REVERSE THE RED CONSERVATION STATUS IMPROVEMENT

GUIDELINES FOR PRACTITIONERS

REVERSE THE RED

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Cover: Admirable-Redbelly-toad (*Melanophryniscus admirabilis*) Listed as Critically Endangered on the IUCN Red List
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Inner cover: Leatherback Turtle (*Dermochelys coriacea*) Listed as Vulnerable on the IUCN Red List
USFWS Photo

Back cover: Yellow-eared Parrot (*Ognorhynchus icterotis*) Listed as Vulnerable on the IUCN Red List
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Not all images and examples expressed in this document have gone through a change in conservation status due to the use of the specific approach described in these guidelines. When the featured species have moved from a higher category of threat to a lower one on the IUCN Red List, or equivalent national red list, this is specifically stated in the text or corresponding caption.

Reverse the Red is co-chaired by the International Union for the Conservation of Nature (IUCN) Species Survival Commission (SSC) and World Association of Zoos and Aquariums (WAZA) and is guided by a unique partnership of conservation organizations, storytellers, zoos, aquariums and botanic gardens. The movement ignites strategic cooperation and action to ensure the survival of species and ecosystems and reverse the trend of biodiversity loss using a data-driven and science-based approach to assess, plan, and act for species conservation. Reverse the Red provides and coordinates the tools and expertise to empower governments, partners, and local communities to set and reach biodiversity targets and celebrates and amplifies successful achievements in conservation.

- *Mobilizing National Networks:* Reverse the Red is building and strengthening national level networks who work collaboratively to accelerate conservation and coordinate to deliver on national biodiversity targets.

- *Measuring Impact:* Reverse the Red is emphasizing measurement tools that show the effectiveness of conservation action and assess progress towards species and biodiversity targets.

- *Empowering Communities:* Reverse the Red is growing online and in-person audiences to foster community, share information and best practices, convene events, build capacity, and galvanize action for conservation.

- *Amplifying Success:* Reverse the Red is dedicated to amplifying successful conservation efforts because the conservation movement is in need of optimism.

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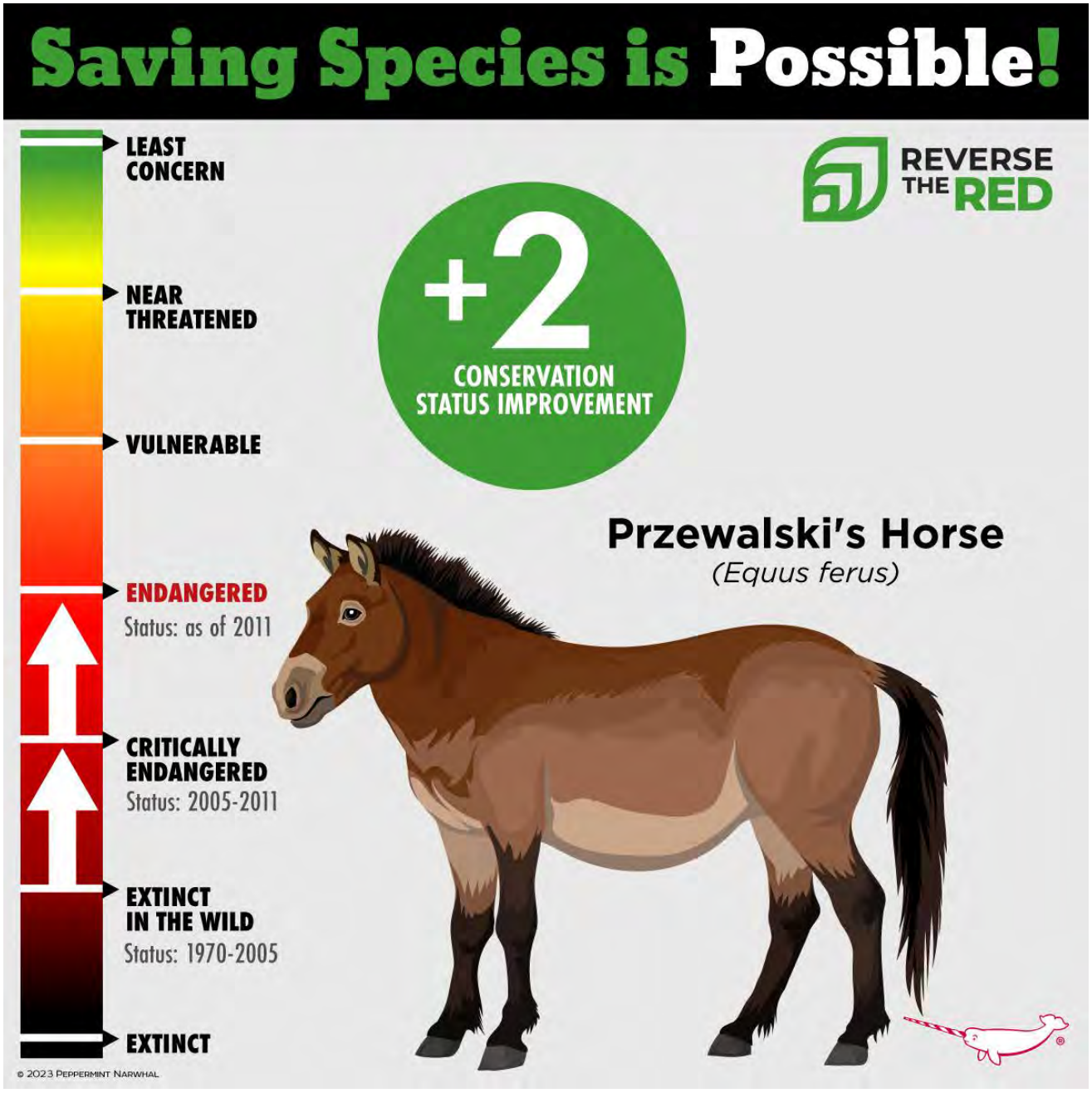


Thanks to conservation efforts, the conservation status of the Przewalski's Horse (*Eqqus ferus*) improved by two steps from Extinct in the Wild to Endangered on the IUCN Red List. © Peppermint Narwal

Foreword

We must make important decisions for nature conservation and take action to Reverse the Red, assuring that species and ecosystems thrive. Ambitious targets, as those set in the Kunming-Montreal Global Biodiversity Framework, are necessary to shock us into action. Reverse the Red taps into the need for strategic, coordinated action and connects stakeholders with expertise, networks, tools, and platforms to raise the profile of successful conservation efforts. By building on existing capacity, and expanding our ability to engage national hubs — the IUCN SSC Centers for Species Survival — Reverse the Red supports national strategies to meet global commitments to biodiversity conservation.

Considering the large-scale transformation of habitats and the imminent risks to species, urgent action is needed to move species away from extinction and towards recovery. Building on decades of knowledge and science, we can identify and implement actions to improve the conservation status of species and ecosystems.

