

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

# Biodiversity in National Parks

Analysis of endangered species observations

# The purpose of analysis

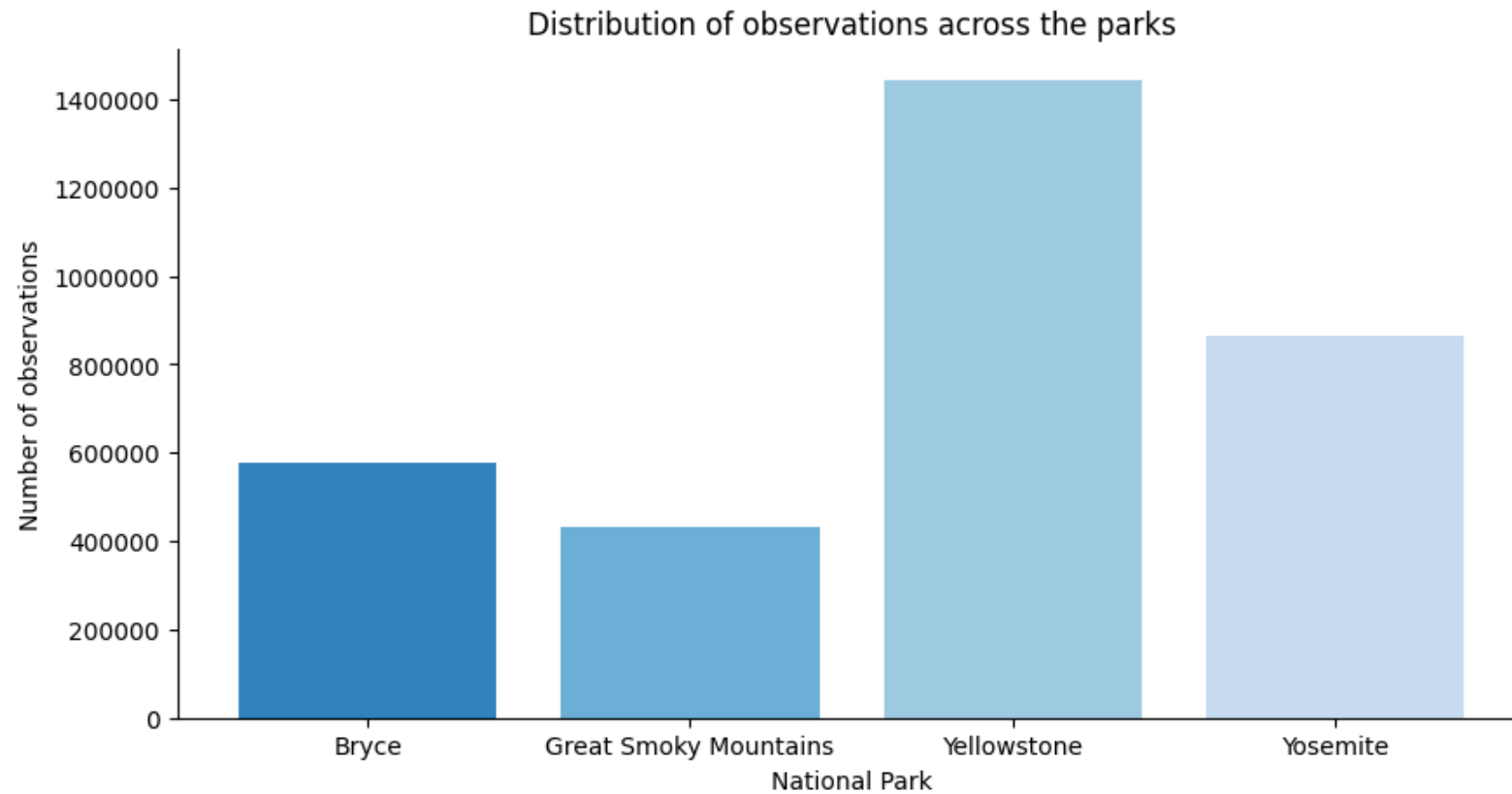
- ▶ The analysis is part of my Data Science Career Path program on [Codecademy.com](https://www.codecademy.com)
- ▶ We are performing data analysis of conservation statuses of the species in the National Parks

