be user-friendly for all users (2013 with continuous improvement thereafter), o 'Popular' website interface implemented, serving up a subset of Red List

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			content for powerful targeted awareness raising on species, including for each species a photo, map and simple account (prototype by 2012; finalised by 2014); • Red List communications and outreach expanded through: o Conservation success stories based on genuine improvements on the Red List written and disseminated and translated (2013 and ongoing), o Social networking strategy (e.g. Facebook page for IUCN Red List; Twitter) developed and implemented (ongoing), o *Amazing Species* profiles that broadly represent taxonomic diversity and cultural interest featured at least weekly on the IUCN Red List website and other communication outlets, including social networking sites (ongoing), o Red List visual identity expanded in zoos, aquaria, and botanic gardens (ongoing); • SSC communication priorities delivered to other relevant bodies that have extensive communications capacity e.g. WAZA, World Tourism Organisation etc. (ongoing); • Red List data made more readily accessible to the user community through wider availability in other IUCN languages, including: o Strategy developed for allowing assessments in other languages (especially French and Spanish) on the Red List website (2013), o Tools implemented on the Red List website for "on-the-fly" translation of content into other languages; • Local support for the IUCN Red List mobilized by ensuring that local traditional knowledge is included in assessments (ongoing); • Capture and publish conservation investments spatially via the IUCN Red List map viewer tool – done in collaboration with our funding partners and the SSC network to raise the profile of such conservation interventions (2013).
	9. The IUCN Red List is sufficiently and sustainably financed Funds secured to ensure the sustainability of the	The anticipated growth of the IUCN Red List will necessitate considerable new investment to ensure that the technologies,	• On-line approaches for funding further developed, including seeking opportunities for Google and other advertising/website advertising (2013); • Recipient GEF countries engaged to include support for National Red List Assessment in their funding requests (ongoing); • Small Island Developing States as a group approached to seek GEF funding for IUCN Red List assessments (ongoing);

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	Red List	resources and procedures underpinning it are sufficient to deliver this globally important knowledge product While contributions from IUCN and project donors will remain an important source of financial support, they must be augmented by other sources that can fund the core costs of running the Red List	• A lead IUCN Red List institutional sponsor ($5 million a year) secured (to start Barometer of Life partnership) (2013); • Direct corporate/institutional/personal support expanded (Barometer of Life contributors) (ongoing); • A Trust Fund for long-term IUCN Red List sustainability established (2016); • A "Sponsor a Taxon" initiative explored (2014); • Friends of the IUCN Red List established (2013); • Opportunities created for personal legacy gifts (in will) for fund-raising for IUCN Red List (tax-deductible bequests) (2013).
	10. Strategic oversight is provided to the IUCN Red List Strategic oversight for delivering the Red List provided by Red List Committee	It is critically important that the delivery of the Red List achieves some very specific targets leading up to 2016 if it is to contribute maximally to the global community; this will only be achieved if the whole Red List process is subject to close strategic oversight	• Strategic advice provided for ensuring the effectiveness and sustainability of the IUCN Red List (ongoing); • IUCN Red List partnership successfully renewed (2015); • IUCN Red List partnership strategically grown to include new institutional members (ongoing); • A strategy to engage appropriate academic and research institutes developed and implemented (2014).
	11. Measuring Conservation Success New methods for measuring and categorising the success of conservation in place	There has been growing despondency in recent years that conservation does not work; new measures are needed to demonstrate the conservation is effective, and especially	• Green List criteria for species conservation actions developed and ready for implementation, including links with Green List criteria for ecosystems and protected areas (2016); • A new methodology for measuring the effectiveness of conservation action on species developed and published (2013); • An objective indicator system developed to measure conservation success for evolutionarily distinct species (2014), following by annual assessments of conservation need, action and effectiveness for these species (2015 onwards);

