

CONSERVATION ASSESSMENT AND MANAGEMENT PLAN (CAMP) WORKSHOP PROCESS: A TOOL FOR RAPID SPECIES ASSESSMENT



Knowledge-based, catalytic facilitation
for conservation

BA Daniel
Zoo Outreach Organisation/CBSG South Asia
Coimbatore, South India

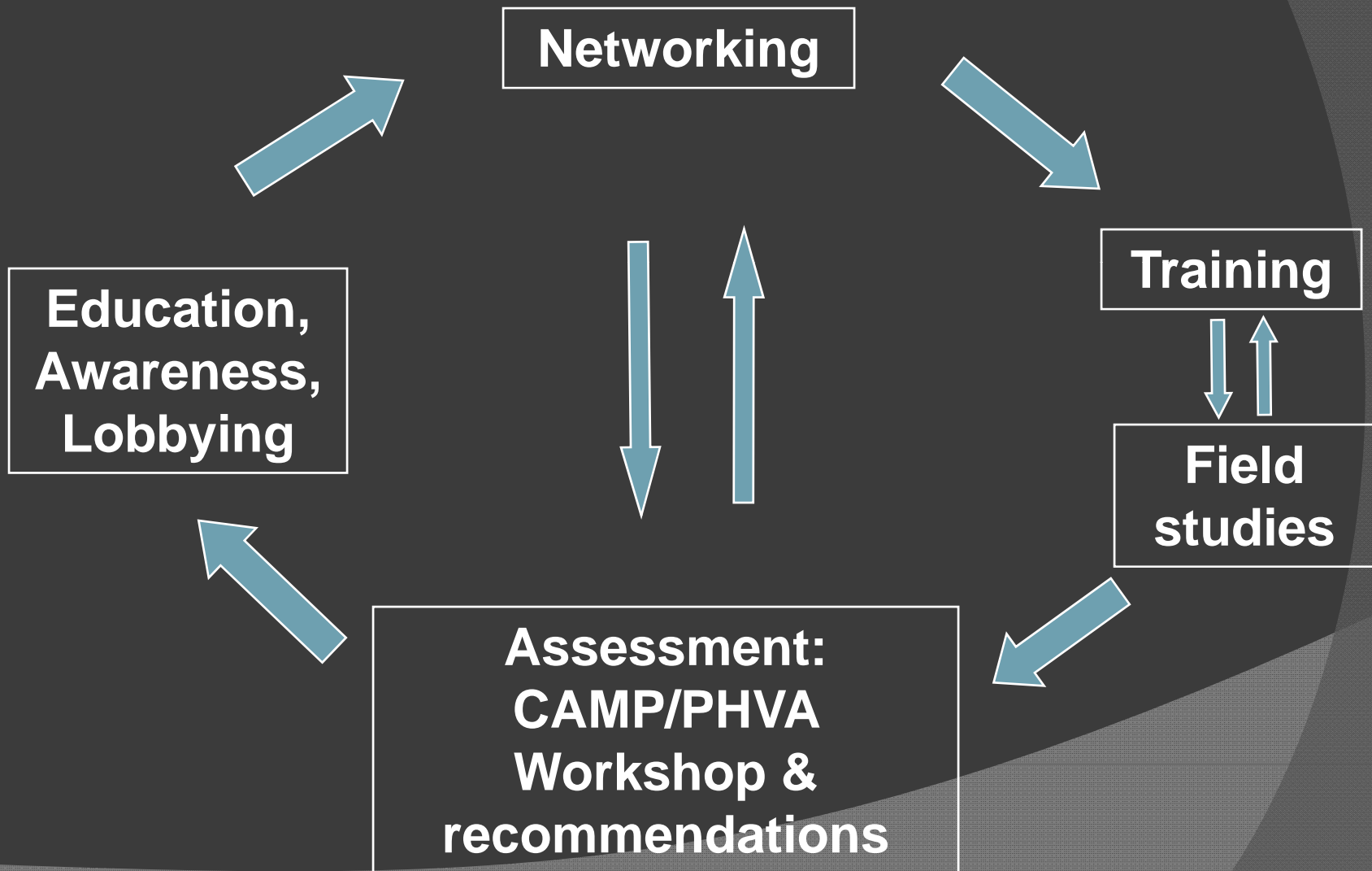


ZOO & its networks use a Conservation Action Formula

It has 5 steps

1. Networking - taxon specialist / species
2. Training - in Field techniques, taxonomy, captive management, education for each taxon group
3. Field surveys - follow training to precede as well as follow CAMP workshops & recommendations
4. Assessments - C.A.M.P. workshops for each taxon group & Report etc. and PHVA
5. Education / awareness / lobbying - follow up CAMP workshops -- three-tiered target groups

Conservation Action Model



STEP 4 of Conservation Action Model

Source for our education programmes and materials

Rapid species
assessment using
C.A.M.P. and PHVA
workshops developed
by CBSG



IUCN's Six Commissions

SPECIES SURVIVAL COMMISSION

6,800 volunteers in 179 countries provide technical and scientific advice for biodiversity conservation to governments, international conventions, and conservation organizations.

~105 Taxon-based Specialist Groups

Cat
Bear
Cetacean
Hornbill
Cracid
Seabird
Crocodile
Freshwater Fish
Lepidoptera
Cactus & Succulent
Carnivorous Plant
and 90 others

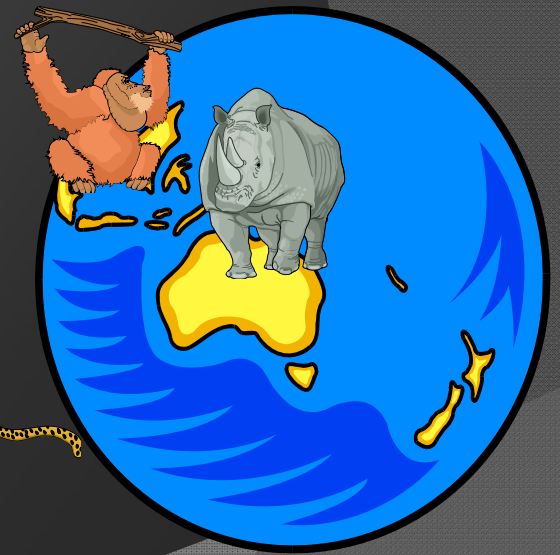
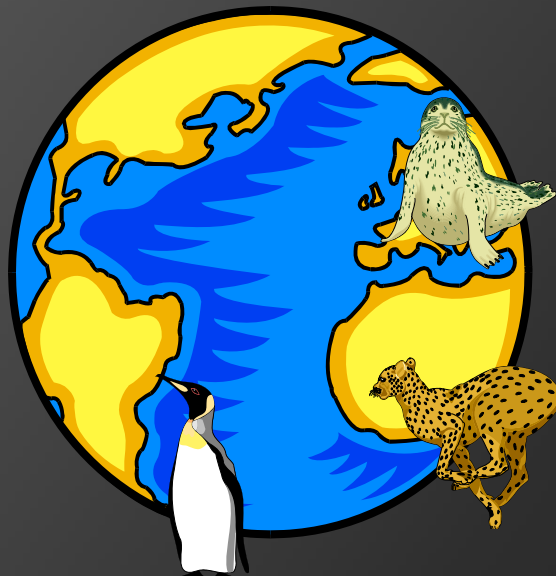
5 Disciplinary Specialist Groups

Conservation Breeding
Sustainable Use
Veterinary Medicine
Invasive Species
Reintroduction

2 Task Forces

Declining
Amphibian
Populations
Declining
Pollinators

CBSG is experienced
in dealing with difficult
management and conservation
issues



Working groups

CONSERVATION ASSESSMENT AND MANAGEMENT PLANS (CAMPS)



AND POPULATION AND HABITAT VIABILITY ASSESSMENTS (PHVAS)

CAMPS

Multiple taxa

Uses available data to assess threat

Prioritizes research and management action

PHVAS

Single taxon

Uses available data to assess risk of extinction/probability of persistence

Tests sensitivity to various factors using models

Develops integrated management strategy most likely to lead to population recovery

Identifies new research directions

CBSG WORKSHOP PROCESSES

- Stakeholder participation
- Common ground and agreements
- Common goal: preventing extinction/further biodiversity loss
- Knowledge in experts' heads
- Pooling of resources
- Outside expertise provides unbiased perspective
- Product owned by participants
- CBSG a knowledge-based facilitator

CAMP Workshop Goals

- **Review population and habitat status and trends and assign new IUCN Red List categories of threat**
- **Identify research and management recommendations**
- **Develop preliminary action plans**
- **Complete a draft Conservation Assessment and Management Plan document**

CAMP Process

- **Working groups (taxon based)**
- **Each group has reference set of draft taxon data sheets and a computer with the CAMP database program**
- **Identify a facilitator, recorder and presenter**
- **Initially complete one TDS including Red List assessment, then report back to plenary**
- **Continue in working groups - complete all assessments, including Red List assignments and distribution maps**
- **Form corridor-based groups for action planning**
- **Complete draft workshop report**

Primary Tool: The Taxon Data Sheet

- **Scientific designation**
- **Distribution**
- **Extent of occurrence and area of occupancy**
- **Habitat status and trends**
- **Threats**
- **Trade**
- **Population status and trends**
- **Field studies**
- **IUCN Red List category of threat**
- **Research and management recommendations**
- **Sources and collaborators**

IUCN Red List

- The IUCN Red List is a record of the conservation status of wild species.
- The Red List Categories provide an easily and widely understood system for classifying species at high risk of global extinction.
- The latest version (3.1) of the categories and criteria was adopted in February 2000.

