

<http://www.iucn.org/>

IUCN è il più vecchio e più grande “global environmental network”, fondato nel 1948.

Unione democratica con più di 200 governi e di 800 ONG (Organizzazioni Non Governative). Vi fanno parte almeno 11.000 ricercatori, esperti e scienziati volontari di più di 160 Paesi, raggruppati in 6 commissioni.

1 Suggerisce soluzioni pragmatiche per la gestione ambientale.

2 Finanzia la ricerca scientifica.

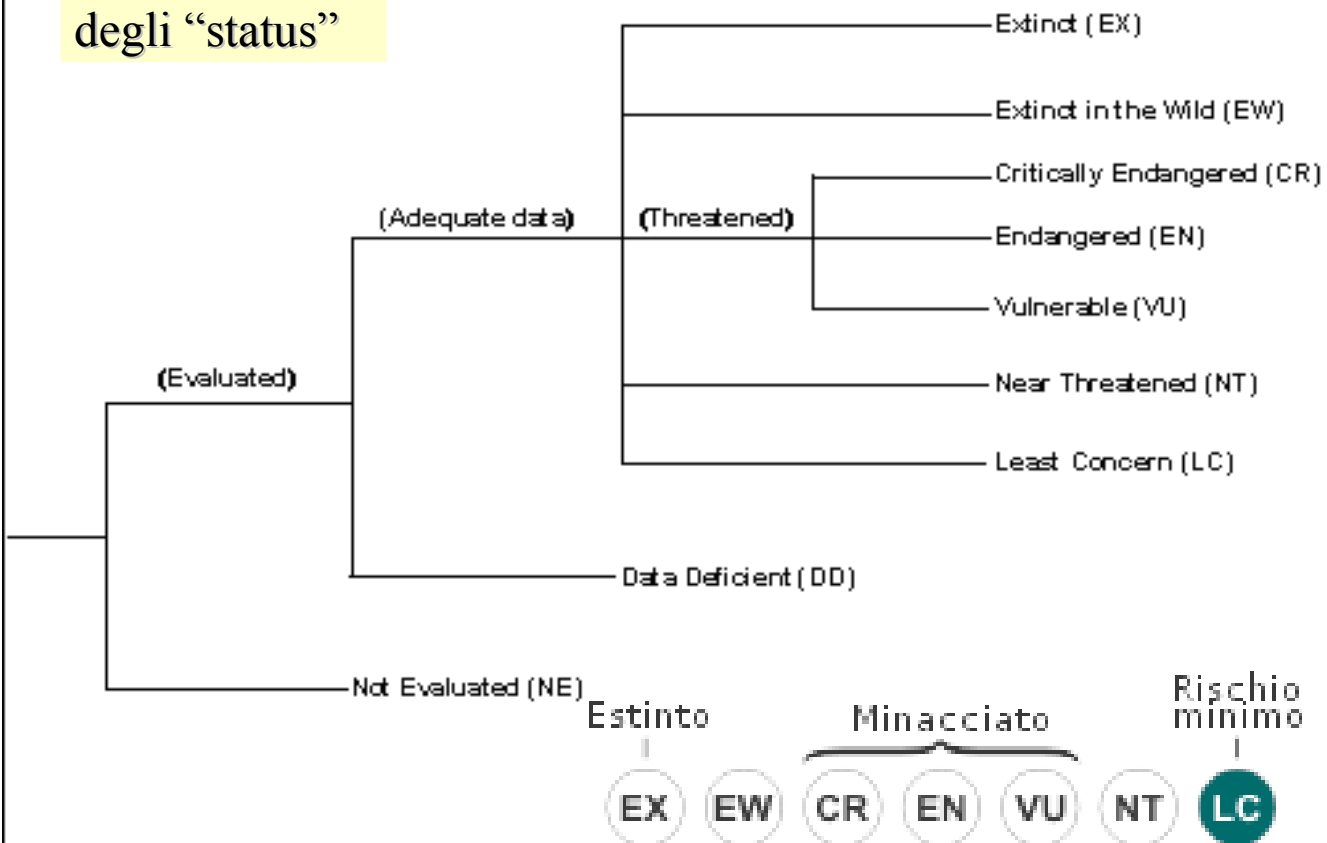
3 Gestisce direttamente progetti gestionali in tutto il mondo

4 Si propone come mediatore (Forum) fra governi, ONG agenzie delle Nazioni Unite e comunità locali al fine di far agire in cooperazione le diverse organizzazioni per la gestione ambientale.

