



Biodiversity

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Data Overview

- Total Species: 5541
- Species Types:
 - Mammal, Bird, Reptile, Amphibian, Fish, Vascular Plant, Nonvascular Plant
- Conservations Statuses:
 - None, Species of Concern, Endangered, Threatened, In Recovery



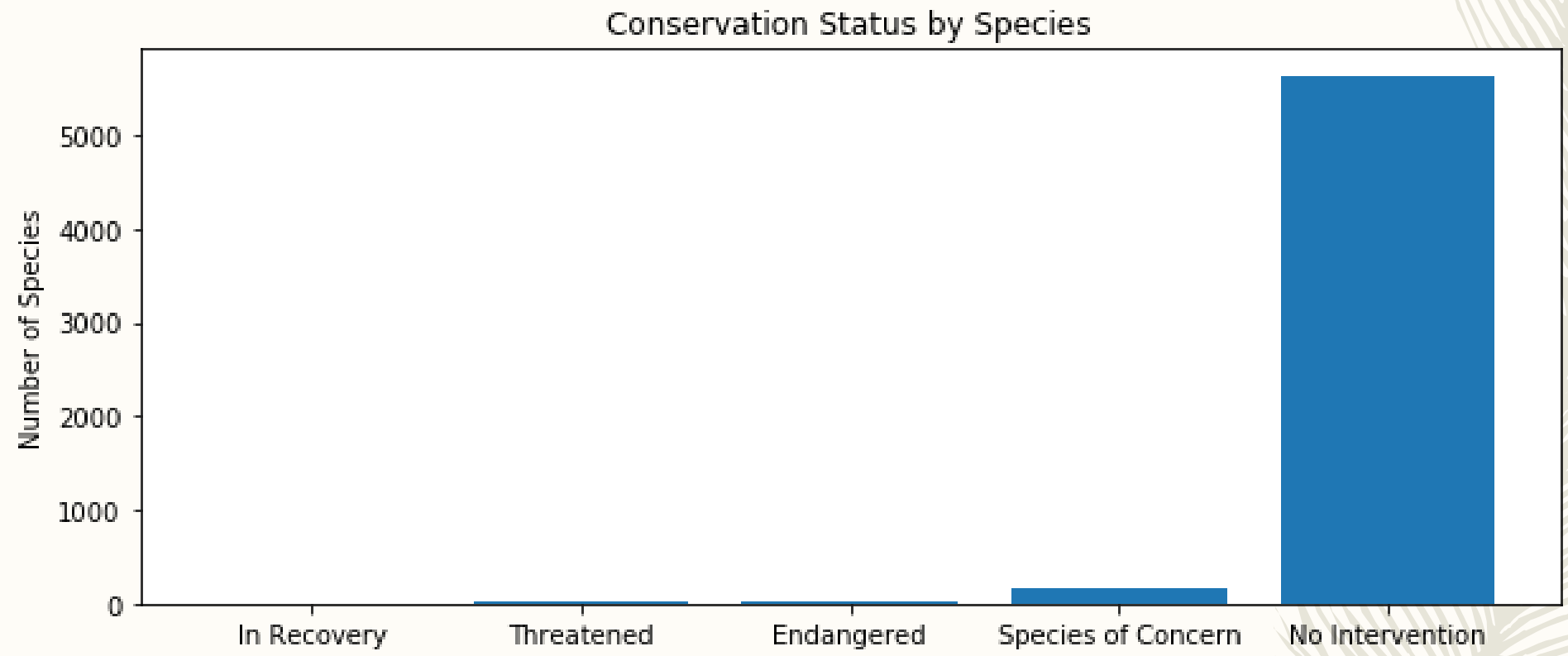
Category Counts

– Mammal:	214
– Bird:	521
– Amphibian:	80
– Fish:	127
– Vascular Plant:	4470
– Nonvascular Plant:	333



Conservation Status Count

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





Statistical Comparisons

- Mammals vs Birds
- Mammals vs Reptiles



Mammals vs Birds

	Protected	Not Protected
Mammal	176	38
Bird	442	79

The conservation status of mammals and birds don't seem to be related.

χ^2 contingency test results

- χ^2 test statistic: 0.5810
- p value: 0.4459
- Degrees of freedom: 1
- Expected:

	Protected	Not Protected
Mammal	179.9349	34.0653
Bird	438.0653	82.9346

Mammals vs Reptiles

	Protected	Not Protected
Mammals	176	38
Reptiles	74	5

There seems to be a relationship between the conservation status of mammals and reptiles.

χ^2 contingency test results

- χ^2 test statistic: 5.1397
- p value: 0.02338
- Degrees of freedom: 1
- Expected:

	Protected	Not Protected
Mammals	182.5938	31.4061
Reptiles	67.4061	11.5938



Foot and Mouth Disease Study

- Baseline Conversion Rate: 15%
- Minimum Detectable Effect: 33%
- Statistical Significance: 90%
- Sample Size: 520

Weeks to observe sample:

- Bryce National Park: 2 weeks
- Yellowstone National Park: 1 week

Observations of Sheep per Week

