

Biodiversity

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1. Introduction

In recent centuries we hurt animals and make a lot of species extinct so we have responsibility to conserve the species we have.

In this report I analyse National Parks Service about endangered species in different parks and their status.

1.1 Get to know the data

We have two CSV files in this data analyst observation and species and columns include:

- **scientific_name** : Scientific names of species
- **park_name**: Name of parks
- **observations**: How many time that species observed
- **category**: Category of species
- **conservation_status** : What conservation species at

1.2 Hands on data

In this analysis I perform cleaning the duplicate and null data, joining data sets so we can answer these questions:

1. [How many species we protected and how is conversion statuses?](#)
2. [what is most protected species among their own and all of the species?](#)
3. [What are most endangered species?](#)
4. [What are most threatened species?](#)
5. [What are most species of concern?](#)
6. [What is the most specie and park in every conservation status?](#)

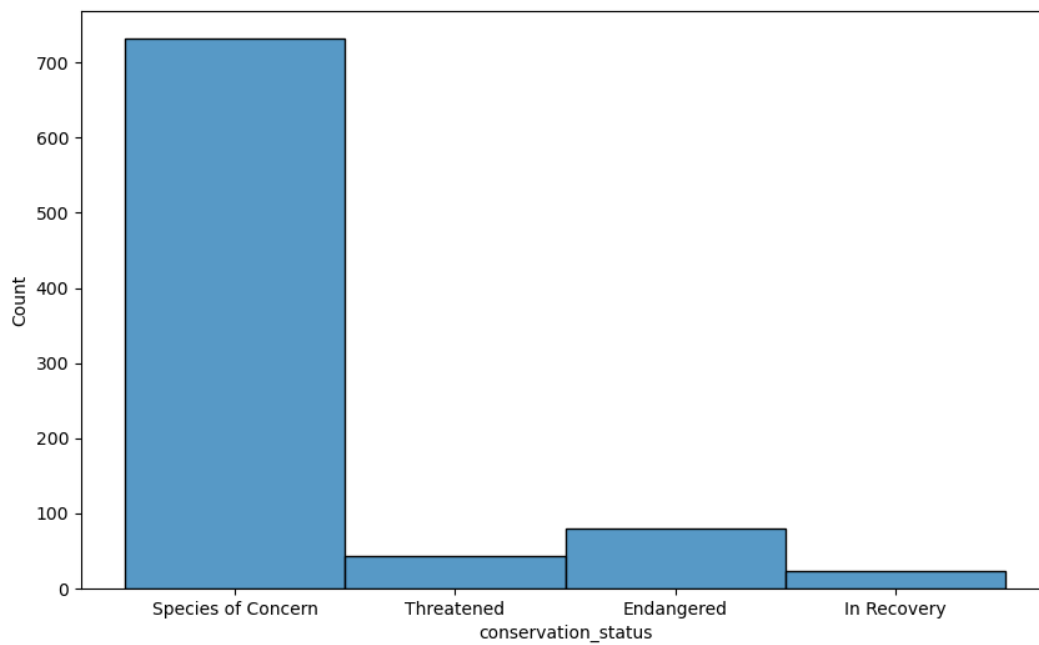
2. Analysis

2.1 conversion status

There are 5633 species that are not protected and other conversion status is :

Conservation status size

Endangered	16
In Recovery	4
No Intervention	5633
Species of Concern	161
Threatened	10

