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The update of the Greek Red Data Book of threatened fauna: Summary results and trends

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Project details

Beneficiary: Hellenic Zoological Society

WWF Greece: communication and awareness

The update of the Red Data Book is the result of the cooperation and work of many researchers, Universities, NGOs, institutes

Within the Operational Programme "Environment" 2000-2006, measure 5.2 "Environmental Awareness". Funded by 80% from EU resources and 20% from national funds

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Project team

- Scientific coordination: T. Legakis, HZS
- Project coordination: P. Maragou, WWF Greece
- Group coordinators:
  - Terrestrial arthropods – T. Legakis (8)
  - Terrestrial mollusks – K. Vardinogiannis (2)
  - Marine arthropods – M. Kitsos (1+3)
  - Freshwater fish – P. Economides (2)
  - Marine fish – K. Papakonstantinou (4)
  - Amphibians – K. Sotiropoulos (3)
  - Reptiles – P. Lymberakis (9)
  - Birds – HOS (T. Kastritis, G. Handrinos) (43)
  - Mammals – A. Sfougaris (34)

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What is a Red Data Book?

An assessment of a taxon's relative risk of extinction, with the main purpose of highlighting the taxa that are facing a higher risk.

Not a conservation measure but a priority-setting exercise.

The threatened status of animals is a widely used indicator for assessing the condition of ecosystems and their biodiversity.

8 categories and 5 main criteria groups *(population size and trends, range, habitat quality, threats, life cycle)*

IUCN threat categories

EXTINCT (EX), EXTINCT IN THE WILD (EW)

There is no reasonable doubt that the last individual has died. 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.

CRITICALLY ENDANGERED (CR)

A taxon that is considered to be facing an **extremely high risk** of extinction in the wild.

ENDANGERED (EN)

A taxon that is considered to be facing a **very high risk** of extinction in the wild.

VULNERABLE (VU)

A taxon that is considered to be facing a **high risk** of extinction in the wild.

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IUCN categories

NEAR THREATENED (NT)

A taxon that does ***not*** qualify for a threat category now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

Widespread and abundant taxa.

DATA DEFICIENT (DD)

Inadequate information to make an assessment of the taxon's risk of extinction based on its distribution ***and/or*** population status..

NOT EVALUATED (NE)

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Species Selection

- **Protected, threatened (global, regional), endemics, …**
- **Vertebrates: 453 species**
  - 45 Marine fish
  - 131 Freshwater fish
  - 22 Amphibians
  - 64 Reptiles
  - 122 Birds
  - 69 Mammals

- **Invertebrates:** 394 terrestrial mollusks, 30 Araneae, 48 Isopoda, etc

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Invertebrate species in a threat category

Cnidaria (1)

Mollusca Bivalvia (1)

Mollusca Gastropoda (166)

Araneae (30)

Isopoda (48)

Chilopoda (5)

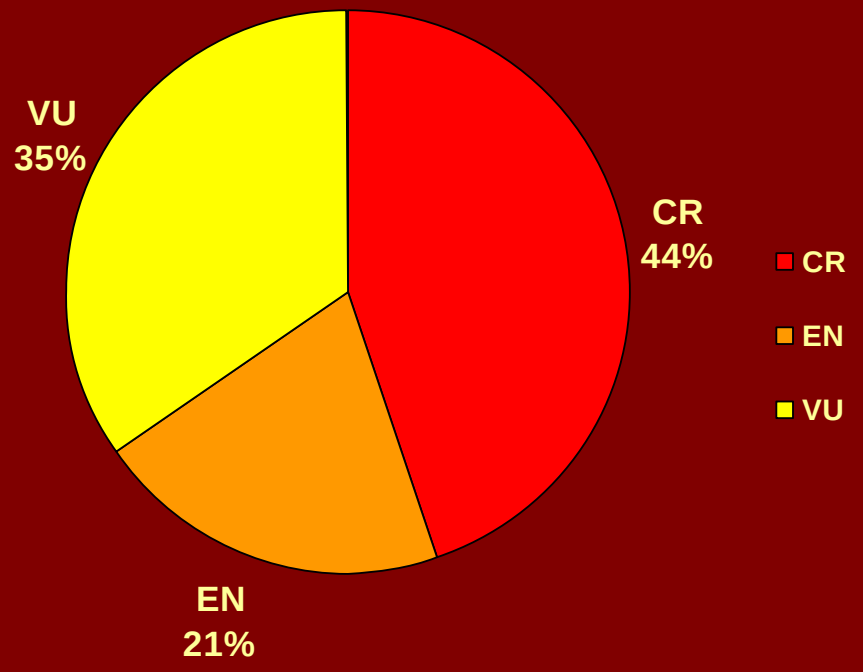
Odonata (4)