Reverse the Red's approach to Conservation Status Improvement (CSI) enables conservation practitioners by building on the knowledge compiled in IUCN Red Lists to systematically select species, set targets, and act to move species from a higher category of threat to a lower one. Its ambition is to facilitate and accelerate the achievement of biodiversity conservation strategies by governments, and design action-based plans for candidate species.

Action is what will save biodiversity. Reverse the Red is shifting the balance – with this Conservation Status Improvement approach, we hope to transform passion for nature into action, and mobilize scientific capacity in a coordinated manner.

Prof. Jon Paul Rodríguez
Chair, IUCN Species Survival Commission and
co-chair of the Reverse the Red Executive Committee

Overview

- Reverse the Red wants to facilitate and accelerate species' Conservation Status Improvement by inviting committed practitioners to **select and target species** whose extinction risk and recovery will most likely be positively impacted by conservation action when the required resources are made available.

- Reverse the Red's Conservation Status Improvement Guidelines provide a blueprint for in-country conservation practitioners to **reduce species' risk of extinction** while contributing to achieve forward progress under the Kunming-Montreal Global Biodiversity Framework.

- With these guidelines, Reverse the Red does not intend to replace conservation action planning processes or propose new ways of measuring success, but **complement** existing approaches and assist conservation practitioners who may be interested in **aligning** their strategies with recognized high level indicators, and **amplify and multiply** their conservation success stories.

- Reverse the Red's science driven approach **builds momentum** on a positive cycle of conservation success driven by **national networks** of practitioners working towards halting extinction for the greatest number of species worldwide.

- Reverse the Red's **optimistic and evidence-based values** promote stories of success, inspire and empower everyone from communities to governments, ensure long-term commitments to action, and engage funders and other actors to collectively focus efforts towards achieving species protection and recovery.

- Reverse the Red's approach to **species Conservation Status Improvement** focuses on moving as many animals, plants and fungi away from extinction and on the road to recovery as possible by successfully implementing plans that allow them to be **downlisted at least one step** on the IUCN Red List of Threatened Species (Red List)[1], or equivalent country, state, or province red list.

Background

STORIES OF CONSERVATION STATUS IMPROVEMENT SUCCESS

Many conservation practitioners and governments have successfully achieved genuine species downlistings[1,2,3,4,5,6,7,8]. The status of more than 200 species has been improved on the IUCN Red List through 2022, including iconic species such as the Przewalski's Horse, Indian Rhinoceros, Giant Panda, Iberian Lynx, Golden Lion Tamarin, Black-faced Spoonbill, Banahao Forest Frog, and Yellow-Eared Parrot, as well as other taxa which generally receive less conservation attention or funding, such as freshwater species (e.g., the Victoria Stonebasher), invertebrates (e.g. the Frigate Island Giant Tenebrionid Beetle), and plants (e.g., the Port Orford Cedar).

Conservation status improvements have also been observed in National and Subnational Red Lists, with some examples being the Eastern Barred Bandicoot in mainland Australia[9] (downlisted, from Extinct in the Wild to Threatened), the Swift Fox in Canada[10] (downlisted, from Extirpated to Threatened) and the Campbell Island Teal and Campbell Island Snipe in New Zealand[11] (downlisted, from Nationally Critical to Nationally Vulnerable).

While improvements are celebrated, and prove that triggering change in the extinction risk category is achievable, Reverse the Red believes the number of success stories could be multiplied with the appropriate focus, communication and adequate resourcing.

The Eastern Barred Bandicoot (*Perameles gunnii*)'s conservation status improved from Extinct in the Wild to Endangered under mainland Australia's sub-national Threatened List thanks to coordinated efforts of an active Recovery Team including the establishment of four fenced reintroduction sites and thriving populations on three islands free of introduced predators facilitated by a large captive breeding and release program by Zoos Victoria.

THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK

In 2022, 196 nations came together to set 23 ambitious targets for conserving nature and reversing trends in biodiversity loss under the Kunming-Montreal Global Biodiversity Framework (GBF)[12] of the Convention on Biological Diversity (CBD). Of the 23 ratified targets, one specifically aims to move species away from extinction and towards recovery: **Target 4 under Goal A**.

Goal A of the GBF states: "Human induced extinction of known threatened species is halted, and, by 2050, extinction rate and risk of all species are reduced tenfold and the abundance of native wild species is increased to healthy and resilient levels".

Target 4 specifies a way to achieve Goal A: "Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence[13]."

The CBD recommends various groups of indicators for monitoring the implementation of the framework[14] and, in particular, using the **Red List Index (RLI)**[15,16] as headline indicator for planning and tracking countries' progress towards Target 4 of Goal A.

Developed by the IUCN as a biodiversity indicator to measure trends in the overall extinction risk — conservation status — of sets of species, the Red List Index shows trends in survival probability (the inverse of extinction risk) over time based on genuine changes in Red List category across multiple points in time, i.e., measured by **movement into a lower Red List category** as a result of either successful mitigation or halting of the main threats to a species, or the result of effective measures aimed at species recovery, or both, or **into a higher Red List Category** if the main threats have continued unabated, have increased, or new threats have developed causing the status of the species to deteriorate enough (Figure 1).

Since the first national RLIs (i.e. indices based on repeated assessments of extinction risk at the national scale) were published, this indicator has been increasingly used by governments to track institutional or national progress towards targets for reducing biodiversity loss in multiple policy agreements, including the GBF, the United Nations Sustainable Development Goals, the Convention the Convention on Migratory Species, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora.

The current *status quo* presents a need and opportunity to develop single and multi-species action plans incorporating goals that focus specifically on recovering species in a manner that can be reported through metrics relevant to the GBF, ultimately informing **National biodiversity strategies and action plans (NBSAPs)**, recognized as the main vehicle for implementation of the CBD's GBF at the national level[17].