IUCN Red List Categories (3.1)

Extinct (EX)

Extinct in the wild (EW)

Critically Endangered (CR)

Endangered (EN)

Vulnerable (VU)

Near Threatened (NT)

Least Concern (LC)

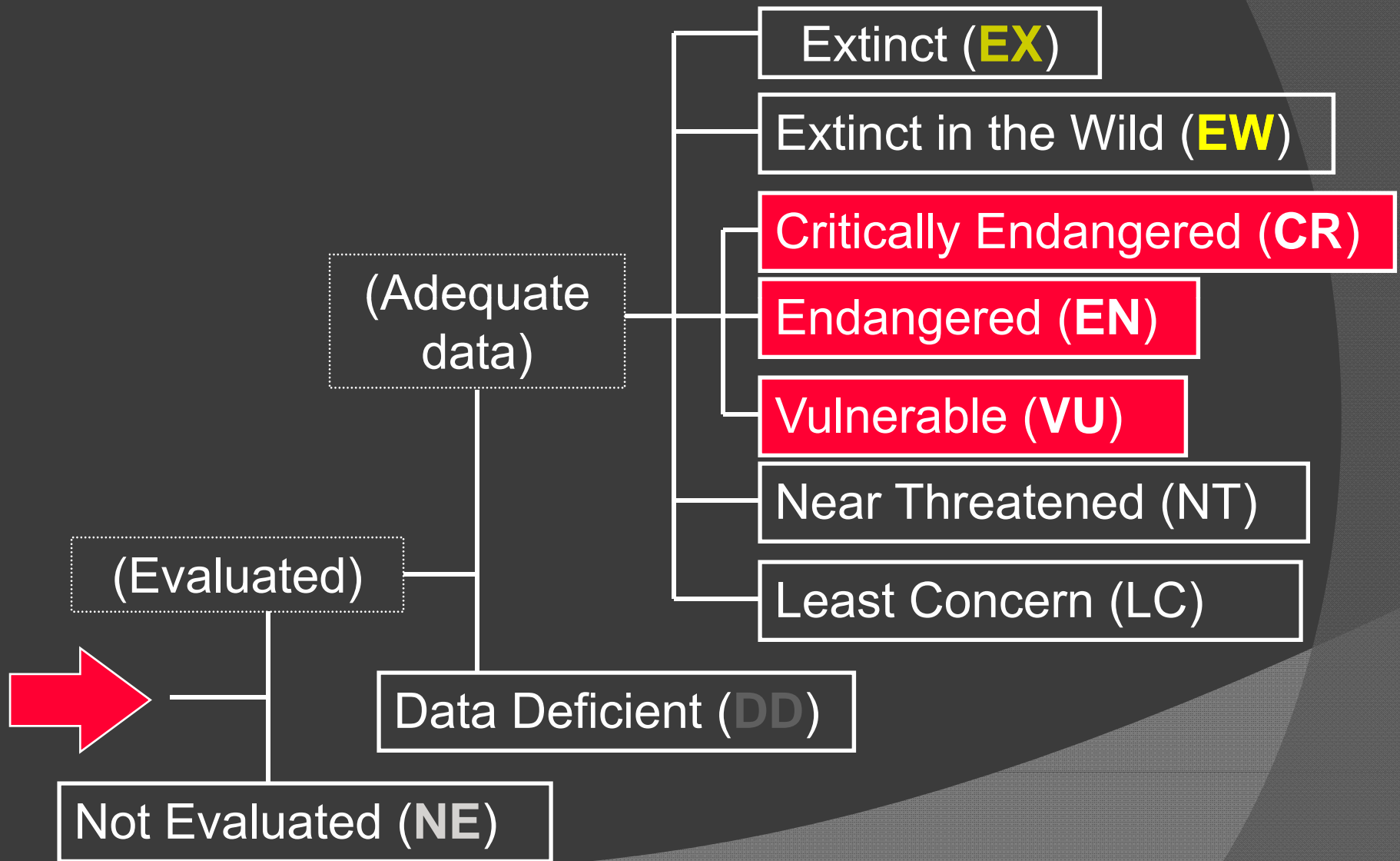
Data Deficient (DD)

Not Evaluated (NE)

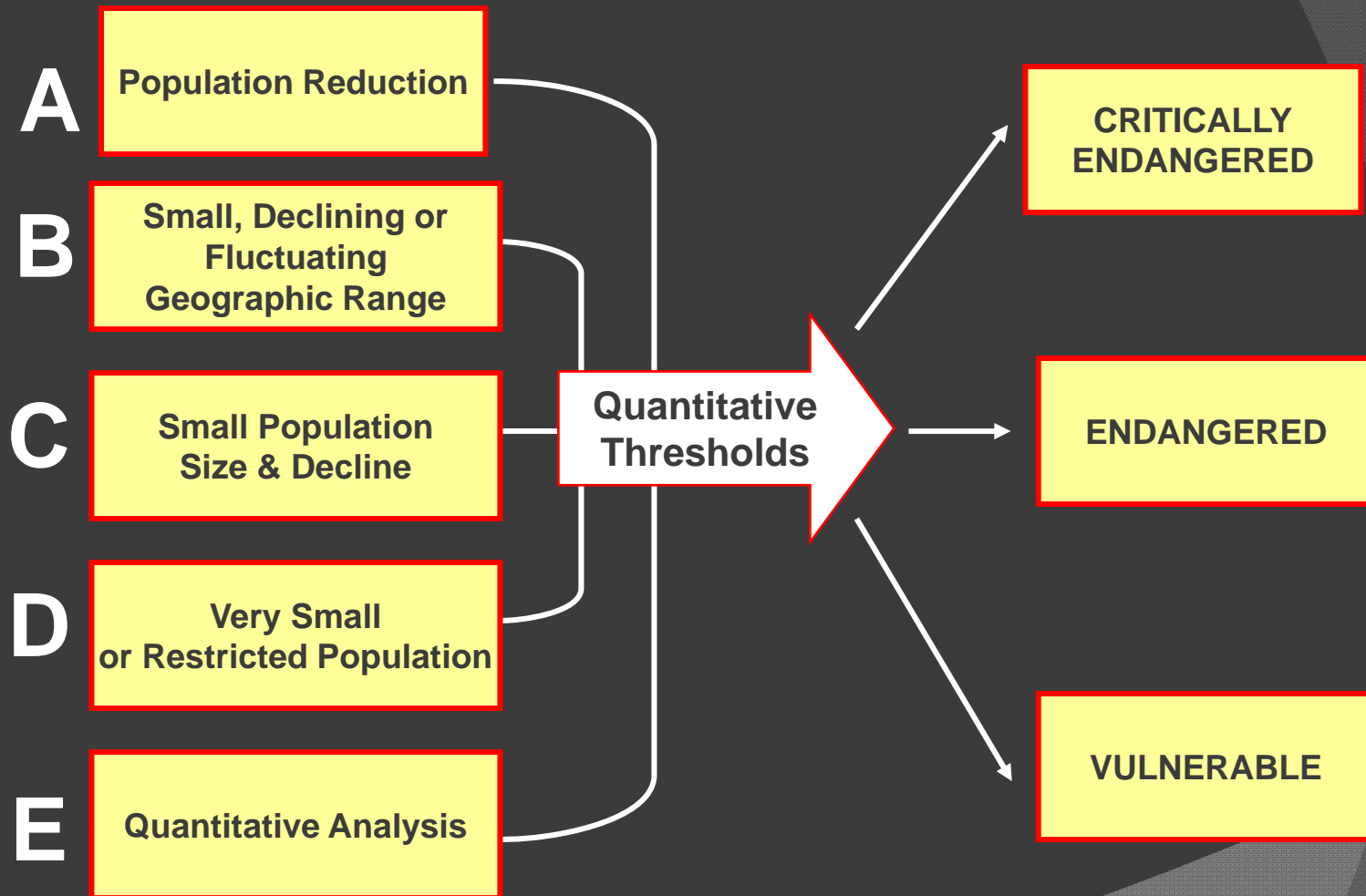
IUCN Red List Categories

- **For listing as CR, EN or VU there is a range of quantitative criteria; meeting any ONE of these criteria qualifies a taxon for listing at that level of threat.**
- **Each taxon must be evaluated against all the criteria.**
- **Any criterion met must be listed.**

