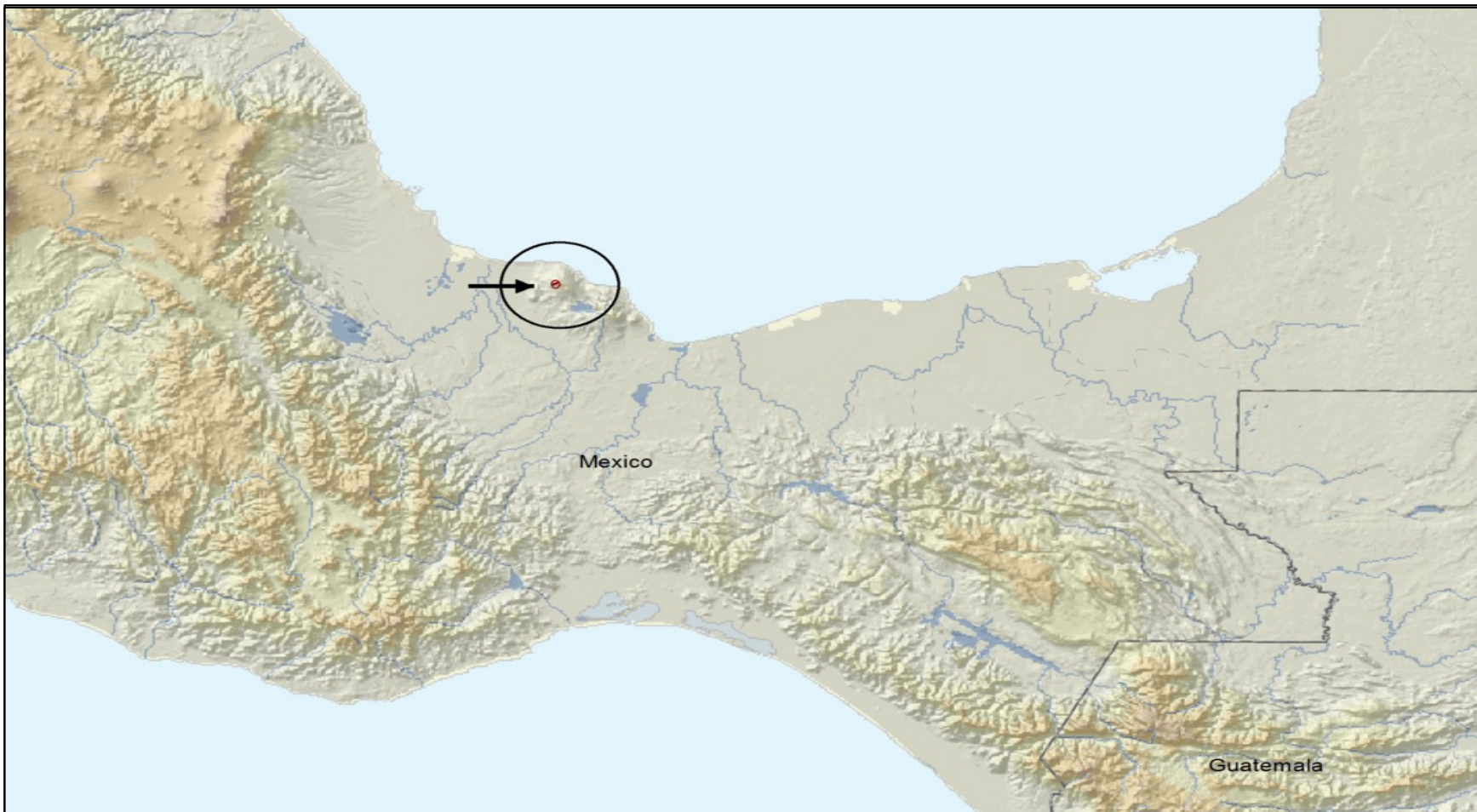


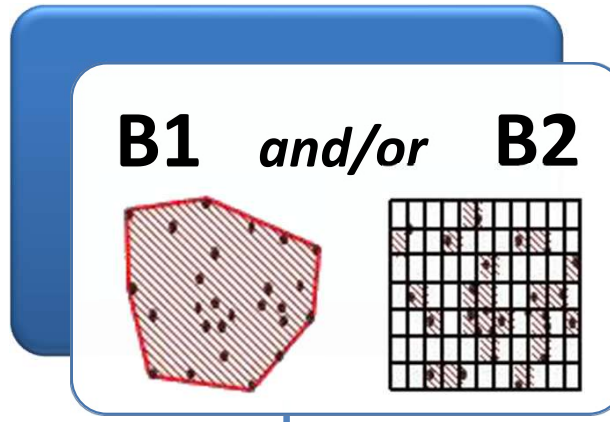


# Red List Criteria: Criterion B

# **Restricted geographic range + fragmentation/ few locations, continuing decline or extreme fluctuations**



First must  
meet the  
thresholds for  
B1 **and/or** B2



Then also must meet the thresholds for at least two of  
subcriteria a, b or c.

## B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy)

	Critically Endangered	Endangered	Vulnerable
