Biodiversity of the National Parks

Mitchell Sullivan - Code Academy Capstone

species_info.csv

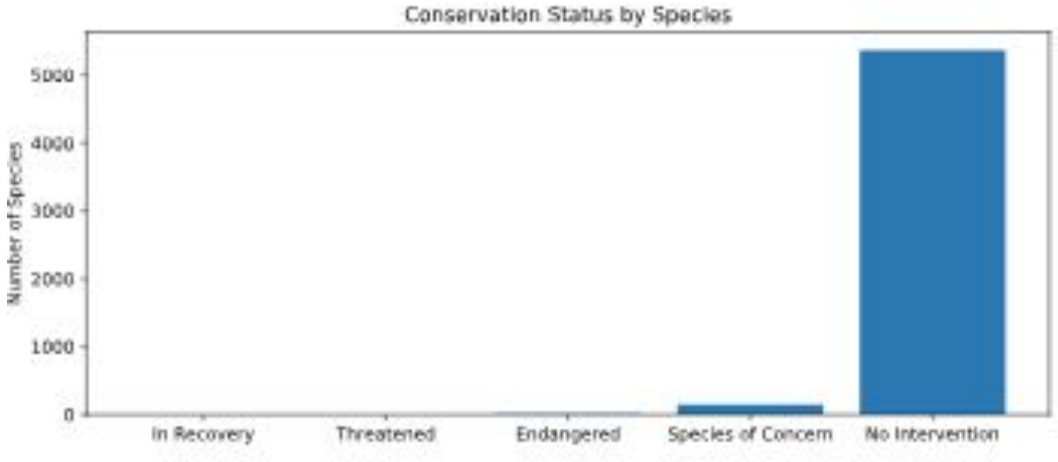
This table gives limited information on species found in a National Park. From the table, we can identify

- If the animal is a mammal (category)
- The animal's scientific name
- The animal's common name
- The animal's conservation status (all nan to begin with)

While this table tells us what kind of animals can be found in the national park, it does not tell us the quantity of each. To figure that out, you need to do some digging.

Breakdown of Conservation Status

- Only 15 species in the National Park are endangered.
  - Many more (151) are a “species of concern”
  - Luckily, a vast majority do not need interventon



Testing for significance

In creating our pivots, we saw that mammals are more likely to be endangered than birds. Using a chi-squared test, we could see if that difference was significant.

- When you run this test to compare mammals and birds, the resulting p-value is 0.68. This is greater than 0.05. **This difference is not significant.** Just chance!

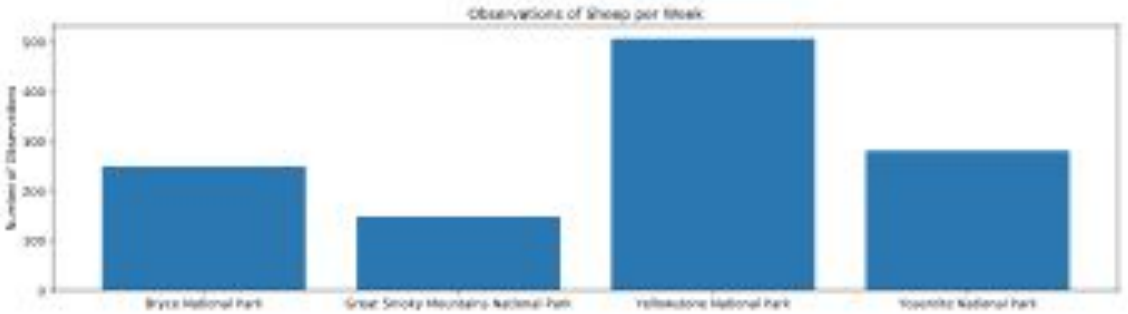
- When you run the test to compare mammals and reptiles, the p-value is 0.03. This is smaller than 0.05. **This difference is significant.**

My recommendation

Based on the results of my chi-squared tests, reptiles are more likely to be endangered than mammals. So, conservationists should focus their efforts more on reptiles than on mammals.

Sheep

Based on observations of different species over 7 days, conservationists would like to determine how many they need to observe to draw accurate conclusions about the scope of foot and mouth disease. They were specifically interested in sheep, whose sightings are represented here.



Sample Size

To determine the effectiveness of their program, park rangers need to observe 870 sheep.