5 Diretto da un consiglio eletto dalle organizzazioni membre ogni 4 anni in occasione del IUCN World Conservation Congress.

6 Osservatore ufficiale presso le assemblee dell'ONU

Classificazione degli “status”



Classificazione
degli “status”

EXTINCT (EX) - “**specie estinta**”: A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form. Un taxon è estinto quando non vi è alcun dubbio che l'ultimo individuo sia morto. Un taxon si presume estinto quando le indagini esaustive nell'habitat noto e/o presunto, non sono riuscite a registrare un solo individuo. Le indagini devono essere condotte per un lasso di tempo adeguato al ciclo e all'aspettativa di vita del taxon in tutto il suo areale storico e nei momenti “adeguati”.

EXTINCT IN THE WILD (EW) - “**specie estinta in natura**”: A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form. Un taxon è estinto in natura quando sopravvive solo se coltivato, in cattività o come popolazione (o popolazioni) naturalizzata al di fuori del territorio di origine. Un taxon si presume estinto in natura, quando le indagini esaustive nell'habitat conosciuto e/o presunto, non sono riuscite a registrare un solo individuo. Le indagini devono essere condotte per un lasso di tempo adeguato al ciclo e all'aspettativa di vita del taxon in tutto il suo areale storico e nei momenti “adeguati”.

Classificazione
degli “status”

CRITICALLY ENDANGERED (CR) - “**specie a forte rischio estinzione**”: A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (vedi criteri per definire una specie **CR**), and it is therefore considered to be facing an extremely high risk of extinction in the wild. Un taxon è in pericolo critico quando le prove disponibili indicano che soddisfa uno dei criteri da A a E per pericolo critico (vedi criteri per definire Una specie CR), e si ritiene pertanto di essere di fronte un altissimo rischio di estinzione del selvatico.

ENDANGERED (EN) - “**specie a rischio estinzione**”: A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (vedi criteri per definire una specie **EN**), and it is therefore considered to be facing a very high risk of extinction in the wild. Un taxon è in pericolo quando le prove disponibili indicano che soddisfa uno dei criteri da A a E per rischio di estinzione (vedi criteri per definire Una specie EN), e si ritiene pertanto essere di fronte a un rischio molto elevato di estinzione in natura.

VULNERABLE (VU) - “**specie vulnerabile**”: A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (vedi criteri per definire una specie **VU**), and it is therefore considered to be facing a high risk of extinction in the wild. Un taxon è vulnerabile quando le prove disponibili indicano che soddisfa uno dei criteri da A a E per vulnerabile (vedi criteri per definire Una specie VU), e si ritiene pertanto di essere di fronte un alto rischio di estinzione in natura.

NEAR THREATENED (NT) - “**specie minacciata**”: 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. Un taxon è quasi a rischio quando non si qualifica a rischio di estinzione o vulnerabile attualmente, ma è vicino alla qualificazione e potrebbe essere minacciato in un prossimo futuro per cui necessita di gestione conservativa.

LEAST CONCERN (LC) - “**specie a nessun rischio**”: 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. Widespread and abundant taxa are included in this category. Un taxon è a nessun rischio quando è stato valutato sulla base dei criteri non qualificarsi in nessun caso a rischio di estinzione o vulnerabile. Tutti i taxa diffusi e abbondanti (indicatori biologici negativi e specie “nocive”) sono inclusi in questa categoria.