B1. Extent of occurrence (EOO)	< 100 km <sup>2</sup>	< 5,000 km <sup>2</sup>	< 20,000 km <sup>2</sup>
B2. Area of occupancy (AOO)	< 10 km <sup>2</sup>	< 500 km <sup>2</sup>	< 2,000 km <sup>2</sup>

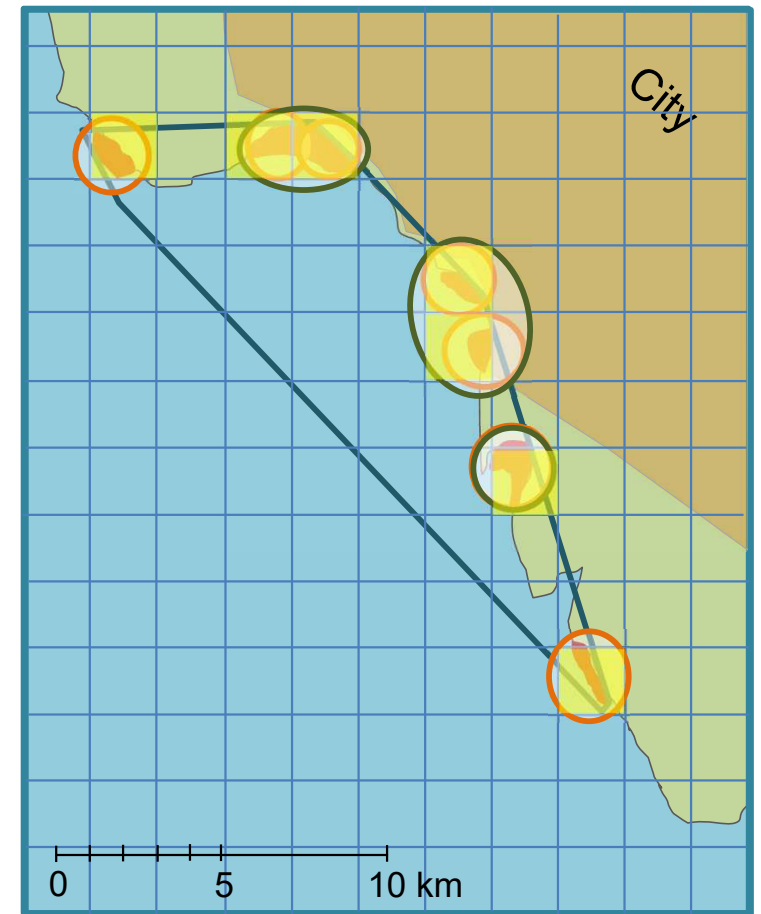
### AND at least 2 of the following 3 conditions:

(a) Severely fragmented OR Number of locations	= 1	≤ 5	≤ 10
(b) Continuing decline observed, estimated, inferred or projected in any of: (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.			
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals.			

