

Biodiversity for the National Parks

Capstone Project 2

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species_info.csv

- What I noticed within Species Info was that each section was categorized by three things – scientific name, conservation status and common name.
- Within those three sections they are categorized by the type such as mammal, their current state of health or stature in the animal kingdom such as “endangered, in recovery, no intervention, threatened, and species of concern”

species_info.csv Continued

- All listings within here are indexed according to order but also have a scientific name column listing the names of all the animals.
- The second graph we needed to create allowed us to count within scientific name and find the amount of all the different animals and their current situations

Significant Calculations for Endangered Species

- [nan 'Species of Concern' 'Endangered' 'Threatened' 'In Recovery']
- conservation_status scientific_name
- 0 Endangered 15
- 1 In Recovery 4
- 2 Species of Concern 151
- 3 Threatened 10
- conservation_status scientific_name
- 0 Endangered 15
- 1 In Recovery 4
- 2 No Intervention 5363
- 3 Species of Concern 151
- 4 Threatened 10

Significant Calculations Continued

- In the previous slide you can see the calculations regarding species info and how many are endangered or other issues.
- We can see that 15 species are endangered however this number could change significantly.

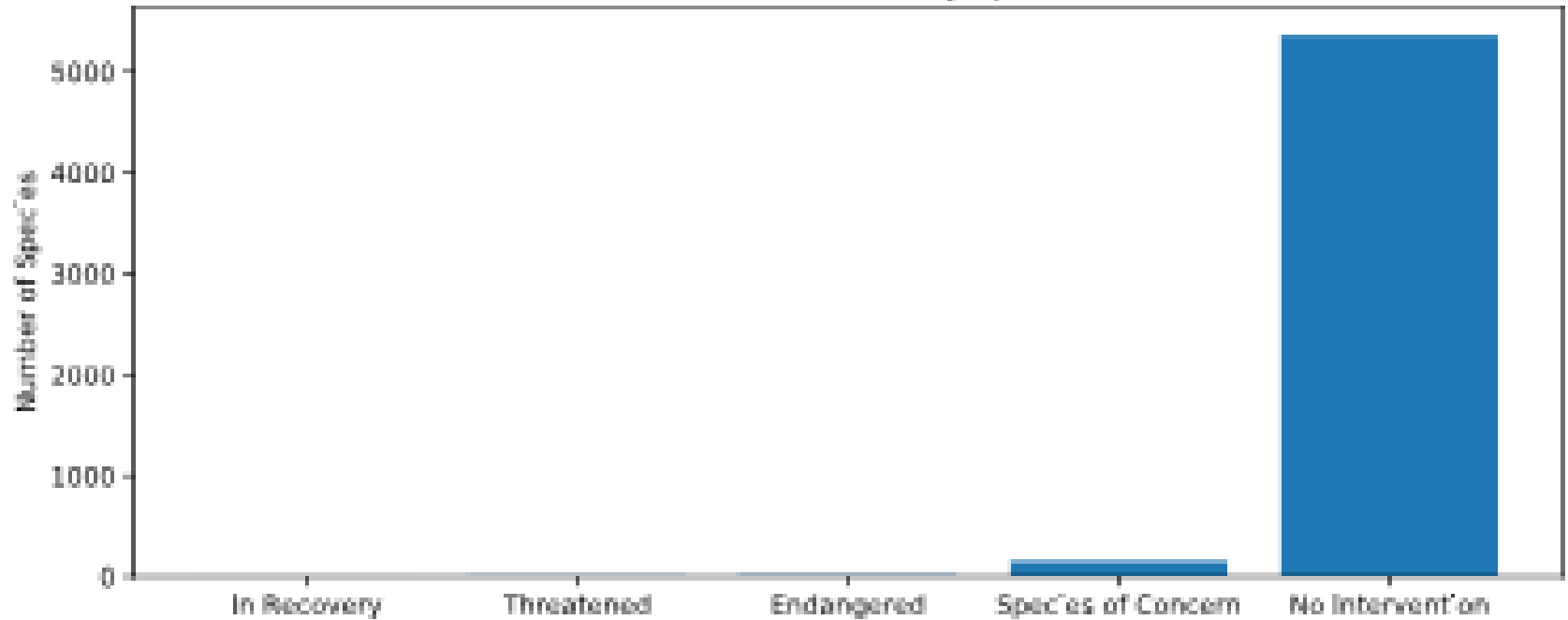
Significant Calculations Continued

- There are 151 species of concern that could be at risk of being endangered. There is also 10 species currently being threatened at risk for extinction.
- A recommendation I would give to conservationist based on the data I discovered is to keep a close eye on the species of concern and immediately intervene in the endangered species as well as the threatened species.