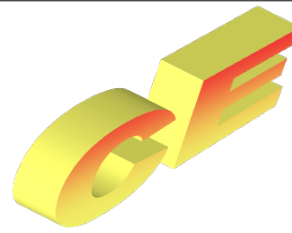
DATA DEFICIENT (DD) - “**specie con dati insufficienti alla classificazione**”

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. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. **Data Deficient is therefore not a category of threat.** Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria. **Not evaluated is therefore not a category of threat.**

Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

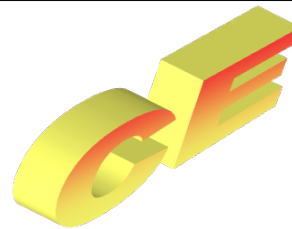
A. **Reduction in population size** based on any of the following:

1 - An observed, estimated, inferred or suspected **population size reduction of $\geq 90\%$ over the last 10 years or three generations**, whichever is the longer, where the **causes of the reduction** are clearly **reversible** and **understood** and **ceased**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

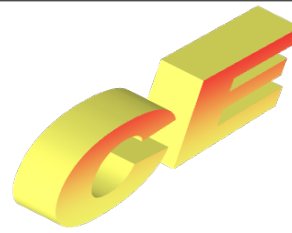
A. **Reduction in population size** based on any of the following:

2 - An observed, estimated, inferred or suspected **population size reduction of $\geq 80\%$ over the last 10 years or three generations**, whichever is the longer, where the reduction or its **causes may not have ceased** or may not be **understood** or may **not be reversible**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

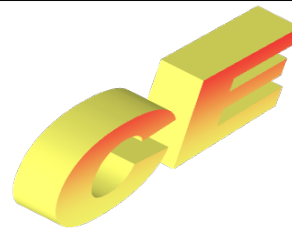
A. **Reduction in population size** based on any of the following:

3 - A **population size reduction of $\geq 80\%$, projected or suspected to be met within the next 10 years or three generations**, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of the following:

- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

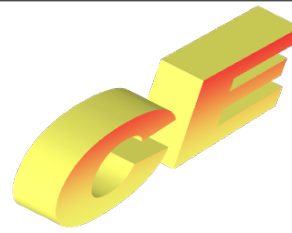
A. **Reduction in population size** based on any of the following:

4 - An observed, estimated, inferred, projected or suspected **population size reduction of $\geq 80\%$ over any 10 year or three generation period**, whichever is longer (up to a maximum of 100 years in the future), where **the time period must include both the past and the future**, and where the reduction or its **causes may not have ceased** or may **not be understood** or may **not be reversible**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”

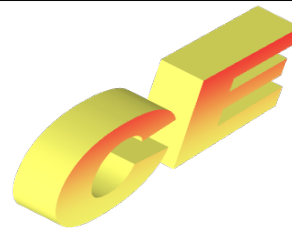


CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:

- 1 - Extent of occurrence estimated to be less than 100 km², and estimates indicating at least two of a-c:
- a. Severely fragmented or known to exist at only a single location.
 - 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.
 - 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.

Classificazione degli “status”

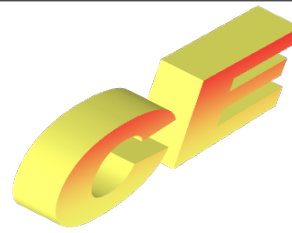


CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:

- 2 - Area of occupancy estimated to be less than 10 km², and estimates indicating at least two of a-c:
- a. Severely fragmented or known to exist at only a single location.
 - 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.
 - 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.

Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

Population size

1 -An estimated **continuing decline** of **at least 25% within three years or one generation**, whichever is longer, (up to a maximum of 100 years in the future)

or

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

(a) Population structure in the form of one of the following:

(i) no subpopulation estimated to contain more than 50 mature individuals,

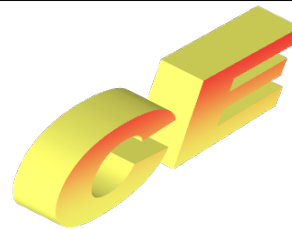
or

(ii) at least 90% of mature individuals in one subpopulation.

(b) Extreme fluctuations in number of mature individuals.