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		that without current conservation efforts the extinction crisis would be much worse	• At least three scientific papers published by 2016 demonstrating that without conservation measures, the status of species would be much worse than it currently is; • Partnerships established with conservation and research organizations to mobilize and maintain data on threatened and other key species populations within and outside of protected areas, to allow ongoing documentation and improvement of protected area success (ongoing); • Tangible indicators developed to the success of management of marine resources (including consideration of stock assessment, quota management, application of the code of conduct for responsible fishing, and comparing certified vs. non-certified fisheries), leading to outputs such as a "green list" of fisheries, and scientific papers (2016).
	12. Population-level Monitoring and Analysis Monitoring programmes established for selected species and groups of species	A broad range of species should be monitored in order to assess changing community composition, population sizes and trends, understand threats and/or review the impact of actions, especially where these can most effectively inform management/ policy. Such monitoring will provide sensitive and fine-scale measures of changes over time, complementing more coarse measures like the Red List Index. The data generated can contribute to national indicators relevant to tracking the	• By 2016, species-focussed monitoring programmes in place for: o Critically Endangered species, wherever possible / feasible (including all those supported by SOS projects), o Flagship/high profile/evolutionary distinct species e.g. African and Asian elephants, African and Asian rhinos, selected reptiles (iguanas), Great Apes, selected ungulates (African buffalo, giraffe), selected carnivores (lion, cheetah, African wild dog, tiger), waterbirds, and marine species (marine turtles, sharks, dugongs (with CMS), fishes (with RFMOs) and seagrasses, as well as key taxa, terrestrial, freshwater and marine, including flagship invertebrates, from other taxonomic groups, o Species at selected sites (protected areas/key biodiversity areas/flyway site networks and other important sites), building on existing initiatives (e.g. BirdLife International's Important Bird Area monitoring, Wetlands International's International Waterbird Census), o Other selected groups of species, indicative of particular threats (e.g. climate change) or the quality of particular habitats (e.g. forests, intertidal wetlands, freshwaters); • A conservation management tool developed for the health of African Freshwater systems using the Dragonfly Biotic Index (2016); • The infrastructure of the existing African Elephant Database used by SSC Specialist Groups (especially those responsible for the species listed above) for capturing, managing and disseminating population-level data;

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		implementation of NBSAPs and the Aichi Targets as well as to larger scale indicators such as the Living Planet Index	• A targeted fundraising initiative in place to support SSC's work on population-level monitoring and analysis.
	13. Invasive Species Measures to manage invasive species greatly enhanced through focused efforts involving knowledge, policy and action	Invasive species are the second largest driver of biodiversity loss and they have been the focus of insufficient attention in recent years	• Data on species threatened by invasive alien species documented for all birds, mammals, amphibians and key freshwater taxa (and possibly other groups, such as dragonflies in South Africa and Pacific Oceanic islands) to allow global prioritization for eradication of invasive species from islands (2016); • Significant enhancements made to the Global Invasive Species Database (GISD) (including a special focus on increasing the number of marine species in it) so that it remains the most readily accessible source of information on invasive species that impact on the conservation of biodiversity, together with guidance on management options (2014); • Development of a Global Register of Invasive Species as a tool to facilitate access to GISD as well as to other major data providers on invasive species (2015); • Full interoperability in place between the GISD and the Red List and with the World Database on Protected Areas, also with the aim to prioritize invasive species for response, as requested by Aichi target 9 (2014); • Data made available on fine-scale distribution of species threatened by invasive alien species to allow prioritization for eradication of invasives (2016); • Collaboration in place with the IUCN World Commission on Protected Areas (WCPA) to promote the compilation and dissemination of best practice guidelines on invasive alien species management in protected areas, promote appropriate training to address this threat and enhance more effective management in protected areas (ongoing); • Gaps in programmatic and policy coverage of invasives species identified and addressed (ongoing); • A rapid advisory service in place through Aliens listserve to guide individuals/institutions facing problems from invasive species (ongoing); • New information of pathways for invasive species available also to allow prioritisation of work as requested by Aichi target 9 (2016);

IUCN GLOBAL RESULTS	KEY SPECIES RESULTS	RATIONALE FOR PRIORITIES	SSC / SP - Targets
			• Analysis completed of the impact of invasive species on marine fishes (2016); • Greater knowledge and guidance developed regarding impacts and advisability of recreational/commercial use of alien species (2014); • Policy developed on the control and management of genetically modified organisms that are potentially invasive or otherwise damaging to biodiversity (2016); • Until such policy is in place, an approach to the management and movement of genetically modified organisms that are potentially invasive (or otherwise damaging to biodiversity) is promoted by IUCN that is consistent with IUCN's existing policies on invasive alien species (ongoing).
	14. Integrating IUCN Knowledge Products IUCN's key biodiversity knowledge products (e.g. Red List and WDPA) fully integrated to allow interoperability and to maximize efficient use	Integrating knowledge products enables increased data access and analysis, promoting more efficient and robust approaches to species conservation management and decision-making	• Integrate the IUCN Red List and Global Invasive Species Database (GISD) with IUCN's area-related databases (the World Database on Protected Areas and the World Biodiversity Database – KBAs) (ongoing): o Establish two-way linkage between the IUCN Red List and World Database on Protected Areas (2013), o Integrate, through a three-way linkage, the IUCN Red List, GISD and WDPA (2014), o Establish a three-way linkage between the IUCN Red List, the World Biodiversity Database (used to manage Important Bird Area data and data for other key biodiversity areas), and World Database on Protected Areas, (such that actual occurrence (and significance) of a species can be derived for any given protected area, and that all actual occurrences in protected areas can be derived for any given species) (2015); • Tracking of conservation actions in the IUCN Red List linked to the World Database on Protected Areas (2016); • The Integrated Biodiversity Assessment Tool (IBAT) consolidated as a partnership platform to support data use, and to provide a mechanism for financing the IUCN Red List process (2013); • Interoperability and where possible full integration in place for IUCN's species/ecosystem-related databases, including the Red List of Species and Ecosystems, GISD, and Green List of Species and Ecosystems); • Plans (both operational and technical) in place to develop and eventually integrate the IUCN Red List of Threatened Species and the Red List of Ecosystems.

