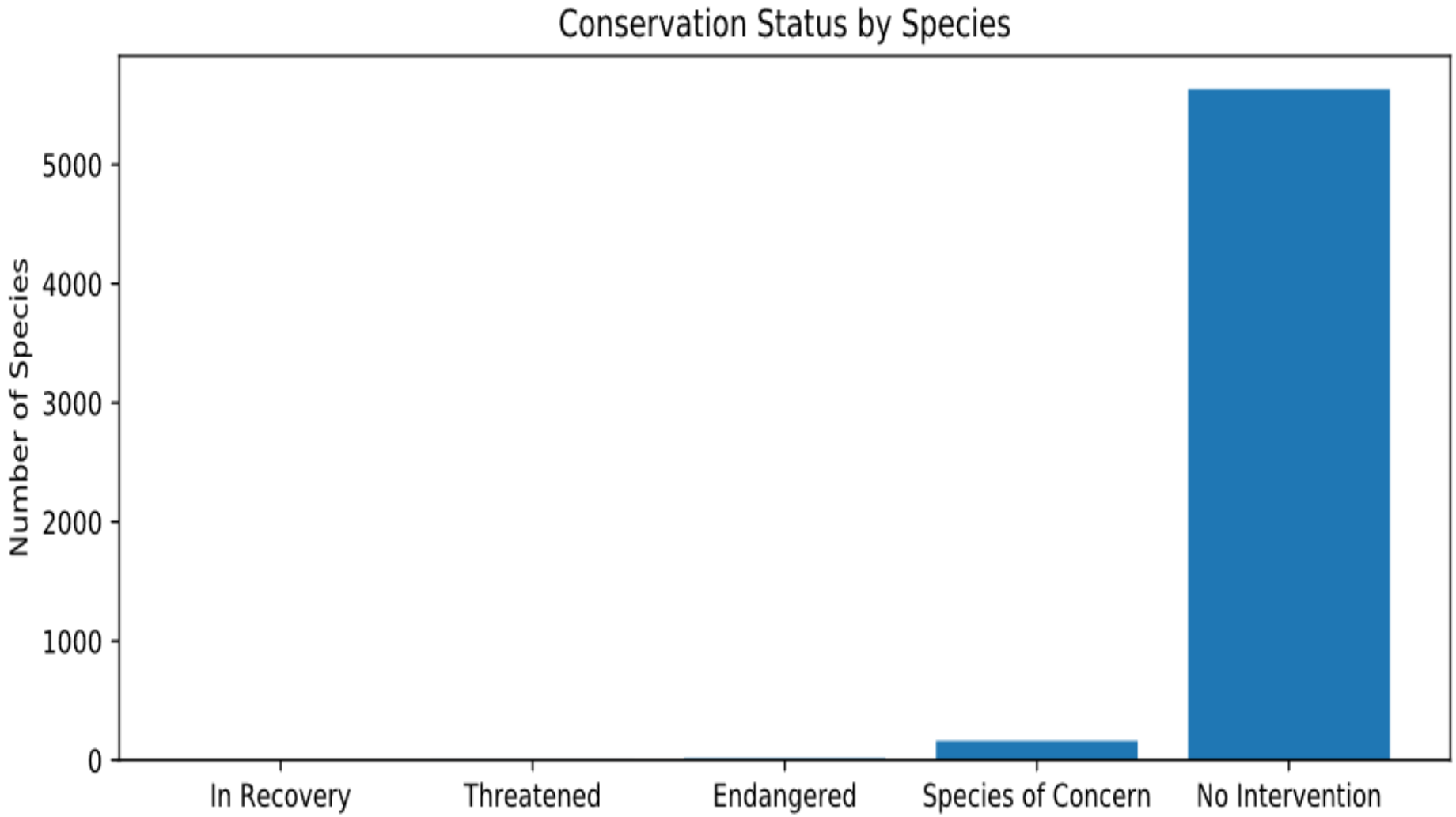
Final Project

Codecademy Data Analysis Project

Levels of concern found in the dataset

- None
- Endangered
- In Recovery
- Species of Concern
- Threatened

	conservation_status	scientific_name
0	Endangered	15
1	In Recovery	4
2	No Intervention	5363
3	Species of Concern	151
4	Threatened	10


Conservation Status by Species
Number of Species
5000
4000
3000
2000
1000
0
In Recovery
Threatened
Endangered
Species of Concern
No Intervention

Suggestions for additional helpful data

- Geographic range

- Seasonal migration (where applicable)
- Species in overpopulation
  - Are some species crowding out species that we are concerned for?