# Example: a cone snail

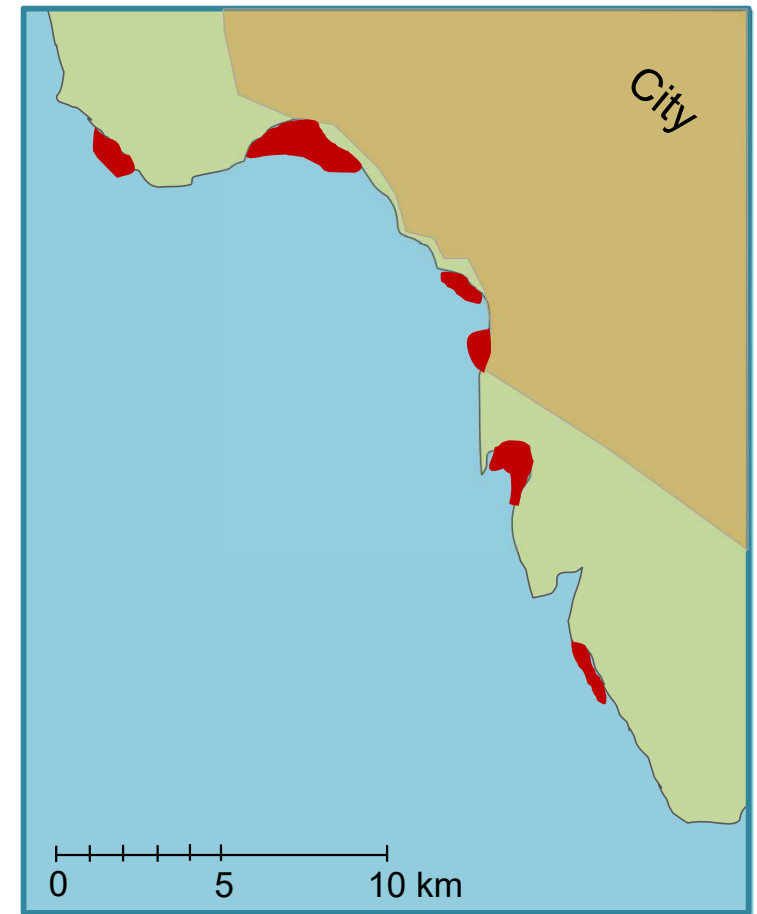
Criterion B

- Known from only 6 sites along a 25 km stretch of coastline with a city occupying part of the area.
- EOO = 150 km<sup>2</sup>
- AOO = 28 km<sup>2</sup>
- Dispersal abilities between areas is not well known; there may be movement between groups. So severe fragmentation unknown.
- Main threats recorded are:
  - Collection for shell trade.
  - Habitat loss and decline from pollution and urban expansion.
- Locations = 5
- Continuing decline in habitat quality & population size
- No known extreme fluctuations



## Example: a cone snail **EN B1ab(iii,v)+2ab(iii,v)**

- Known from only 6 sites along a 25 km stretch of coastline with a city occupying part of the area.
- EOO = 150 km<sup>2</sup> **EN B1**
- AOO = 28 km<sup>2</sup> **EN B2**
- Dispersal abilities between areas is not well known; there may be movement between groups. So severe fragmentation unknown.
- Main threats recorded are:
  - Collection for shell trade.
  - Habitat loss and decline from pollution and urban expansion.
- Locations = 5 **EN B1a+2a**
- Continuing decline in habitat quality & population size **EN B1b(iii,v)+2b(iii,v)**
- No known extreme fluctuations





To qualify for a threatened category, the species must meet **ALL** the required thresholds and conditions for the category

- EOO = 50 km<sup>2</sup>
- AOO = 8 km<sup>2</sup>
- There is continuing decline
- No extreme fluctuation
- Not severely fragmented but occurs 3 locations

B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy)			
	Critically Endangered	Endangered	Vulnerable
B1. Extent of occurrence (EOO)	✓ < 100 km <sup>2</sup>	✓ < 5,000 km <sup>2</sup>	✓ < 20,000 km <sup>2</sup>
B2. Area of occupancy (AOO)	✓ < 10 km <sup>2</sup>	✓ < 500 km <sup>2</sup>	✓ < 2,000 km <sup>2</sup>
AND at least 2 of the following 3 conditions:			
(a) Severely fragmented OR Number of locations	✗ = 1	✓ ≤ 5	✓ ≤ 10
(b) Continuing decline observed, estimated, inferred or projected in any of: (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.	✓	✓	✓
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals.	✗	✗	✗

## Endangered

To qualify for a threatened category, the species must meet **ALL** the required thresholds and conditions for the category

- EOO = 16,000 km<sup>2</sup>
- AOO = 4,200 km<sup>2</sup>
- There is continuing decline
- No extreme fluctuation
- Not severely fragmented but occurs 3 locations

