CITES - IUCN Checklist example of a means to assist in making NDFs

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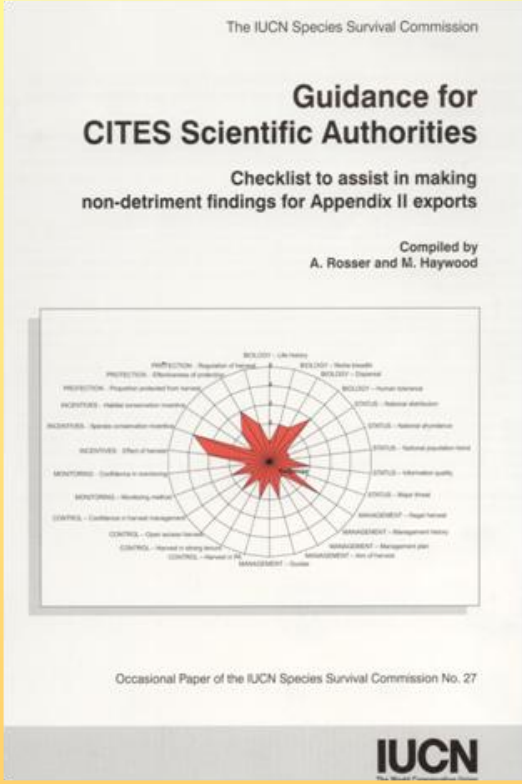
Terms of reference

- Background on the IUCN checklist
- General description
- Progress since publication
- How it has been used and problems
- Principles thought to be important



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Structure of talk

Why do we need guidance?

Principles on which checklist based

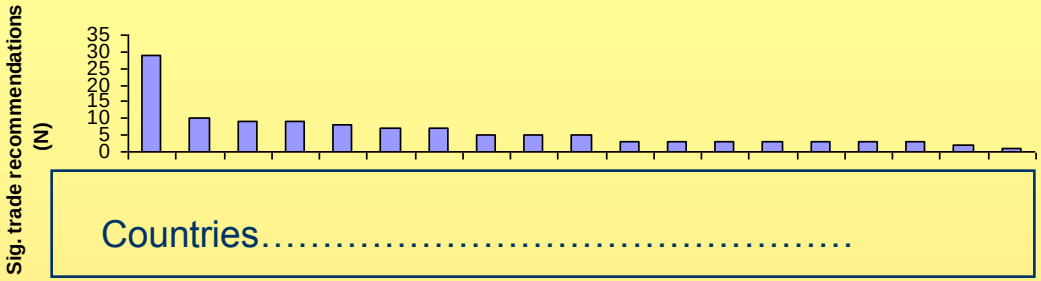
What did we develop & how to use it?

Levels of uptake

Conclusions & next steps

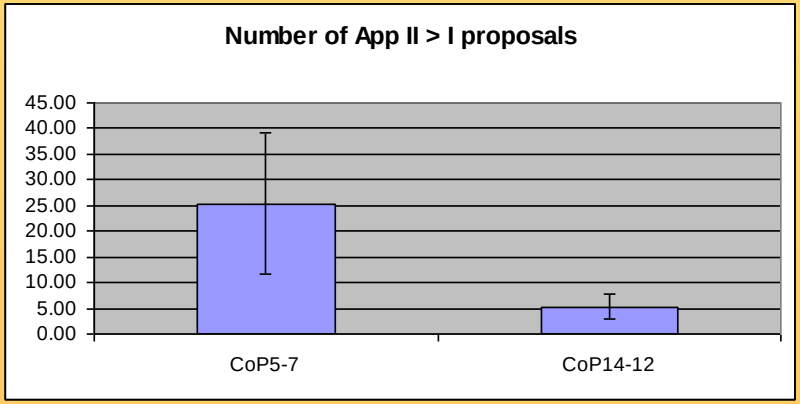
Why do we need guidance?

- Significant trade reviews Phase 1-3:



Recent Significant trade recommendations for taxa/country:
11 urgent concern and 42 possible concern
Also call for mgmt plans….. Doc. AC 22 summary record

- Uplisting proposals:



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What are the difficulties with making NDFs?