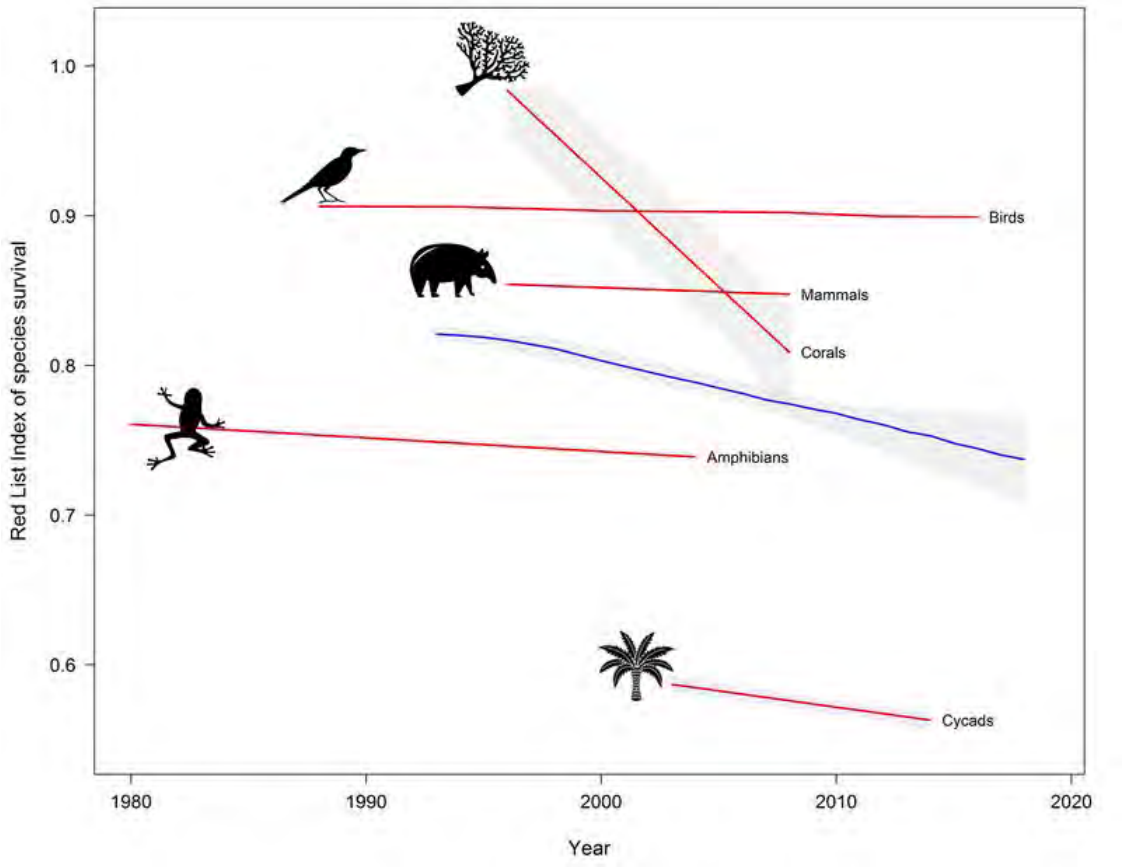


Figure 1. The Red List Index (RLI) of species survival for mammals, birds, amphibians, reef-forming corals and cycads. The blue line indicates the overall RLI for all the taxa combined. An RLI value of 1.0 equates to all species being categorized as Least Concern, and hence that none are expected to go extinct in the near future. An RLI value of zero indicates that all species have gone Extinct. If the rate of biodiversity loss were reducing, the RLI would show an upward trend. Confidence intervals (shown in grey) are calculated to take into account the number of Data Deficient species in each group and the uncertainty over exactly when changes in status occurred, given that assessments are repeated only at multi-year intervals, and therefore the precise value for any particular year is uncertain[15].

Black-faced spoonbill (*Platalea minor)*
Listed as Endangered on the IUCN Red List

THE IUCN RED LIST OF THREATENED SPECIES AND GREEN STATUS OF SPECIES

Two fundamental standards and tools for practitioners focusing on improving conservation status stand out due to their ability for capturing changes in a species condition on the basis of extinction risk or recovery: the Red List and its Green Status. Their standardized criteria, parameters, and quantitative thresholds provide a baseline to identify, rank and initiate actions to set targets to achieve recovery goals.

> *The IUCN Red List tells us where we ought to be concerned and where urgent needs are to do something to prevent the despoliation of this world. It is a great agenda for the work of conservationists.*
>
> — Sir David Attenborough

The **IUCN Red List of Threatened Species**[1] is widely recognized as the most comprehensive, scientifically based source of information on the global conservation status of species, and a critical indicator of the health of the world's biodiversity[18].

The relative extinction risk of plants, animals and fungi on a scale from Least Concern to Extinct is determined through the application of the **Categories and Criteria** using data on ecology and life history, distribution, habitat, threats, current population trends and conservation measures. Quantitative and qualitative criteria based on **common biological indicators of populations** that are threatened with extinction, such as rapid population decline or very small population size, must be used to justify more specifically the listing of a taxon under a particular Red List category[19,20,21] (Figure 2).

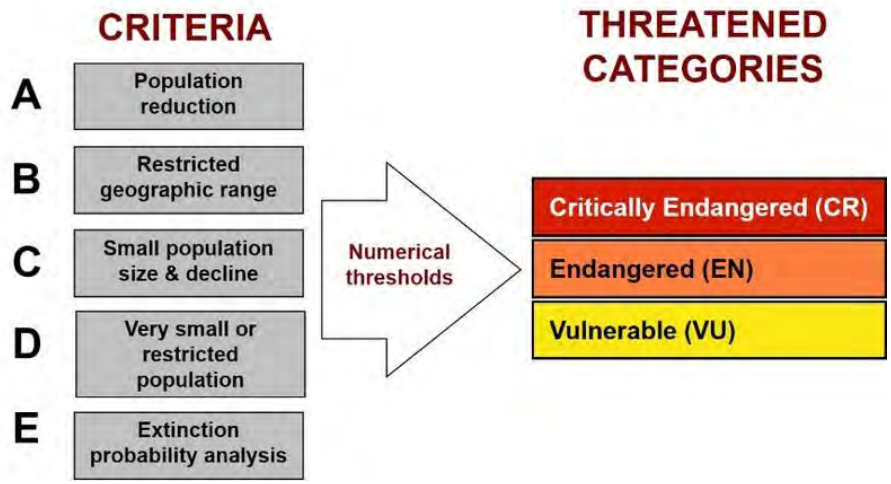


Figure 2. Summary of the IUCN Red List criteria (A-E) for the categories Critically Endangered (CR), Endangered (EN), and Vulnerable (VU) according to IUCN. At least one of these criteria should be met for a species to be assigned[22].

Successful mitigation or halting of the main threats to a species, the result of effective measures aimed at species recovery, or both, can result in the species qualifying to move to a lower extinction risk threat category (downlisting) in the Red List (Figure 3).