# Data sources

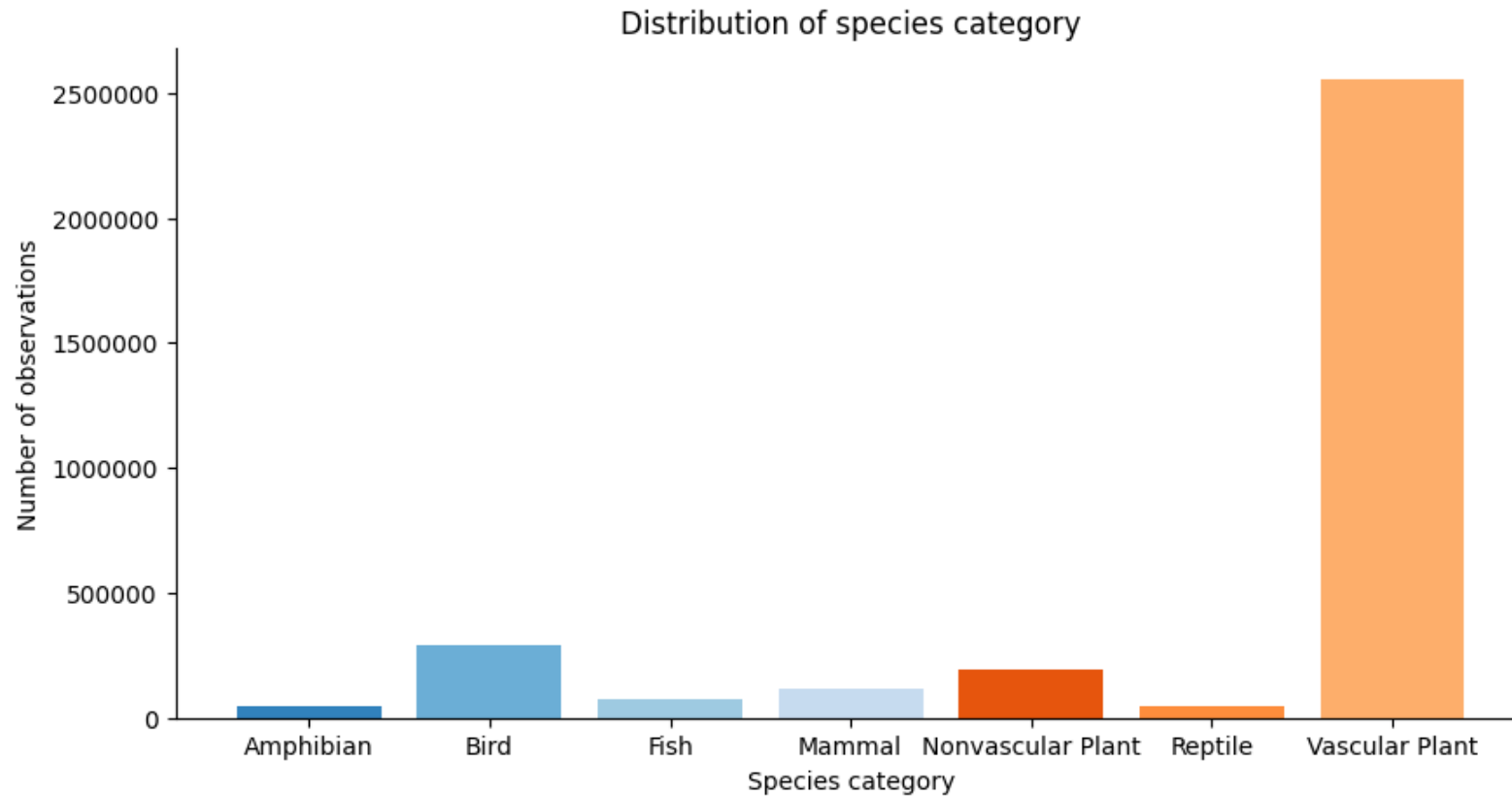
- ▶ We were provided with two files:
  - ▶ “observations.csv” where are the results of the observations, containing 23296 number of observations, containing:
    - ▶ “scientific\_name” - scientific (latin) name of the species
    - ▶ “park\_name”
    - ▶ “observations” - number of observation
  - ▶ “species.csv” where are listed all the species being observed, containing 5541 different species, containing:
    - ▶ “category” - 7 different types of species (ex. Bird, mammal, vascular plant, etc.)
    - ▶ “scientific\_name” - scientific (latin) name of the species
    - ▶ “common\_name”
    - ▶ “conservation\_status” - 4 different status types (ex. Endangered, threatened, etc.)