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	15. Species Conservation Strategies, Action Plans and Tools Conservation action for species improved through application of IUCN species specific conservation strategies and action plans and other relevant tools	If species are to be saved in the long-term, then Species Conservation Strategies and Action Plans (SCSs) based on the best information, and with wide stakeholder support, need to be developed and implemented	• The development of the SSC conceptual framework for setting priorities for the conservation of threatened species is completed, giving special attention to threatened families and genera (2015); • A demonstrable increase in the number of Specialist Groups: o With identified planning needs (ongoing), o Accessing and using SSC planning tools, o Requesting and receiving technical assistance in planning; • The SCS guidelines are being used in species planning outside the IUCN network and IUCN technical assistance provided as requested and feasible (ongoing); • SSC's species conservation planning enhanced through inclusion of a variety of new elements, including the One Plan approach promoted by the *ex-situ* community (ongoing); • "One Plan" approach to species conservation planning used for 10 species to explicitly integrate intensively managed populations with their wild population counterparts (ongoing); • The "One Plan" species conservation planning process to include technical expertise in modelling intensive population management strategies using tools for assessing wild and intensively managed population (IMP) viability, harvest and supplementation strategies, metapopulation management strategies (including wild and IMP exchanges), and different types and levels of management intensity (ongoing); • Training provided to increase global capacity for species conservation planning, including in the use of population modelling tools to both the IMP and field conservation communities, integrated species management strategies (priority to be given to high biodiversity range countries with limited access to training and to priority Specialist Groups) (ongoing); • Collective experience and new tools are used to reduce the cost of effective species planning through acceptable short-cut measures (ongoing); • SCS guidelines periodically updated and enhanced (ongoing); • A review of plan implementation through the SSC (2016); • By 2016, 40 SCS's completed and endorsed.
	16. Setting global	For many species, the	• Formalize standards for the identification of key biodiversity areas (2014):

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	standards for the identification of sites of biodiversity conservation significance Global standard for defining and identifying "key biodiversity areas" developed and adopted	most effective and efficient way to save them is to focus on conserving the sites where they occur	o Technical working groups convened to address key themes and produce background papers in support of each theme, o Regional consultations convened to seek input into emerging criteria from specific national contexts, o Based on the consultations, a global synthesis process implemented to consolidate and agree the criteria for key biodiversity areas, o The finally agreed criteria published and results disseminated as i) a slender guidelines booklet, including hyperlinked electronic version; ii) recommendations as to the implications of documentation/ validation/endorsement for informatics infrastructure development, o Case study factsheets produced on the importance of standards for the identification of key biodiversity areas for different sectors, o Guidance developed, and technical support made available, on the application of the Key Biodiversity Area standard (2015 onwards).
	17. Applying IUCN standard for identification of sites of global biodiversity conservation significance Biodiversity conservation action improved through the application of consolidated standards	There will be an important need to support and encourage national application of IUCN standards for the identification of sites of global biodiversity conservation significance	• All governments contacted to stress the importance of conserving Alliance for Zero Extinction sites, and the opportunities available for achieving this (2013); • Key biodiversity area standard implemented by national conservation constituencies in 100 countries, building on existing national inventories of Important Bird Areas, Important Plant Areas, and similar designations (2016); • Key biodiversity area standard promoted in all relevant national and global policy fora (e.g. CBD Aichi Target 11 for 2015) (ongoing); • KBA database developed, implemented, and linked with other IUCN knowledge products (by 2015); • Key biodiversity area safeguards are applied through the safeguard policies of international financial institutions (e.g. International Finance Corporation, World Bank, etc) (ongoing); • Ten case studies completed of the application of KBA standard in the marine environment, in collaboration with the Ecologically and Biologically Sensitive Areas (EBSA) process (for example using coral or seagrass data) (2016).
	18. Wildlife Health Wildlife health monitoring in place and	Critical wildlife health issues and emerging infectious diseases are a growing conservation	• IUCN actively participating in the UN One Health Initiative to represent biodiversity as part of a broad approach to address health issues (ongoing); • Links in place with other organizations and relevant SSC Specialist Groups for engagement on disease-related conservation issues associated with specific species, including: amphibians, Ethiopian wolf, Siberian and Bengal tiger,