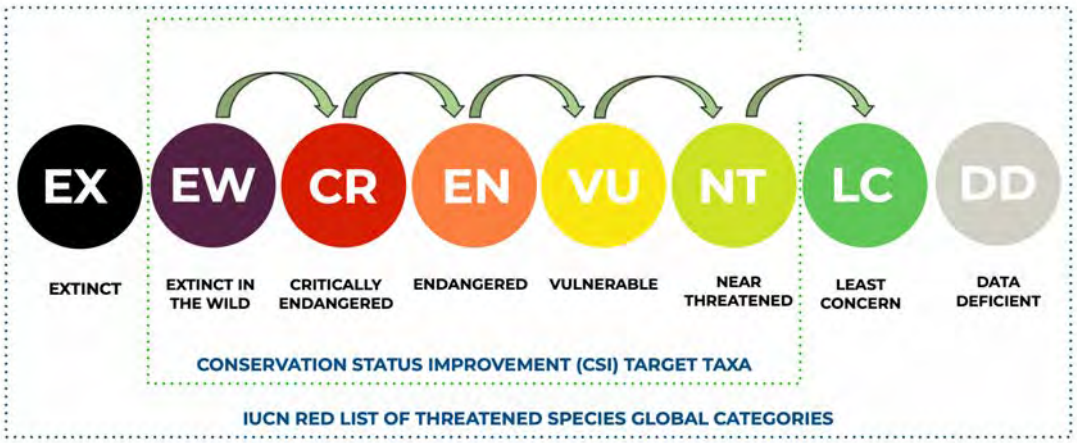


Figure 3. Progressive downlisting of Red List categories as proposed by Reverse the Red.

The **Green Status of Species**[23] was developed by IUCN to track the success of species recovery efforts through four complementary metrics under the Red List: Conservation Legacy (which shows how conservation actions have affected that current status), Conservation Dependence and Conservation Gain (what we might expect if conservation actions were halted), and Recovery Potential (how a species' status might be improved in the future with conservation action).

Green Recovery Scores (GRSs) can be calculated at different points in time (scenarios) to show the current status. They can be reported numerically and/or categorically, from 0% for Extinct to 100% for Fully Recovered, based on a series of the conditions that need to be met to qualify for each category[24] (Figure 4).

Assessing Green Status can provide valuable information on the status of populations and how planned actions may contribute to the species' recovery, helping to set feasible targets. As tracking a decrease in extinction risk over time requires reassessment which takes, on average, 10 years, Green Status metrics are essential to **track interim progress** towards recovery, and a cause for optimism to incentivize conservation interventions.

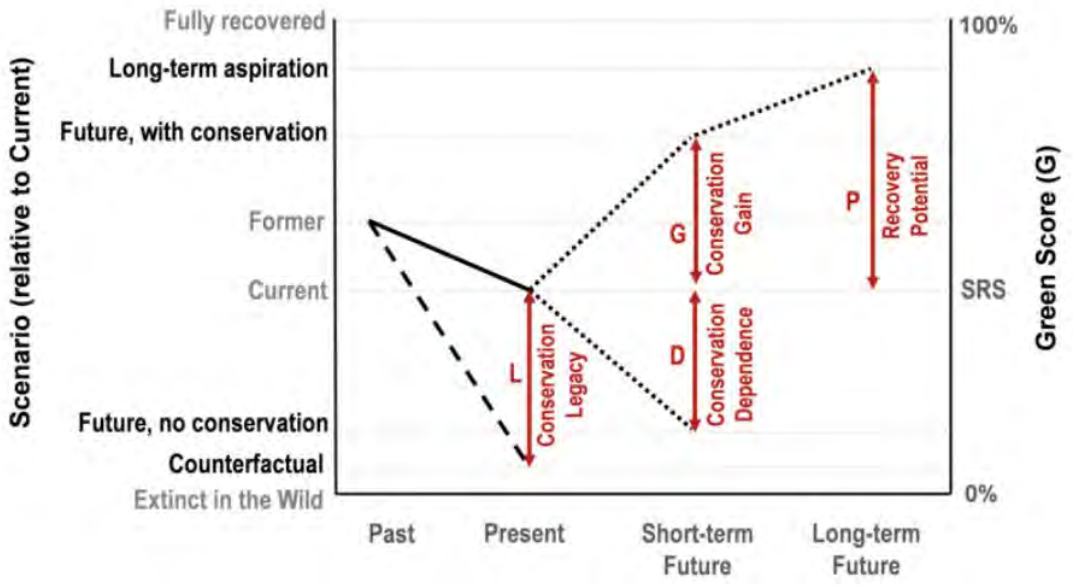


Figure 4. The four conservation metrics assessed for the Green Status of Species[21]. The Green Score (G) (right y-axis) is estimated at each of the bolded scenarios on the left y-axis. Contextual reference points are also provided on the left y-axis. The differences between the Green Score generated under a scenario and the current Green Score (i.e., the Species Recovery Score, labeled SRS) produce the four Conservation Metrics (red arrows and text)[24].

Iberian Lynx (*Lynx pardinus)*
Listed as Endangered on the IUCN Red List

Reverse the Red's Approach to Conservation Status Improvement

AIM

Moving as many species as possible away from extinction and on the road to recovery, by successfully implementing plans that allow them to be downlisted at least one step on the IUCN Red List of Threatened Species, or equivalent country, state, or province red list, with preference given to species that could show tangible progress towards downlisting in a short timeframe and whose conservation efforts would benefit others.

MAIN OBJECTIVES

- Halt human induced extinction of known threatened species, and move them towards recovery in line with GBF's target 4, Goal A.
- Find methods to identify suitable target species that could show tangible progress towards downlisting in a short timeframe (5 years).
- Promote focus on recovery, generating understanding of the resources required to deliver this change, and communicate successes along the way.
- Showcase and amplify stories of conservation success.
- Help increase the impact of investment by directing efforts towards species and actions identified by experts to be highly likely to be beneficial in reducing extinction risk.
- Generate momentum in political will and resource allocation.

REVERSE THE RED CONSERVATION STATUS IMPROVEMENT STEPS

- [ ] STEP 1: **Select a species or a group of species** in danger of extinction based on aforementioned criteria by examining the most up-to-date information available on their status.
- [ ] STEP 2: **Identify the Red List parameters and qualifiers** that, if improved, would help meet all criteria and sub-criteria thresholds for the immediately lower Red List category for the selected taxa and **set feasible targets** to achieve this improvement.
- [ ] STEP 3: **Create a detailed plan** that outlines the set of actions that, once implemented, would be expected to reduce extinction risk at least one step, from a higher to a lower level.
- [ ] STEP 4: **Secure resources** needed and **implement** this plan.
- [ ] TRANSVERSAL STEPS: **Build a network** of partners, **monitor progress** towards targets and goals, and **communicate** the conservation journey to a wide ranging audience for each step and individual task of this cyclical approach.

An ongoing breeding program and research by Australia's Melbourne Zoo in collaboration with San Diego Zoo Wildlife Alliance has substantially improved the long-term survival prospects of the Lord Howe Island Stick-insect (*Dryococelus australis).* Listed as Critically Endangered on the IUCN Red List

CSI INTEGRATION IN IUCN SPECIES CONSERVATION CYCLE

Reverse the Red aims to **bring the focus** of conservation practitioners to achieve the greatest conservation status improvements by **working collaboratively** using knowledge products[25] mobilized by IUCN and following the Species Conservation Cycle (SCC) developed by SSC [26] (Figure 5).