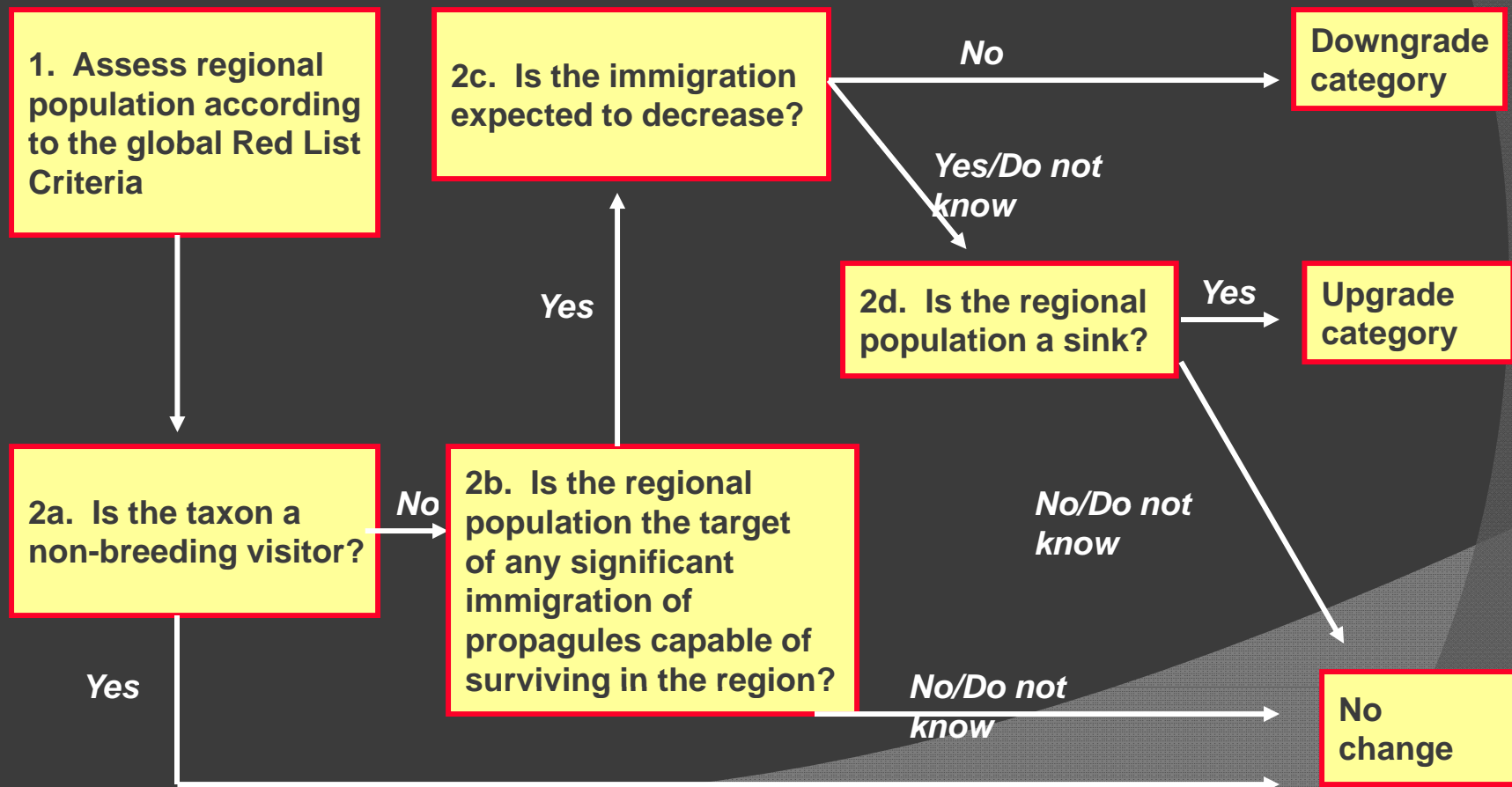
IUCN Red List Categories 2001



IUCN Red List Criteria



Regional Application of Red List Criteria



DEFINITIONS

of the IUCN Categories

Extinct (EX)

Extinct in the Wild (EW)

Critically Endangered (CR)

Endangered (EN)

Vulnerable (VU)

Near Threatened (NT)

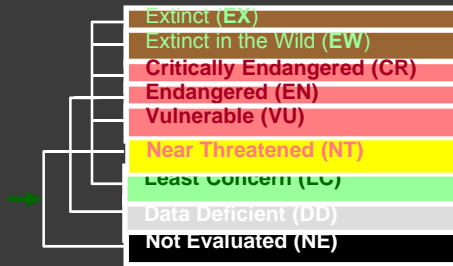
Least Concern (LC)

Data Deficient (DD)

Not Evaluated (NE)

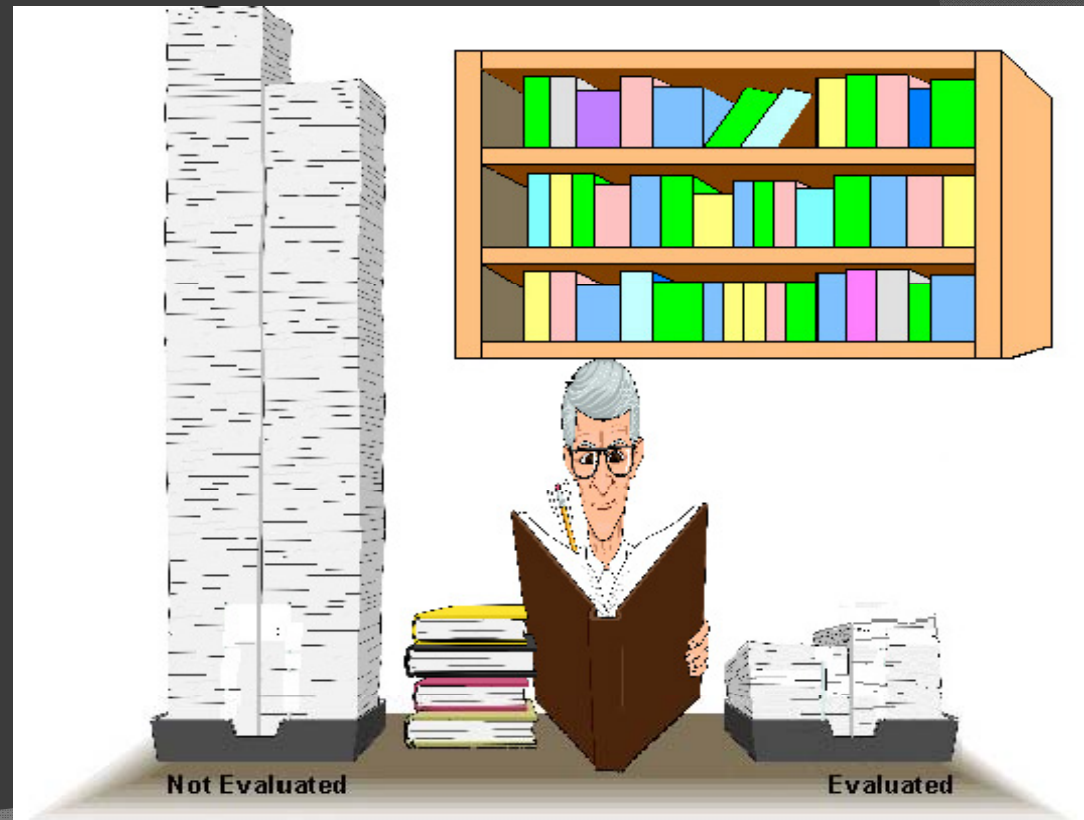
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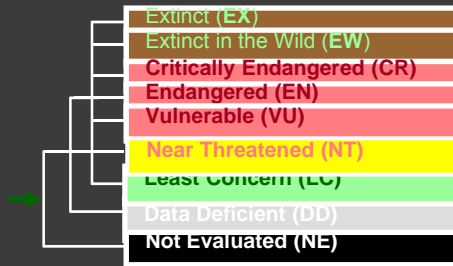
The abbreviation of each category (in parenthesis) should follow the English denominations even when translated into other languages)



Not Evaluated (NE)

A taxon is *Not Evaluated* when it has not yet been evaluated against the criteria.

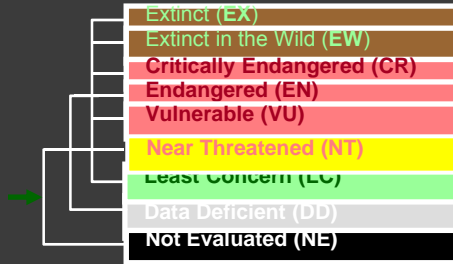




Data Deficient (DD)

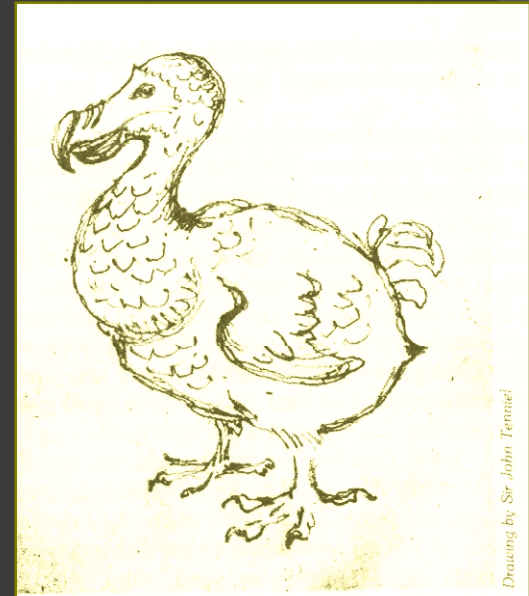
A taxon is *Data Deficient* when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status.



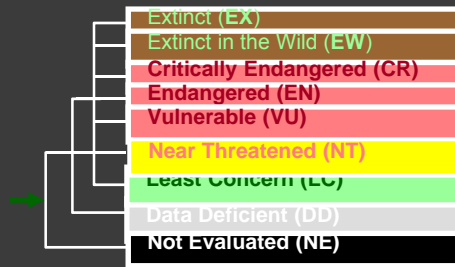


Extinct (EX)

A taxon is *Extinct* when there is no reasonable doubt that the last individual has died.



Raphus cucullatus = dodo

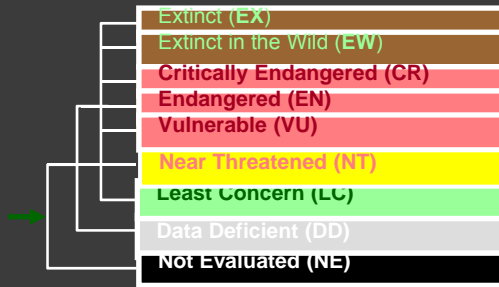


Extinct in the Wild (EW)

A taxon is *Extinct in the Wild* when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range.