Info found in species_info.csv

- The species class (category)
  - Animal kingdom represented
  - Plant kingdom represented
- The scientific name of the given species
  - Latin
- The Conservation status where indicated
  - Overpopulation not indicated in data
- The common name or names for the given species
  - English only, presumed non-exhaustive

Current state of protection

- At risk species are not likely to be protected.
  - this may be an opportunity for increased protection depending on level of risk.

is_protected	category	False	True
0	Amphibian	73	7
1	Bird	442	79
2	Fish	116	11
3	Mammal	176	38
4	Nonvascular Plant	328	5

Protection by class

- Of at risk species mammals are most likely to be protected.
  - Why would this be?
    - The social/commercial value of mammals over other species
    - The ease of legislation and enforcement for a given species compared to another species. (beasts of the air, land, sea require distinctive protections)
    - The resilience of a given species (high birth/reproductive rates)
    - Lack of plan or prescription for protecting other species

	category	not_protected	protected	percent_protected
0	Amphibian	73	7	0.087500
1	Bird	442	79	0.151631
2	Fish	116	11	0.086614
3	Mammal	176	38	0.177570
4	Nonvascular Plant	328	5	0.015015

Recommendations for conservation

- Seek to develop better strategies to protect fish and birds.

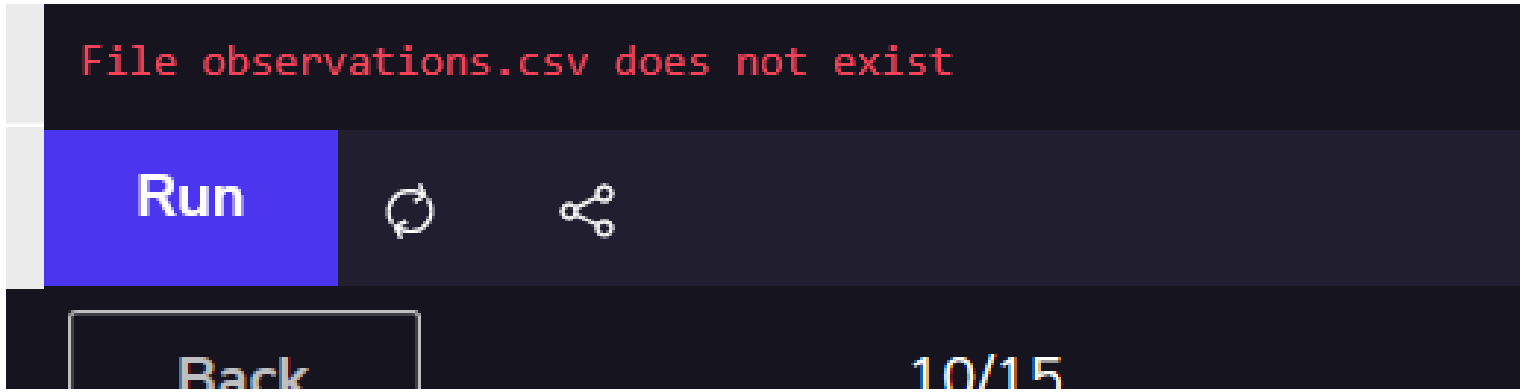
- Define pairs or sets of species that are at risk that could be protected simultaneously such as birds mammals and plants that work together to support each others existence.
- For plants explore alternative environments that could support them.
  - Plants are stationary and typically require specific climate ranges

Info about foot and mouth disease

- Affects cloven Hoofed animals
- Other animals are resistant or not affected.
- Plants not affected.

Difficulty with data

- After many attempts to load the data including pulling it directly from my computer I was met with a message the data did not exist.
- I did the best I could working around this problem.



Data about sheep

- Searching for the scientific name ‘Ovis aries’ I returned the following observations
- What is missing from the data is the
  - size of the parks
  - other species that may be susceptible to foot and mouth disease
  - The range sheep may travel among the park and other species they may encounter

Ovis aries	Yosemite National Park	126
Ovis aries	Great Smoky Mountains National Park	76
Ovis aries	Bryce National Park	119
Ovis aries	Yellowstone National Park	221