Orthoptera (2)

Lepidoptera (39)

Coleoptera (4)

Echinoderma (1)



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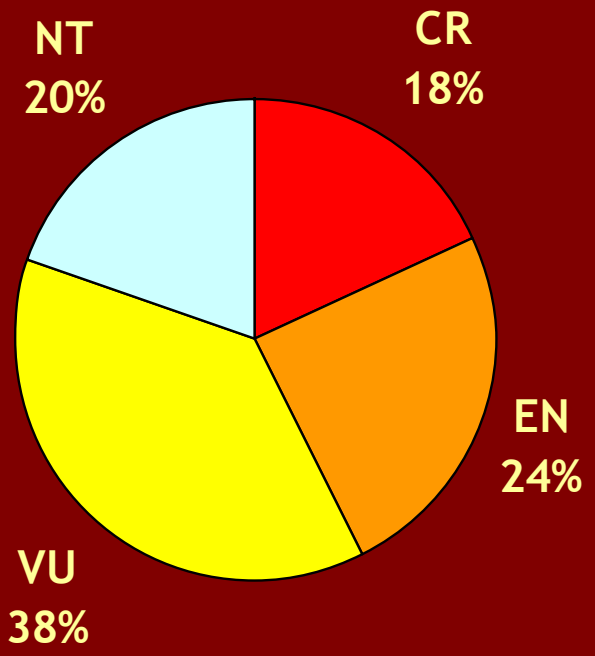
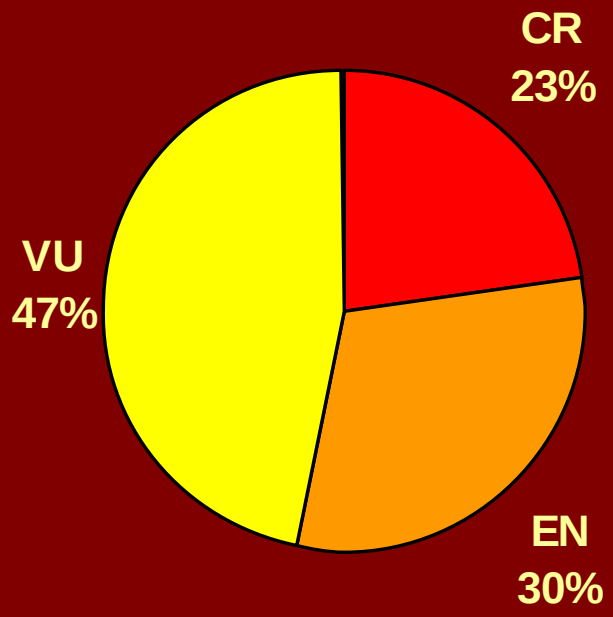
Vertebrate species in a threat category