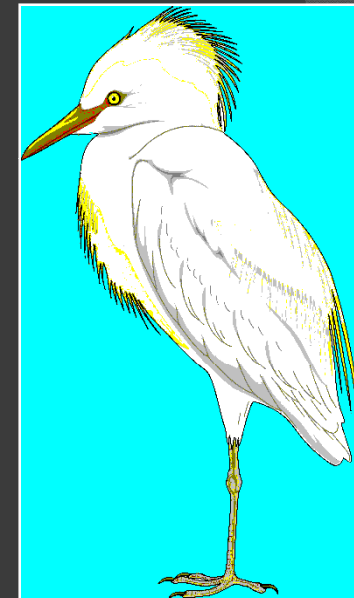


Equus przewalskii = Przewalski's horse

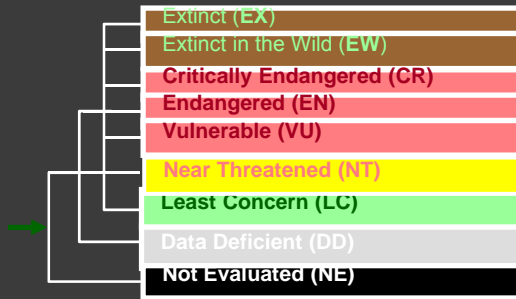


Least Concern (LC)

A taxon is *Least Concern* when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened.



Bulbucus ibis = Cattle egret

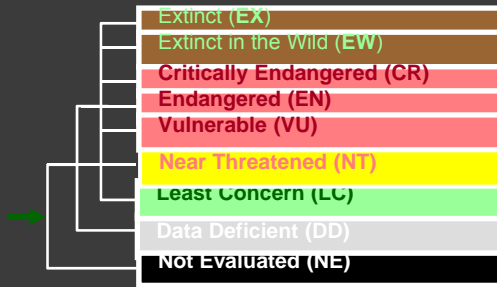


Near Threatened (NT)

A taxon is *Near Threatened* when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is *close to qualifying* for or is likely to qualify for a threatened category in the near future.



Categories of Threat



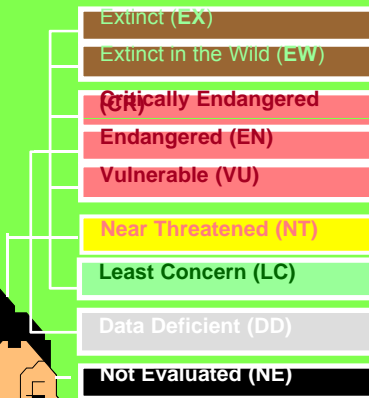
Critically Endangered (CR)

Endangered (EN)

Vulnerable (VU)

(as defined by criteria A-E)

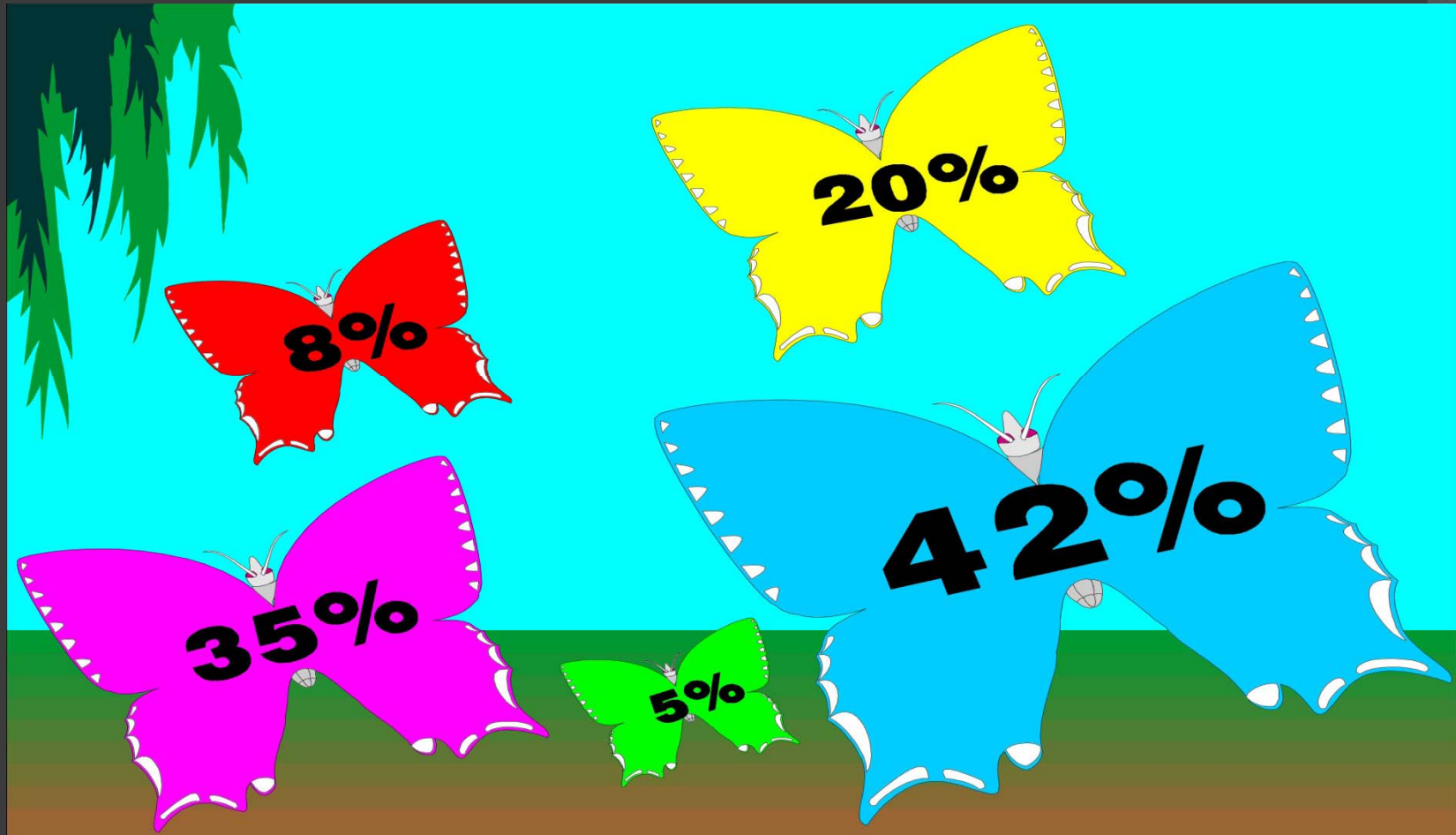
Criteria



- A. Reduction in population size
- B. Geographic range
- C. Small Population Size (w/ decline)
- D. Small population size (or restricted range)
- E. Quantitative Analysis

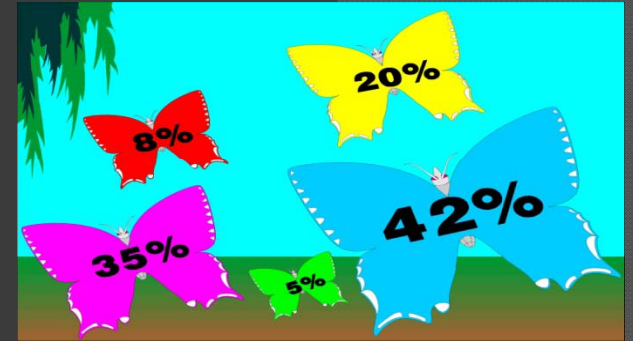


A: Reduction in population size



A1. Reduction in population size

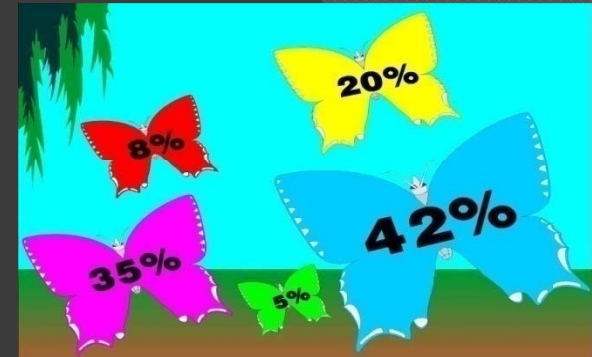
where the **causes** of the reduction are: clearly reversible AND understood AND ceased



Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
= or > 90%	= or > 70%	= or > 50%

A2. Reduction in population size

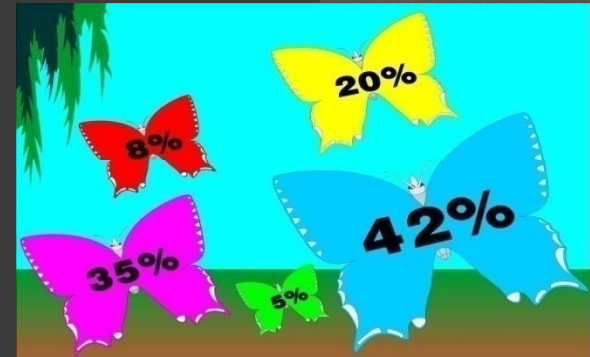
where the reduction or its causes may not have ceased OR be understood OR be reversible



Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
= or > 80%	= or > 50%	= or > 30%

