IUCN Datasets and Tools to Support Conservation Planning and Assessment
IUCN Overview

Founded in 1948.

World’s oldest and largest global environmental network.

Democratic membership union with more than 1,000 government or NGO member organizations in over 140 countries.

Almost 11,000 volunteer scientists in more than 160 countries.

IUCN’s work is supported by over 1,000 professional staff in 45 offices and hundreds of partners in public, NGO, and private sectors around the world.
IUCN Overview

Key role: setting consistent, practical & scientific standards for assessing conservation status of biodiversity values.

Standards established for species conservation status and protected area management categories

New standards underway for assessing important sites and ecosystems

Important reference point for many MFI safeguards; private sector guidance & commitments, and public policy (e.g. CBD targets)
Background details

IUCN Red List assessment: an estimate of extinction risk

What is the likelihood of a species becoming extinct in the near future, given current knowledge about population trends, range, and recent, current or projected threats?

*It is not a list of species that are priorities for conservation action*
IUCN Red List Categories and Criteria

- Extinct (EX)
- Extinct in the Wild (EW)
- Critically Endangered (CR)
- Endangered (EN)
- Vulnerable (VU)
- Near Threatened (NT)
- Least Concern (LC)
- Data Deficient (DD)
- Not Evaluated (NE)
Components of a Red List assessment

1. Red List category and criteria
   - Purple Skimmer *Libellula jesseana*
   - Vulnerable A2a;B2ab(iii)

2. Documentation supporting the category and criteria
   - Population size, trend and status; range; threats; conservation measures; etc.

3. Map of species’ distribution
Where do these data come from?

- Expert Workshops (local and international participants)
- IUCN/SSC Specialist Groups (7000+ members)
- Collaborations with other partner organizations and projects
Richness Maps

Coordinate System: GCS WGS 1984
Source: IUCN Arabian Peninsula Reptile Assessment
The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.
Key Biodiversity Areas (KBA’s)

- Biodiversity (and threats to biodiversity) is not distributed in a regular manner
- Critical to identify areas that contribute significantly to the global persistence of biodiversity
- How to characterize areas based on their biodiversity features, such as restricted or threatened species or ecosystems?
Numerous approaches

- Important Bird Areas
- Important Plant Areas
- Important Freshwater Areas
- Prime Butterflies Areas
- Alliance for Zero Extinction, etc.
Criteria mainly used

- Globally threatened species (Red List)
- Restricted-range species
- Globally significant congregations
- Globally significant source populations
- Bioregionally restricted assemblages
- Botanical richness
- Threatened habitats
- Inclusion in an International agreement (Bern Convention, etc.)
Harmonizing approaches

IUCN SSC / WCPA Joint Taskforce
Developing a global standard

The WCPA/SSC Joint Task Force is

- Leading a wide consultation process
- Building, and not subtracting, from existing approaches
- Consolidating scientific criteria and thresholds, applicable for all regions, biomes and species/ecosystems
- Developing an easy and effective methodology
Benefits of a Global Standard

• Ensure that areas contributing significantly to the global persistence of biodiversity are adequately identified

• Allow to compare results between regions, biomes and taxonomic groups (credibility and repeatability)

• Inform a wide range of end-users (for example to implement safeguards, guide conservation investments, or inform risk management and environmental impact assessment)

• Help countries to define their conservation priorities and to achieve their international commitment (Aichi Target 11 - Key sites for biodiversity protected)
World Database on Protected Areas

The WDPA is the most comprehensive global spatial dataset on marine and terrestrial protected areas available.

The WDPA is a joint project of UNEP and IUCN, produced by UNEP-WCMC and the IUCN World Commission on Protected Areas working with governments and collaborating NGO's.

There are ~160,000 sites available through the WDPA/Protected Planet.
Protected Planet

http://protectedplanet.net/
Background to the IUCN Red List of Ecosystems
Motivation for a “Red List” categories system for ecosystems

• Abundant experience with red list categories for species. Red list “explosion” world-wide (> 100 countries have applied them).

• National demand for ecosystem red lists

• Increased availability of remotely-sensed data, covering 20-40 years.
Why focus on ecosystem status?

Combined with species Red Lists, more powerful assessment of biodiversity status.

Ecosystem loss and degradation might precede species declines (e.g. extinction debt).

Ecosystem loss more apparent than species loss: clean water, food, fuel.

More time-efficient than species-by-species assessments (<3% species evaluated by IUCN).
Target

By 2025, aims to assess the conservation status of all of the world’s terrestrial, freshwater, marine and subterranean ecosystems.
IUCN Red List of Ecosystems
Major global consultation 2009-2012

- **18** workshops
- **17** conferences
- **20** countries
- **5** continents

Note: In cities where more than one workshop or conference took place, only one is shown (Beijing, Bogotá, Dakar, Santiago and Washington DC).
Past, present and future of the IUCN Red List of Ecosystems

2008: Process begins at Barcelona WCC.

2009: IUCN Red List Thematic Group established.

2010: Draft red list categories and criteria available.

2011: Global consultation and testing initiated.

2012: Synthesis and presentation at Jeju WCC.

2013: IUCN Ecosystem Red List Office and Task Force established.

2013: Proposal for formal adoption of categories and criteria by IUCN.


2015: Standardized protocols and online tools fully available.

2015-2020: Expansion to other biological realms and regions initiated.

2020: Report on progress towards achieving Aichi Biodiversity Target 5.

2025: First IUCN Red List of Ecosystems completed.
What is the Red List of Ecosystems?
The Ecosystem Red List compiles information on the state of the world’s ecosystems at different geographic scales. Its central objective is to evaluate the risk of ecosystem "collapse".

More »

Case Studies
Explore several case studies developed worldwide which have already applied the "Categories and Criteria for Red Lists of Ecosystems".

More »

• Documents, support, case studies, communications.
• English, Spanish and French.
MORE INFORMATION

Red List of Threatened Species - Neil Cox
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Thank You