

Biodiversity Project

by Jesse Gay(MrShade138)

Conservation status in out National Parks

Raw Data

- This was provided in a pair of files one containing the species categorization and the other the observations across seven days.
- The links to the provided files will be included in the appendix but here are some examples.

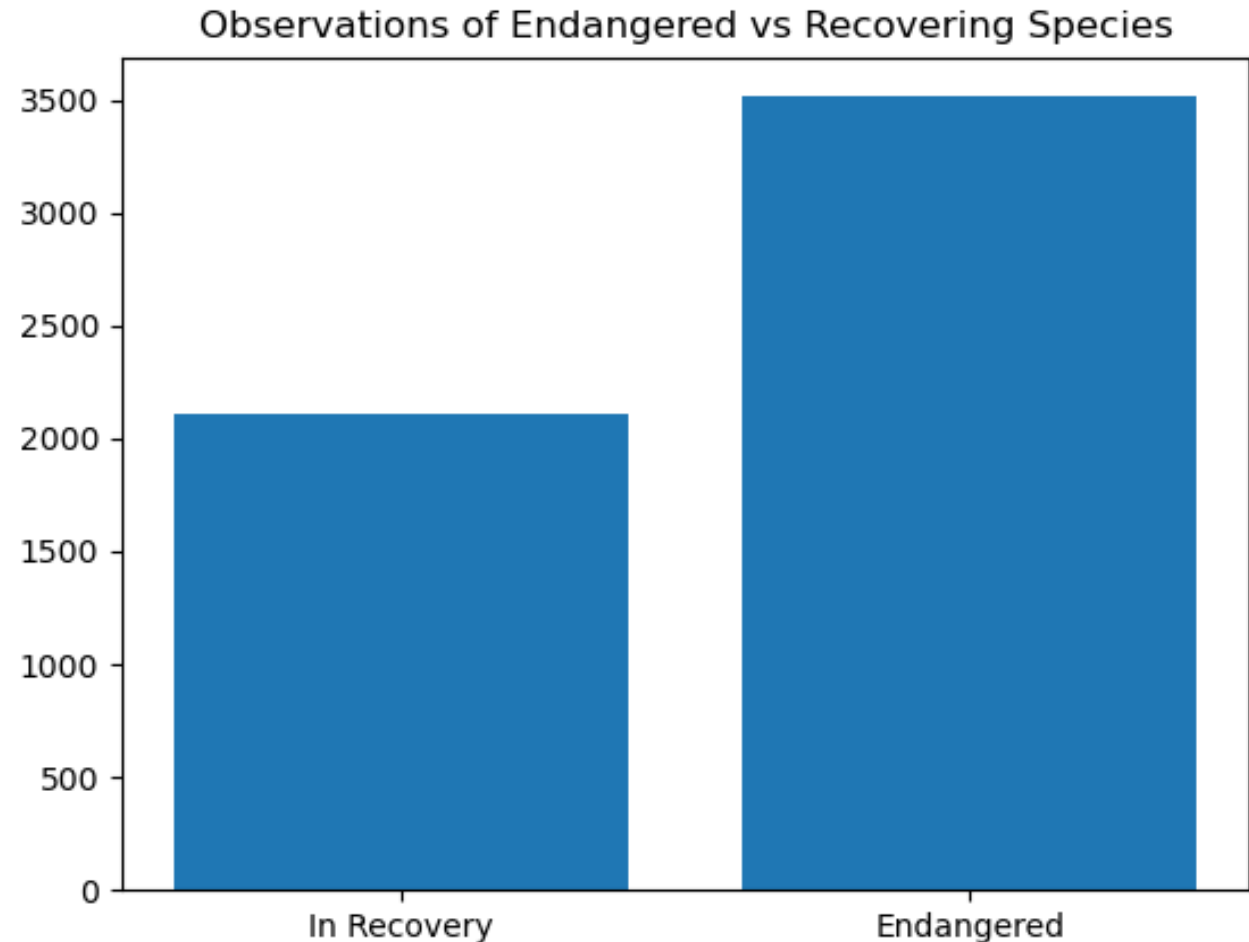
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Bird,Scolopax minor,American Woodcock,  
Bird,Tringa flavipes,Lesser Yellowlegs,  
Bird,Tringa melanoleuca,Greater Yellowlegs,  
Bird,Tringa solitaria,Solitary Sandpiper,  
Bird,Columba livia,Rock Dove,  
Bird,Ectopistes migratorius,Passenger Pigeon,  
Bird,Zenaidura macroura,Mourning Dove,  
Bird,Ceryle alcyon,Belted Kingfisher,  
Bird,Ceryle torquata,Ringed Kingfisher,  
Bird,Coccyzus americanus,Yellow-Billed Cuckoo,  
Bird,Coccyzus erythrophthalmus,Black-Billed Cuckoo,Species of Concern  
Bird,Falco columbarius,Merlin,Species of Concern  
Bird,Falco peregrinus,Peregrine Falcon,Species of Concern  
Bird,Falco sparverius,American Kestrel,  
Bird,Colinus virginianus,Northern Bobwhite,  
Bird,Alectoris chukar,Chukar,  
Bird,Bonasa umbellus,Ruffed Grouse,  
Bird,Meleagris gallopavo,Wild Turkey,  
Bird,Pavo cristatus,Peacock,  
Bird,Phasianus colchicus,"Common Pheasant, Ring-Necked Pheasant",  
Bird,Gavia immer,Common Loon,Species of Concern  
Bird,Grus americana,Whooping Crane,Endangered  
Bird,Grus canadensis,Sandhill Crane,  
Bird,Fulica americana,American Coot,  
Bird,Gallinula chloropus,Common Moorhen,  
Bird,Porzana carolina,Sora,  
Bird,Rallus elegans,King Rail,Species of Concern  
Bird,Rallus limicola,Virginia Rail,  
Bird,Eremophila alpestris,Horned Lark,  
Bird,Bombycilla cedrorum,Cedar Waxwing,  
Bird,Calcarius ornatus,Chestnut-Collared Longspur,
