Biodiversity of National Parks

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Species_info.csv Description

- ► This CSV file contained a list of all the different species that can be found in National parks including:
 - ► Type of wildlife (plant, mammal, etc.)
 - Scientific name
 - Common name
 - Conservation status (Is it endangered?)

Significance Calculations of Endangered Species

- A table was generated to determine how many species are endangered based on the category of wildlife.
- After a chi2 analysis, it was determined that there is no significant difference between endangered birds and mammals
- ► The same analysis determined that there is a significant difference between endangered reptiles and mammals
- ▶ Recommendation: Mammals and birds need more protection to ensure that the number of endangered species does not increase in the future.

	category	not_protected	protected	percent_protected
0	Amphibian	73	7	8.750000
1	Bird	442	79	15.163148
2	Fish	116	11	8.661417
3	Mammal	176	38	17.757009
4	Nonvascular Plant	328	5	1.501502
5	Reptile	74	5	6.329114
6	Vascular Plant	4424	46	1.029083

Foot and Mouth Disease Study

- ▶ Based on the number of sheep observations per week for each national park and the percentage of sheep that have foot and mouth disease, a sample size of 890 is suggested to determine if the program to reduce foot and mouth disease is working.
- Bryce National park would need 3.56 weeks to complete the study, while Yellowstone National Park would only need 1.75 weeks to complete the study.

			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

Appendix: Charts