C. Population size number fewer than 250 mature individuals and either:

Classificazione degli “status”



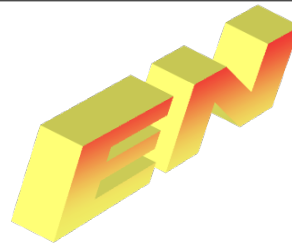
CRITERI PER DEFINIRE UNA POPOLAZIONE CRITICALLY ENDANGERED - CE

Population size

D. Population size estimated to number fewer than 50 mature individuals

E. Quantitative **analysis** showing the **probability of extinction** in the wild is **at least 50% within 10 years or three generations**, whichever is the longer (up to a maximum of 100 years).

Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

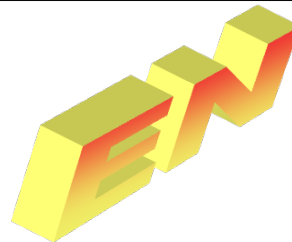
A. **Reduction in population size** based on any of the following:

1 - An observed, estimated, inferred or suspected **population size reduction of $\geq 70\%$ over the last 10 years or three generations**, whichever is the longer, where the **causes of the reduction** are clearly **reversible** and **understood** and **ceased**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

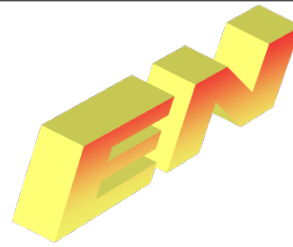
A. **Reduction in population size** based on any of the following:

2 - An observed, estimated, inferred or suspected **population size reduction of $\geq 50\%$ over the last 10 years or three generations**, whichever is the longer, where the reduction or its **causes may not have ceased** or may not be **understood** or may **not be reversible**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

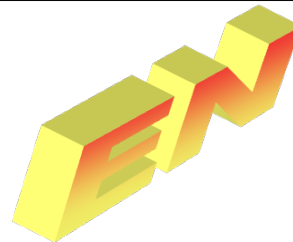
A. **Reduction in population size** based on any of the following:

3 - A **population size reduction of $\geq 50\%$, projected or suspected to be met within the next 10 years or three generations**, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of the following:

- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

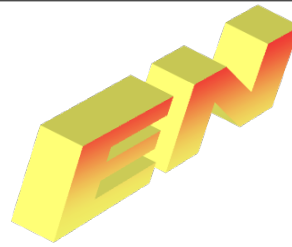
A. **Reduction in population size** based on any of the following:

4 - An observed, estimated, inferred, projected or suspected **population size reduction of $\geq 50\%$ over any 10 year or three generation period**, whichever is longer (up to a maximum of 100 years in the future), where **the time period must include both the past and the future**, and where the reduction or its **causes may not have ceased** or may **not be understood** or may **not be reversible**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”

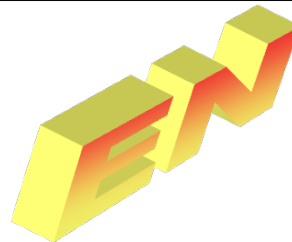


CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:

- 1 - Extent of occurrence estimated to be less than 5.000 km², and estimates indicating **at least two of a-c**:
- a. Severely fragmented or known to exist at only a single location.
 - 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.
 - 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.

Classificazione degli “status”

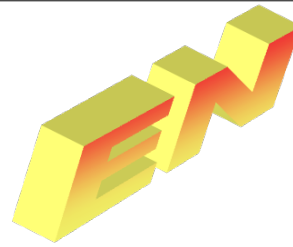


CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:

- 2 - Area of occupancy estimated to be less than 500 km², and estimates indicating at least two of a-c:
- a. Severely fragmented or known to exist at only a single location.
 - 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.
 - 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.

Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

Population size

1 -An estimated **continuing decline** of **at least 25% within three years or one generation**, whichever is longer, (up to a maximum of 100 years in the future)

or

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

(a) Population structure in the form of one of the following:

(i) no subpopulation estimated to contain more than 50 mature individuals,

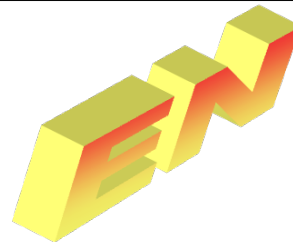
or

(ii) at least 90% of mature individuals in one subpopulation.