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Sorex preblei,Yellowstone National Park,193  
Botrychium multifidum,Yosemite National Park,148  
Ludwigia palustris,Yellowstone National Park,310  
Poa annua,Bryce National Park,128  
Sphagnum molle,Great Smoky Mountains National Park,73  
Chamaesyce glyptosperma,Yosemite National Park,124  
Hyla chrysoscelis,Bryce National Park,122  
Pseudotriton ruber ruber,Bryce National Park,77  
Carphophis amoenus helenae,Yosemite National Park,166  
Solidago speciosa var. speciosa,Great Smoky Mountains National Park,96  
Geum rivale,Great Smoky Mountains National Park,112  
Pseudotriton ruber schenckii,Great Smoky Mountains National Park,89  
Rhytidadelphus squarrosus,Yosemite National Park,142  
Artemisia dracunculus,Yellowstone National Park,232  
Salix boothii,Yellowstone National Park,269  
Ornithogalum umbellatum,Great Smoky Mountains National Park,71  
Viola bicolor,Great Smoky Mountains National Park,75  
Carex albonigra,Bryce National Park,110  
Brachythecium rivulare,Great Smoky Mountains National Park,67  
Asclepias quadrifolia,Great Smoky Mountains National Park,83  
Juncus filiformis,Bryce National Park,88  
Viburnum lentago,Bryce National Park,106  
Tantilla coronata,Yellowstone National Park,234  
Allophyllum gilliioides ssp. violaceum,Great Smoky Mountains National Park,39  
Ranunculus eschscholtzii var. eximius,Bryce National Park,106  
Plethodon serratus,Great Smoky Mountains National Park,89  
Viola hirsutula,Yosemite National Park,134  
Egretta caerulea,Bryce National Park,78  
Cynodon dactylon,Bryce National Park,112  
Hulsea brevifolia,Yosemite National Park,126  
Notropis photogenis,Great Smoky Mountains National Park,68
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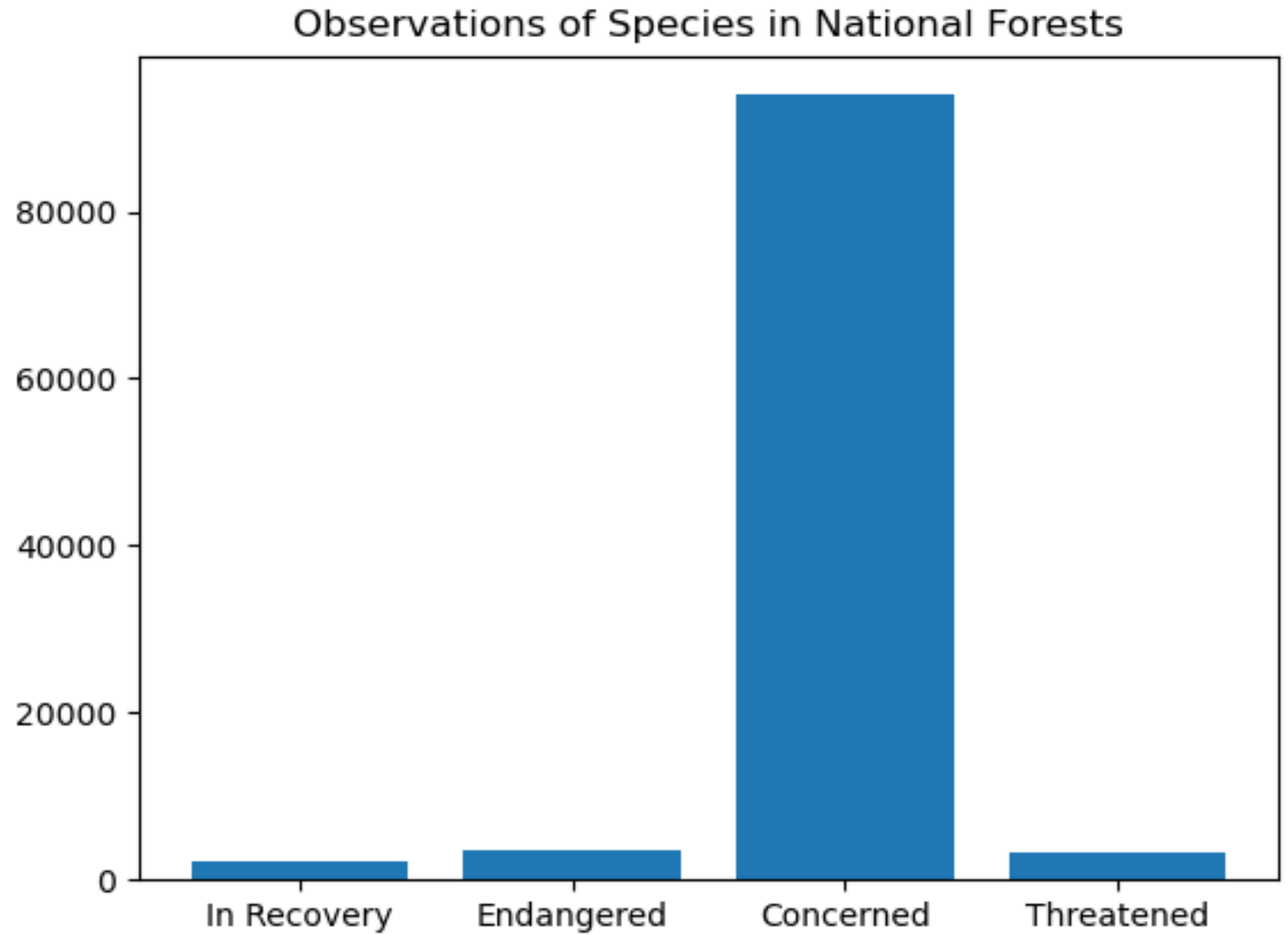
Overall Species observations