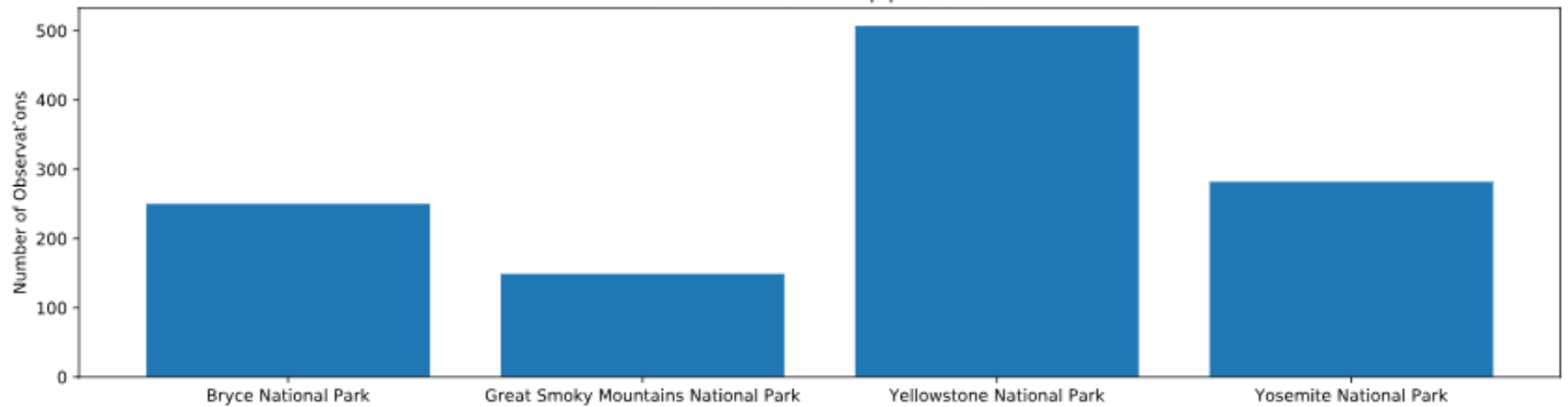
Foot and Mouth Reduction Effort

- The foot and mouth reduction effect was to find the sample size on the effectiveness of the program to reduce foot and mouth disease. Using the data given to me I calculated that the effects of the program were conclusive and the amount of animals effected by the disease has decreased.

Conservation Status by Species



Observations of Sheep per Week



	category	scientific_name	common_names
0	Mammal	Clethrionomys gapperi gapperi	Gapper's Red-Backed Vole
1	Mammal	Bos bison	American Bison, Bison
2	Mammal	Bos taurus	Aurochs, Aurochs, Domestic Cattle (Feral), Domestic Cattle
3	Mammal	Ovis aries	Domestic Sheep, Mouflon, Red Sheep, Sheep (Feral)
4	Mammal	Cervus elaphus	Wapiti Or Elk

	conservation_status	scientific_name
0	Endangered	15
1	In Recovery	4
2	Species of Concern	151
3	Threatened	10

	conservation_status	scientific_name
0	Endangered	15
1	In Recovery	4
2	No Intervention	5363
3	Species of Concern	151
4	Threatened	10

	scientific_name	park_name	observations	category	common_names	conservation_status	is_protected	is_sheep
0	Ovis canadensis	Yellowstone National Park	219	Mammal	Bighorn Sheep, Bighorn Sheep	Species of Concern	True	True
1	Ovis canadensis	Bryce National Park	109	Mammal	Bighorn Sheep, Bighorn Sheep	Species of Concern	True	True
2	Ovis canadensis	Yosemite National Park	117	Mammal	Bighorn Sheep, Bighorn Sheep	Species of Concern	True	True
3	Ovis canadensis	Great Smoky Mountains National Park	48	Mammal	Bighorn Sheep, Bighorn Sheep	Species of Concern	True	True
4	Ovis canadensis sierrae	Yellowstone National Park	67	Mammal	Sierra Nevada Bighorn Sheep	Endangered	True	True

	park_name	observations
0	Bryce National Park	250
1	Great Smoky Mountains National Park	149
2	Yellowstone National Park	507
3	Yosemite National Park	282