

An Examination of Biodiversity and Species Endangerment in National Parks

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Facts About the Survey:

A total of 5541 unique species are observed in the dataset.

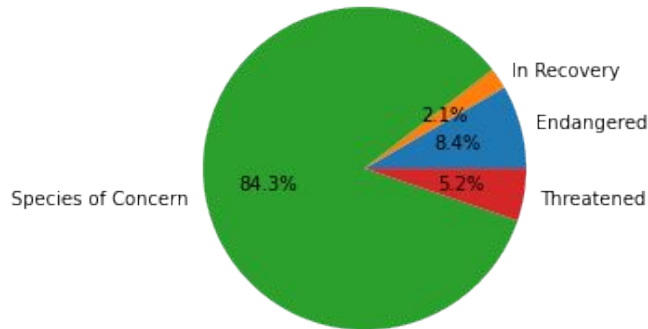
Vascular Plant species are by far the most represented, with 4470 unique species observed.

Reptile species are the least represented, with 79 unique species observed.

Amphibian	80
Bird	521
Fish	127
Mammal	214
Nonvascular Plant	333
Reptile	79
Vascular Plant	4470

Among Protected Species, What Proportions of Each Conservation Category are Represented?

Proportions of Each Conservation Status
Represented in the Survey among
Species Given Protection



191 out of the 5541 unique species observed are under some form of protection.

Among these 191, 160 of the unique species (84.3%) are considered “Species of Concern”.

4 species are considered “In Recovery” (2.1%).

16 species are considered “Endangered” (8.4%).

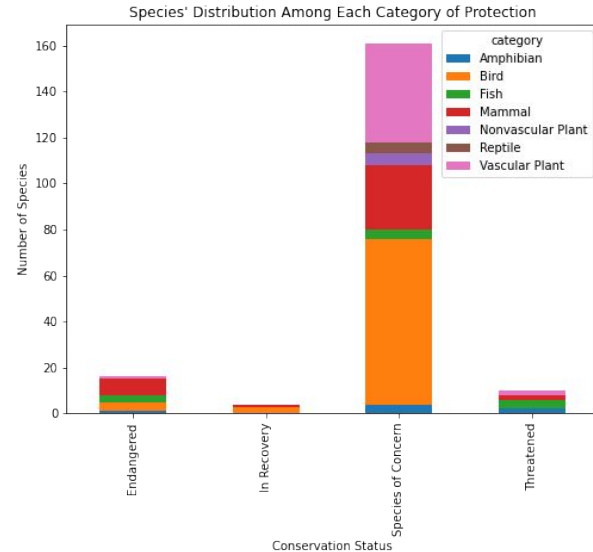
10 species are considered “Threatened” (5.2%).

Distribution of Flora/Fauna Categories Across Protection Categories

There are 160 species designated as “Species of Concern”.

Birds represent the largest plurality of all protected species, with most falling under “Species of Concern”, followed by Vascular Plants whom also mostly fall under the designation of “Species of Concern”.

Mammals almost entirely fall under the “Species of Concern” or “Endangered” designations.



Are there statistically significant differences in needed protection between species?

Depending on the species, there are statistically significant differences in needed protection designations.

Mammals have a statistically significant higher needed protection status than do Reptiles ($p = 0.0384$).

Between Amphibians and Fish ($p = 1.0$), Reptiles and Fish ($p = 0.6623$), as well as Vascular and Nonvascular plants ($p = 0.0531$), no statistically significant difference in needed protection status was found.

Sources and Acquired Data:

This project was completed for my [Codecademy “Data Scientist: Machine Learning Specialist”](#) certification course.

The datasets were given by the project prompt from Codecademy. All data was generated for the purpose of practice, and is not representative of any real observations, nor does the data belong privately to any National Park institution.