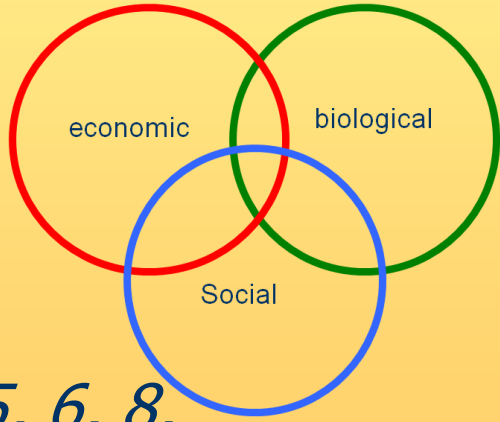
An issue of:

- Capacity?
  - Link with & educate universities & NGOs
- Resources?
  - Link with consumers - certification
  - Local communities, traders, NGOs and university students
  - Training funds
- Costs/ benefits?
  - Conservation cost/ benefits
  - livelihood cost/benefits
- Governance/Political will?

Principles of checklist development

- Focus on Appendix II species
- Aim to avoid:
  - Unplanned range reduction
  - Long-term population decline
  - Changes leading to inclusion in Appendix I

- Include:
- Socio-economic factors
  - Addis principles *1, 2, 4, 7, 9 and 12* covered
  - *"Principles may need further consideration 5, 6, 8, 11* "(ecosystem services, inter-disciplinary research, international co-operation, minimize waste & optimize benefit (Res conf. 13.2 rev CoP14)



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Checklist aims:

- not to replace any systems in place.
- to provide a general framework for parties without systematic tools in place for making NDFS.
- to be purely qualitative.
- to provide a range of points to be considered - only some relevant to any particular case/ region.
- to allow a visual representation and comparison of results.
- to allow a rapid assessment.
- to promote adaptive management by identifying areas where more management effort is needed.
- to provide a basis for communication between SA and MA Staff and exporter/importer countries
- to encourage consideration on NDF on basis of total national harvest.
- was an early stage in an evolving process

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Checklist components

Table 1 Summary of national harvest

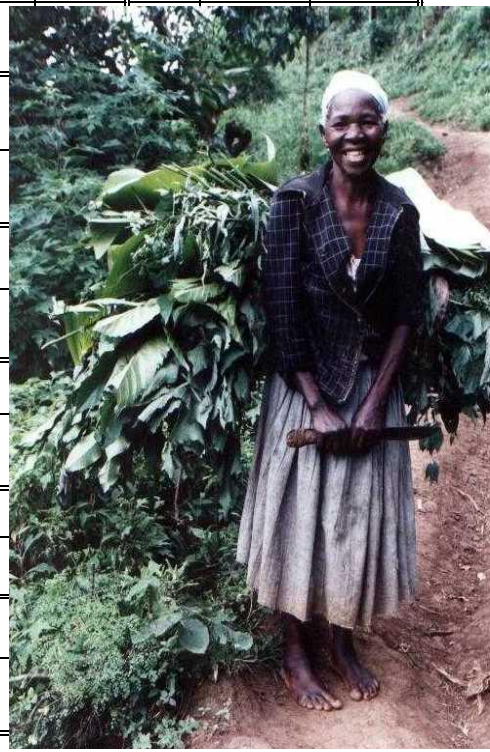
- Provides a summary of harvest quantities
- Examines regulated vs unregulated harvest
- Rows arranged according to increasing levels of impact of harvests eg collection of parts to eggs to adults
- Different tables for animals and plants
- Fish not well considered

Summary of National Harvest

Table 1 - Animals. Summary of Harvest Regime for Animal Species (or population of an animal species)

Species: **Country (if applicable State or Province):**
Date (of making Non-detriment Finding): **Period to be covered by finding:**
Name: **Position in Scientific Authority:**
Is the species endemic, found in a few countries only, or widespread?
Conservation status of the species (if known): IUCN Global status: **National status:** **Other:**

Type of harvest	Main product	Degree of control	Demographic segment removed from wild population					Relative level of off-take (include actual number or quantity if known)				Reason for off-take			Commercial destination(s) (numbers and percentages if known)		
			Eggs	Juvs.	Adult males	Adult females	Non-selective	Low	Medium	High	Un-known	Sub-sistence	Com-mercial	Others	Local	National	Inter-national
1.1. Captive breeding		a) Regulated															
		b) Illegal or unmanaged															
1.2. Non-lethal harvesting for parts/ products		a) Regulated															
		b) Illegal or unmanaged															
1.3. Removal for Ranching		a) Regulated															
		b) Illegal or unmanaged															
1.4. Pest or problem animal control		a) Regulated															
		b) Illegal or unmanaged															
1.5. Live capture		a) Regulated															
		b) Illegal or unmanaged															
1.6. Killing of individual		a) Regulated															
		b) Illegal or unmanaged															