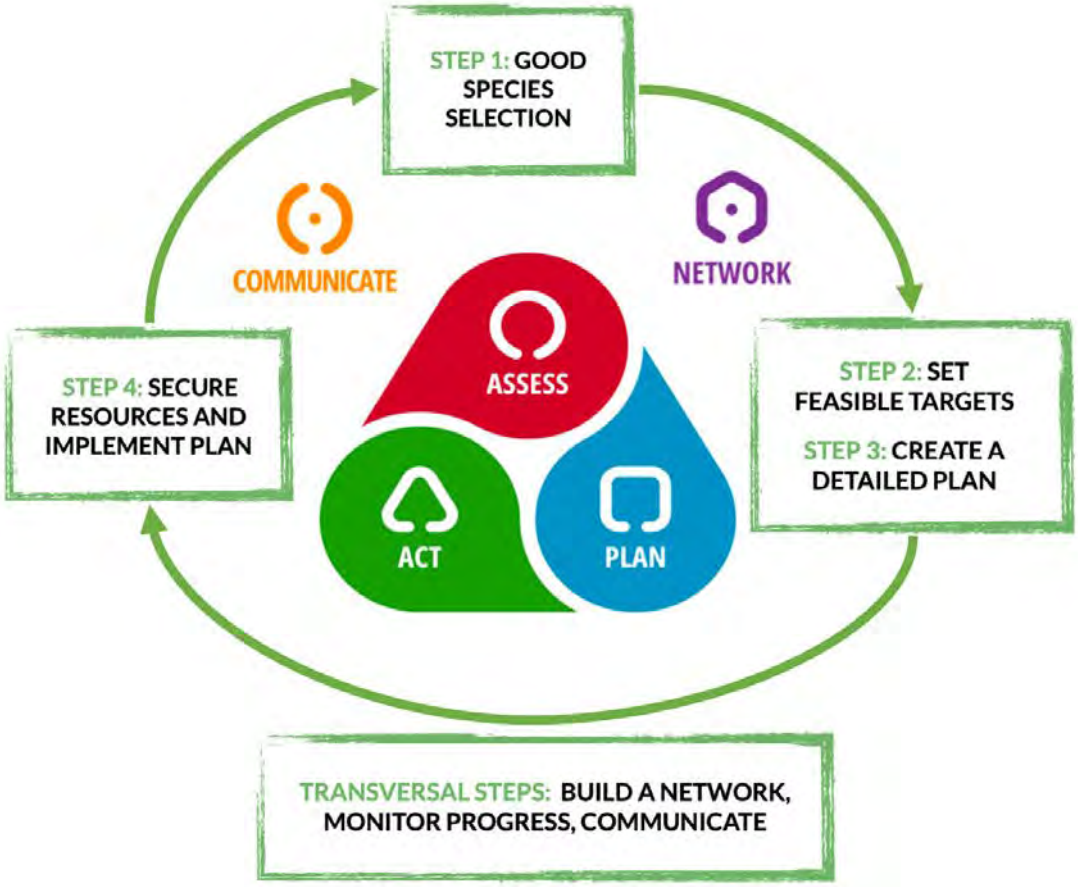


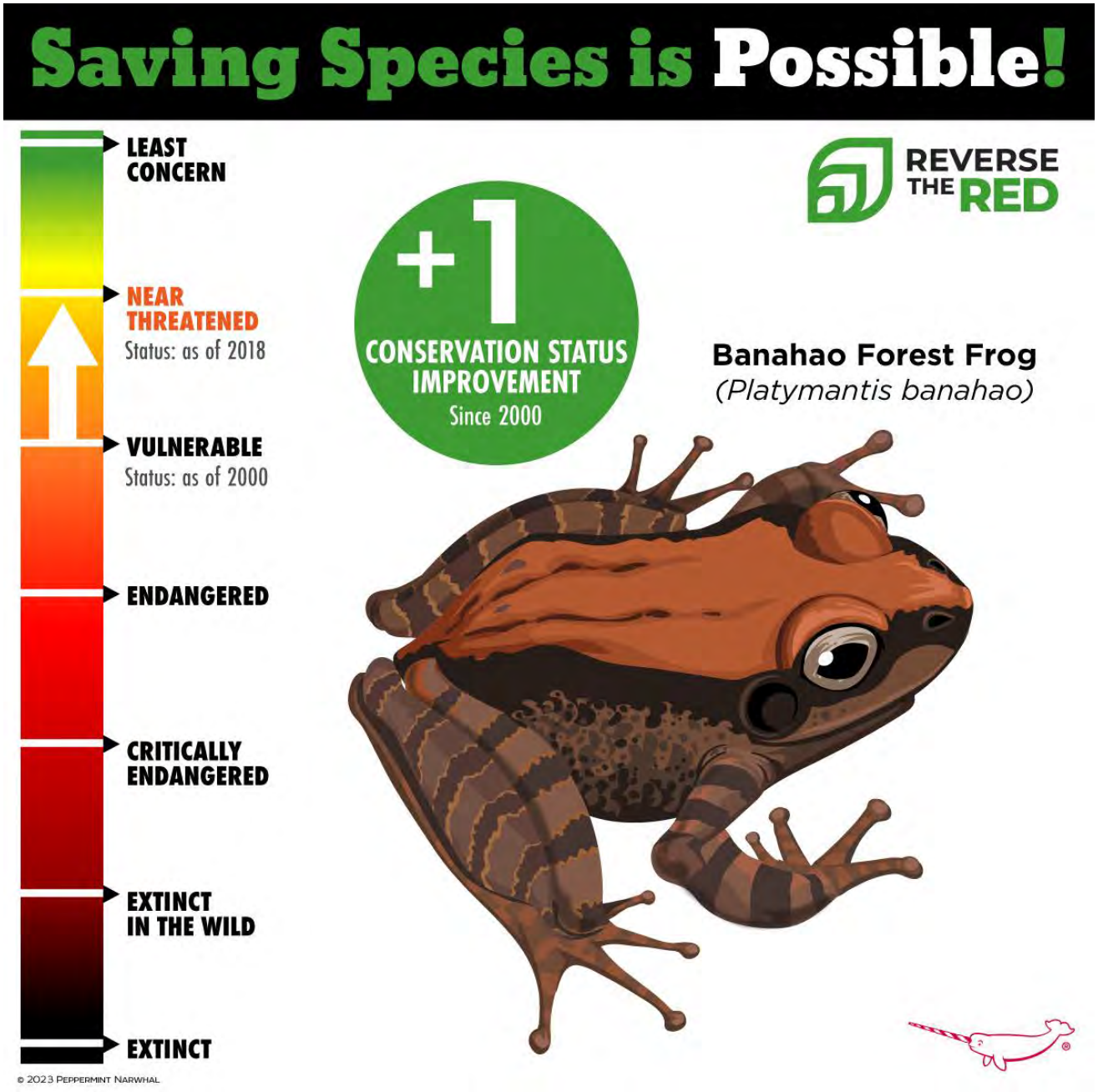
Figure 5. Reverse the Red's Conservation Status Improvement steps, linked to the Species Conservation Cycle. **Assess** focuses attention on understanding and informing the world about the status and trends of biodiversity. **Plan** speaks about collaborative, inclusive and science-based conservation strategies, plans and policies. **Act** centers on convening and mobilizing conservation actions. **Network** enhances and supports our immediate network and alliances to achieve our biodiversity targets, and **Communicate** drives strategic and targeted communications to enhance conservation impact.