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	advice given on remedial actions needed	concern for which the world is ill-prepared There is potential to address this concern through synergy among organizations/ groups with related interests and limited wildlife health capacity and resources in several regions The toxicological pressures on species are growing Specific regional/ country conservation priorities and needs need to be identified and addressed	Amur leopard, African wild dog, jaguar, rhinoceros, various antelope (e.g. East African roan, hirola, Swayne's hartebeest, desert antelope, saiga antelope), river dolphins, Tasmanian devils, kiwi (ongoing); • Improved networking and capacity building (through the new SSC Wildlife Health Specialist Group website, trainings, resource sharing and member involvement) (ongoing); • Awareness raised on wildlife secondary poisoning (e.g. Diclofenac and vultures), use and disposal of toxic agents (ongoing); • Addressing health-related priorities emerging from the Red List and supporting conservation and biodiversity efforts; • Policies and best practices relating to wildlife health improved (ongoing); • Disease Risk Analysis (DRA) tools developed, including IUCN Guidelines, DRA Process Description, Tools Library and online Training Programme (2013); • Technical support available to Specialist Groups, governments, NGOs and others in using DRA tools (ongoing).
	19. Re-introductions Information and advice service in place to support species reintroductions	With increased focus and need to restore species to parts of their ranges, expert advice from SSC is increasingly sought by governments and others	• Regular updates of *Global Reintroduction Perspectives* published (ongoing); • *Global Reintroduction Perspectives* made available online as a searchable database (ongoing); • New IUCN Guidelines on Reintroductions and Other Conservation Translocations published (2013); • Wide promotion and dissemination of the updated guidelines (ongoing); • Advisory service in place to support reintroduction projects worldwide (ongoing).
	20. Conservation Breeding, and links to ex situ community Advice and facilitation in place to support *ex situ*	Growing threats to species that cannot immediately be controlled in the wild require an increase in ex situ management	• SSC Conservation Breeding Specialist Group's largely *ex situ* network broadened to include taxonomic Specialist Group experts, facilitating integration of these communities, and the tools and populations they represent (ongoing); • *IUCN Technical Guidelines on the Management of Ex Situ Populations for Conservation* revised (2013), widely disseminated and broadly used to better guide the establishment and/or maintenance of intensively managed

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	species recovery programmes	and recovery programmes	populations to support species conservation (ongoing); • *IUCN Technical Guidelines on the Management of Ex Situ Populations for Conservation* used to assist decision making regarding target taxa for *ex situ* management and gene banking (ongoing); • Technical expertise in modelling intensive population management strategies made available in support of establishment and/or maintenance of *ex situ* populations as part of integrated species conservation planning (ongoing); • Training provided to the *ex situ* conservation community in the use of population modelling tools to build capacity (expertise), understanding and interest in integrated species management strategies (priority given to training in high biodiversity range countries without a regional zoo association) (ongoing).
	21. Global and regional policy for biodiversity conservation Global and regional policy mechanisms influenced to enhance the effectiveness of biodiversity conservation	The effective implementation of global and regional biodiversity-related Multilateral Environmental Agreements depends on expert advice and information on species: CBD, CITES, CMS, IWC, Ramsar, ITPGR, IPBES, EU Habitats Directive; Bern Convention; RMFOs	• CITES: o Analyses of Proposals to Amend the CITES Appendices (2013, 2016), o Assistance provided to Parties on making non detriment findings (ongoing), o Advice and support provided to the Animal, Plants and Standing Committees (ongoing), o Policies and cross-cutting analyses of wildlife trade/livelihood issues developed and promoted for the CITES COP and other CITES fora (ongoing), o Key scientific and technical support provided to CITES' elephant monitoring systems: Monitoring Illegal Killing of Elephants (MIKE) and Elephant Trade Information System (ETIS) (ongoing); • CMS: o Advice and support provided to the Scientific Council and COP (ongoing), o Advice and support provided to CMS Agreements and MOUs (ongoing), o Better representation of freshwater fishes in CMS (ongoing); • Ramsar: information on freshwater species used in applying the criteria for selection of wetland sites of international importance (i.e. Ramsar sites) (ongoing); • CBD: o The implementation of the Aichi targets from a biodiversity perspective monitored and reported on with a focus on those aimed at improving the

IUCN GLOBAL RESULTS	KEY SPECIES RESULTS	RATIONALE FOR PRIORITIES	SSC / SP - Targets
			status of species, ecosystems and genetic diversity (2016), o Advice on key CBD Programmes of Work and cross-cutting themes; protected areas, invasives (especially through the Liaison Group on Invasive Species), sustainable use, marine and coastal, inland waters, Global Strategy for Plant Conservation (especially in East Asia through the East Asia Botanic Gardens Network), etc. (ongoing), o SSC capacity to advise on Access and Benefit-sharing, as it relates to species conservation, developed in collaboration with the IUCN World Commission on Environmental Law (WCEL) (ongoing); • IWC: Scientific input provided annually to the IWC Scientific Committee; policy advice given to the IWC as needed; • ITPGR: IUCN work on crop wild relatives incorporated into policy deliberations at ITPGR; • IPBES: IUCN information and expertise on species fully integrated into IPBES, (ongoing) with the SSC and Global Species Programme playing a major role in the IPBES assessment process (ongoing), with a role for IUCN on the IPBES Science Panel secured (2013); • EU Habitats Directive and Bern Convention: expertise of SSC Specialist Group provided to assist in implementation (ongoing); European Red List processes target to support implementation (ongoing); Charter development under Bern Convention (2013); • RFMOs: Bycatch initiative, focusing on all taxa, developed (2013), agreed and promoted within RMFOs; advice provided on sustainable fisheries management, including specific recommendations to ensure sustainability in tuna and shark fisheries (ongoing); • FAO: closer links established between FAO and IUCN on issues in relation to commercial fish and invertebrate species (ongoing); • IUCN polices or guidelines developed on: o International genetic manipulation of wild species (2015), o Mitigating human-wildlife conflicts (initially through the development of a database to share information (2014)), o Biodiversity security (2016), o Management of alternative livelihood projects to ensure sustainable