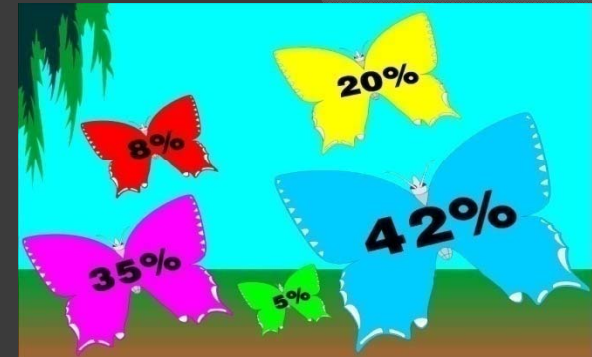
A3. Reduction in population size

projected or suspected to be met within the **next 10 years or 3 generations**



Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
80%	50%	30%

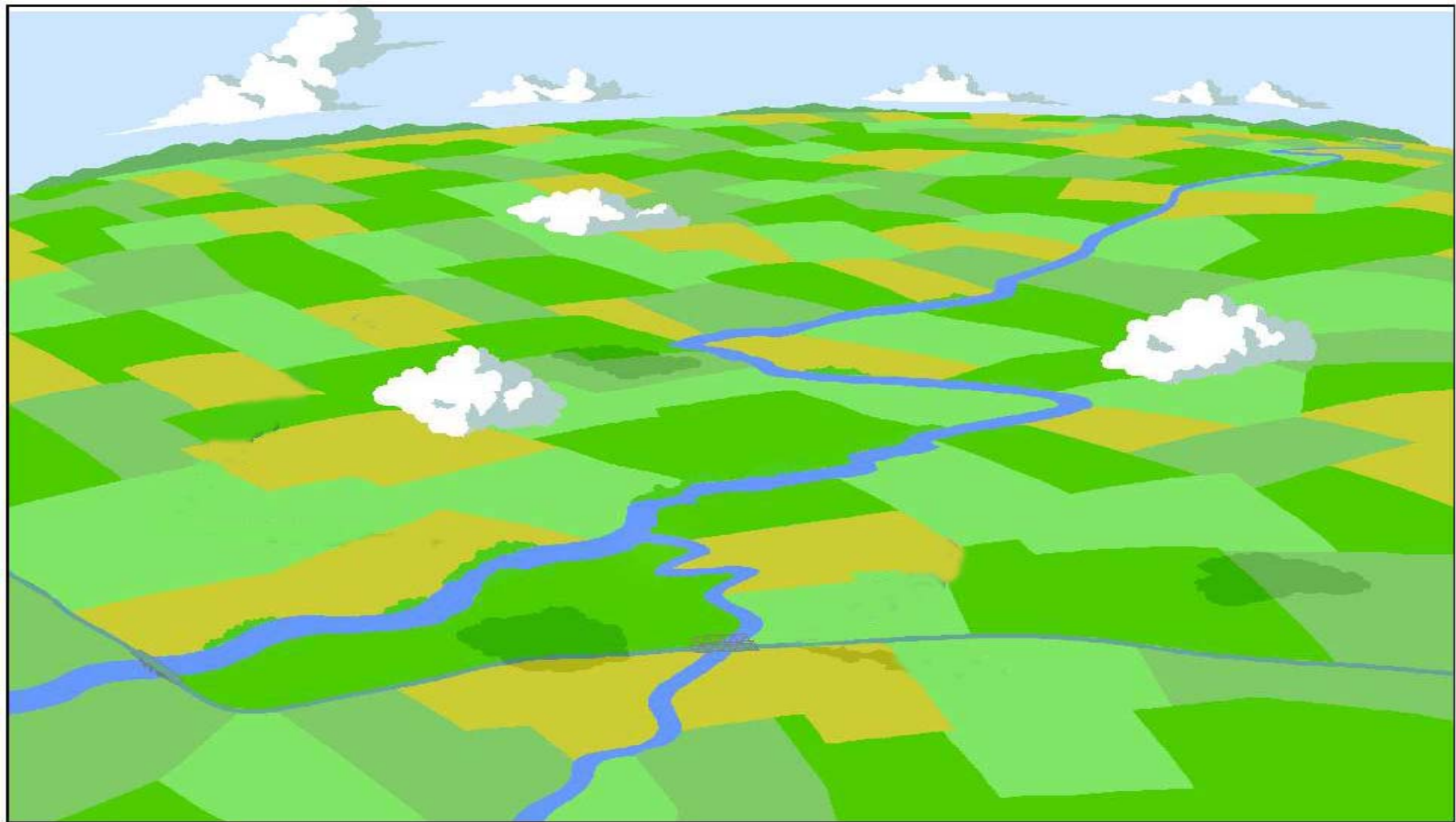
A4. Reduction in population size



over any period of **10 years or 3 generations** whichever is longer (up to a maximum of 100 years), where the time period includes both the past and the future, and where **the decline or its causes have not ceased**

Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
= or > 80%	= or > 50%	= or > 30%

B: Small Distribution



B. Small Distribution + Decline or Fluctuation

	CR	EN	VU
1. Extent of Occurrence	<100km ²	<5 000km ²	<20 000km ²
or			
2. Area of Occupancy	<10km ²	<500km ²	<2 000km ²

+ 2 of the following

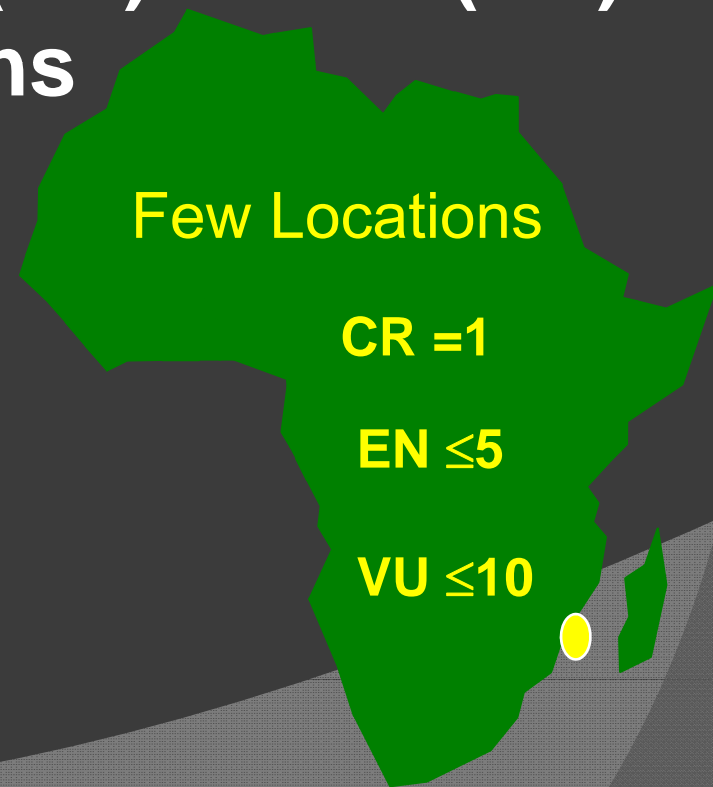
B: Small Distribution +



a: Severely fragmented or known to exist
at only 1 (CR) or ≤ 5 (EN) or ≤ 10 (VU)
locations



or

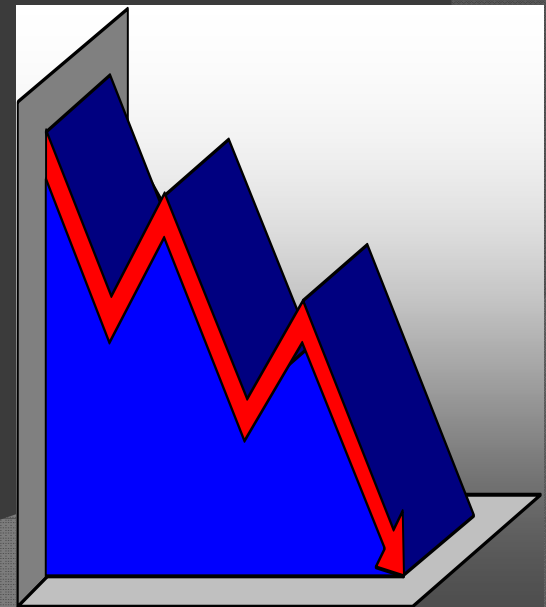


B: Small Distribution +



b. Continuing decline, observed, inferred or projected, in any of the following:

- (i) extent of occurrence
- (ii) area of occupancy
- (iii) area, extent and/or quality of habitat
- (iv) number of locations or subpopulations
- (v) number of mature individuals.



