Addressing the Barriers to National Red List Implementation

SSC Leaders’ meeting
Abu Dhabi, September 2015
Workshop structure

• Introduction to National Red Lists – 5 mins
• Lessons learned from developing country exchange – 10 mins
• Break out groups – 30 mins
• Reporting back from break out groups – 15 mins
Introduction National Red Lists

Katherine Secoy, ZSL
Chair, National Red List Working Group
Importance of National Red Lists

- Provide countries with key information about species status within their borders.
- Underpin national conservation and planning policies that support the effective protection of biodiversity.
- Identify trends in biodiversity, and extinction risk of species at a national level. More sensitive than the global Red List.
- Provide a key tool for assessing the impact of national-scale conservation interventions.
- Key tool to inform Environmental Impact Assessments
- Can assist nations and regions to measure progress towards the 2020 Aichi Targets, particularly Target 12 and the Sustainable Development Goals
- Provide a basis for tracking progress at a national level under various other agreements such as the Ramsar Convention, Convention on Migratory Species, EU Habitats and Species Directive and the EU Birds Directive, CITES.

**Target 12**

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
The Alliance is committed to supporting development and implementation of NRLs; identifying ways to improve linkages between national red listing efforts and the IUCN Red List, and developing tools to help national red listing efforts.

- Collating and uploading NRLs, species and ecosystem action plans, national level distribution maps and storing them in a central repository – www.nationalredlist.org
- Helping to build regional capacity by sharing experience, tools and providing advice on the development of national-level databases for storing and managing Red List data.

Coordinating Body members act as regional focal points.
Raising the profile of NRLs

- CBD Executive Secretary - **call to parties** for NRL data – May 2014

- **Sustainable Development Goals indicator consultation** – calling for publically available NRLs

- **World Bank Safeguards consultation** – call for NRLs to be funded under EIAs

- **ABCD Net regional meeting** – biodiversity databases network

- **CBD COP 12**- Republic of Korea – October 2014
  - Inf document: UNEP/CBD/COP/12/INF/43,
  - Side event
Recommendations to Parties

• Further enhance work on NRLs, or start them if they have not already done so.

• Move towards basing the Target 12-related components of their NBSAPs to their NRLs and to the global IUCN Red List

• Participate in the National Red List Alliance - identify national champions to help facilitate NRLs.

• Each support at least one government member and one supporting NGO member to be trained in NRL by CBD COP 13.

• Support NRL training courses, to help facilitate the achievement of Target 12.

• Allocate Global Environment Facility resources toward the development of NRLs

• Submit their National Red List data
IUCN STRATEGIC PLAN
National Red Listing expanded to cover 70% of countries by 2016 with 75% of countries using the IUCN Red List Categories and Criteria

- 498 NRLs recorded
- Spanning 108 countries (55.6% (277) since 2005 / up to date)
- 43 countries carried out repeat assessments
Co-ordination with National Red listing processes leads to the addition of at least 12,000 national endemics onto the global IUCN Red List, taking advantage of new initiatives from around the world (e.g. Brazil, China, India), focusing especially on plants (2016).

Website at present holds a total of 142,021 species assessments (representing 86,774 unique species and sub-species and Red Lists being conducted at regional, national, and sub-national levels).
Maps highlight areas where National Red Lists are up to date (dark red) and out-of-date (light red); grey denotes no National Red List exists which covers the taxon group in question.
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Lessons learned from a developing country exchange

Domitilla Raimondo, SANBI
Lessons exchange selected African and Latin American countries May 2015
Mexico, Colombia, Brazil, Madagascar, South Africa
Namibia, Lesotho, Swaziland, Botswana, Zimbabwe, Mozambique
Approach to assessments:

current assessment

recent assessments
Species status presented in National Biodiversity Assessment 2012
Assessment of species and ecosystems

→ Classification & mapping of ecosystem types

e.g. vegetation types

e.g. marine & coastal habitat types
Examples of work from megadiverse countries
Key challenges

• Funding!
• Institution capacity
• A central institution preferably in government that undertakes species and ecosystem assessments
• This ensure best take up of species and ecosystem assessment into land use decision making.
Key challenges for species conservation

• Where to find occurrence data (specimens and observation records)
• How to manage data (data base to work into, keeping data taxonomically updated)
• How to mobilize data
• How to conduct assessments
• How to use assess in conservation planning
What are the key things that are needed to mobilise species data?