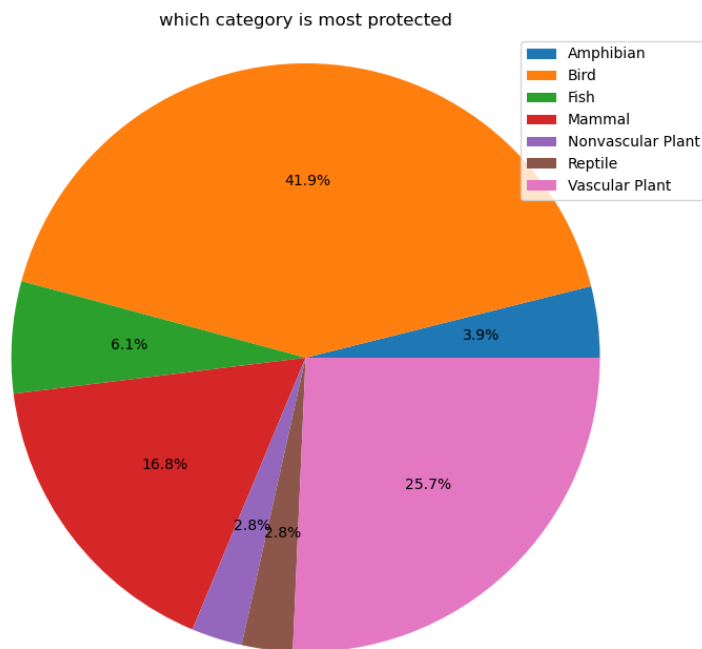


2.2 protection status of species

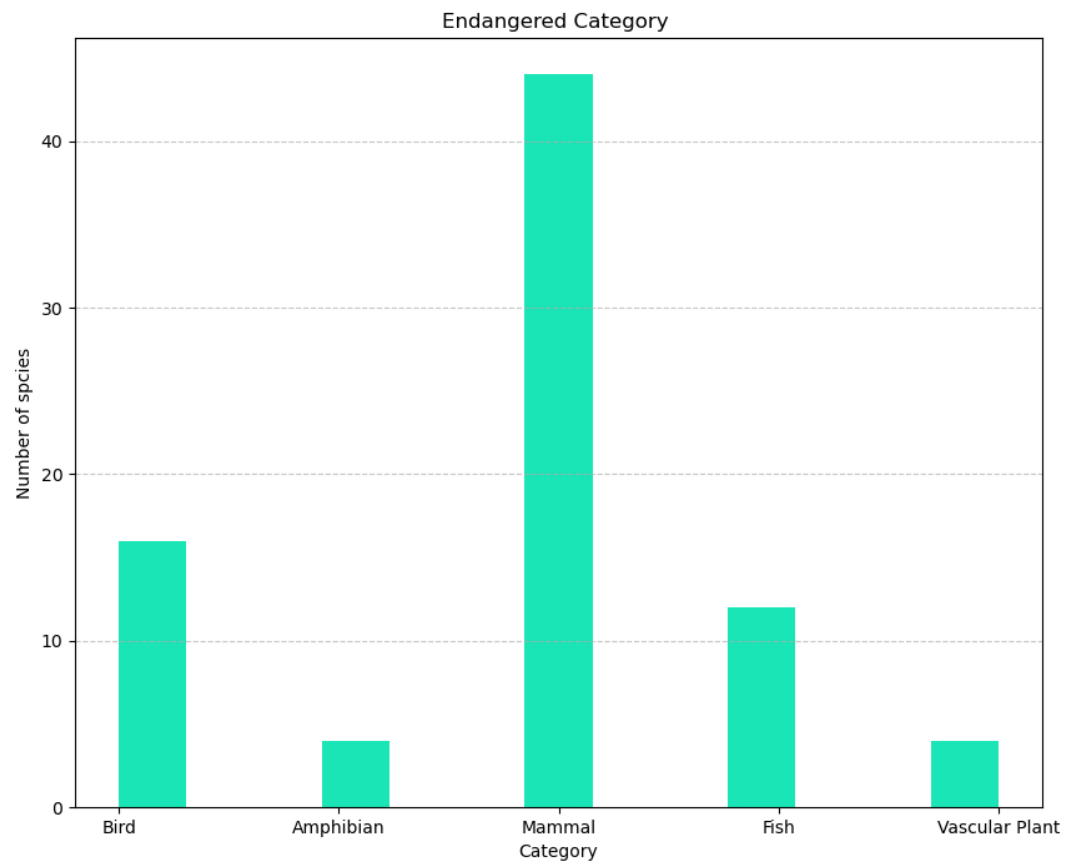
Only 1% of Vascular plant and 2% of Nonvascular plant are protected and this is really low percentage among other species, and most protected species are Mammals and birds in their own category.