B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy)			
	Critically Endangered	Endangered	Vulnerable
B1. Extent of occurrence (EOO)	✗ < 100 km <sup>2</sup>	✗ < 5,000 km <sup>2</sup>	✓ < 20,000 km <sup>2</sup>
B2. Area of occupancy (AOO)	✗ < 10 km <sup>2</sup>	✗ < 500 km <sup>2</sup>	✗ < 2,000 km <sup>2</sup>
AND at least 2 of the following 3 conditions:			
(a) Severely fragmented OR Number of locations	✗ = 1	✓ ≤ 5	✓ ≤ 10
(b) Continuing decline observed, estimated, inferred or projected in any of: (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.	✓	✓	✓
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals.	✗	✗	✗

## Vulnerable



## Near Threatened (NT) and Criterion B :

*Close to qualifying for Vulnerable*

- Extent of occurrence = 18,000 km<sup>2</sup> → **VU B1**
- Area of occupancy is not known.
- The population is severely fragmented → **VU B1a**
- Number of locations is not known (there may be many more than 10)
- No continuing decline
- No extreme fluctuations

**Near Threatened**  
**(meets VU B1a only)**

## Near Threatened (NT) and Criterion B :

*Close to qualifying for Vulnerable*

- Extent of occurrence = 32,000 km<sup>2</sup>.
- Area of occupancy = 420 km<sup>2</sup>. → **EN B2**
- The area of occupancy is declining → **EN B2b(ii)**
- It is not known if the population is severely fragmented
- Number of locations is not known (there may be many more than 10)
- No extreme fluctuations

**Near Threatened**  
**(meets EN B2b(ii) only)**

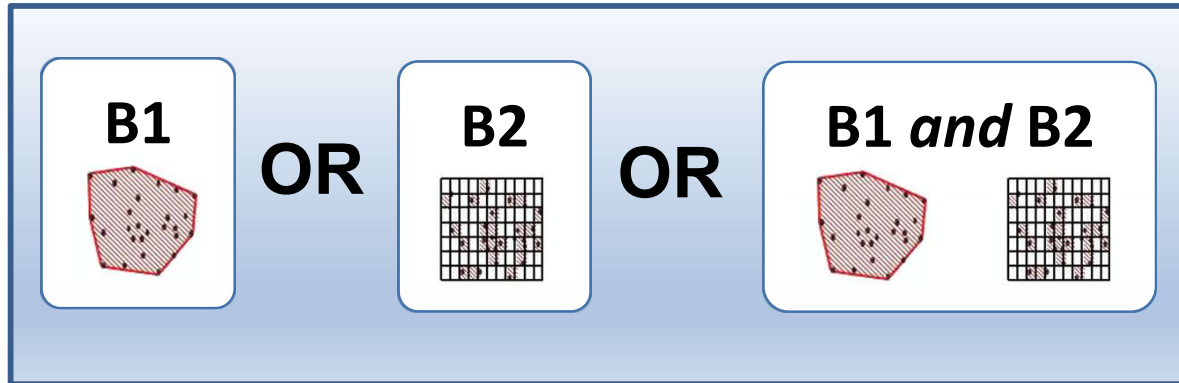
## Near Threatened (NT) and Criterion B :

