

# Biodiversity Study

David 26/03/2018

# Species\_info.csv

- Dataset containing 5,824 records of animal species, a category, their scientific name, common names and a conservation status.
- Dataset contained some null entries for conservation status
- 7 distinct categories
- Null entries for conservation status replaced with 'No Intervention'

# Endangered Species

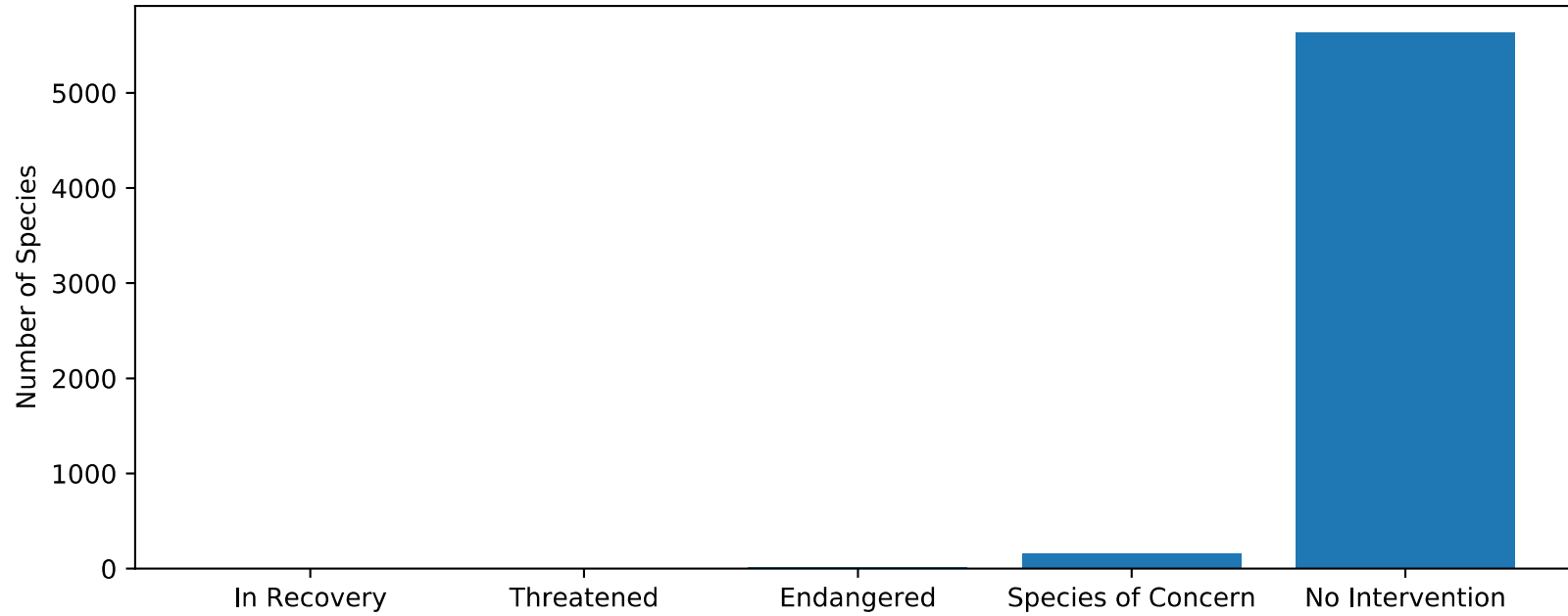
- Chose to carry out a Chi-squared test to test the significance of difference in endangered percentages between different species. This was used because the data is categorical.
- Although Mammals are the category with the highest proportion of protected species, there is no significant difference to the % protected figure in Birds.
- There is however, a significant difference in the % protected in Reptiles, that have a much lower %.
- Recommendation – nobody likes slimy Reptiles, but they do like Mammals and Birds, so because of this, they are not likely to be protected. We should run an advertising campaign about how great and important Reptiles are.

# Sheep!

- Vascular Plants are not Sheep, even if we sometimes call them Sheep. Hopefully all Mammals commonly called Sheep are actually Sheep.
- Sheep are a pretty common sighting in Yellowstone National Park, or there are lots of Sheep spotters in Yellowstone National Park
- If you want to be able to detect a 5% change in the % of Sheep that have Foot and Mouth disease, based on 90% confidence and a baseline of 15%, you should check out 510 to be 'significantly' sure. Handily, this is just over a weeks worth of Sheep spotting in Yellowstone National Park, but over 2 in Bryce National Park.

# Charts

Conservation Status by Species



Observations of Sheep per Week