Checklist components

Table 2 Factors affecting management of the harvesting regime

Designed on basis of 5 answers per question, each including "unknown" category

The answers run from those with least to most impact on the population (scores 1-5)

Also different table for plants and animals

FACTORS AFFECTING MANAGEMENT OF THE HARVESTING REGIME

Biological characteristics: Animals only

2.1. Life history: What is the species' life history?	High reproductive rate, long-lived High reproductive rate, short-lived Low reproductive rate, long-lived Low reproductive rate, short-lived Uncertain
2.2. Ecological adaptability: To what extent Is the species adaptable (habitat, diet, environmental tolerance etc)?	
2.3 Dispersal efficiency: How efficien is the species' dispersal mechanism a key life stages?	
2.4. Interaction with humans: Is the species tolerant to human activity other than harvest?	

BIOLOGY	Life history (r/K), Niche breadth, Dispersal, Human tolerance
STATUS	National distribution, National abundance, National population trend, Information quality, Major threat
MANAGEMENT	Illegal harvest, Management history, Management p Aim of harvest, Quotas
CONTROL	Harvest in PA, Harvest is strong tenure, Open access harvest, confidence in harvest management
MONITORING	Methods, confidence in monitoring
INCENTIVES	Effect of harvest, Species and Habitat conservation incentives
PROTECTION	%protected from harvest, effectiveness of protection, regulation of harvest

Table 2 Responses:

Question	score
1 BIOLOGY - Life history	1
2 BIOLOGY - Niche breadth	2
3 BIOLOGY - Dispersal	2
4 BIOLOGY - Human tolerance	2
5 STATUS - National distribution	2
6 STATUS - National abundance	2
7 STATUS - National population trend	2
8 STATUS - Information quality	2
9 STATUS - Major threat	1
10 MANAGEMENT - Illegal off-take	5
11 MANAGEMENT - Management history	2
12 MANAGEMENT - Management plan	4
13 MANAGEMENT - Aim of harvest	3

Microsoft Excel - NDF animalradars.xls

File Edit View Insert Format Tools Data Window Help

100%

Reply with Changes... End Review...

fx 2.4

	A	B	C
2	question		Cr
3	2.1	1 BIOLOGY - Life	1
4	2.2	2 BIOLOGY - Nich	1
5	2.3	3 BIOLOGY - Disp	2
6	2.4	4 BIOLOGY - Hun	2
7	2.5	5 STATUS - Natio	2
8	2.6	6 STATUS - Natio	2
9	2.7	7 STATUS - Natic	3
10	2.8	8 STATUS - Inforn	1
11	2.9	9 STATUS - Majc	3
12	2.1	10 MANAGEMEN	1
13	2.11	11 MANAGEMEN	2
14	2.12	12 MANAGEMEN	2
15	2.13	13 MANAGEMEN	3
16	2.14	14 MANAGEMEN	4
17	2.15	15 CONTROL - Ha	2
18	2.16	16 CONTROL - Ha	3
19	2.17	17 CONTROL – O	4
20	2.18	18 CONTROL - Cc	3
21	2.19	19 MONITORING	1
22	2.2	20 MONITORING	1
23	2.21	21 INCENTIVES -	2
24	2.22	22 INCENTIVES -	3
25	2.23	23 INCENTIVES -	3

Chart Wizard - Step 1 of 4 - Chart Type

Standard Types | Custom Types

Chart type:

- Column
- Bar
- Line
- Pie
- XY (Scatter)
- Area
- Doughnut
- Radar
- Surface
- Bubble