*Close to qualifying for Vulnerable*

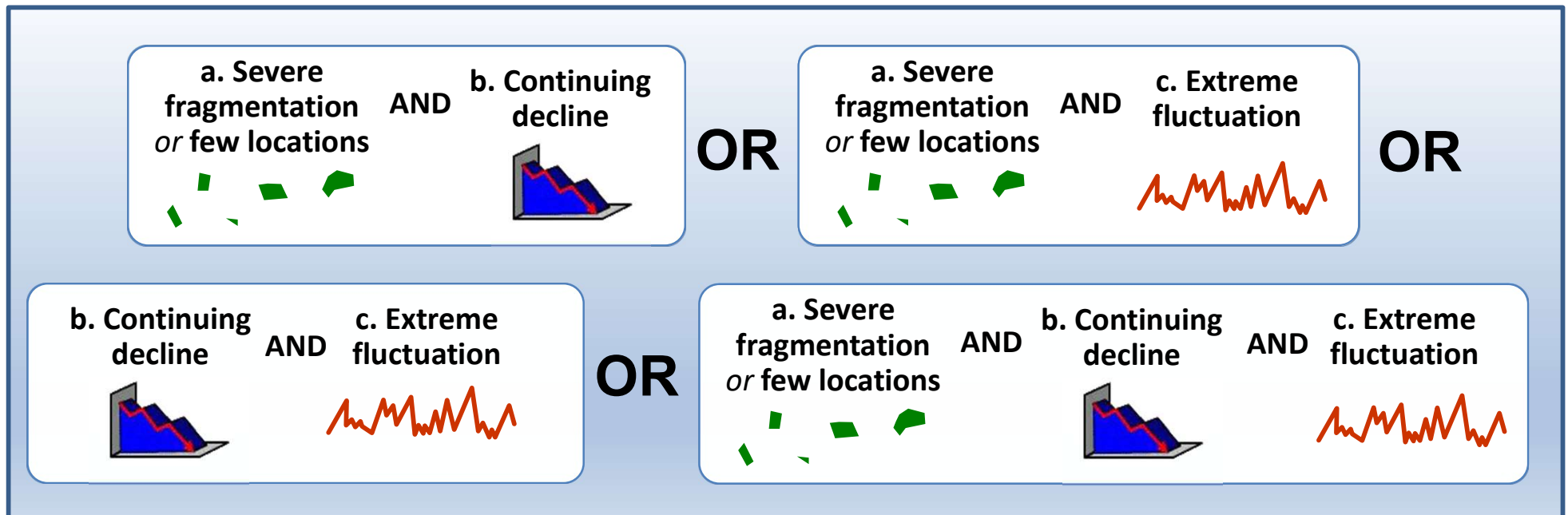
- Extent of occurrence = 30,000 km<sup>2</sup> (uncertain estimate – it may be lower than this). —→ **Nearly meets VU B1**
- Area of occupancy = 3,000 km<sup>2</sup> (uncertain estimate – it may be lower than this). —→ **Nearly meets VU B2**
- It is not known if the population is severely fragmented
- Number of locations = 10 —→ **subcriterion a**
- The population is declining —→ **subcriterion b(v)**
- No extreme fluctuations

**Near Threatened**  
**(nearly meets VU B1ab(v)+2ab(v))**

## Criterion B points to remember:



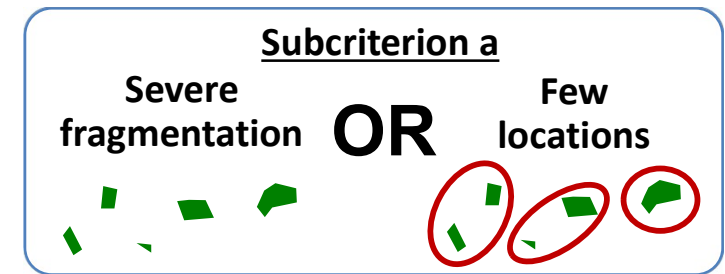
At least one of the B1 or B2 thresholds must be met



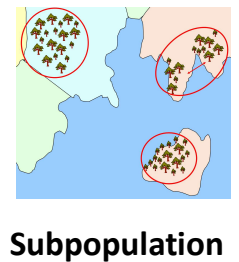
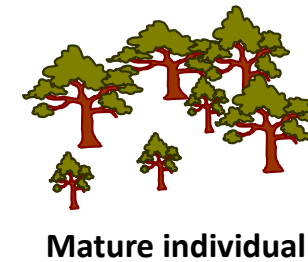
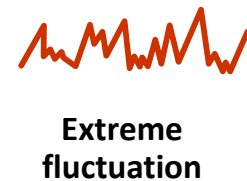
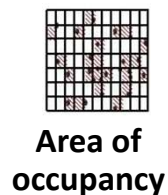
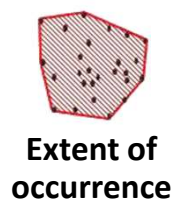
At least two of the subcriteria (a, b or c) must be met

## Criterion B points to remember:

Subcriterion 'a' can be based on **either** severe fragmentation **OR** small number of locations



Remember the definitions of all the terms used in criterion B.





## Criterion B points to remember:

Be careful with subcriterion b(iii): “continuing decline in area, extent and/or quality of habitat”

- Define "habitat" in the strict sense (i.e., area, characterized by its abiotic and biotic properties).
- Avoid generic descriptions for habitat (e.g., “forest”).
- Document the location of declines in relation to the species’ range.



*Photo © Caroline Ponce, IUCN Red List Unit*