STEP 1: GOOD SPECIES SELECTION

Start by identifying and selecting species where successful downlisting is achievable by, *first*, **compiling a long list** of candidate species and their most up-to date information, to *consequently* **narrowing the list**, and *finally* **selecting a species**, or a group of species, based on a series of factors (Table 1).

KEY FACTORS	KEY QUESTIONS	CONSIDERATIONS
DATA AVAILABILITY	Are there **good data available** to carry out the project?	Evidence-based, recent, data, will inform and underpin relevant recovery activities required to shift categories, including **publications, expert consultation, traditional and indigenous knowledge,** and lessons learned from historical and **current conservation successes and failures**.
RED LIST ASSESSMENT	Is the species categorized as **Extinct in the Wild, Critically Endangered, Endangered, Vulnerable or Near Threatened** in the Red List, or an equivalent country, state or province red list?	Endemic species not yet assessed **in the Red List** are important priorities for inclusion in the analysis.
PROJECT TIMEFRAME	Would it be feasible for your organization to **deliver measurable status improvement achievements over a short (e.g., 5 year) time frame** based on the species' biology?	The **minimum viable timeframe** will largely be influenced by species life histories, which should also be taken into consideration in prioritization.
GLOBAL RANGE	Does your organization have the ability to implement conservation actions across a **sufficient amount of the species' global range**?	It may be **all or a substantial amount** (at least >50%) of the species' range, enough to improve the conservation status of the species as listed in the global Red List, or a country, state, or province red list. Although the approach can be applied to any species, threatened species with **narrower ranges**, endemic to a country, state, or province, may be easier for your organization to impact if actions can be taken wholly within one jurisdiction.
AMPLIFIED IMPACT	Might the status of **other species** also improve?	Consider maximizing impact by potentially improving **multiple species'** status.
RISKS AND LIMITATIONS	Are the main threats to the species **manageable** in scope and level of impact, timeline, and in line with the size and leverage of the organization and its network partners? Are there major **risks and limitations** (political, technical, biological considerations, legislative, cultural) for the implementation?	Evaluate expected **challenges and resources** required to be overcome and make downlisting feasible. A useful tool could be a project feasibility graph measuring cost per unit effort of downlisting vs. cost per unit impact to the species and the public.
NATIONAL NETWORK	Is there ongoing collaboration with **other national efforts** working on the same species and/or ecosystem?	**Alignment with other stakeholders** to avoid duplication of work and/or competition for resources. Integration of the available species action plan builds on experience and provides insight into the strategies that may succeed.

Table 1. Key factors, questions and considerations for CSI good species selection.



Habitat protection led to improvement of the status of the Banahao Forest Frog (*Platymantis banahao*) from Vulnerable to Near Threatened on the IUCN Red List and the majority of the frog's population is currently stable. © Peppermint Narwal

STEP 2: SET FEASIBLE DOWNLISTING TARGETS BASED ON PROXIMITY TO RED LIST CRITERIA THRESHOLDS

To achieve a **genuine change** in extinction risk, a plan must focus on the actions that are highly likely to lead to status improvements for each of the species selected in Step 1, and have **evidence of sustained change** (Table 2).

ACTIONS	KEY POINTS
IDENTIFY the RED LIST PARAMETERS that can be targeted for a particular species (e.g., number of mature individuals, number of locations, population fragmentation)	Review current **Red List assessment** and, if available, Green Status assessment, as well as other IUCN knowledge products. Register **Red List category** as listed on the global, or equivalent country, state, or province red list. Identify the **Red List parameter values** — rate of reduction, extent of occurrence and/or area of occupancy, population size, continuing decline rate, extreme population fluctuation, size of the largest subpopulation, highly restricted range or small number of locations and plausible threat and/or population viability analysis — based on the biology of the species and data availability. If available, register also the current Green Status category and parameter values. Document **how many** different criteria **quantitative thresholds** are met for the **highest Red List/Green Status category** of extinction risk or recovery. Document **how close** are the identified parameters to the Red List/Green Status criteria **quantitative threshold**.
PROVIDE JUSTIFICATION on the EXTENT OF THE PARAMETER that is expected could be improved if resources are available	Document the **extent of the parameter** (e.g., increase the population in X mature individuals, reduce fragmentation, increase extent of occurrence or area of occupancy, increase the number of locations) that needs to be changed to qualify for a genuine category improvement. Justify the expected **feasibility** of this change.
SET A FEASIBLE GENERAL GOAL and timeline of INTERMEDIATE TARGETS that will be celebrated	Set a Reverse the Red Conservation Status Improvement goal and intermediate **targets** that align with the scope of the organization leading the development of the plan. Set an expected **deadline** for delivery of each target when progress will be celebrated.

Table 2. Actions and Key points for CSI feasible targets setting.

STEP 3: CREATE A DETAILED PLAN OF ACTIONS TO DELIVER THE DOWNLISTING OF YOUR SELECTED SPECIES

Develop, or identify in existing action plans, the necessary, sufficient and most important **conservation actions** that are highly likely to deliver a significant extinction risk reduction and progress towards recovery in the specified timeframe for the species selected in Step 1, and for whose targets were set in Step 2. Include detailed information on how you would implement **activities and deliverables** within a timeline, taking into consideration key target actions, as well as indirect actions that are required to mitigate threats and other associated factors.

Conservation planning strategies can vary in their level or exhaustiveness based on a wide range of factors, but should always include:

- The **Conservation Planning Specialist Group (CPSG)**[27] process for developing a conservation action plan, planning steps and principles with specific focus on the One Plan Approach[28].

- Targets and indicators which are Specific, Measurable, Achievable, Relevant and Time-bound (SMART)[27,29].

CPSG's integrative, multistakeholder, participatory approach to species planning is used by decision makers to determine whether and how to invest in planning the conservation of threatened taxa.

In this line, CPSG's leading collaborative approach to the development of species conservation plans designed the Assess to Plan (A2P)[30] process for threatened species to move multiple species[31] rapidly to effective action by identifying groups of species whose overlapping needs (e.g., they inhabit the same areas or share specific biological characteristics) can be planned for and acted on together.