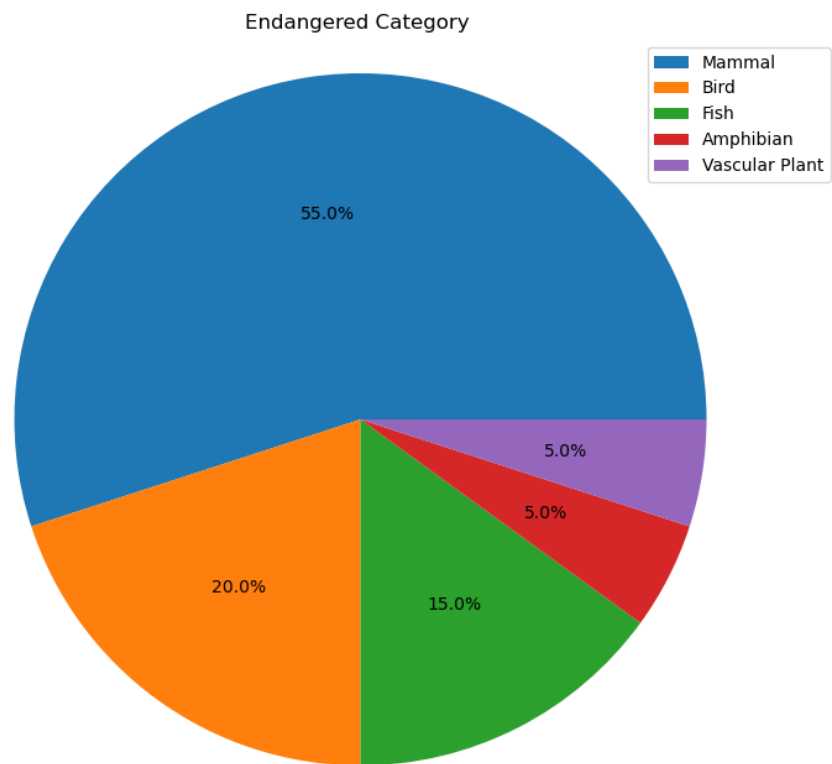
	category	not_protected	protected	percent_protected
0	Amphibian	72	7	9.0
1	Bird	413	75	15.0
2	Fish	115	11	9.0
3	Mammal	146	30	17.0
4	Nonvascular Plant	328	5	2.0
5	Reptile	73	5	6.0
6	Vascular Plant	4216	46	1.0

You can see what is most protected species among all of the species and Birds have the most attention with about 42%.