# Observations by parks

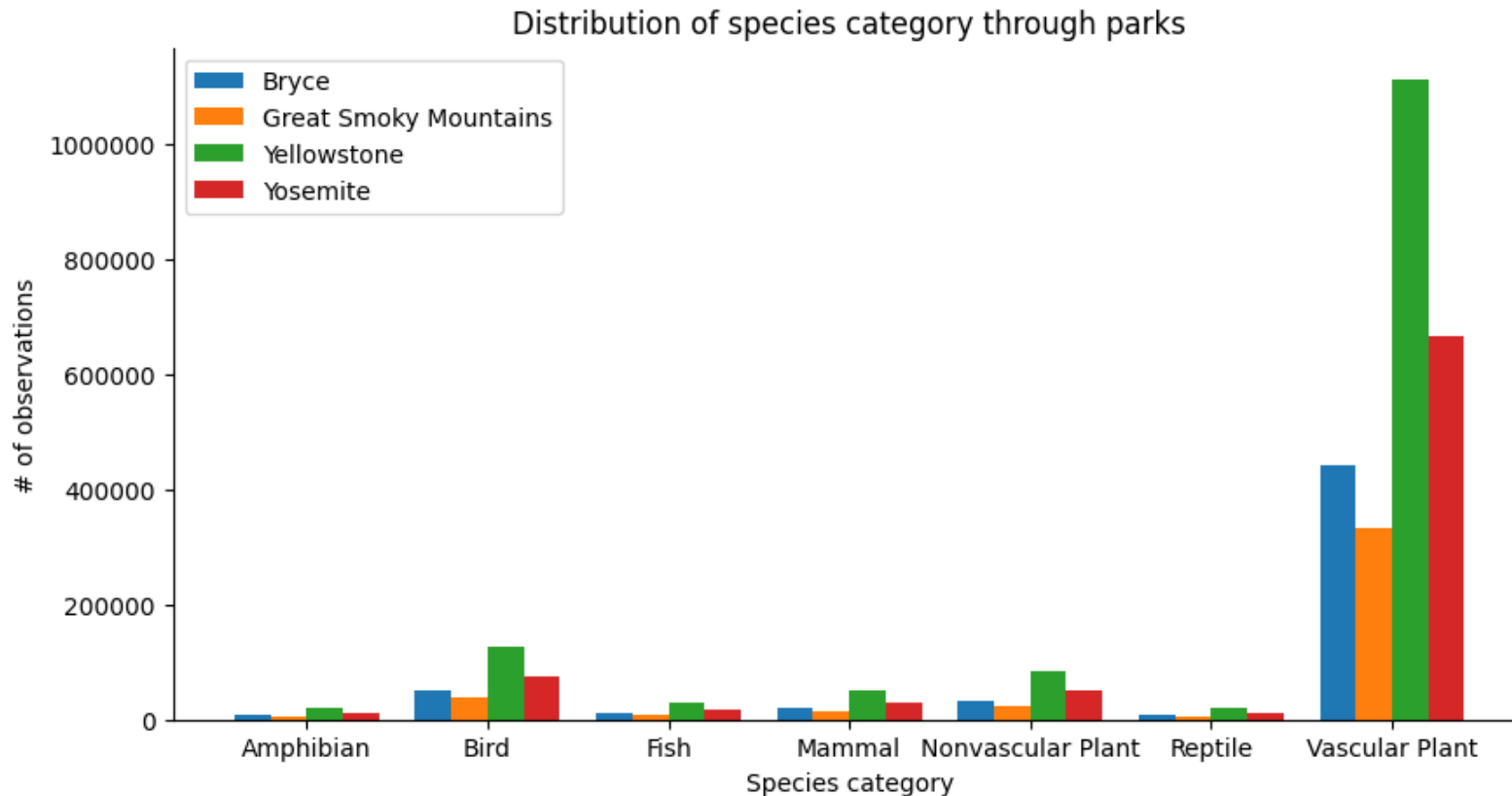
Total of 3.313957 observations