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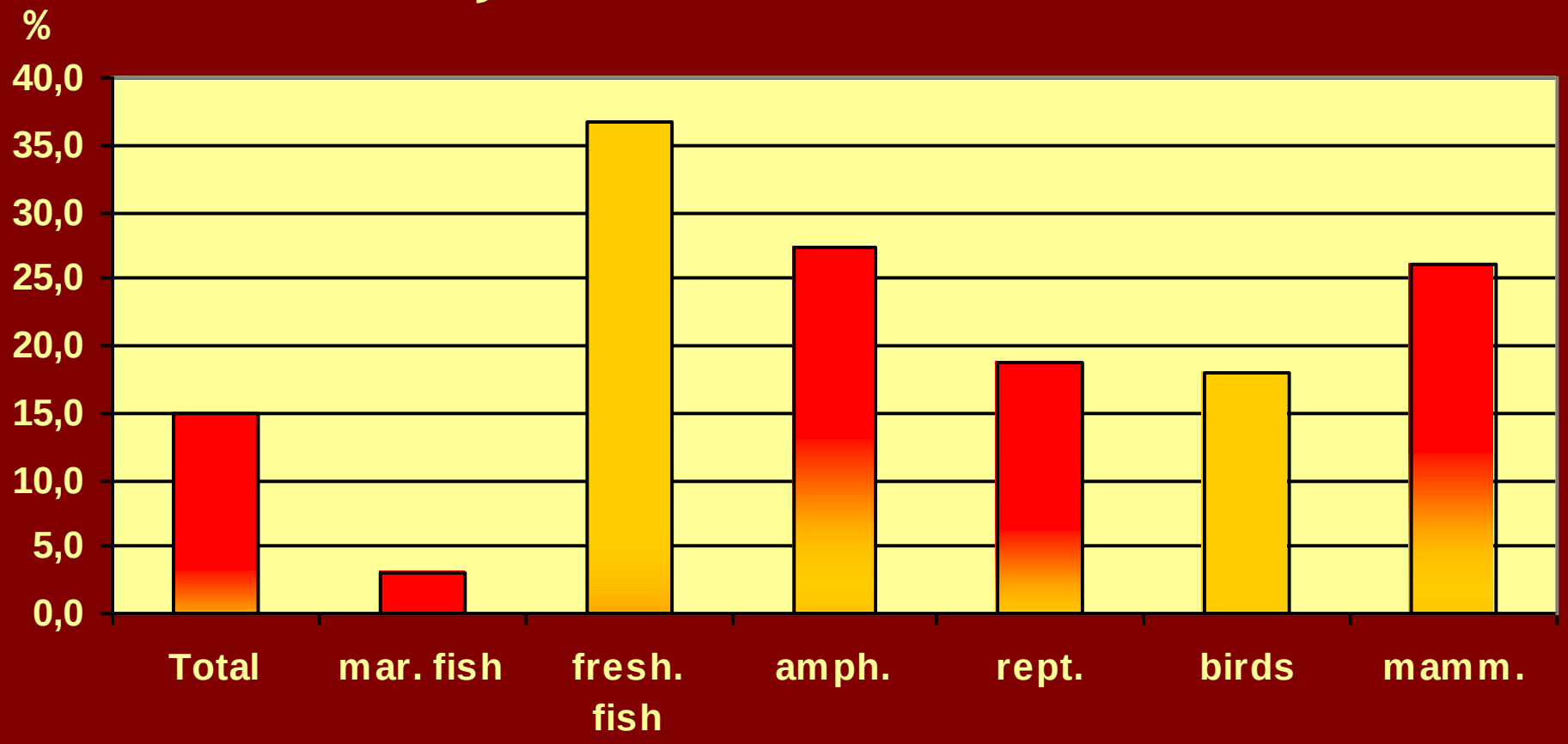
How many vertebrates are threatened?