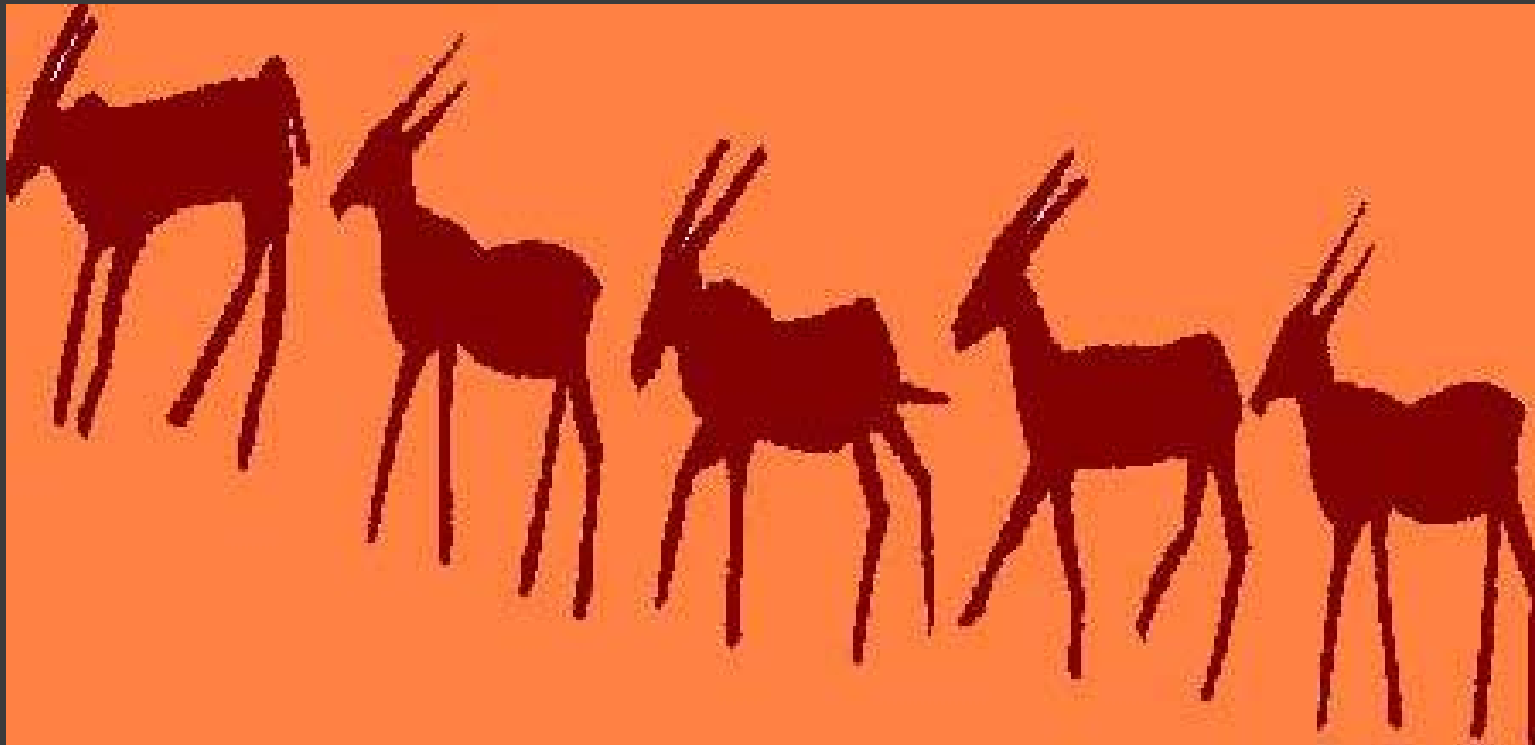
B: Small Distribution +



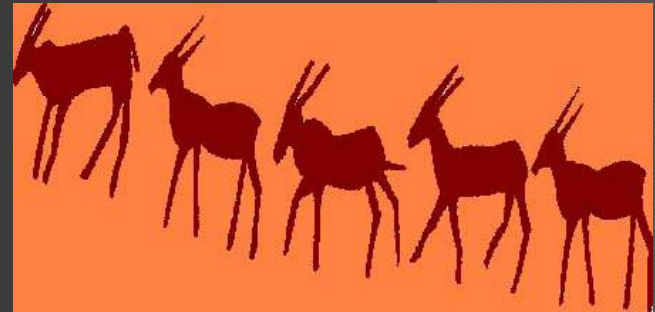
c. Extreme fluctuations in any of the following:

- (i) extent of occurrence
- (ii) area of occupancy
- (iii) number of locations or subpopulations
- (iv) number of mature individuals.

C: Population size (and decline)



C: Population size ...



	Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
estimated to be less than...	250	2'500	10'000

... mature individuals **AND** either C1 **OR** C2

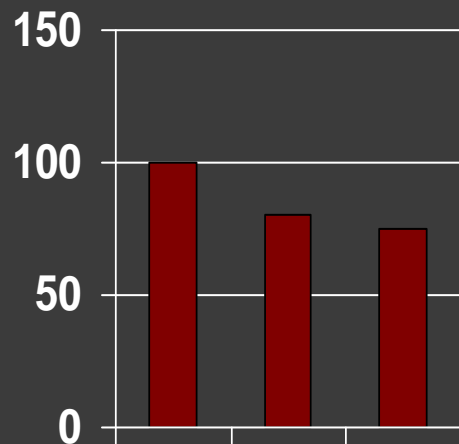
C: Population size

... estimated to number less than (mature individuals) and either (C1 or C2) ...



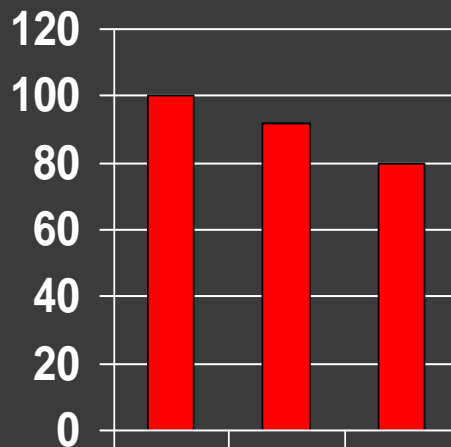
c1. An estimated continuing decline of at least...

CR



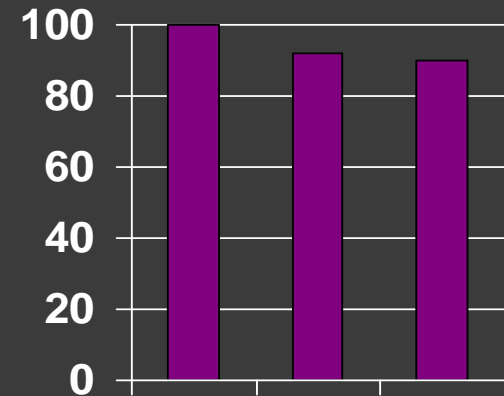
25% within 3 years or 1 generation

EN



20% within 5 years or 2 generations

VU

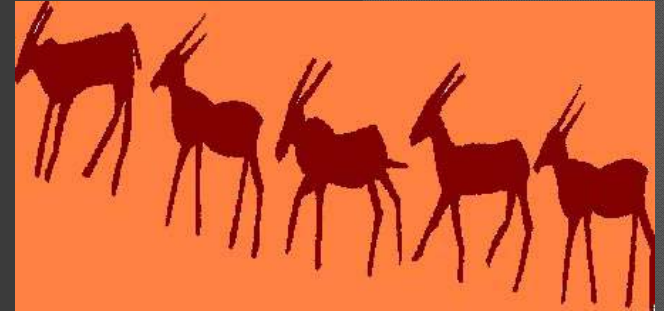


10% over 10 years or 3 generations

...whichever is longer, **OR** C2

C: Population size

... estimated to number less than (mature individuals) and either (C1 or C2) ...



C2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals **AND at least one of the following: (a-b)**

C: Population size

... estimated to number less than (mature individuals) and either (C1 or C2) ...



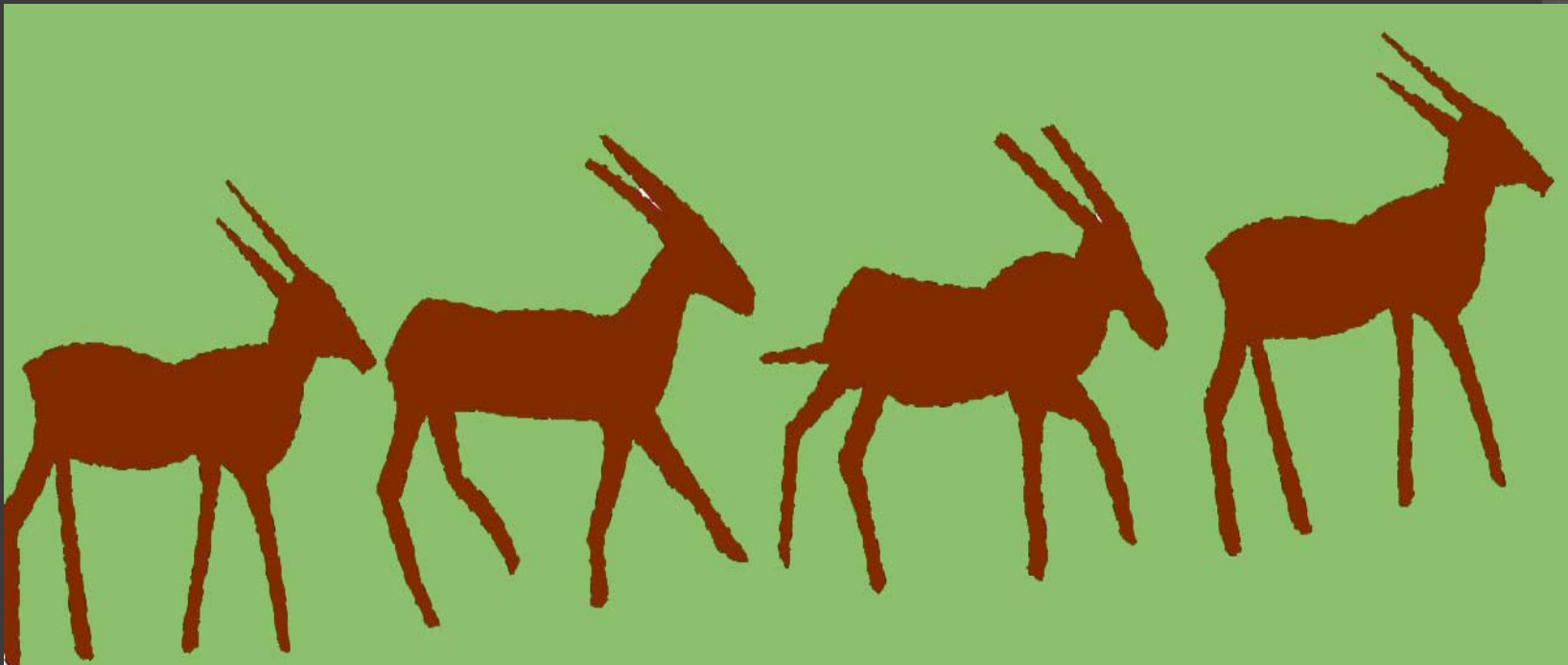
a) Population structure in the form of one of :