As we can see the observations of recovering animals are almost half as much as the observations of the endangered

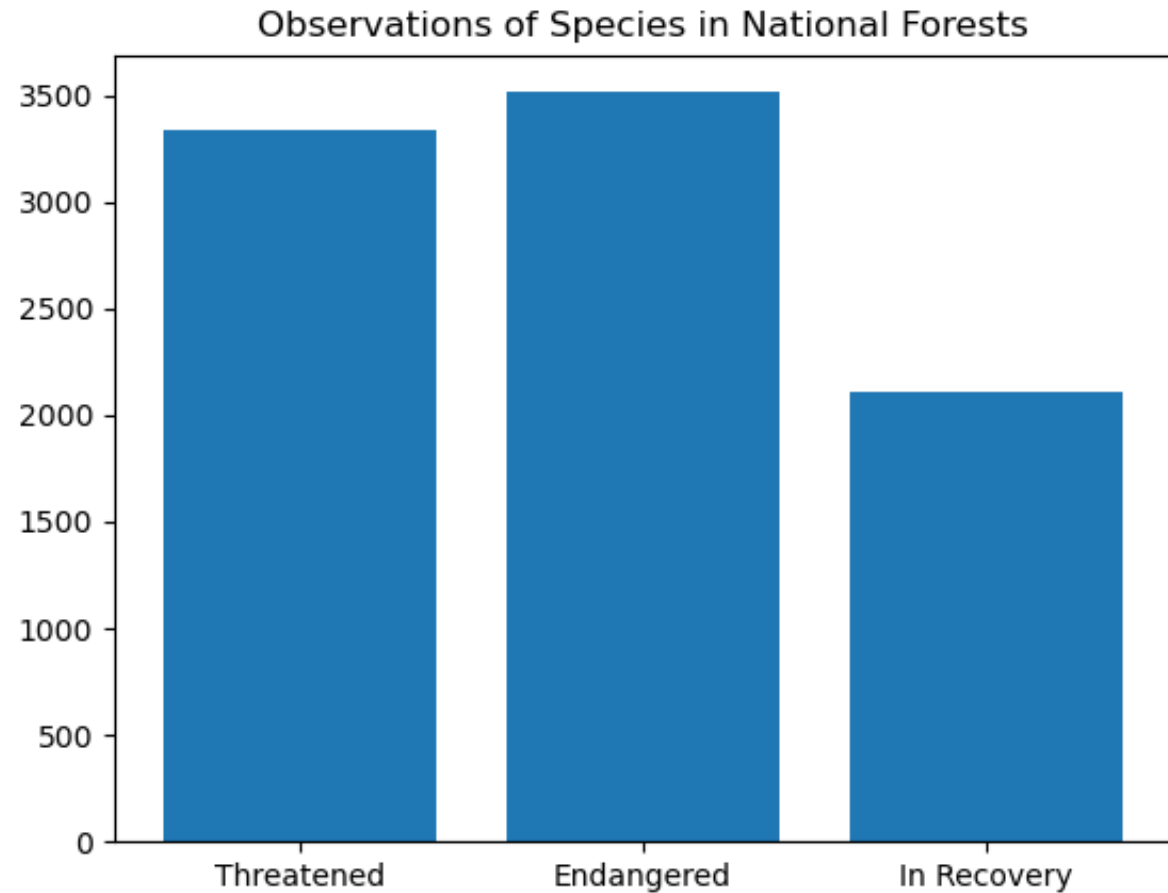
This may not seem significant but when you know there are only **4** species in recovery in this data and over **50** endangered species it puts these numbers into a different perspective.