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			benefits to species, ecosystems and people (2016).
	22. Policy and action at national and cross-boundary levels Actions and policies for species and sites implemented at the national level	There are many examples where IUCN has had to make national-level interventions in order to influence national policies and actions on biodiversity (e.g. Yellow Sea, Poyang Lake and Yangtze River dams, Indonesian and Zimbabwean rhinos, etc.) In all cases, IUCN needs to advocate scientifically-underpinned species data, conservation action and policy change	• SSC national groupings developed to provide input to national policy processes and decision making (ongoing); • Specific interventions made to address urgent biodiversity conservation issues, including on Poyang Lake and Yangtze River dams (China), the North-east Asian Ecological Corridor; migratory birds in the Mediterranean countries, Mavrovo National Park (Macedonia), and others (ongoing).
	23. Communicating species conservation The effectiveness of IUCN's species conservation work enhanced through strategic and targeted communications	For the biodiversity crisis to be addressed there needs to be much stronger support for conservation, both in the general public, and politically A species focus is perhaps the most compelling way to communicate biodiversity in a way that most people can appreciate and relate to	• IUCN Species Communications and Marketing Strategy implemented (ongoing) including: o Further development of the IUCN Species website to increase visibility of IUCN SSC species work(ongoing), o Promote SSC driven species conservation projects on the Red List web site through the investments module of the map viewer (2014), o Press releases and news stories on key work of IUCN Global Species Programme and the SSC (ongoing), o Development of the IUCN Species magazine as an Annual Review of the SSC and IUCN Global Species programme work (ongoing), o Implementation of social media strategy (ongoing), o Development of communications products to support fundraising e.g. Red List information brochure (2012),

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			o Promotion of IUCN SSC publications (ongoing).
	24. Fostering conservation on land and in water Conservation supported through existing and novel funding mechanisms	Recent experience with new funding mechanisms, such as the Mohammed bin Zayed Species Conservation Fund and the Save Our Species Fund demonstrate that there are many important species conservation funding needs that cannot be supported from existing sources	• USD 8 million allocated to projects through the SOS fund (by 2016); • At least 70 SOS projects implemented or being implemented around the world (by 2016); • Additional novel funding mechanisms secured through the private sector.
	25. Special initiatives to tackle major conservation crises Focused attention brought to resolving major crises in biodiversity conservation	A number of new conservation crises have emerged in recent years, catching the conservation community unawares in terms of technical solutions, political will and funding	• Amphibians: a major increase in the funding available to support amphibian conservation and prevent amphibian extinctions by 2016, through the Amphibian Survival Alliance (ASA - including amphibian Ark and the SSC Amphibian Specialist Group); amphibian species no longer declining by 2016 as a result of *in situ* conservation (220 species) and *ex situ* conservation (150 species); at least 50 institutions joined ASA by 2016; • Turtles: conservation action catalysed to safeguard the most seriously threatened species by 2016; • Asian intertidal wetlands: in-depth study of these wetlands completed, including a focus on species threatened, ecosystem services provided, and conservation options and priorities (2014); and advice provided to implement conservation options (ongoing); • Action Asia: the Action Asia programme developed and priorities agreed, with funding provided to stem the decline in at least ten Critically Endangered species by 2016; • West, Central and North African large animals: a situation analysis competed (2013), leading to enhanced fundraising (2014) and new initiative to stem species declines in place and being implemented by 2016; • Poaching of economically valuable wildlife species: a special initiative launched (2013) and implemented (by 2016) to enhance capacity, political will,