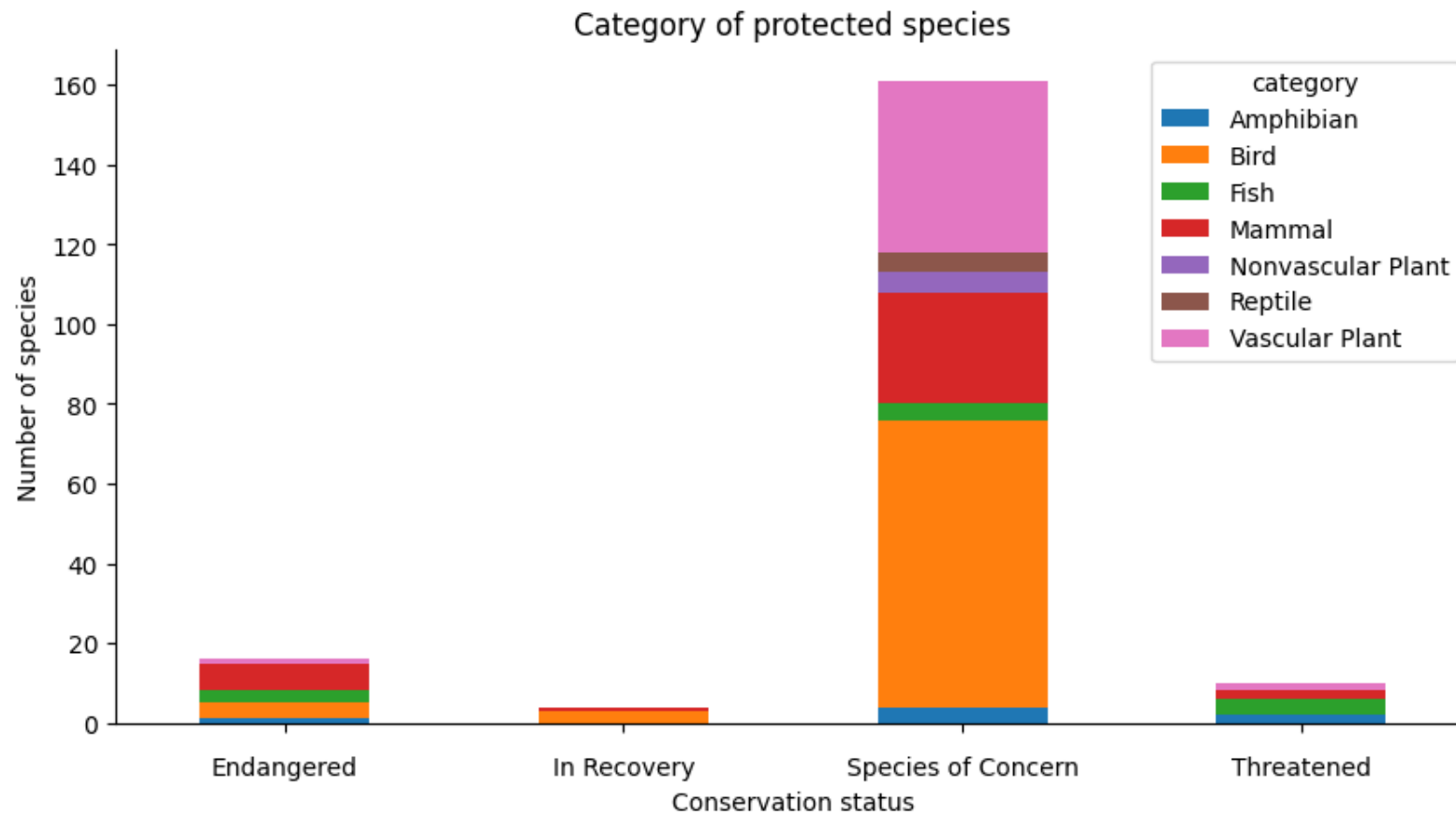
# Species category observations