	Critically Endangered	Endangered	Vulnerable
	(CR)	(EN)	(VU)
(i) no subpopulation estimated to contain more than ____ (mature individuals), OR	50	250	1,000
(ii) at least (%) of mature individuals are in one subpopulation	90%	95%	100%

OR

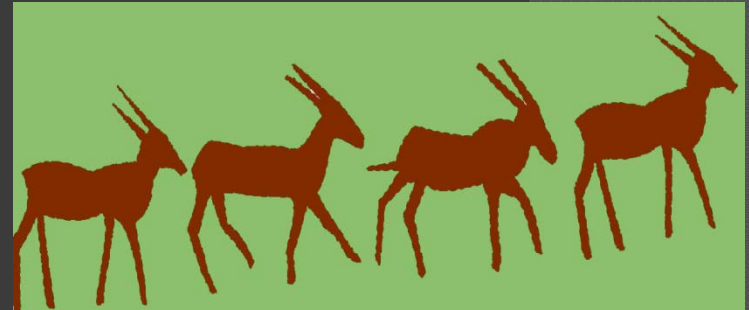
(b) Extreme fluctuations in number of mature individuals.

D: (Small) Population size



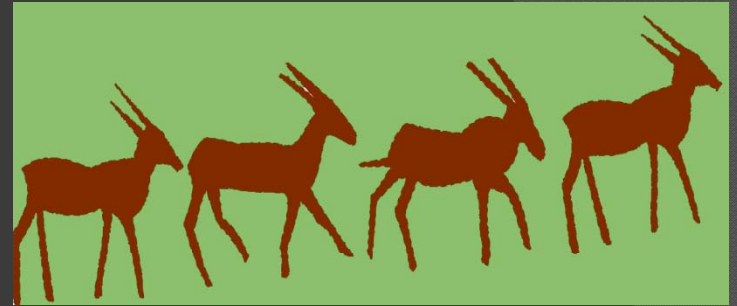
D: (Small)

Population size



D1: Population size	Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
Mature individuals estimated to number less than	50	250	1,000

D: (Small)
Population size
(only for “Vulnerable”)



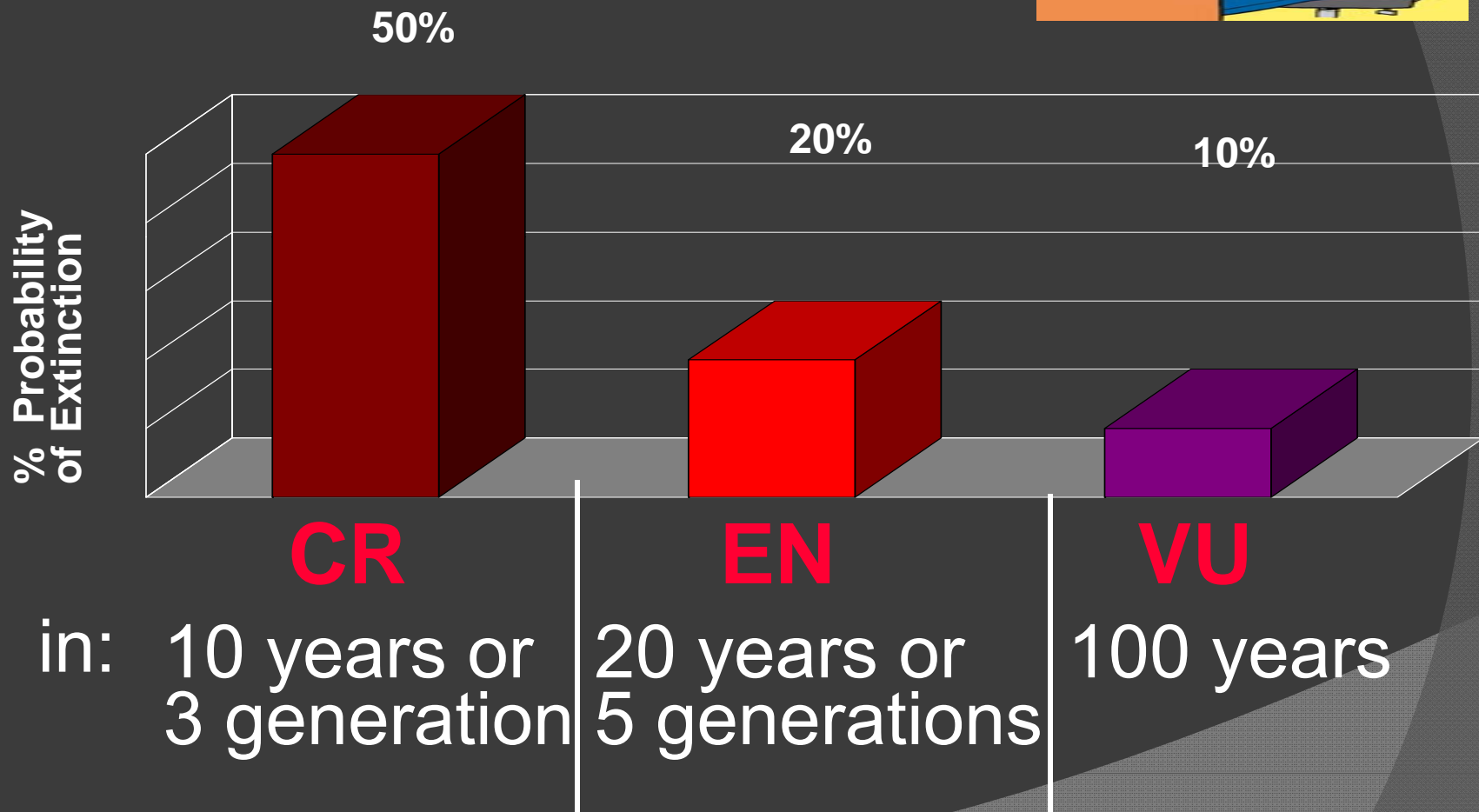
VU- D2. Population with a very restricted area of occupancy (typically less than 20km²) or number of locations (typically 5 or less)

