Visualizing the Global Extinction Crisis

This presentation explores the IUCN Red List data, a global standard for assessing species extinction risk. We will visualize this data to understand the current state of global biodiversity and highlight areas of concern.

IUCN Red List: A Global Baseline

Data Source

The IUCN Red List is a comprehensive inventory of the global conservation status of biological species.

Data Characteristics

The Red List uses nine categories to classify species based on their risk of extinction. The most critical categories are Critically Endangered, Endangered, and Extinct.

Main Dataset Variables

The IUCN Red List categorizes species based on their extinction risk. The main categories are:

- **Extinct (EX):** The species is no longer observed despite exhaustive surveys in its known habitat.
- **Extinct in the Wild (EW):** Survives only in captivity, cultivation, or reintroduced populations outside its historical range.
- **Critically Endangered (CR):** Faces an extremely high risk of extinction in the immediate future. This category includes:
  - **Possibly Extinct (CR(PE)):** Likely extinct but requires confirmation.
  - **Possibly Extinct in the Wild (CR(PEW)):** Likely extinct in the wild but alive in captivity.
- **Endangered (EN):** Faces a very high risk of extinction in the near future.
- **Vulnerable (VU):** Faces a high risk of extinction in the medium term.
- **Near Threatened (NT):** Close to meeting the criteria for a threatened category.
- **Least Concern (LC):** Widespread and abundant, not at risk of extinction.
- **Data Deficient (DD):** Insufficient data to assess the risk of extinction.
- **Lower Risk/Conservation Dependent (LR/cd):** Not currently threatened but dependent on ongoing conservation efforts.

Note that CR(PE) and CR(PEW) are not official IUCN categories, but are used to highlight potentially extinct species.

Data Quality and Completeness

Reliable Source

The IUCN Red List is widely recognized as the global standard for assessing biodiversity threats.

Rigorous Methods

Evaluations use standardized criteria and methods to ensure consistency and data quality.

Global Harmonization

Detailed guidelines promote a unified methodology for national Red List programs worldwide.