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			legislation and funding to combat poaching, especially in Africa (ongoing); • African elephants: a high-level meeting convened to address the problem of illegal ivory trade (2013), leading to concerted actions in source, transit and consumer countries ensure effective conservation of this species (2014 onwards); • Rhinos: a rhino range states meeting held to address immediate urgent needs (2013), leading to a focused initiative, with a particular focus on saving the Javan and Sumatran rhinos in Indonesia from extinction (2013 onwards); • Bear farming: a situation analysis completed on the impacts of bear farming for bile on wild bear populations (2016); • Threatened dolphins and porpoises: support and monitoring provided for conservation actions on the most threatened species, focusing in particular on the Vaquita, on threatened species around New Zealand, and on river dolphins (ongoing); • China: a policy oriented initiative within China in place by 2016 to raise awareness of China's direct impact on biodiversity in many parts of the world, and to gain political support for minimizing negative impacts; • Madagascar: SSC national group established (2013); advice and assistance provided, in particular to help ensure that all use of species is sustainable and provides support for conservation (ongoing); • Evolutionarily distinct lineages: conservation action promoted especially for threatened families and genera (ongoing); • In recognition of the global freshwater conservation crisis, a suite of regional and taxonomic actions identified (2013); • The over-arching global threats to terrestrial and freshwater invertebrates assessed (2016); • A priority marine initiative implemented to assess the impacts of commercial fisheries on non-target species and habitats, and, where relevant, on local coastal fisheries and livelihoods, in recognition of the continued decline in fishery landings (target and non-target) and ecosystem resilience (2015);

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	26. Analyses and investigations into pressing conservation issues High profile scientific analyses and investigations completed and published	A number of important conservation issues are still not fully understood, and require in-depth investigation and analysis in order to guide future conservation options	• A new gap analysis completed to assess adequacy of protected areas in encompassing phyletic representation and species distributions, and ensuring adequate representation of freshwater, marine, and terrestrial habitats (2014); • Systemic pesticides: a scientific understanding of the impacts of systemic pesticides on non-target species in place by 2013, with any needed policy interventions being taken thereafter; • New analyses completed to examine important, emerging issues (potentially including acidification, emerging infectious diseases, nitrification, etc) (ongoing); • Luxury seafood initiative implemented (2013); • Medicinal marine species initiative implemented (2014); • Particular RFMO regions of importance (based on assessments of threatened fish species) mapped and identified (2013).
	27. World Species Congress World Species Congress held in 2015 to draw together the species conservation community and to chart progress in the achievement of the Aichi Biodiversity Targets	There is an urgent need to take a high-level species view to global biodiversity conservation challenges, issues, and priorities Species are the building blocks of ecosystems playing subtle and often unknown roles in ecosystem function and the bearers of genetic diversity, and so are the most integrative element of biodiversity This high-level species view is best achieved by assembling the	• A country identified to host and help support the World Species Congress (WSC) (2013); • Funding in place for the WSC, including to ensure worldwide participation (2014); • The detailed purpose and objectives of the WSC agreed, and responsibilities allocated (2014); • Design the detailed agenda of the WSC (2014); • Organize symposia to involve SSC and IUCN Members, academia, research institutes, private sector participation (2014); • The WSC held and a widely-supported and visionary declaration agreed (2015); • A follow-up process to the WSC in place to build on the political will generated, and to promote a new agenda for species (2016).

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		global community, and seizing the opportunity to increase the global political will for conservation (especially given the fact that species are the most appealing component of biodiversity to the general public)	
Governing nature's use and sharing its benefits equitably **Effective, just and equitable conservation yields tangible livelihoods benefits**			
	28. Understanding and communicating sustainable use Greater common understanding achieved of the theory and practice of sustainable use of biodiversity, and key linkages to human livelihoods The importance of species to supporting livelihoods, particularly of the poor, is	Over exploitation continues to threaten species and the people that rely on them Common understanding and application of tools and guidance for achieving sustainable use of resources is still lacking Knowledge (scientific and local/traditional) needs to better inform use of wild resources Development strategies	• Economic analysis completed of marine fisheries and their value to human communities, with a focus on reflecting the overall value of healthy fisheries to communities (2016); • Marine species information on selected threatened commercial marine fish or shellfish species is incorporated into relevant RFMOs (minimum of 2 RFMOs by 2014); • The conservation status of species that contribute to livelihoods is assessed in order to support the development of biodiversity and development strategies: o Refined IUCN classification schemes for trade, use and livelihood data (2013), o Inclusion of trade, use and ecosystem services information in species assessments for selected groups and/or regions (2016); • The provision of livelihoods and services from freshwater fisheries and associated ecosystems analysed (2016); • Trade and use data for mammals, amphibians, fishes, invertebrates and other selected taxa analysed (2016);

