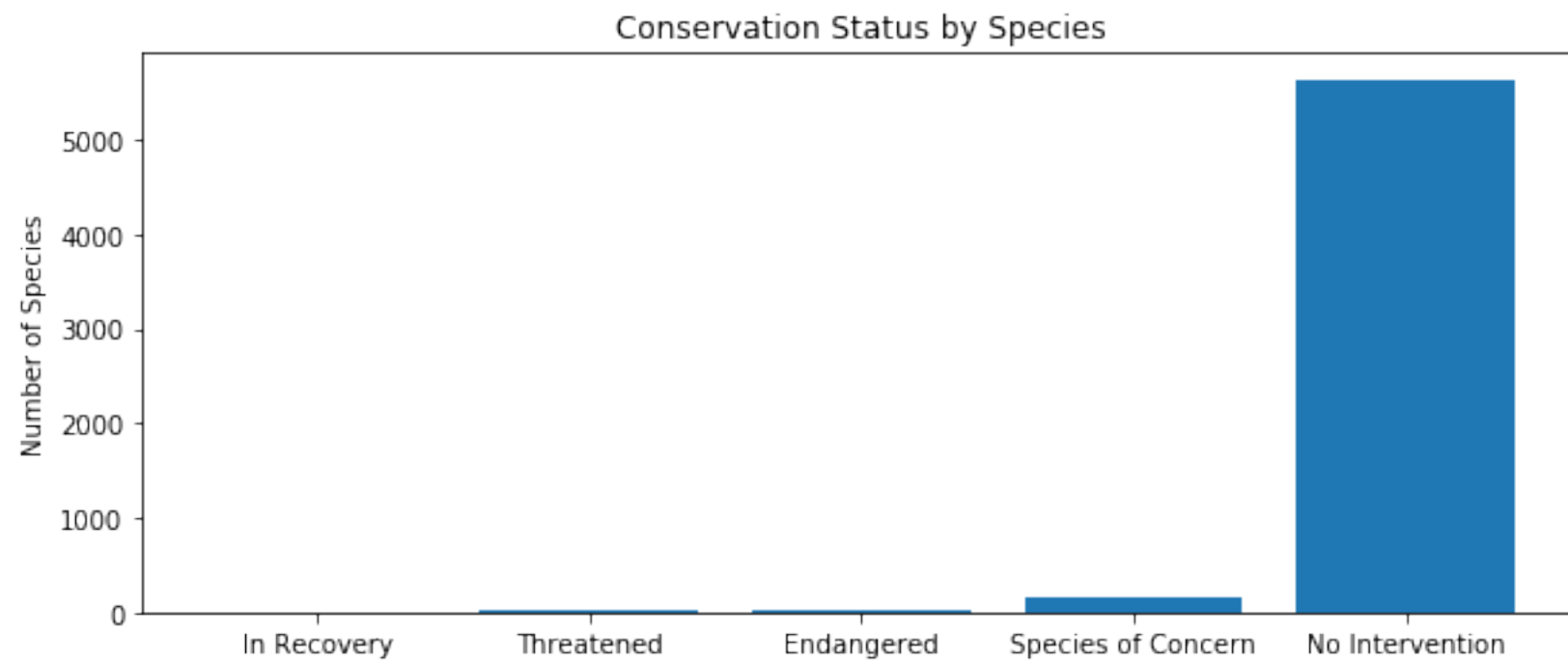# Capstone #2

Analyzing Conservation Data for Patterns in Endangered Species

Species Data

- The species data table contains a list of species by class (category column).

- Contains Birds, Fish, Mammals, Plants, Reptiles

- Each species is listed by common name, scientific name, and their conservation status (endangered, etc).
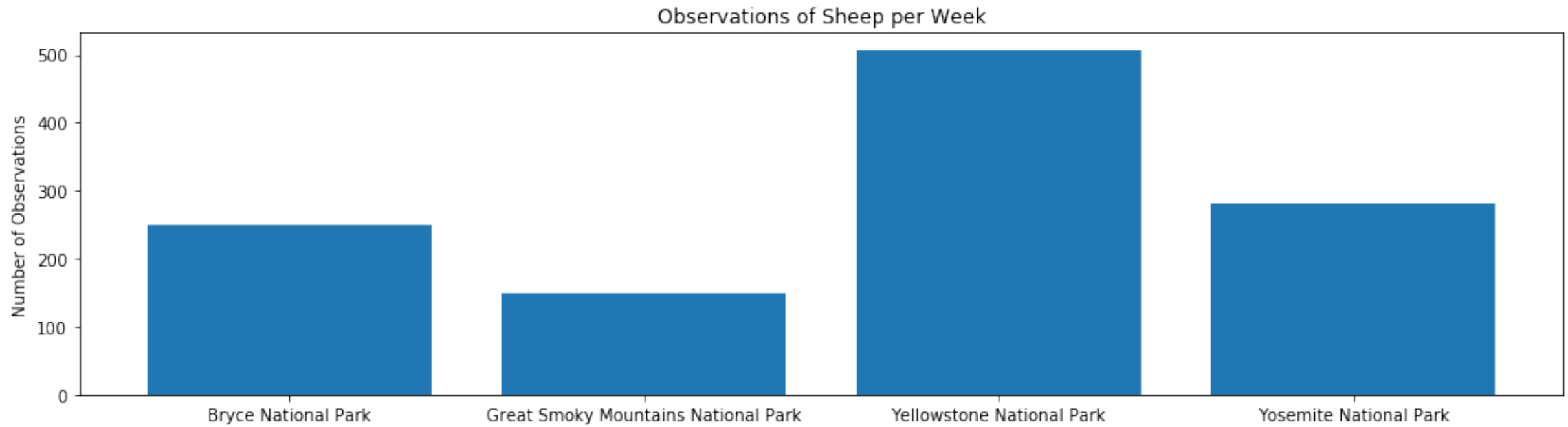
Conservation Status by Species

Significant Data

- Only a small portion of the 5,000+ species listed contain a conservation status

    - 180 are either endangered, in recovery, of concern, or threatened

    - 5,363 currently require no intervention

- Roughly 20% of Mammals listed require some form of intervention.

- 1% of Plants listed require intervention.

- Some are sheep. Some have the word sheep in their common name.

Recommendations

- Mammals and Birds are the most at risk for intervention.

- I would recommend that conservations look at how they can create and maintain a stable environment for these species while they increase their numbers.

Recorded Observations of Sheep in Four Nationals Parks

Sheep and Foot & Mouth Disease

- Scientists know that 15% of sheep at Bryce National Park have foot and mouth disease.

- Rangers at Yellowstone have been running a program to reduce the rate at which foot and mouth disease affects their sheep.

- Yellowstone would like to confirm a 5% reduction.

- To confirm this, with confidence, rangers would have to maintain observations consistent with there data reported for slightly more than 1 week.

- Bryce National Park would have to observe sheep at roughly the same rate as reported for slightly more than 2 weeks.