(b) Extreme fluctuations in number of mature individuals.

C. Population size number fewer than **2.500** mature individuals and either:

Classificazione degli “status”



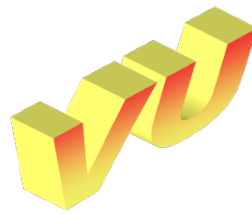
CRITERI PER DEFINIRE UNA POPOLAZIONE ENDANGERED - EN

Population size

D. Population size estimated to number **fewer than 250** mature individuals

E. Quantitative **analysis** showing the **probability of extinction** in the wild is **at least 20% within 20 years or five generations**, whichever is the longer (up to a maximum of 100 years).

Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

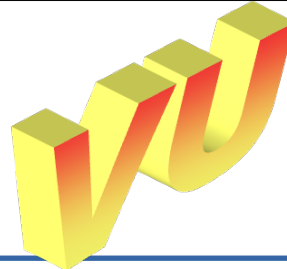
A. **Reduction in population size** based on any of the following:

1 - An observed, estimated, inferred or suspected **population size reduction of $\geq 50\%$ over the last 10 years or three generations**, whichever is the longer, where the **causes of the reduction** are clearly **reversible** and **understood** and **ceased**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

A. **Reduction in population size** based on any of the following:

2 - An observed, estimated, inferred or suspected **population size reduction of $\geq 30\%$ over the last 10 years or three generations**, whichever is the longer, where the reduction or its **causes may not have ceased** or may not be **understood** or may **not be reversible**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

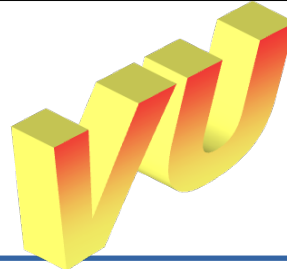
A. **Reduction in population size** based on any of the following:

3 - A **population size reduction of $\geq 30\%$, projected or suspected to be met within the next 10 years or three generations**, whichever is the longer (up to a maximum of 100 years), based on (and specifying) any of the following:

- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

A. **Reduction in population size** based on any of the following:

4 - An observed, estimated, inferred, projected or suspected **population size reduction of $\geq 30\%$ over any 10 year or three generation period**, whichever is longer (up to a maximum of 100 years in the future), where **the time period must include both the past and the future**, and where the reduction or its **causes may not have ceased** or may **not be understood** or may **not be reversible**, based on (and specifying) any of the following:

- (a) direct observation
- (b) an index of abundance appropriate to the taxon
- (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
- (d) actual or potential levels of exploitation
- (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.

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Classificazione degli “status”

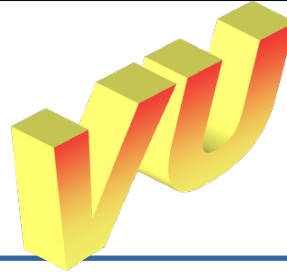


CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:

- 1 - Extent of occurrence estimated to be **less than 20.000 km²**, and estimates indicating **at least two of a-c**:
- a. Severely fragmented or known to exist at only a single location.
 - 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.
 - 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.

Classificazione degli “status”

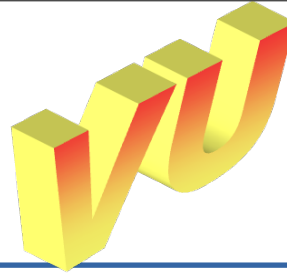


CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

B. Geographic range in the form of either B1 (extent of occurrence) or B2 (area of occupancy) or both:

- 2 - Area of occupancy estimated to be **less than 2.000 km²**, and estimates indicating at least two of a-c:
- a. Severely fragmented or known to exist at only a single location.
 - 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.
 - 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.

Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

Population size

1 -An estimated **continuing decline** of **at least 10% within three years or one generation**, whichever is longer, (up to a maximum of 100 years in the future)

or

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

(a) Population structure in the form of one of the following:

(i) no subpopulation estimated to contain more than 1.000 mature individuals,

or

(ii) all mature individuals in one subpopulation.