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	demonstrated Innovative, experience-based and adaptive approaches to sustainable use are explored	need to include biodiversity considerations and need to emphasise livelihood links	• The contribution of use of wild plants/animals/fungi to food security and providing other community benefits is analysed and communicated (2014); • Factors affecting sustainability of artisanal, coastal fisheries, and the livelihoods that depend on them, assessed and analysed (2015); • Patterns and drivers of wild meat exploitation better understood, and understanding improved on wildlife governance/management approaches that promote sustainable use of hunted species and address food security and livelihood concerns (2016); • Topics and themes for examination of best practice case studies of sustainable use are selected (e.g. hunting, incorporation of indigenous knowledge, medicinal/aromatic plants), and case studies developed and disseminated (2014); • Sustainability modelling working group active and providing insights and tools for understanding and modelling linked social, ecological and economic aspects of human-nature interactions (2014); • The relevance and importance of CBNRM as a strategy for meeting community development/empowerment and conservation priorities, including in the face of global challenges including food security and climate change adaptation, supported and communicated to key audiences (ongoing); • Understanding of the dynamics of international trade in key species (e.g. rhino, elephant), and the relationship between legal and illegal trade enhanced (2013).
	29. Enabling and implementing strategies for sustainable use The use of living natural resources is sustainable and recognized as a positive tool for achieving long-term conservation The importance of	Over exploitation continues to threaten species and the people that rely on them Common understanding and application of tools and guidance for achieving sustainable use of resources is still lacking Knowledge (scientific	• Specific guidance is given to IUCN Members and Commission Members, and external partners, on the implementation of sustainable use in specific contexts, including on use as a conservation tool, and levels of use that are likely to be sustainable (ongoing); • Knowledge tools for enabling local level sustainable use strategies developed and implemented (2016); • Toolkit implemented for integrated biodiversity, economic and livelihoods assessment of wetland values through the HighARCS project (2014) and the tool refined and developed on the basis of this learning (2015), ready for wider use inside and beyond IUCN (ongoing); • The applicability of the toolkit to marine and terrestrial; ecosystems is investigated (2014);

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	species to supporting the livelihoods of the poor is recognized by key stakeholders, leading to improved governance for people and nature	and local/traditional) needs to better inform use of wild resources Development strategies need to include biodiversity considerations and need to emphasise livelihood links	• Natural Resource Governance Framework knowledge product developed and supported (working with CEESP and key elements of the IUCN Secretariat) (2016); • Development of Human Dependency on Nature knowledge product (working with CEESP and elements of the IUCN Secretariat) supported (ongoing until 2016); • GreenFish and aquarium plant sustainability projects; develop a set of guidelines for sustainable freshwater aquarist trading (ongoing, 2016 completion); • Liaison provided with, and contribution made to, the development of the proposed Collaborative Partnership on Wildlife Management (ongoing).
	30. Human wildlife interaction (including marine) Livelihoods of people and species conservation enhanced through improved human-wildlife interactions	Growing human populations and expanding human activities inevitably bring humans into increased contact with wildlife; guidance is needed to minimise conflicts and to enhance positive interactions	• An SSC definition of human-wildlife conflict completed (2013); • An SSC database on human-wildlife conflicts, geared towards practitioners, developed and implemented (2013 onwards); • Guidance on mitigation of human-wildlife conflict for prioritised species and sites (2015); • Positive economic benefits (e.g. from tourism) from human interactions with fishes and marine mammals is quantified (2016).
Deploying nature-based solutions to global challenges: climate, food, economy **Global development challenges (climate, food, economy) are addressed through the use of nature based solutions**			

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	31. Biodiversity and climate change understanding Impacts of climate change on species and the response of species to climate change documented, analysed and better understood	The understanding of the impact of climate change on species, sustainable use of species, and the livelihoods that depend on them, is still poorly understood There is a need to improve this understanding in order to pre-empt the negative impacts of climate change on species	• The relevant trait-based data are collected to allow climate change impacts to be incorporated into Red List assessments for marine pelagic-spawning fishes, amphibians, mammals, birds, corals, mangroves, seagrasses, fishes, dragonflies, molluscs and other sample groups and geographic regions (by 2016); • The development of the current trait-based assessment framework is continued to ensure improved taxonomic applicability, and greater reliability of results (ongoing); • How climate change affects sustainability of use (particularly the relationship between ecological and social impacts) will be examined and implications for adaptation strategies developed and communicated (2016); • Through concurrent application of the assessment framework described above, the knowledge of taxa and/or geographic regions that are highly susceptible to climate change is increased, including on the specific, anticipated mechanisms resulting in high susceptibility (ongoing); • By 2016, the impacts of climate change are incorporated into Red List assessment methodology and practise through the completion of the Red List Climate Change Guidelines, in part focusing on how climate change impacts interact with existing threats to influence a species' overall threat status (2016); • Best practice guidelines for assessing species susceptibility and adaptation to climate change (both as a direct and indirect threat) are produced and disseminated (2016).
	32. Biodiversity and climate change policy Biodiversity considerations taken into account in public and private sector adaptation and mitigation policies and practices at global and regional levels	There is an urgent need for climate change negotiations to take biodiversity fully into account, in particular to ensure that the Aichi Biodiversity Targets are met Information is needed on the role species assemblages (habitats	• Information highlighting susceptible taxa and/or geographic areas (including specific mechanism(s) of impact) used to inform and develop appropriate conservation responses (ongoing); • Conservation recommendations made following designation of Red List threat status to include consideration of future climate scenarios and associated impacts and changes (2016); • An observable uptake of, and adherence to, best practice guidelines for assessing species vulnerability and adaptation to climate change by all relevant stakeholders (2016); • Climate change-related impacts to biodiversity are demonstrably taken into account in public and private sector adaptation and mitigation policies and