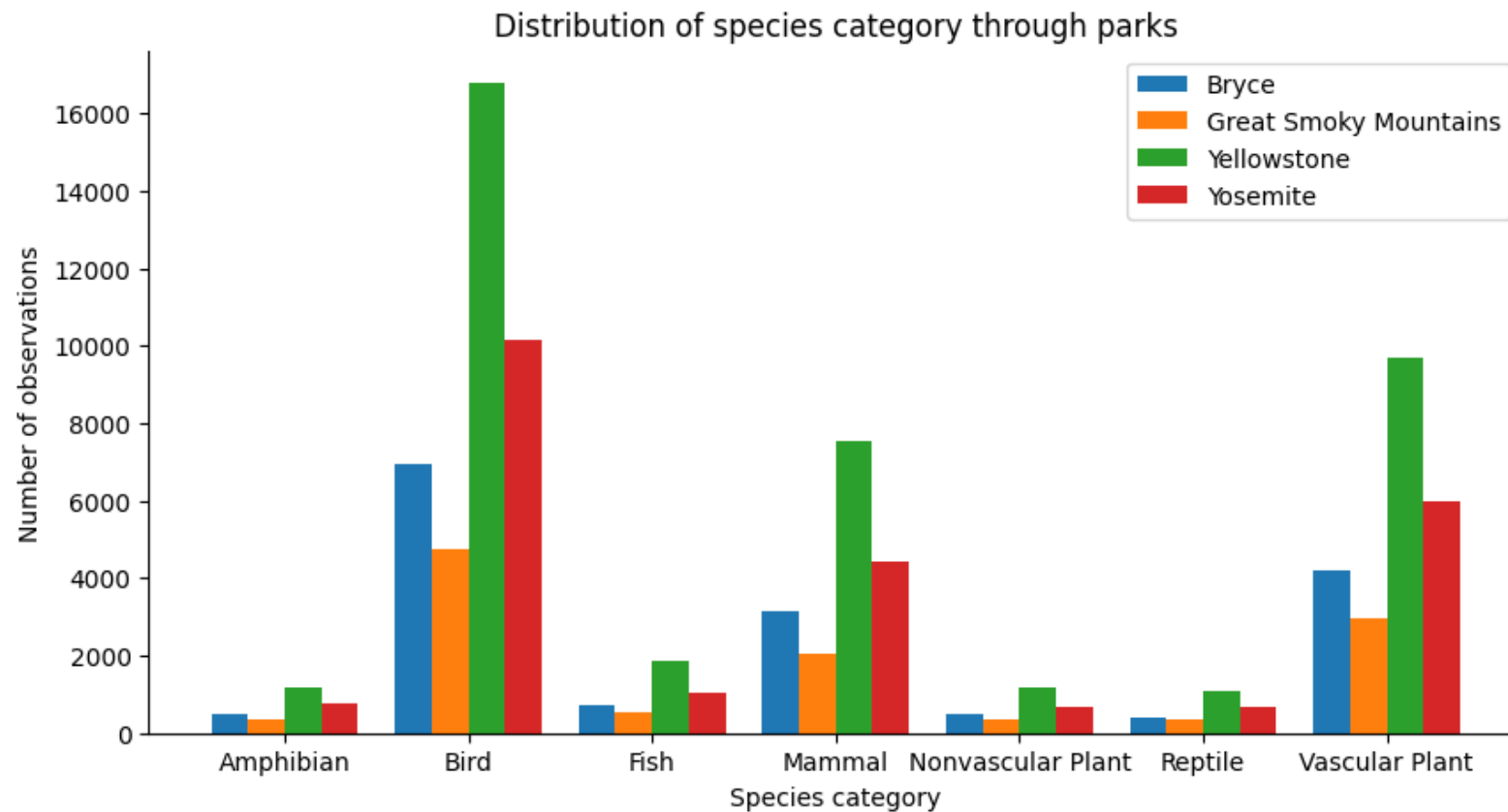
# Species category observation through different parks



