TD No. 1: Basic Definitions

A rare species

It is a species that is difficult to find, uncommon, and represented by a small number of individuals. However, if we look more closely, rarity can reveal surprises: a species that is rare on a national scale may appear locally abundant in a specific region. A species can be rare in some places and common elsewhere — rarity seems to depend on location. Furthermore, rarity often appears to be closely associated with a particular type of habitat: for instance, a species characteristic of peat bogs or high mountains cannot be found elsewhere.

A threatened species

A species is declared threatened if it meets certain criteria (habitat loss, significant population decline, genetic erosion, excessive hunting or fishing, etc.). It is a species that is potentially in danger within a given territory.

An endemic species

Endemism refers to the natural presence of a biological group exclusively within a defined geographical region. This concept, used in biogeography, can apply to species as well as to other taxa, and can concern all kinds of living organisms: animals, plants, or others.

An endemic species (or endemic taxon) is always defined in relation to a specific territory: the koala is endemic to Australia, the Monterey cypress is an endemic tree of California (even if it has since been planted worldwide), and the argan tree is endemic to Morocco and part of Algeria.

The endemic species of a geographical area form a subset of the species naturally present without human influence, known as indigenous species. However, many indigenous species are not endemic if they occur naturally in other regions of the planet.

The rate of endemism is one of the indicators used to assess biodiversity. For example, in Europe, four out of five endemic species live only in the Mediterranean zone — a biogeographic area where more than 50% of the 25,000 species of vascular phanerogams and cryptogams exist (a figure to be compared with the 15,000 species of higher flora in Australia, which occupy an area three times larger). That is why the Mediterranean and its surroundings are considered one of the world's biodiversity "hotspots."

1 Dr. Djeddi Hamssa

A protected species

A protected species is a plant or animal species that benefits from legal protection for scientific reasons or for the need to preserve biological heritage. These are generally threatened species whose poaching, transport, handling, and sometimes even approach or photography are temporarily or permanently prohibited (except under special exemption) by various authorities, in all or part of their natural range. These are mostly vertebrates or plants, but invertebrates, insects, or fungi may also be concerned.

In general, the transport and trade of these species are prohibited in all forms (dead or living individuals, eggs, larvae, by-products, meat, etc.). The sale of stuffed or preserved specimens (even old ones) is usually forbidden, though they may be donated to museums. A species that has become extinct may also be protected.

An extinct species

A species that has not been observed in the wild for at least fifty (50) years.

An endangered species

A species that exists in a very small number within a territory.

An extirpated species

A species that has abandoned its usual region or habitat due to unfavorable conditions that have developed there.

A vulnerable species

A species in decline within a territory, whose numbers are gradually decreasing.

Habitat

The place or type of site in which an organism or a population naturally exists.

Monograph

A detailed study on a given subject. Therefore, a national monograph on biological diversity is the detailed study of that diversity within a specific country.

Preservation

Policies and programs ensuring the maintenance of individuals or groups but not their evolution (for example, zoos and botanical gardens).

2 Dr. Djeddi Hamssa