(b) Extreme fluctuations in number of mature individuals.

C. Population size number fewer than **10.000 mature individuals** and either:

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Classificazione degli “status”



CRITERI PER DEFINIRE UNA POPOLAZIONE VULNERABLE - VU

Population size

D. Population size very small or restricted in the form of either of the following:

1. Population size estimated to number **fewer than 1,000 mature individuals.**

2. Population with a **very restricted area of occupancy** (typically less than 20 km²) or number of locations (typically five or fewer) such that it is prone to the effects of human activities or stochastic events within a very short time period in an uncertain future, and is thus capable of becoming Critically Endangered or even Extinct in a very short time period.

E. Quantitative analysis showing the **probability of extinction** in the wild is **at least 10% within 100 years.**

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Enter Red List search term(s)

Output

<http://www.iucn.org/>

Taxonomy
Assessment Information
Geographic Range
Population
Habitat and Ecology
Threats
Conservation Actions

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Probabilità di estinzione in tot anni

ANALISI STOCASTICA

In matematica la matrice stocastica o matrice di probabilità viene usata per descrivere un processo random che è caratterizzato dalla proprietà che lo stato successivo dipende dallo stato precedente

Analogamente la variazione della consistenza di una popolazione selvatica può essere analizzata con un processo scientifico stocastico che dipende dal numero di riproduttori che sono presenti all'inizio di ogni stagione riproduttiva e dalle caratteristiche riproduttive.

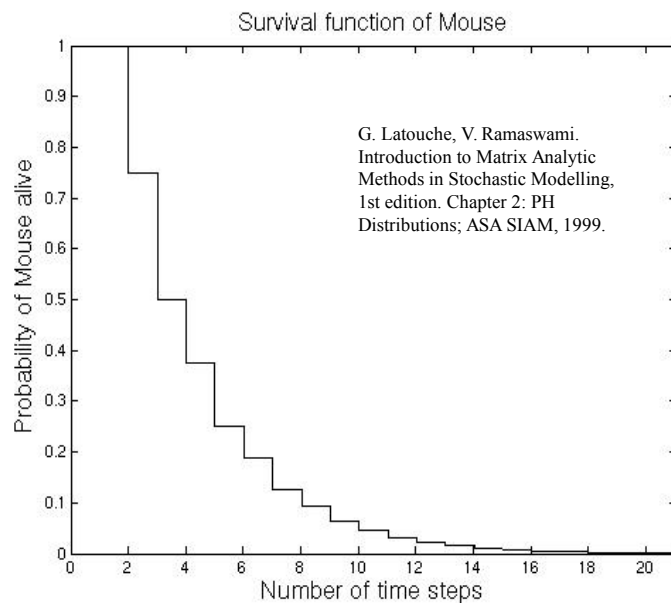
32

I fattori probabilistici che determinano il numero di riproduttori presenti all'inizio della seguente stagione riproduttiva sono (semplificando), oltre al numero di riproduttori presenti l'anno precedente :

- indice riproduttivo della specie;
- aspettativa di vita delle diverse categorie.

Esempio di come “lavora” la matrice stocastica

Consideriamo un esempio molto semplice (senza riproduzione): ipotizziamo 5 recinti; al momento zero nel primo recinto è presente un gatto e nel quinto è presente un topo; ogni “step” (anno di una popolazione selvatica a riproduzione stagionale) il gatto salta a random nel recinto adiacente e così il topo (calcola la probabilità di morte sequenziale). Quando il gatto e il topo si trovano nello stesso recinto il topo si “estingue”.



Tramite

L'ANALISI STOCASTICA

È possibile quindi determinare il livello di probabilità che una determinata popolazione si estingua dopo un determinato numero di step (anni)

Foglio elettronico utilizzabile solo per esempio didattico molto semplice

Programmi utilizzabili:
Frontier-4.1 with R-2.11.1

<http://www.r-project.org/>

<http://frontier.r-forge.r-project.org/front41.html>