E. Quantitative analysis

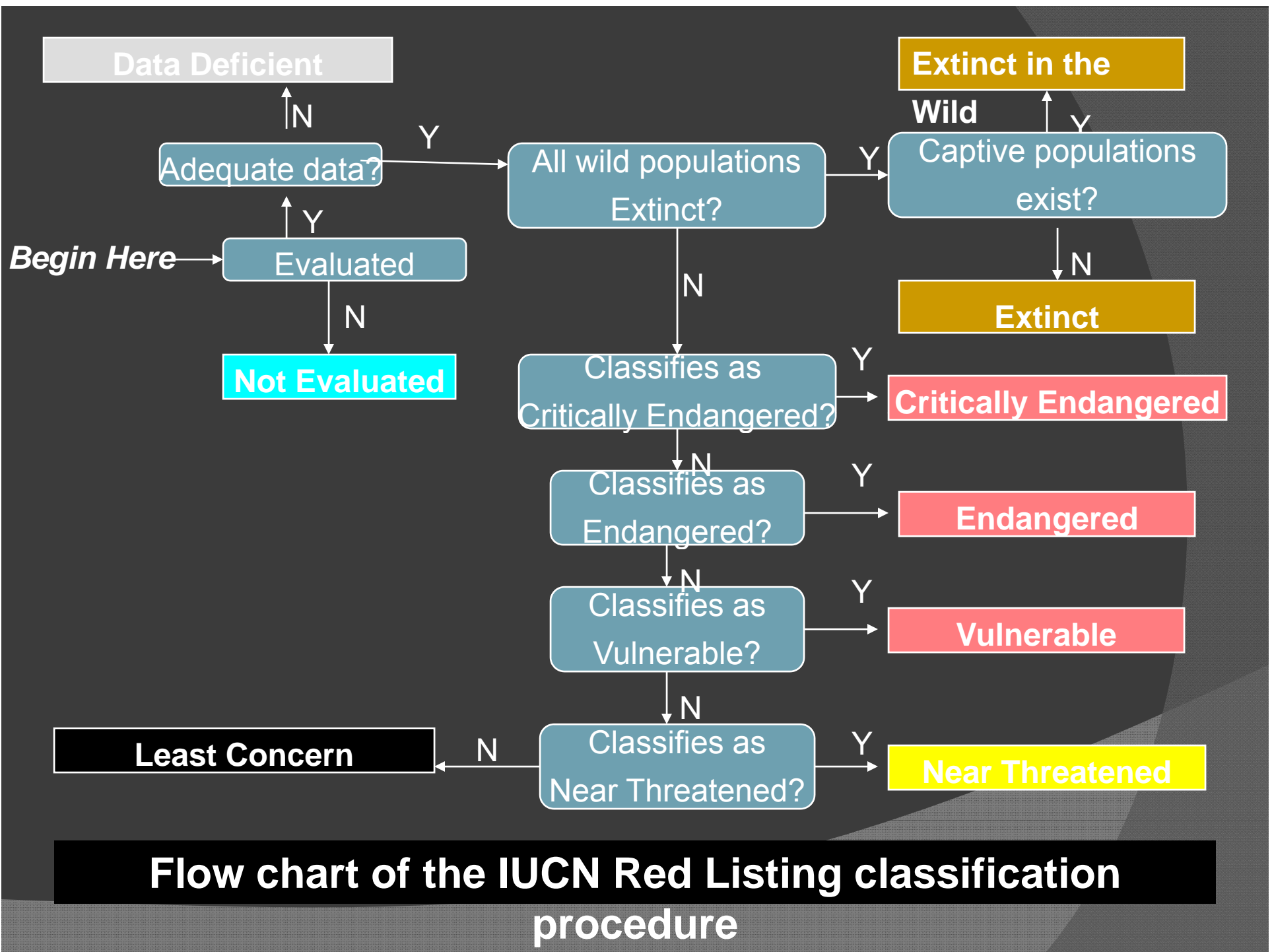


E. Quantitative analysis,

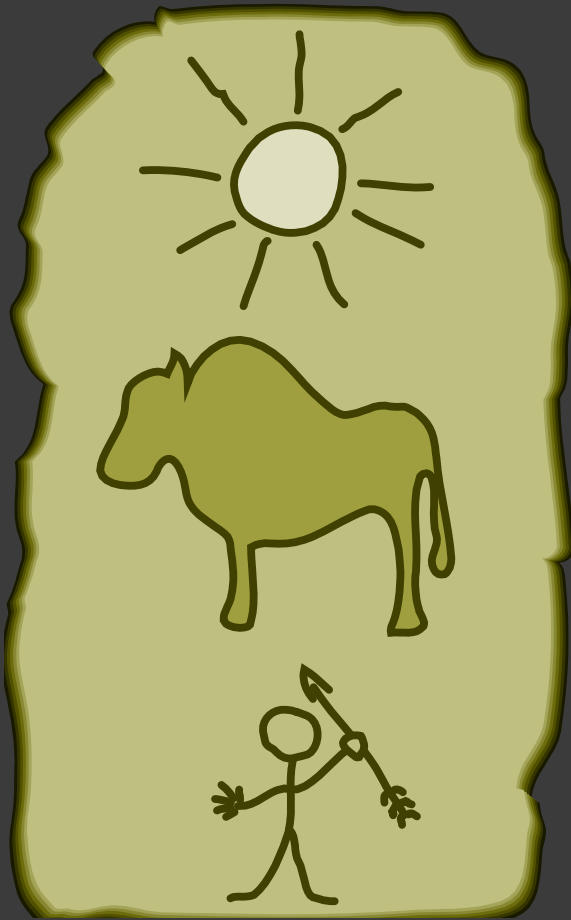
showing the probability of extinction in the wild to be at least



Whichever is longer (up to a maximum of 100 years)



Citation of the IUCN Red List Categories and Criteria



Examples:

- EX
- VU A2c+3c
- EN B1ac(i, ii, iii)
- CR A2c+3c; B1ab(iii)
- VU D2



Documentation Requirements for Taxa Included on the IUCN Red List

The documentation of evaluations gives greater credibility and transparency to the Red List and facilitates better analysis of the findings.

It also provides a basis on which listings can be contested.



Documentation Requirements for Taxa Included on the IUCN Red List

Each listing should be documented
with a narrative specifying the
information used to make the Red List
Category determination



Red Listing Authorities



The **Red List Authorities** are responsible for the assessment and evaluation of all taxa included on the IUCN Red List.

IUCN 2008 Red List - Poecilotheria hanumavilasumica - Microsoft Internet Explorer

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IUCN 2008 Red List - Poecilothe... Add Tab



The IUCN Red List of Threatened Species™ 2008

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Search the Red List



Poecilotheria hanumavilasumica

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED
NE	DD	LC	NT	VU	EN	CR

[Summary](#)
[Classification Schemes](#)
[Images & External Links](#)
[Bibliography](#)
[Full Account](#)

Taxonomy [top]

Kingdom	Phylum	Class	Order	Family
ANIMALIA	ARTHROPODA	ARACHNIDA	ARANEAE	THERAPHOSIDAE

Scientific Name:	Poecilotheria hanumavilasumica
Species Authority:	Smith & Carpenter, 2004
Common Name/s:	English – Rameshwaram Ornamental, Rameshwaram Parachute Spider

start IUCN 2008 Red List - ... IUCN - Climate Chang...



IUCN 2008 Red List - Poecilotheria metallica - Microsoft Internet Explorer

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IUCN 2008 Red List - Poecilothe... Add Tab

Taxonomy [top]

Kingdom	Phylum	Class	Order	Family
ANIMALIA	ARTHROPODA	ARACHNIDA	ARANEAE	THERAPHOSIDAE

Scientific Name: Poecilotheria metallica
Species Authority: Pocock, 1899
Common Name/s:
 English – Gooty Tarantula, Metallic Tarantula, Peacock Parachute Spider, Peacock Tarantula, Salepurgu

Assessment Information [top]

Red List Category & Criteria: Critically Endangered B1ab(iii) [ver 3.1](#)
Year Assessed: 2008
Assessor/s: Molur, S., Daniel, B.A. & Siliwal, M.
Evaluator/s: Spector, S. & Mason, T. (Terrestrial Invertebrates Red List Authority)
Justification:
 The habitat where the species occurs is completely degraded due to lopping for firewood and cutting for timber. The habitat is under intense pressure from the surrounding villages as well as from insurgents who use forest resources for their existence and operations. It is assumed that the area of habitat has decreased over the years, but there is definitely a decline in quality of habitat for the spiders who seek cavities and deep crevices in old growth forests. This species is categorized as CR because of its range restricted to less than 100 km², single location and continuing decline in habitat quality.

Geographic Range [top]

Range Description: The species is found in a single location, which is severely fragmented. The extent of occurrence is less than 100 km². India: Andhra Pradesh: Reserve forest between Nandyal and Giddalur.

The type description stated the species as occurring in Gooty, which is wrong since although the animal was caught in the railway timber yard in Gooty, the specimen could have come from the Eastern Ghats, which is at least 100 km away. Molur et al. (2001) stated that the species is found in a single location, which is severely fragmented. The extent of occurrence is less than 100 km². India: Andhra Pradesh: Reserve forest between Nandyal and Giddalur.



CAMP and Education

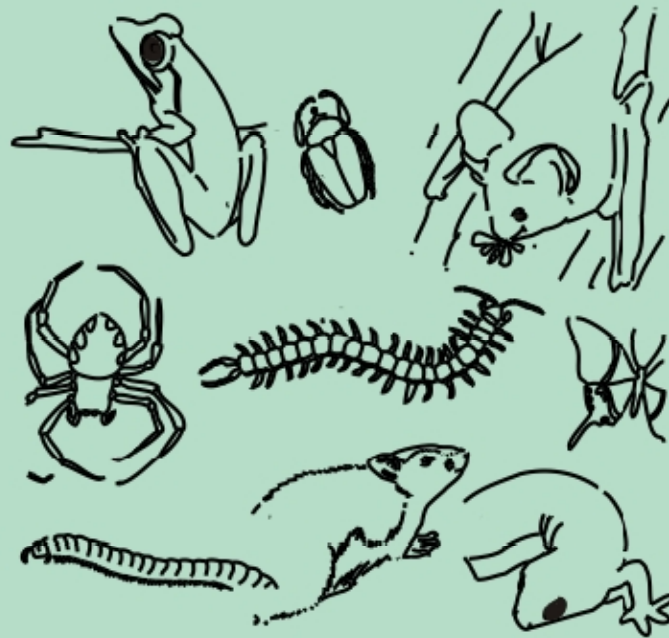
CBSG South Asian recommends a comprehensive education programme

Target Groups

Education / Awareness / Action Programmes

Level 1 - Policy	Policy-makers, bureaucrats, professional foresters, wildlife officials, wildlife biologists, academics	CAMP REPORT - variants, from complete report for scientists to salient points for policy makers
Level 2 - layman	Common man, from both urban and rural areas, educated and non-educated, English speaking & vernacular	CAMP information attractively typeset and formulated appropriately for general reading or for use in group activities, Material on special issues in vernacular
Level 3 - students	Young people from 6 - 16	CAMP output information of interest to youngsters and made palatable for different ages. Packets to use in zoo, NGOs, wildlife areas, school, and museums.

DAILY LIFE WILDLIFE



CONSERVATION & WELFARE

Wildlife Welfare
in Daily Life

Protect
imates

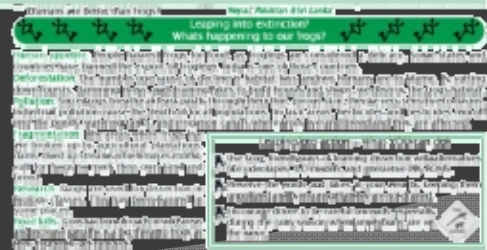
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Stamp Album



S so you can be a
W wildlife welfare
X xtra-heroic
Y young
Z zoologist





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PROGRAMMES FOR CHILDREN





Educator skills training programme: utilizing *CAMP* data base



Introducing active learning methodology at Tinsukia, Assam 14-16 Feb 2007



ZOO Education Network

ZOO team **develop** ed. materials using CAMP and PHVA reports and Network members

Evaluate/produce



Distribute through

6 Taxon network members

CBSG members

SANIZE members

SAZARC members

Bat Club members

Individuals

Training / guidelines

Bangladesh
India
Nepal
Sri Lanka
Pakistan
Afghanistan

Members **organise** Local education programmes

We receive **report** from Organisers

Thank you for listening