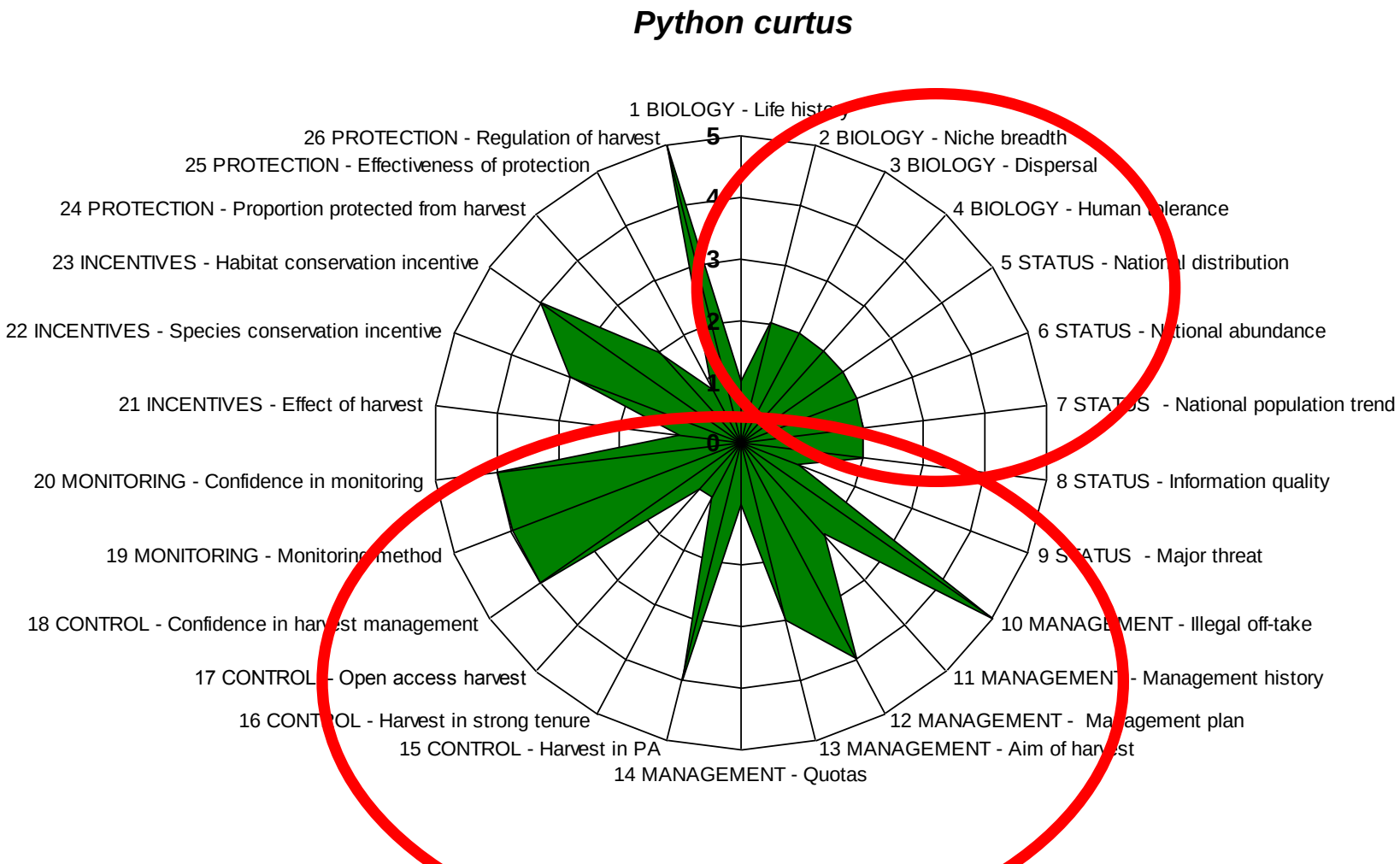
Chart sub-type:

Radar. Displays changes in values relative to a center point.

Press and Hold to View Sample

Cancel | < Back | Next > | Finish

Using the checklist to assess a harvest



Uptake……

- **5 responses & training to 100+ Parties**

	Challenges (Cons)	**In Favour (Pros)**
Too qualitative	Lack of quantitative descriptors	Can be applicable across taxa & stimulates discussion
Radar Plots	Radar plot not useful US	Can provide visual context
Training Tool		USA, UK; TRAFFIC SA
Checklist/ reference tool		CA, CU, CZ, US

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Table 3. A comparison of issues covered by the IUCN Checklist and EU SRG Guidance