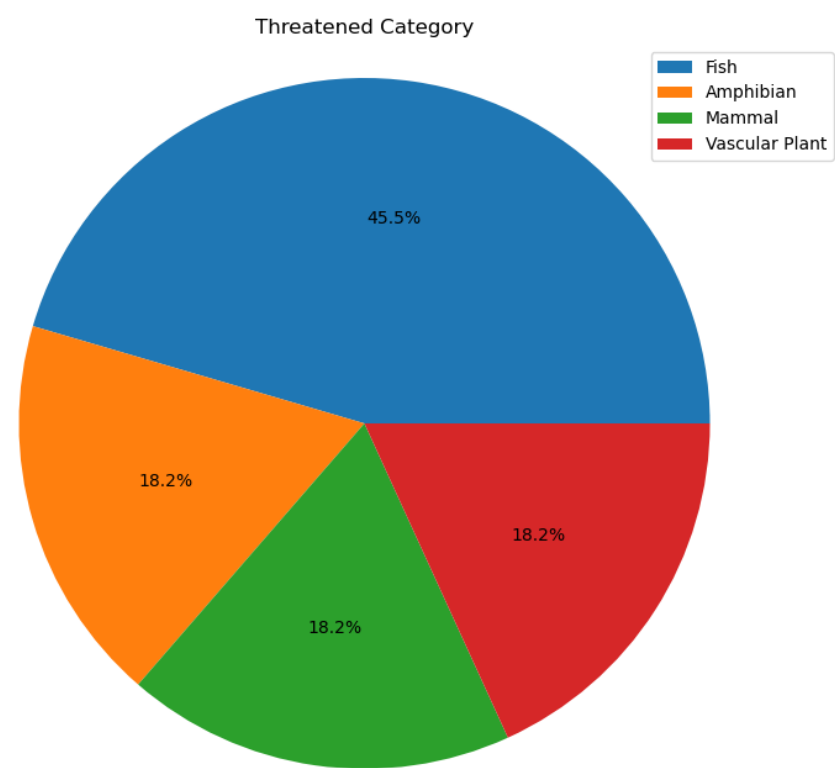
2.3 Endangered species

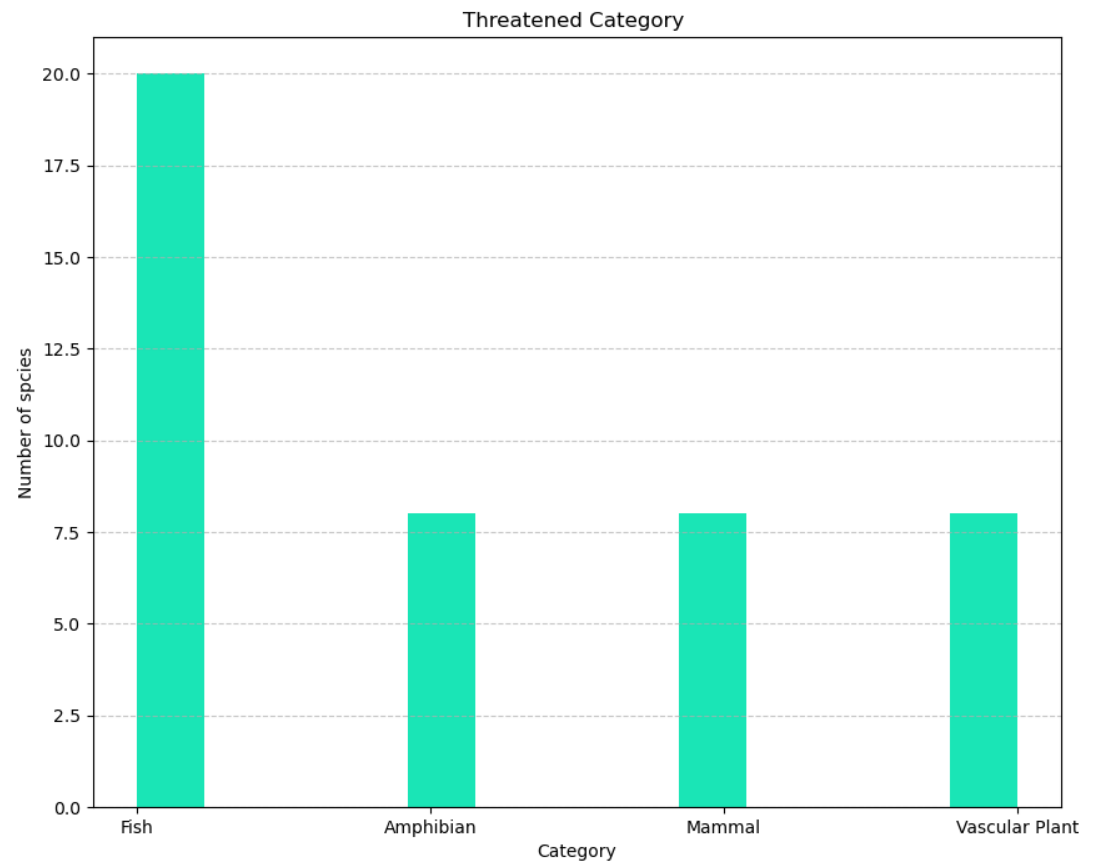




Endangered species should be are most concern and there is more than half (55 percents) of endangered species are Mammals and Vascular plants and Amphibians only get 10% together.