For plants, **Botanical Gardens Conservation International (BGCI)**[32] **and International Association of Botanical Gardens' (IABG)**[33] Species Recovery Manual[34] and Species Recovery Briefs[35] are comprehensive resources for this taxonomic group aiming specifically to provide guidance for conservation practitioners.

STEP 4: SECURE RESOURCES AND IMPLEMENT THE DOWNLISTING PLAN

Act for selected species by **securing resources** needed for the implementation of the plan designed in Step 3, and **implement priority actions** resulting from the planning process.

A well-managed, coordinated and monitored investment is key to be able to successfully implement priority actions from planning.

The following components are crucial to ensure sufficient **resources** and **funding**:

- **Coordinate Partners and Resources:** changing the conservation status of a species will involve many partners implementing diverse and complementary actions. Partners from different institutions with past experience managing the target species or a similar one, species experts and where active, recovery teams, First Nations and Indigenous Peoples, zoos, aquariums and botanical gardens, governmental conservation bodies, academic institutions, universities, museums, community agencies, particularly youth and school based local community organizations, and the private sector.

- **Identify the Needed Funding:** each action's implementation, monitoring progress, and communicating results all require funding. Set a budget and draft proposals and grants. Identify funding agencies and partners. Approach governments, trust and foundations to support the work. Spread the risk by approaching multiple funding partners.

- **Draft a Prospectus:** a well budgeted plan for each of the selected species can be combined into a prospectus to attract funding or combined to create the basis for a biodiversity plan. The cost plan should include the actions to be undertaken by multiple agents and the contributions, both financial and partner resources.

Once resources are available, collaborative work between all relevant stakeholders is crucial for the successful implementation of the priority actions of the conservation plan. The next step would be prioritizing actions based on the severity of threats to species or ecosystems, available resources, and feasibility. The implementation team should identify and prioritize the most urgent actions that can be implemented within the available timeframe and budget. The team should monitor the effectiveness of these actions and adjust them as needed to achieve the desired outcomes. This prioritization should be regularly reviewed and updated as circumstances change.

Port Orford Cedar (*Chamaecyparis lawsoniana*)
Listed as Near Threatened on the IUCN Red List
USFS

TRANSVERSAL STEPS: BUILD YOUR NETWORK, MONITOR PROGRESS AND COMMUNICATE IMPACT.

Build a network of key partners with whom to develop strategic conservation action that creates capacity and promotes species recovery across local and national levels.

- Evaluate the expected **involvement** of each partner to leverage what they do best, establish governance and define roles and responsibilities.

- Consider **continually expanding your network** to include partners and colleagues with a variety of expertise, perspectives, and networks of their own. Diversity of thought and experience is vital to a well-rounded approach to successful conservation.

Monitoring helps practitioners to keep the public and investors well informed and engaged, generating excitement and optimism for conservation that works. It also enables governments and investors to promote the successful work they are investing in or prioritizing. Monitoring is complex, difficult and expensive, but is essential to track progress and provide **evidence of success and secure funding**. Implementing strong monitoring systems allow knowledge to be accumulated early and the program can be adjusted to achieve success.

Moving a species to a lower extinction risk category normally takes a long time and requires tracking progress through regular reassessments. To overcome this limitation, showing short term progress through the appropriate indicators is cause for optimism, and an added incentive to monitor and report along the way.

The **incremental approach** makes it possible for decision makers to take stock of current conservation priorities and reassess the value of actions going forward. Using a RLI and/or GSS metrics to track incremental progress towards species recovery allows practitioners to demonstrate the impact of conservation plans and the improvement of species' status. Some examples of Impact tracking indicators for measuring success may include:

- **Extinction Risk Indicators** to measure success towards meeting Red List category change objectives (e.g., the indicator % number of mature individuals in the wild have increased since the beginning of the plan implementation is linked to Red List Criterion D trigger point to downlist from a higher Red List category of threat to a lower one).

- **Recovery Indicators**, particularly the four Green Status conservation impact metrics, which track proportional progress towards full recovery: Conservation Legacy, Conservation Dependence , Conservation Gain and Recovery Potential.

- **Other Indicators** to assess success towards meeting the plan goals (e.g. number of targets met through implemented actions in relation to the number projected)

Involve and empower the community throughout the project from beginning to end. Community engagement includes diverse parties and perspectives and can invite co-design of collaborative solutions that address both conservation goals and human effects of the project. Historical and cultural significance, economic value, and other factors are important to take into account. Empowering communities to take ownership of the status of the species and health of the environment is essential to long-term success.

Communication enables participating parties to be recognized and acknowledged, fostering pride and ownership in the success. It can also mobilize more funding for downlisting more species. Create a communications plan for celebrating interim achievements as well as reaching larger milestones. This should include strategies for outreach to communities and clear communication around actions that will help achieve objectives for both the conservation plan and the communities.

Habitat restoration for Campbell's Alligator Lizard (*Abronia campbelli*)
Listed as Critically Endangered on the IUCN Red List
© Mónica Torres

Conclusion

Reverse the Red invites all conservation practitioners to join forces in making a difference for species, targeting conservation status improvement goals by focusing on species that could show tangible progress towards downlisting in a short timeframe based on the most up-to-date science, data, and resources available, committing to short and long term action, and celebrating large and small success along the way.

This positive-focused catalyzing approach using IUCN tools, to apply the Species Conservation Cycle conceptual framework — Assess, Plan, Act, Network and Communicate — brings together existing tools, products, methodologies, and ways of thinking towards our common goal of reducing extinction risk and recovering species. The fate of more than 42,100 threatened species relies on us, and Reverse the Red calls for increasing the reach, impact and funding of conservation action.

Arabian Oryx (*Oryx leucoryx*)
Listed as Vulnerable on the IUCN Red List
© Tamar Assaf

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A successful reintroduction program helped to improve the status of the Swift Fox (*Vulpes velox*) from Extirpated to Threatened on Canada's National Red List.
Craig Miller/BLM

Lear's Macaw (*Anodorhynchus leari*)
Listed as Endangered on the IUCN Red List

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Humpback Whale (*Megaptera novaeangliae)*
Listed as Least Concern on the IUCN Red List
Ed Lyman/NOAA

Supplementary Information

NATIONAL RED LIST DATABASE

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INFORMATION TECHNOLOGY RESOURCES

RAMAS Red List Pro for implementing IUCN Criteria.
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IUCN SSC SPECIALIST GROUPS

AMPHIBIANS: Amphibian

REPTILES: Chameleon, Crocodile, Iguana, Marine Turtle, Monitor Lizard, Sea Snake, Skink, Snake, Viper, Tortoise and Freshwater Turtle

BIRDS: Asian Songbird Trade, Bustard, Cormorant, Crane, Duck, Flamingo, Penguin, Pigeon and Dove, Stork, Ibis and Spoonbill, Swan, Threatened Waterfowl, Vulture, Galliformes, Goose, Heron, Hornbill, Loon, Pelican, Woodcock and Snipe