IUCN NDF checklist	EU SRG Guidance http://ec.europa.eu/environment/cites/pdf/srg/guidelines.pdf
Table 1 Harvest characteristics	**Harvest characteristics**
Harvest type	Types
Demographic segment of	Volumes
Relative harvest volume	Segment of population
Regulated/ unregulated	Trends
	Data quality
Table 2	
Biological characteristics	**Species characteristics**
Life history/ Life form	Life history characteristics
Ecological adaptability or	Distribution
Dispersal efficiency	Habitat adaptability
Human tolerance/ Habitat	Migratory/shared
	Risk of mortality after capture and before export (for species where
National Status	**Biological status**
National distribution	Abundance
National abundance	Present distribution
National population trend	Trend
Information quality	Quality of data
Major threat	
Harvest Management	**Management Regime**
Illegal harvest or trade	Land types
Management history	Tenure
Management plan	Effectiveness
Aim of harvest	% harvested vs. effectively protected
Quotas & their basis	
Control of Harvest	

Factors common to different checklists:

EU Checklist

Addis Principles

Standards and criteria for certification of medicinal plants (ISSC MAP)

National vs local harvest

Harvest for trade should be considered in context of total national harvest:

NH = LH1 + LH2 +LH3 + Illegal harvest + mortality (capture+ transport)

Localised harvesting – provide site specific data

More general harvests – assess at national level

ADAPTIVE Management:

Precautionary harvest →

collect further data →

refine harvest levels

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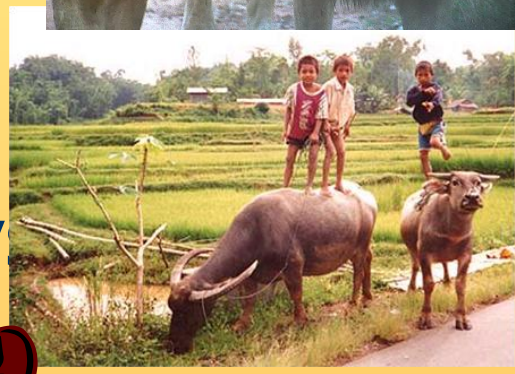
Collecting & analysing data:

- Comprehensive inventories & modelling
- Use of indices
- Rules of thumb
- Participatory experiments and monitoring
- Grounded questionnaire survey
- Modelling



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Conclusions

Sustainable harvest depends on:

- Biological or life-history characteristics
- Habitat characteristics
- Nature & selectivity of harvest
- Management regime including:
  - resource ownership
  - proportion of the species' range protected

- Confidence in implementation of various management measures (monitoring of population & harvesters; implementation of catch quotas & export quotas; protection; interdiction of illegal activity and……?)

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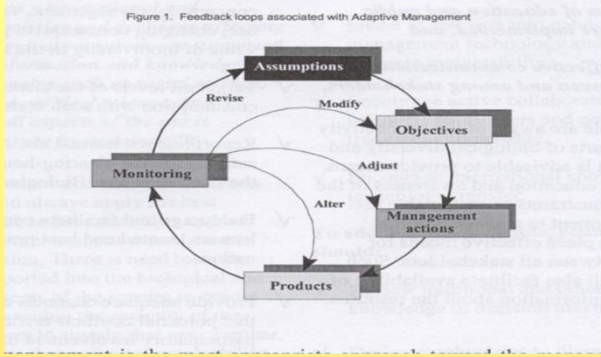
Future considerations

- Collection of harvest location data
- Role of the species in the ecosystem (Table 1)
- Genetic effects of harvests (male trophy hunts)
- Climate change effects
- Certification promoting role of NDFS

Next steps

- Guidance should:
- Be pragmatic
- Aim to encourage monitoring and adaptive management
- Establish initial precautionary harvest levels
- Acknowledge a variety of information sources whilst assessing data quality
- Recognise the role of sustainable trade in providing incentives for conservation
- Use indicators developed as part of strategic vision



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14 MANAGEMENT - Quotas	1
15 CONTROL - Harvest in PA	4
16 CONTROL - Harvest in strong tenure	1
17 CONTROL – Open access harvest	1
18 CONTROL - Confidence in harvest management	4
19 MONITORING - Monitoring method	4
20 MONITORING - Confidence in monitoring	4
21 INCENTIVES - Effect of harvest	1
22 INCENTIVES - Species conservation incentive	3
23 INCENTIVES - Habitat conservation incentive	4
24 PROTECTION - Proportion protected from harvest	2
25 PROTECTION - Effectiveness of protection	1
26 PROTECTION - Regulation of harvest	5