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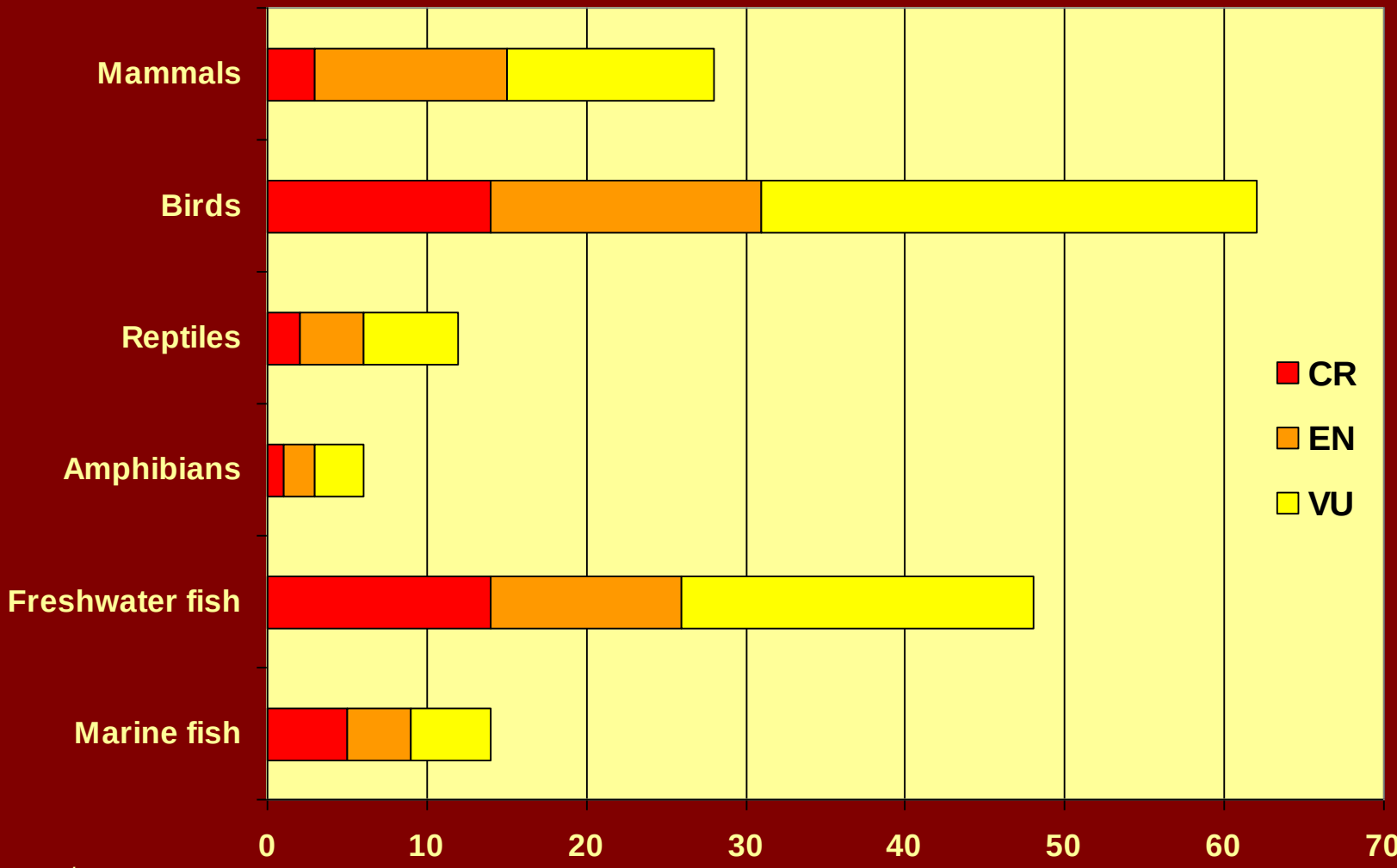
No of species in threat category