- **Central database**: herbaria and museums and distribution data from research projects all connected in a data sharing platform. Minimum requirements of database: locality information (spatial), what (the species ID), date of collection, information on habitat.
- **Update taxonomic data regularly**.
- **Data repatriation**: Identify where your data is being housed, mobilise your country’s species data that resides in these other repositories, data sharing agreements and platforms
- **Digitise records**: from herbaria within the country
- **Quality check**: make sure you quality check, refine curation of data by setting standards
CNCFlora Data Share

Integrated Publishing Toolkit (IPT)

GBIF

Darwin Core Archive

Web Services (JSON)

ckan

XLS, CSV, JSON, PDF, XML, etc.

Third-party Information Systems

General Users

Data Consumers

Darwin Core Archive
What are the key things that are needed to mobilise species data?

- **Survey gaps**: Prioritise data collection in under-represented species, taxonomy gaps – field or herbaria, data deficient species (e.g. invertebrates), invasive species surveys

- **Mobilising citizen scientists**: developing citizen scientist data collecting projects, mobilising the data from these projects (e.g. iSpot)
Citizen science programmes
Online options (ADU & iSpot)
### CREW - Custodians of Rare and Endangered Wildflowers

#### Data collection forms

**OBSERVER & LOCALITY**

<table>
<thead>
<tr>
<th>Date:</th>
<th>Collector:</th>
<th>Ismail Ibrahim</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GPS Co-ordinates - Dimensions of the Site:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corner 1</td>
<td>S 34 26 30.5</td>
<td>E 19 10 47.2</td>
</tr>
<tr>
<td>Corner 2</td>
<td>S 34 26 37.7</td>
<td>E 19 09 48.1</td>
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<tr>
<td>Corner 3</td>
<td>S 34 26 40.7</td>
<td>E 19 10 58.1</td>
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<td>Corner 4</td>
<td>S 34 26 40.4</td>
<td>E 19 10 50.4</td>
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<tr>
<td>Alt 206</td>
<td>Site no. 1</td>
<td>Est size of site 10 ha</td>
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</tbody>
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**Description of locality:**

Caledon Waterloof farm. On the 316 from Caledon to Breedevald 500m west of TBJ R5 on mid-slope of waterloofkop north of main farmhouse.

<table>
<thead>
<tr>
<th>Landform:</th>
<th>Slope:</th>
<th>Aspect:</th>
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</thead>
<tbody>
<tr>
<td>Hilltop</td>
<td>x</td>
<td>Gentle</td>
</tr>
<tr>
<td>Hill slope</td>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td>Ridge</td>
<td></td>
<td>Sleep</td>
</tr>
<tr>
<td>Cliff face</td>
<td></td>
<td>Variable</td>
</tr>
<tr>
<td>Knoll/Ravine</td>
<td></td>
<td>E</td>
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<tr>
<td>Floodplain</td>
<td></td>
<td>NE</td>
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<tr>
<td>Riverbank</td>
<td></td>
<td>SSW</td>
</tr>
<tr>
<td>Valley</td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geology:</th>
<th>Soil type:</th>
<th>Soil colour:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conglomerate</td>
<td>x Sand</td>
<td>Black</td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td>x Red</td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td>Silt</td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td>Brown</td>
</tr>
<tr>
<td>Granite</td>
<td></td>
<td>Clay</td>
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<tr>
<td>Quartzite</td>
<td></td>
<td>Grey</td>
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<tr>
<td>Silex</td>
<td></td>
<td>Lorn</td>
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<tr>
<td>Ferricrete</td>
<td></td>
<td>White</td>
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<tr>
<td>Ternary sands</td>
<td></td>
<td>Yellow</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>Orange</td>
</tr>
</tbody>
</table>

**Vegetation Description:**

Sandstone Fynbos. Vegetation dominated by Proteas and Restios.

