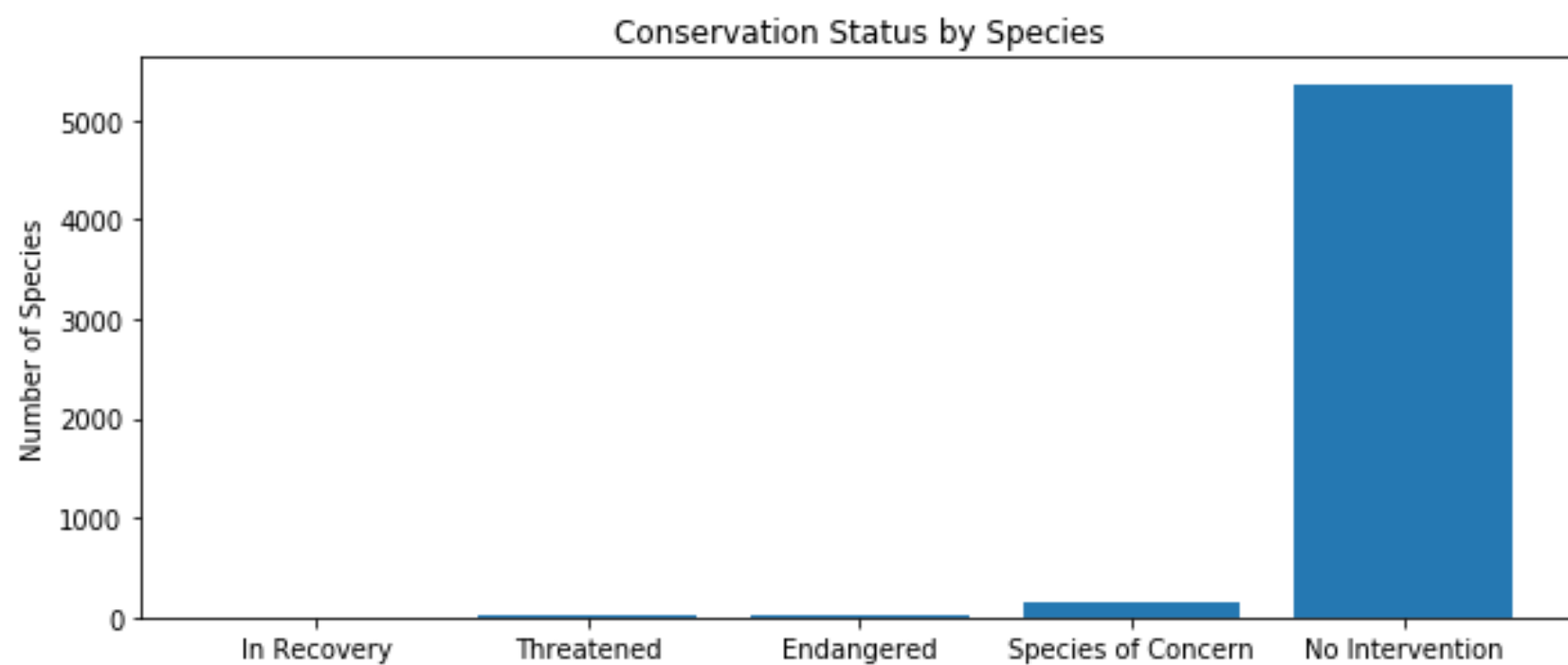


# Biodiversity for the National Parks



# calculations

Mammal Vs. birds and Mammal Vs reptiles

- Determined Percent protected
- Chi2 Contingency

# A/B Testing

- I would monitor the aniamlas and ensure that our program is effective at reducing the disease.

# sample size determination

```
In [33]: minimum_detectable_effect = 100 * 0.05 / 0.15  
         minimum_detectable_effect
```

```
Out[33]: 33.333333333333336
```

```
In [34]: baseline = 15
```

```
In [35]: sample_size_per_variant = 510  
         # Note: This could be 520 if you used 33% for the "Minimum Detectable Effect" instead of 33.33%. That's fine.
```

How many weeks would you need to observe sheep at Bryce National Park in order to observe enough sheep? How many weeks would you need to observe at Yellowstone National Park to observe enough sheep?

```
In [36]: bryce = 510 / 250.  
         yellowstone = 510 / 507.  
  
         # Approximately 2 weeks at Bryce and 1 week at Yellowstone.
```