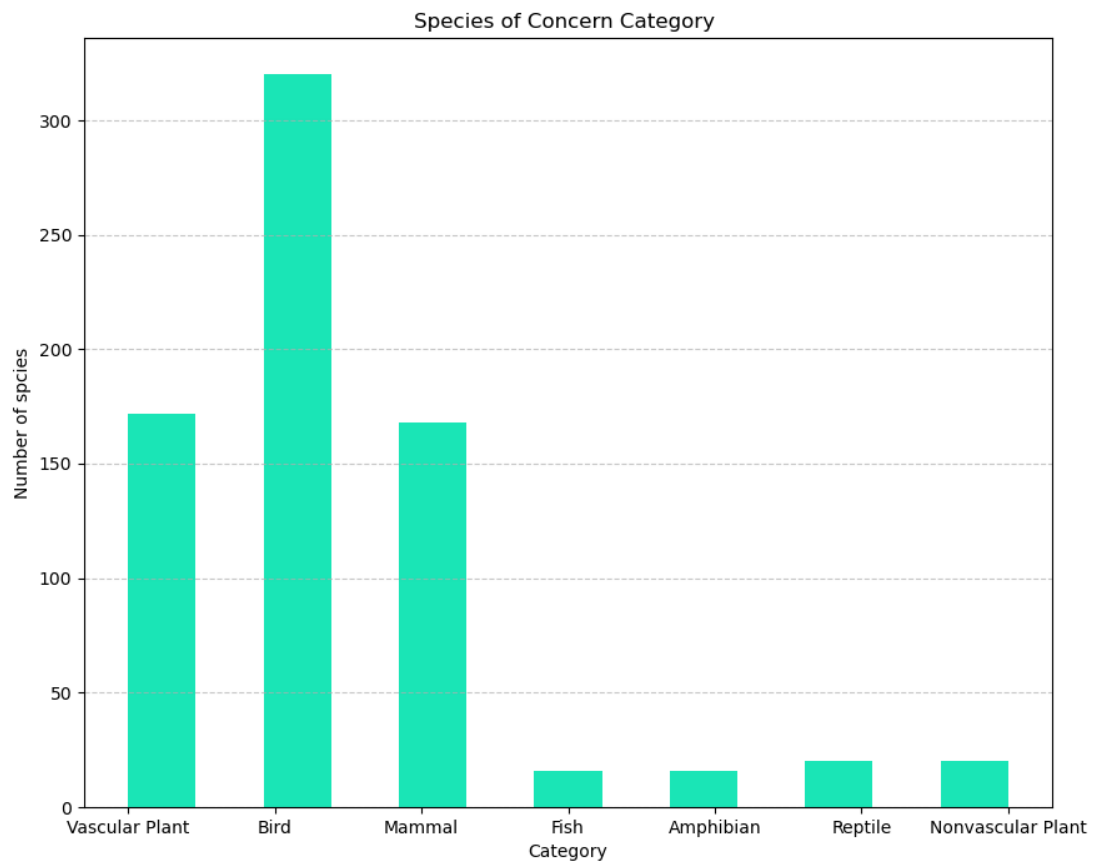
2.4 Threatened species

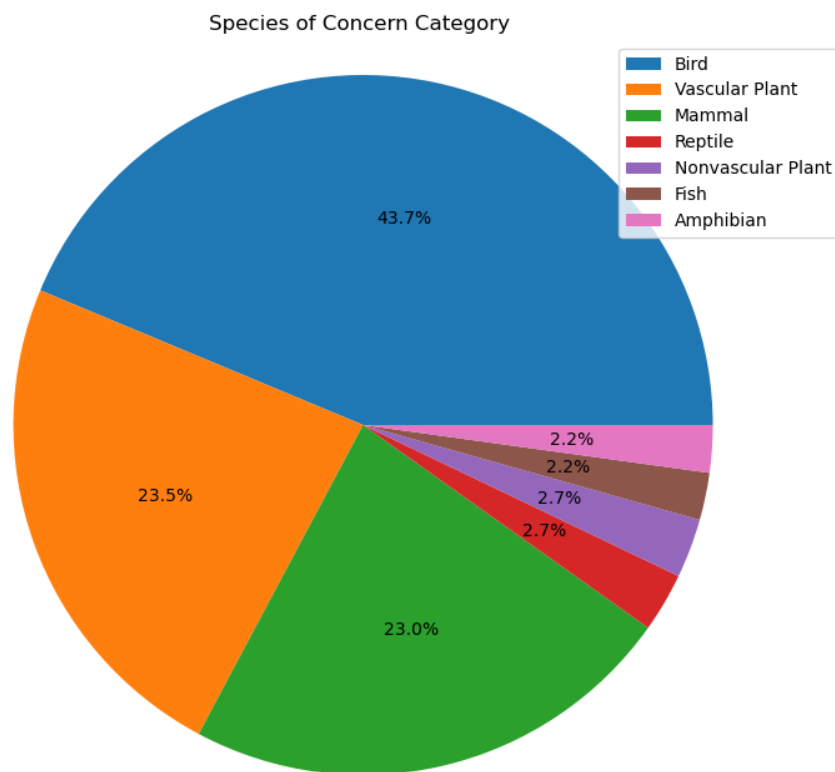




Humans make living hard for other species and threaten their life in so many ways but you can see we make water so polluted that most threaten species are fishes and their life is about twice treated than others.

2.5 Species of Concern





Birds are most concerned species along with Mammals and Vascular plants.