**Landuse:**

<table>
<thead>
<tr>
<th>x Crops</th>
<th>Game</th>
<th>Mining</th>
<th>Black</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>Industry</td>
<td>Plantations</td>
<td>Conservation</td>
<td>Private</td>
</tr>
</tbody>
</table>

**Ownership:**

<table>
<thead>
<tr>
<th>x Private</th>
<th>Communal</th>
<th>State</th>
<th>Other</th>
</tr>
</thead>
</table>

**Population codes for special species:**

R: 1-9; F: 10-50; C: 50-100; A: 100-250; D: 250-500; S: 500-1000; P: >1000

**Special species @ locality:**

<table>
<thead>
<tr>
<th>Spe1</th>
<th>Sp2</th>
<th>Sp3</th>
<th>Sp4</th>
<th>Sp5</th>
<th>Sp6</th>
<th>Sp7</th>
<th>Sp8</th>
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</thead>
<tbody>
<tr>
<td>34 26 32.8 19 09 43.6</td>
<td>34 26 33.4 19 09 50.3</td>
<td>34 26 40.1 19 10 04.6</td>
<td>34 26 35.7 19 10 26.7</td>
<td></td>
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</tbody>
</table>

**Custodians of Rare & Endangered Wildflowers**

[Image of custodians]
What do you need to start species assessments (once you have the data)?

- **Primary institution**: one institution / project (preferably mandated and funded) to be responsible for the assessments
- **Dedicated team**: dedicated to undertake the assessments, skills should include GIS skills, Red List Criteria,
- **Funding to employ a team**
What do you need to start species assessments (once you have the data)?

• **Network of experts**: to validate information
• **Standardisation**: of both criteria and the categories (i.e. use IUCN)
• **Data needs**: identify the data needed to do the assessment, accessibility issues, and understand the threats (e.g. land cover data helps you to identify potential threats to species)
• **Legal support**: get endorsement of species assessments and involve the local authorities
What do you need to start species assessments (once you have the data)?

- **Capacity building** for the red listing process but also for managing input data and knowing how to conduct spatial analyses to support Red Listing.
South Africa: Detailed assessments for 6800 species over 7 years (ave. 980 per year).

Brazil: 4618 assessments in 3 years (ave. 1538 per year).

Exchange process with other countries.
Suggestions for Supporting National Red List work

• Work with CBD secretariat to continue to encourage parties to Red List (dedicate government staff time to Red Listing).

• IUCN SIS to be developed to support national Red Lists:
  – Ability to include spatial subpopulation level data for feeding into land use decision making.
  – Ability to download data to support policy work nationally.

• Explore options for further support for exchange between countries and capacity development (e.g. Colombia exchange.)
Break out sessions
Finding solutions to address the barriers

Synergising global and national Red Lists - Caroline
- What data do people need from the global red list and how should it be made available to provide a baseline for national processes?
- How can we ensure national datasets to feed into the global lists?

Data Management - Ackbar
- Recommendations for data management systems that would feed into SIS
- How can we use other existing datasets (other than the global list) to populate national Red Lists?
  What would these be – e.g. GBIF – point data?

Capacity building - Domitilla
Parties often don’t know where to start; the scale of which they need to do assessments or how to store data.
- Creation of a list of priority training needs (e.g. mapping / GIS / Data management)
- Outline potential solutions and gaps to address these training needs
- Review of the outline for the development of a toolkit to assist countries in NRL implementation

Policy - Jon Paul
- How can we use NRLs and ensure that they translate into policy?