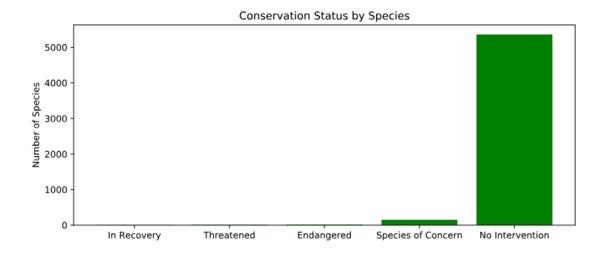
Biodiversity for the National Parks

Data Analysis by Inge van den Boomen

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Distribution of the Data



Conservation Status	Number of Species
Endangered	15
In Recovery	4
No Intervention	5363
Species of Concern	151
Threatened	10

Category	Not Protected	Protected	Percent Protected	
Amphibian	72	7	0.088608	
Bird	413	75	0.153689	
Fish	115	11	0.087302	
Mammal	146	30	0.170455	
Nonvascular Plant	328	5	0.015015	
Reptile	73	5	0.064103	
Vascular Plant	4216	46	0.010793	

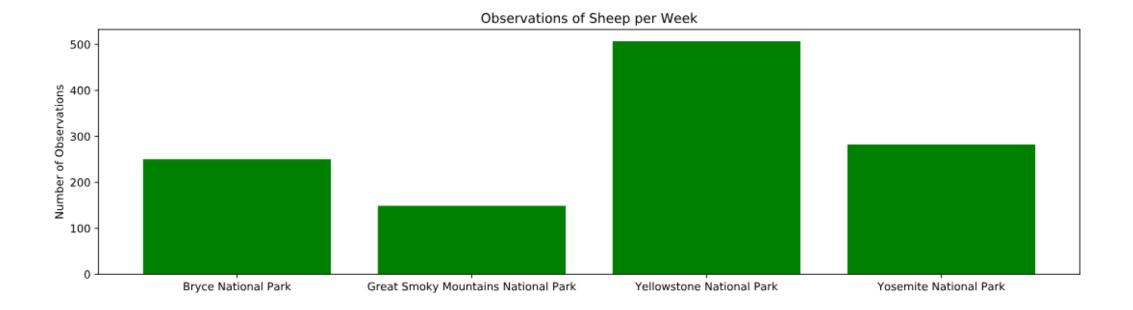
Percentage Protected per Class

	Mammal	Bird	Amphibian	Fish	Reptile	NV Plant	V Plant
Mammal	Χ	0.687595	0.127577	0.056148	0.038356	<0.00001	<0.00001
Bird	0.687595	X	0.175936	0.076682	0.053135	<0.00001	<0.00001
Amphibian	0.127577	0.175936	X	0.824794	0.781450	0.001779	<0.00001
Fish	0.056148	0.076682	0.824794	X	0.740652	0.000496	<0.00001
Reptile	0.038356	0.053135	0.781450	0.740652	Χ	0.033627	0.000145
NV Plant	<0.00001	<0.000001	0.001779	0.000496	0.033627	X	0.662342
V Plant	<0.00001	<0.000001	<0.000001	<0.000001	0.000145	0.662342	X

Significance of Difference between Percentages per Class

Park Name	Observations		
Bryce National Park	576025		
Great Smoky Mountains	431820		
National Park			
Yellowstone National Park	1443562		
Yosemite National Park	863332		

Observations of Sheep



Sample Size Calculation

- Baseline of 15%
- Minimal detectable effect of 33,3%
- Significance of 90%
- Sample size needs to be 890
 - ► Yellowstone National Park ±12 days
 - Bryce National Park ±25 days