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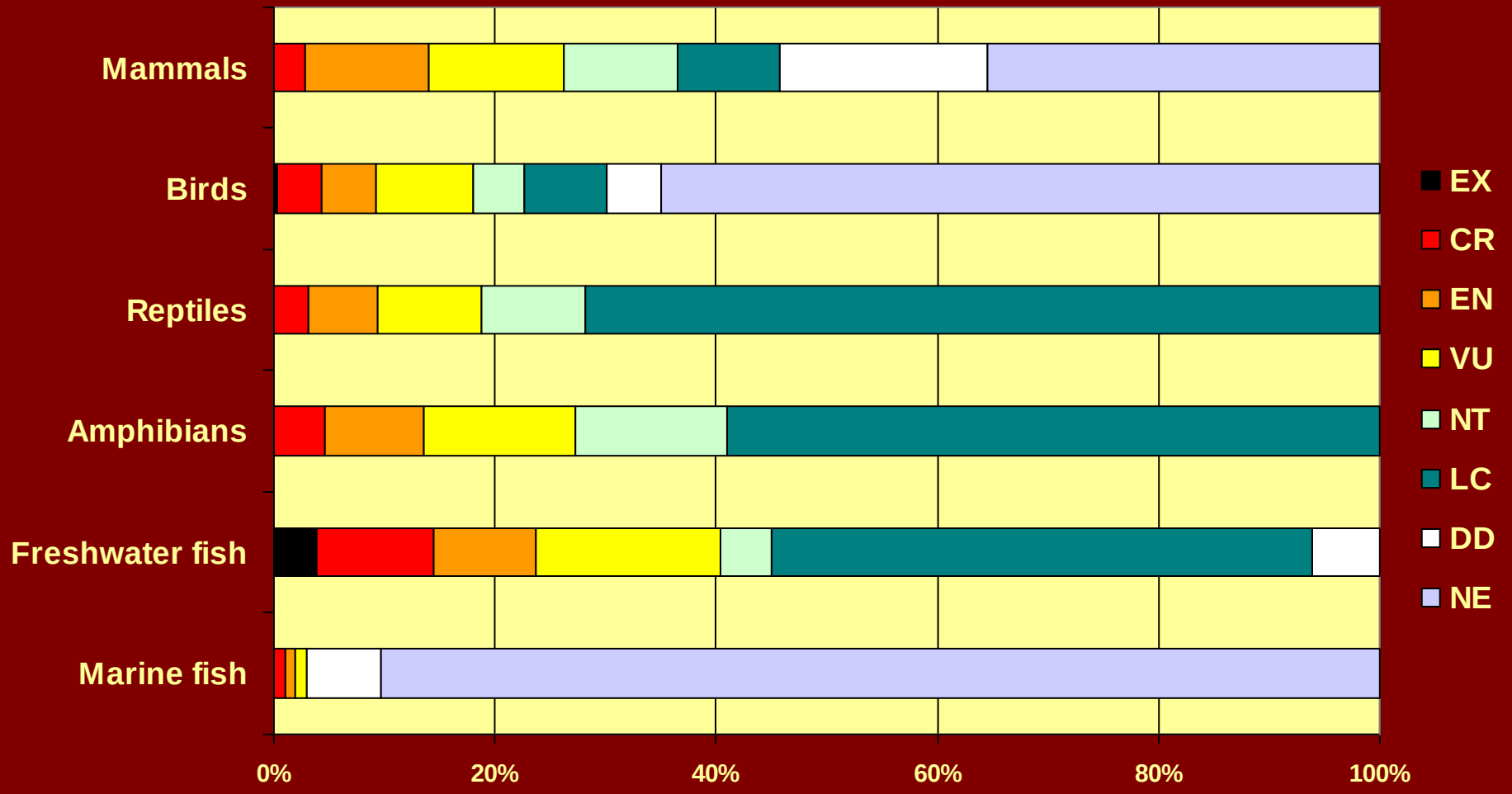
Differences between groups



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Criteria

A: Reduction in population size

B: Geographic range (area, fragmentation, habitat quality and/or extend, # of subpopulations)

C: Number and trends of mature individuals

D: Very small or restricted population

E: Quantitative analysis showing the probability of extinction in the wild.

