

🔗 WWF-Inspired Biodiversity Dashboard Project

🔗 Project Inspiration

Today, our planet is facing an unprecedented biodiversity crisis. According to WWF's Living Planet Report, global populations of mammals, birds, amphibians, reptiles, and fish have declined by an average of **69% since 1970**. Habitat destruction, climate change, pollution, and poaching are accelerating these losses at alarming rates.

This project was born from my concern for these issues, and a desire to combine **data analytics** with **conservation awareness**. Through this dashboard, I've tried to take a small but meaningful step — transforming real-world data into insights that inform, inspire, and encourage dialogue.

It reflects:

- Exploring and communicating patterns through data.
- Using data to understand public awareness and behavioral trends.
- Turning numbers into nature stories that matter.

🔗 Datasets Used

Primary:

- Living Planet Index (LPI) – Real conservation impact data showing species population trends from 1950 to 2020.

Supplemental (for future expansion):

- Google Trends
- Charity Navigator Sector Reports
- GlobalGiving Campaign Data

□ Tools & Workflow

1. Data Understanding – Explored structure, coverage, nulls – Python (Pandas), Excel
2. Data Cleaning – Removed NaNs, reshaped for Tableau – Python (Google Colab)
3. Insight Planning – Defined key metrics, visual types, and storytelling goals – Done through structured reflection and dashboard storyboarding
4. Dashboard Design – Visualized trends, maps, bars, tables – Tableau Desktop
5. Storytelling Layer – Added filters, narrative, polish – Tableau Dashboard Editor
6. Wrap-up – Documentation and upload to GitHub – Word, Markdown

📊 Tableau Dashboard Overview

Title: The State of Global Biodiversity: Trends, Threats & Hope

Key Visuals:

1. Species Trends Over Time (Line Chart)
2. Global Biodiversity Heatmap (Map)
3. Population by Ecosystem (Bar Chart)
4. Species Impact Table (Text Table)

📝 Insights & Reflections

- Marine systems showed varied, often lower population health
- African regions (e.g., South Africa) had high species tracking but mixed population outcomes
- Line trends helped spot both declines and recoveries (e.g., African Elephant)

✓ Ethical Note

This project was created strictly as a personal learning and portfolio showcase. All data used is publicly available, and any interpretation, transformation, or visualization of it is my own. While I strive for accuracy and respectful data representation, I welcome suggestions or improvements.

If you're from a conservation or data organization and notice areas of concern or improvement — I'm open to collaboration and feedback.

🔗 Data Source Credits

- Living Planet Index - ZSL & WWF (<https://livingplanetindex.org>)
- Visual inspiration referenced from WWF Living Planet Report and open biodiversity dashboards

🔗 View the Dashboard Live

Explore here:

https://public.tableau.com/shared/WDCZ6ZNZZ?:display_count=n&:origin=viz_share_link