# Species category and their conservation status

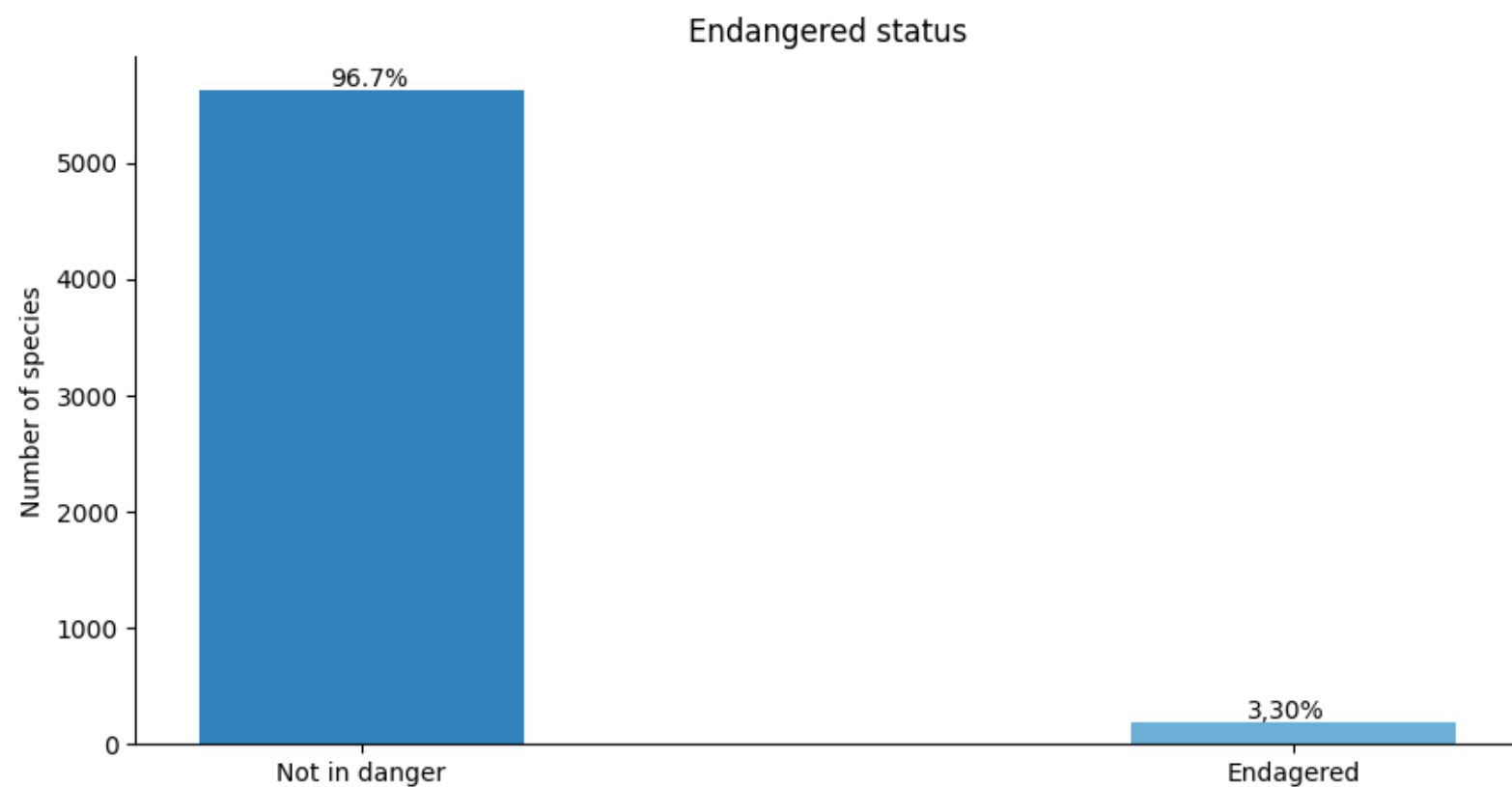


# Species category through parks

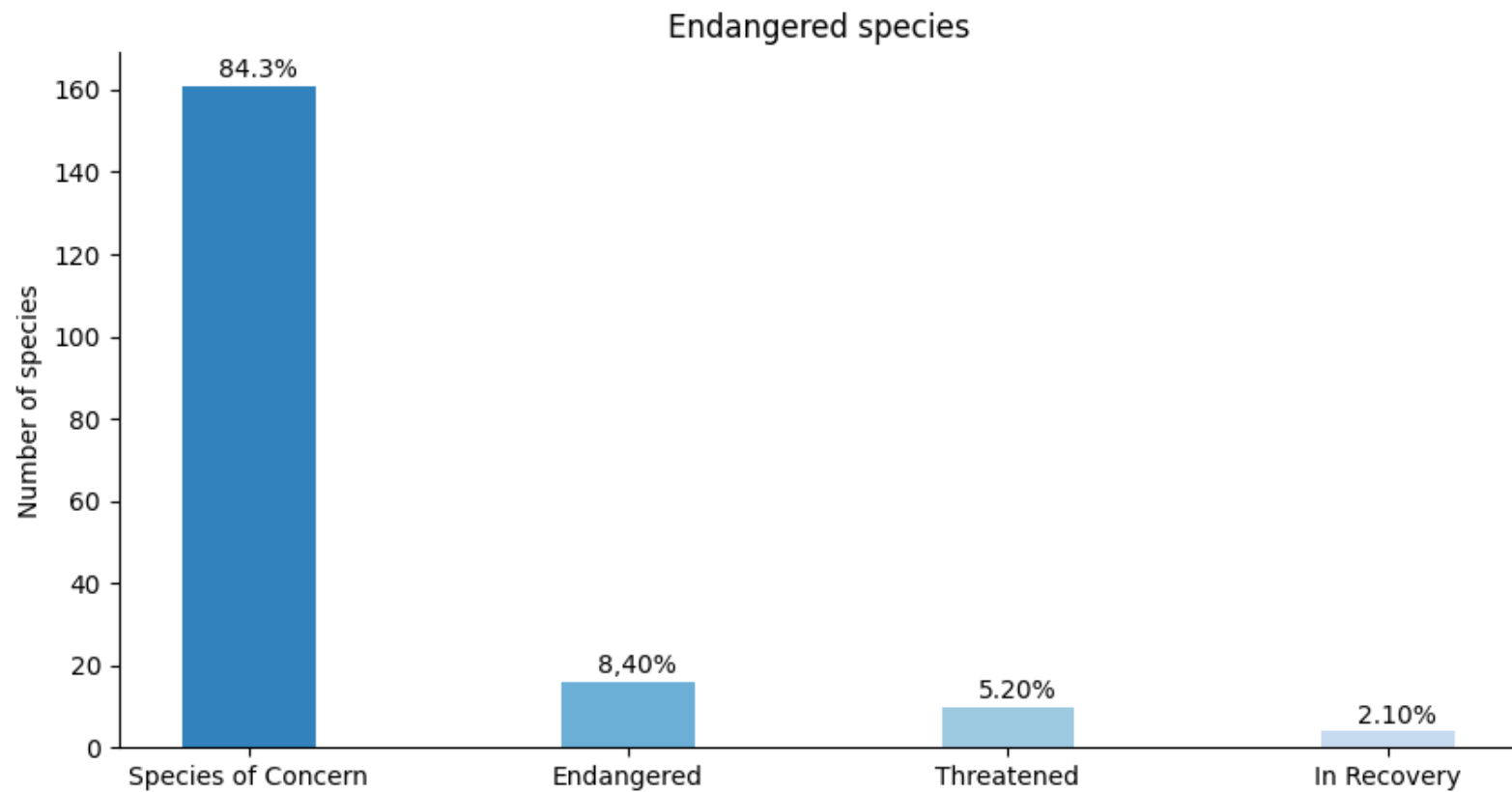




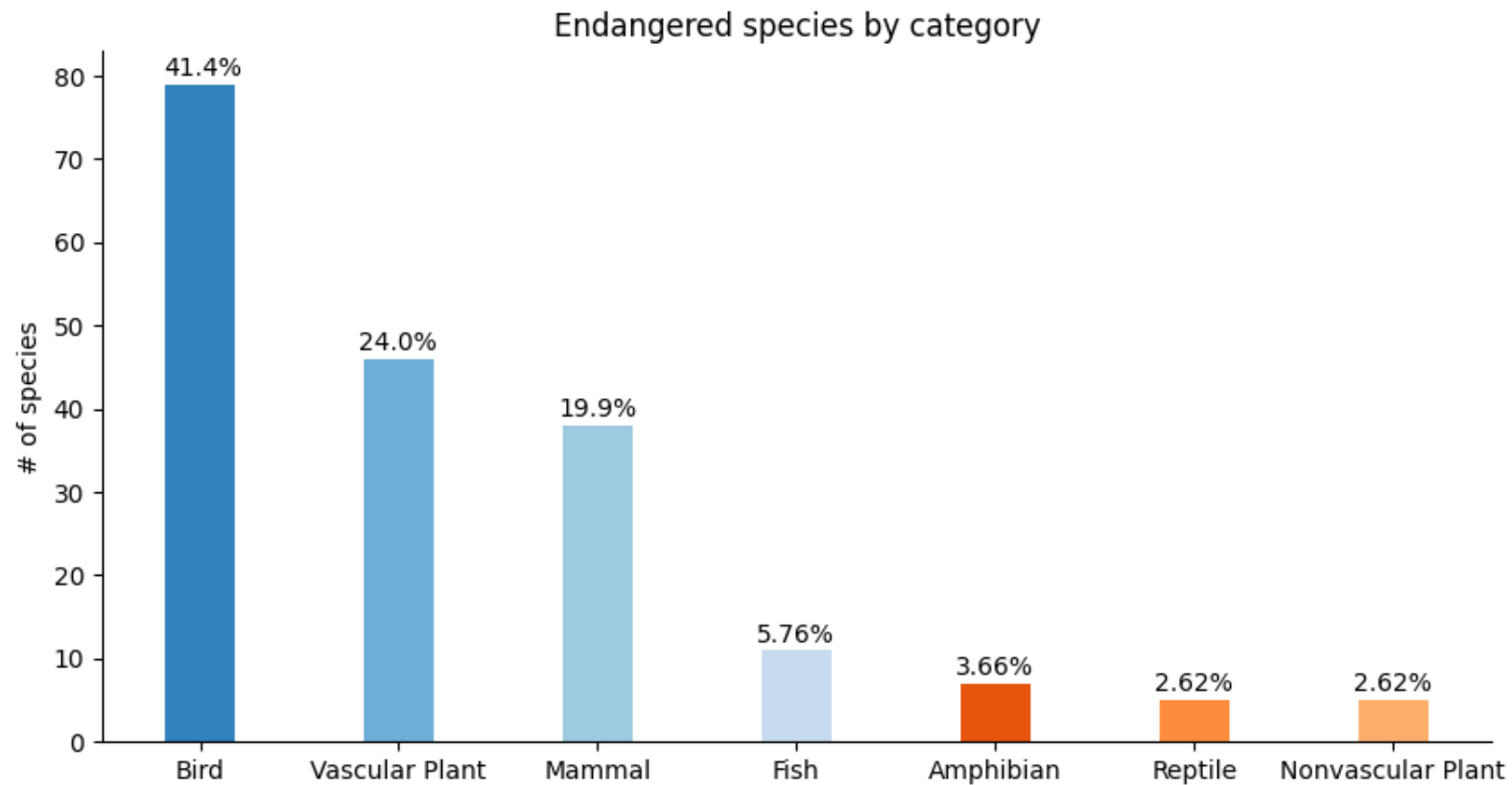
# Species endangered status percentage



# Percentage of endangered species types



# Percentage of endangered species by category



# Conclusion

- ▶ We can see that there is only a portion of the observed species that are somehow endangered - just above 3% of all observed species. Almost half of the endangered species are birds (41%), following by vascular plants and mammals (24% and 19,9%).
- ▶ Most of the endangered species are "Species of concern" (more than 84%). More than 8% of endangered species are "Endangered".
- ▶ We can see that there is large gap between number of observed species in parks. This could be the reason for not allocating the observations equally or just the indication of the park size, Yellowstone being the largest.