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Main criteria used

			Unique criterion	
A	45	19%	27	11%
B	93	39%	63	27%
C	30	13%	10	4%
D	70	29%	49	21%
	238		149	63% 1 criterion 37% Multiple criteria

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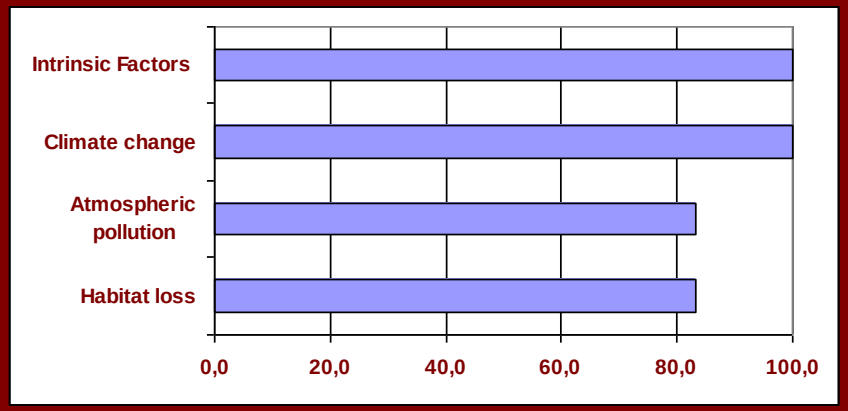
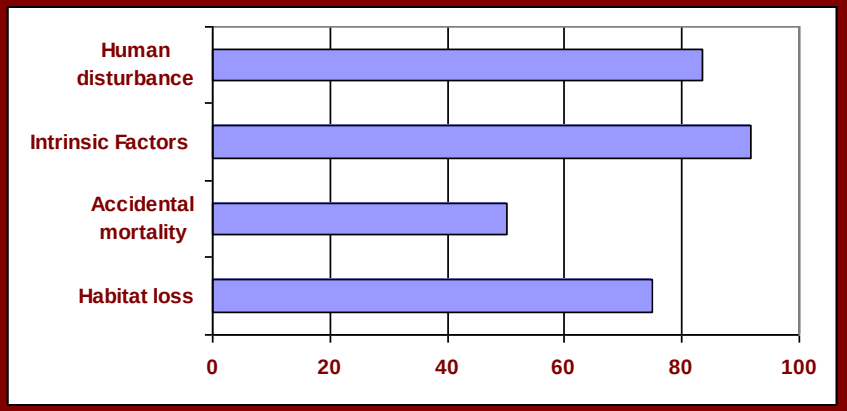
Main threats

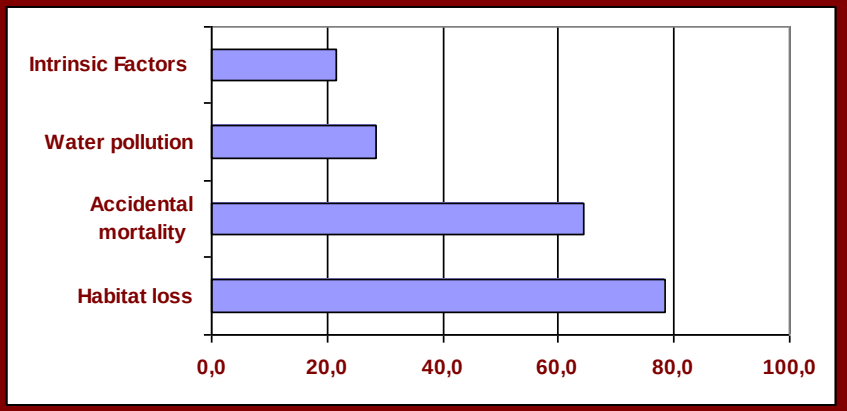
Amphibians



Reptiles



Marine fish



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Main management measures

- **Law & Policy**
  - Development of management plans
  - Implementation of legislation (esp. nationally)
- **Communication & awareness**
  - On value, importance, threat status
- **Research activities**
  - Biology & ecology, monitoring, threats
- **Site specific measures**
  - Designation and management of protected areas
- **Species specific**

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During the last 17 years …

- **Different numbers & species**
- **Not possible to quantify changes**
  - Different criteria
  - Increased knowledge
- **Species with status change**
  - Real change or previous lack of data
  - Changes in taxonomic status (e.g. *Rana*, *Podarcis*)

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