2.6 Brief details

Endangered

Most Endangered Specie is: **Vermivora bachmanii**

Park That has The Most Endangered Species Is: **Yosemite National Park**

Animal Category That is the most Endangered Is: **Vascular Plant**

In Recovery

Most In Recovery Specie: **Pelecanus occidentalis**

Park That Has The Most In Recovery Species Is: **Yosemite National Park**

Animal Category That is the most In Recovery Is: **Mammal**

Concern Species

Most Species of Concern Species is: **Zizia trifoliata**

Park That Has The Most Species of Concern Species Is: **Yosemite National Park**

Animal Category That is the most Species of Concern Is: **Vascular Plant**

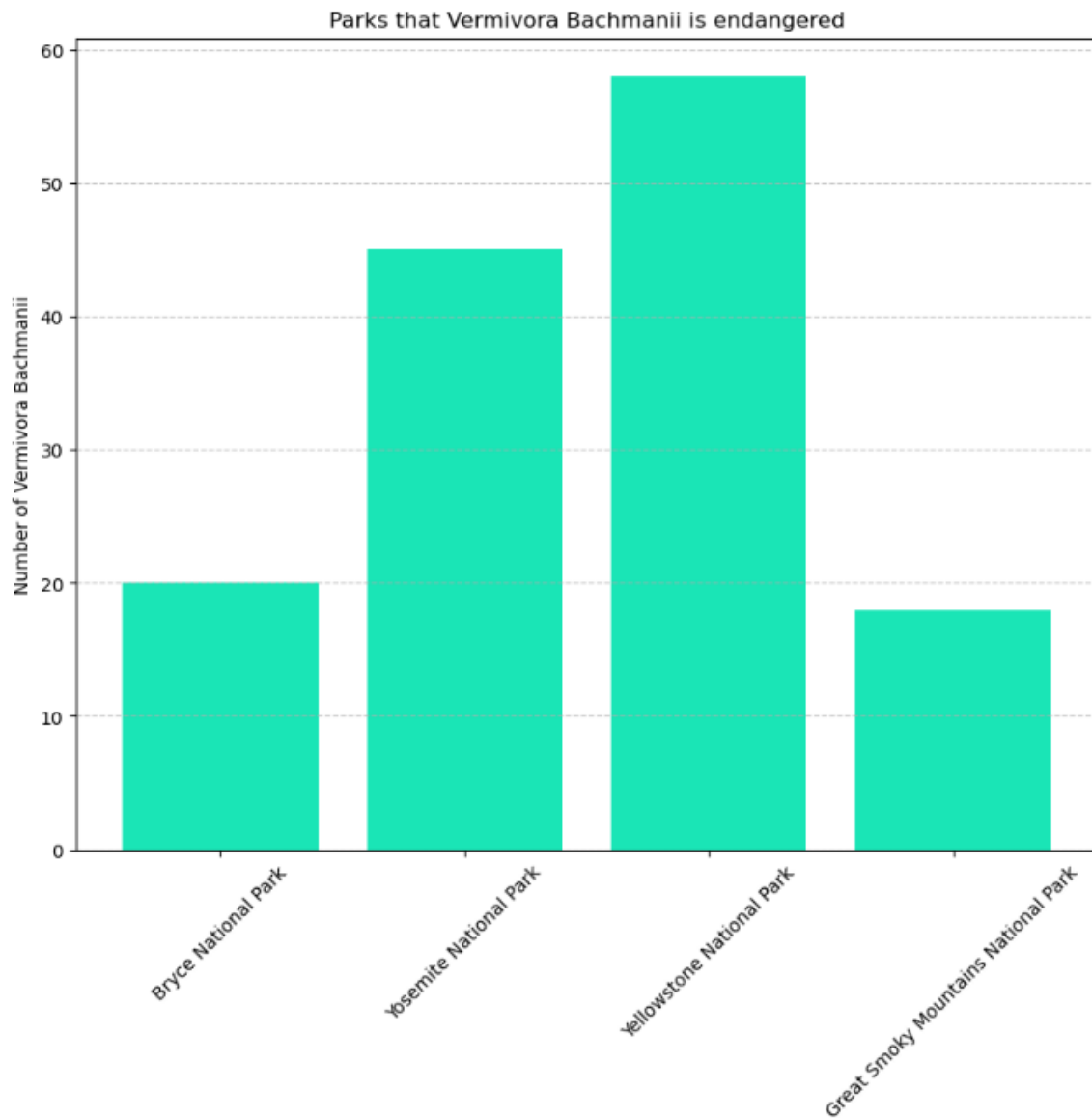
Threatened Species

Most Threatened Species Are: **Ursus arctos horribilis**

Park That Has The Most Threatened Species Is: **Yosemite National Park**

Animal Category That is the most Threatened Is: **Vascular Plant**

2.7 Parks that *Vermivora Bachmanii* is endangered



The most endangered species is *Vermivora Bachmanii* and Yellowstone National Park is where these species are in danger.

2.8 Most species are concerned

category	Amphibian	Bird	Fish	Mammal	Nonvascular Plant	Reptile	Vascular Plant
conservation_status							
Endangered	4	16	12	44	0	0	4
In Recovery	0	12	0	12	0	0	0
Species of Concern	16	320	16	168	20	20	172
Threatened	8	0	20	8	0	0	8

Among all the conservation status we have covered most species in concern.

2.9 Conservation status in Yosemite National Park

category	Amphibian	Bird	Fish	Mammal	Nonvascular Plant	Reptile	Vascular Plant
conservation_status							
Endangered	1	4	3	11	0	0	1
In Recovery	0	3	0	3	0	0	0
Species of Concern	4	80	4	42	5	5	43
Threatened	2	0	5	2	0	0	2

Yosemite national park get the most of all conservation statuses so it's good to see how they are doing and they concern most of the species they have.

3. Conclusions

Birds are most species they protect and concern but we missing huge number of species.

Mammals are the most species that are in danger so we should concern them more liked birds.

Fishes are most threatened species but the least concerned so we really take attention and research about it.