IUCN GLOBAL RESULTS	KEY SPECIES RESULTS	RATIONALE FOR PRIORITIES	SSC / SP - Targets
		& ecosystems) can play in the policy and practice of climate change adaptation	practices at global and regional levels (2016).
	33. Biodiversity and food production Biodiversity considerations introduced into emerging policies in the food production sector (agriculture, fisheries, and aquaculture)	Policies to enhance food security are being developed without consideration to the importance of sustainability in the use of wild food sources, or the need to conserve natural habitats, or the importance of biodiversity in improving food security	• Assessment of risk of aquaculture and aquatic horticulture to biosecurity as a source of invasives, including pathogens and parasites, completed and communicated to the food production sector (2015); • Red List assessment of commercial fish and mollusc species completed and communicated to the food production sector (2016); • Information on the impacts of by-catch to fisheries industry completed and communicated to the food production sector (2016); • The development of food security policies of governments and international organisations influenced in a way that promotes sustainable use of natural resources and takes into account biodiversity considerations (i.e. making the best use of existing agricultural lands, avoiding the clearance of natural habitats for agriculture, and practicing sustainable intensification strategies that use integrated pest management (involving natural pests), the right amount of fertilizers, and the use of crop diversity) (ongoing); • The contribution of use of wild plants/animals/fungi to food security is analysed and communicated (2014). *Note overlap with valuing and conserving biodiversity section and with "Understanding Sustainable Use" section above.*
	34. Maintaining genetic diversity of wild relatives of crops and domesticated animals The long-term supply of food resources secured through the conservation of wild relatives of crops (CWR) and domesticated animals.	Insufficient attention has been paid to the conservation of wild relatives of domesticated plant and animal species, and this could have negative implications for conservation and for future food security	• Toolkit for Crop Wild Relative (CWR) conservation and use completed and disseminated (2013); • Global priority list of CWR species completed and disseminated (2013); • Priority CWR collected for *ex situ* conservation (gap filling) for economically important crops (annex 1 of the International Treaty on Plant Genetic Resources for Food and Agriculture) (2014); • Global network of CWR sites for *in situ* conservation identified (2016); • Global assessment of conservation status and extent of threat of 500 priority CWRs (2016).

IUCN GLOBAL RESULTS	KEY SPECIES RESULTS	RATIONALE FOR PRIORITIES	SSC / SP - Targets
	35. Species information for private sector Species information contributed to reduce the negative impacts and strengthen the benefits of corporate sector activities on biodiversity	There is a hugely increased demand from the private sector for information to minimise the impacts of businesses on biodiversity; the SSC is well placed both to provide such information, and to clarify and develop policy guidance on biodiversity offsets, and on concepts such as "Net Positive Impact" and "No Net Loss"	• Key biodiversity area, protected area, and species information contributed to reduce the negative impacts and strengthen the benefits of corporate sector activities on biodiversity, including through IBAT (ongoing); • A sustainable flow of resources from the private sector into maintaining and improving IUCN knowledge products, so that IUCN's information can better support the needs of the private sector (ongoing); • Commitments established by businesses to cause no increase in extinction risk at a minimum, and ideally net positive impact on biodiversity, from corporations with which IUCN and Red List partner organizations have existing relationships (ongoing); • Certification industries involved in sustainable use of species and their habitats (Forest Stewardship Council, Marine Stewardship Council, FairWild, etc.) engaged to incorporate no negative loss/net positive impact as requirements for certification (2016); • Environmental Impact Assessments (EIAs) and similar processes incorporate IUCN Red List data into planning on a routine basis (2016): o Processes for use of IUCN Red List data by private consulting companies working for corporations/governments to conduct environmental impact assessments and ensure adherence to safeguard policies are clarified (2013), o By 2016, and ongoing thereafter, businesses incentivized to seek economic advantage by reducing threats to species listed as threatened on the IUCN Red List; • Advice provided to corporate sector to help mitigate impacts on biodiversity: (e.g. chemical, extractive and construction industries) (ongoing); • Freshwater biodiversity assessment data into the WBCSD Global Water Tool, using basins (Africa (2013), South & South-east Asia (2014), all data integrated by 2016); • Expert SSC perspectives provided to assist the development of IUCN's offset policy (ongoing up to 2016).
	36. Biodiversity considerations informing the limits to growth	There is growing evidence that current macroeconomic policies are incompatible with	• SSC/Global Species Programme input provided to CEESP for their work on developing criteria for the green economy (2014).

IUCN GLOBAL RESULTS	KEY SPECIES RESULTS	RATIONALE FOR PRIORITIES	SSC / SP - Targets
	Biodiversity incorporated into nature-based solutions to macroeconomic thinking	the achievement of the Aichi Targets; biodiversity experts need to collaborate with economists to develop alternative approaches	