FISHES: Anguillid Eel, Freshwater Fish, Groupers and Wrasses, Salmonid, Seahorse, Pipefish and Seadragon, Shark, Snapper, Seabream and Grunt, Sturgeon, Tuna and Billfish

FUNGI: Brazil Fungal, Chytrid, Zygomycete, Downy Mildew and Myxomycete, Colombia Fungal, Cup-fungi, Truffles and Allies, Lichen, Mushroom, Bracket and Puffball, Rusts and Smuts

INVERTEBRATES: Ant, Butterfly and Moth, Cave Invertebrate, Coral, Dragonfly Dung, Beetle, Firefly, Freshwater Crustacean, Grasshopper, Horseshoe Crab, Hoverfly, Ladybird, Mayfly, Stonefly and Caddisfly, Mid Atlantic Island Invertebrate, Mite, Mollusc, Parasite, Sea Cucumber, South Asian Invertebrate, Spider and Scorpion, Wild Bee

MAMMALS: African Elephant, African Rhino, Afrotheria, Anteater, Sloth and Armadillo, Antelope, Asian Elephant, Asian Rhino, Asian Wild Cattle, Australasian, Marsupial and Monotreme, Bat, Bear, Bison, Canid, Caprinae, Cat, Cetacean, Deer, Equid, Giraffe and Okapi, Hippo, Hyaena, Lagomorph, Large Carnivore Initiative for Europe, New World Marsupial, Otter, Pangolin, Peccary, Pinniped, Polar Bear, Primate, Sirenia, Small Carnivore, Small Mammal, South American Camelid, Tapir, Wild Pig

PLANTS: Bryophyte, Cactus and Succulent Plant, Carnivorous Plant, China Plant, Colombian Plant, Conifer, Crop Wild Relative, Cuban Plant, Cycad, Freshwater Plant, Galapagos Plant, Global Tree, Hawaiian, Islands Plant, Indian Subcontinent Plant, Korean Plant, Macaronesian Islands Plant, Madagascar Plant, Mangrove, Mascarene Plant, Medicinal Plant, Mediterranean Plant, Orchid, Palm, Seagrass Species, Seed Conservation, Sonoran Desert Plant, Southern African Plant, Temperate South American Plants, West Asia Arabian Plant, Western Ghats Plant

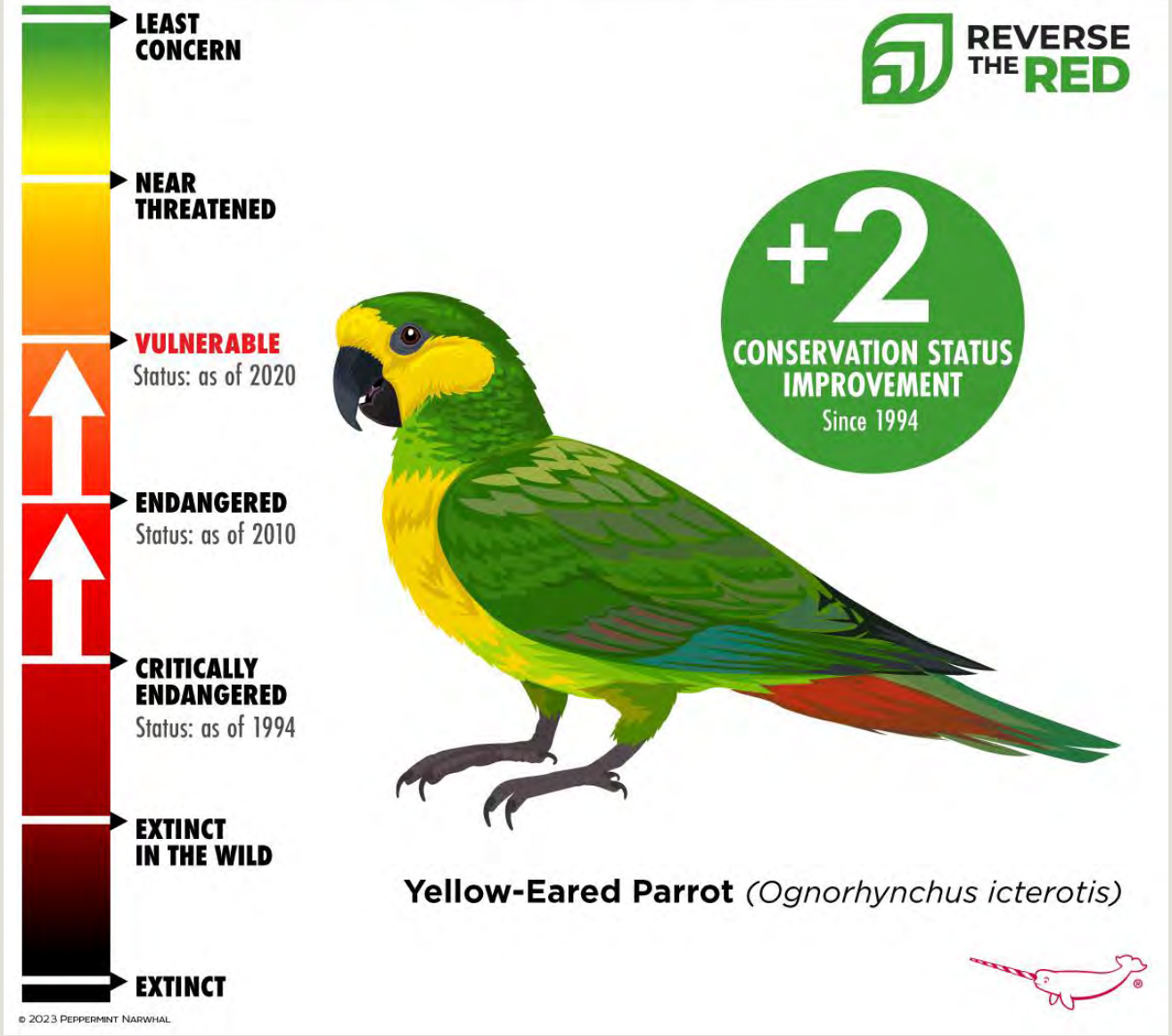
CROSS-CUTTING: Animal Biobanking for Conservation, Climate Change, Conservation Genetics, Conservation Planning, Conservation Translocation, Human-Wildlife Conflict and Coexistence, Invasive Species, Species Monitoring, Wildlife Health

NATIONAL: Colombia Species Specialist Group, China Species Specialist Group, Madagascar Species Specialist Group, Indonesia Species Specialist Group

Scharlachkäfer (*Cucujus cinnaberinus*)
Listed as Near Threatened on the IUCN Red List

Giant Panda (*Ailuropoda melanoleuca*)
Listed as Vulnerable on the IUCN Red List

Saving Species is Possible!



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