As we can see here the look at overall species is difficult as the observations of the '**Concerned**' group is much higher than the other groups. This prompted us to consider the three other groups rather than aggregate the '**Concerned**' column which will be a focus in the future.

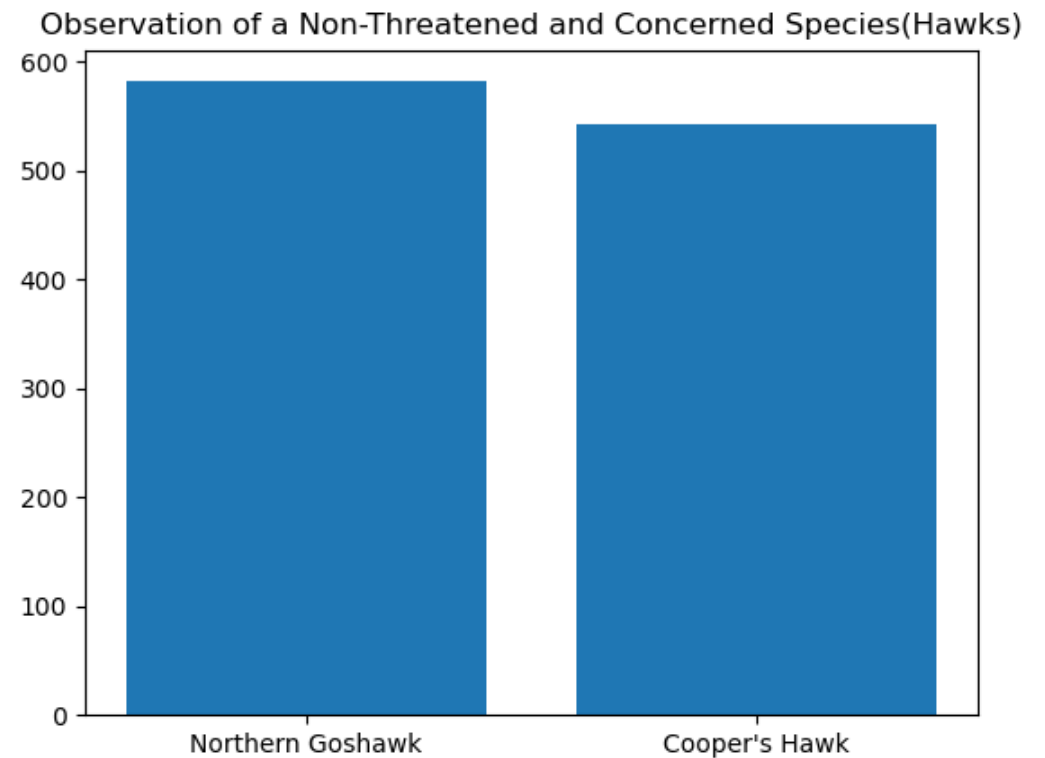


This give us a much closer look at the counts of each of these categories but we dove even further down . We choose to focus on counts of several species of birds in each of these groups.

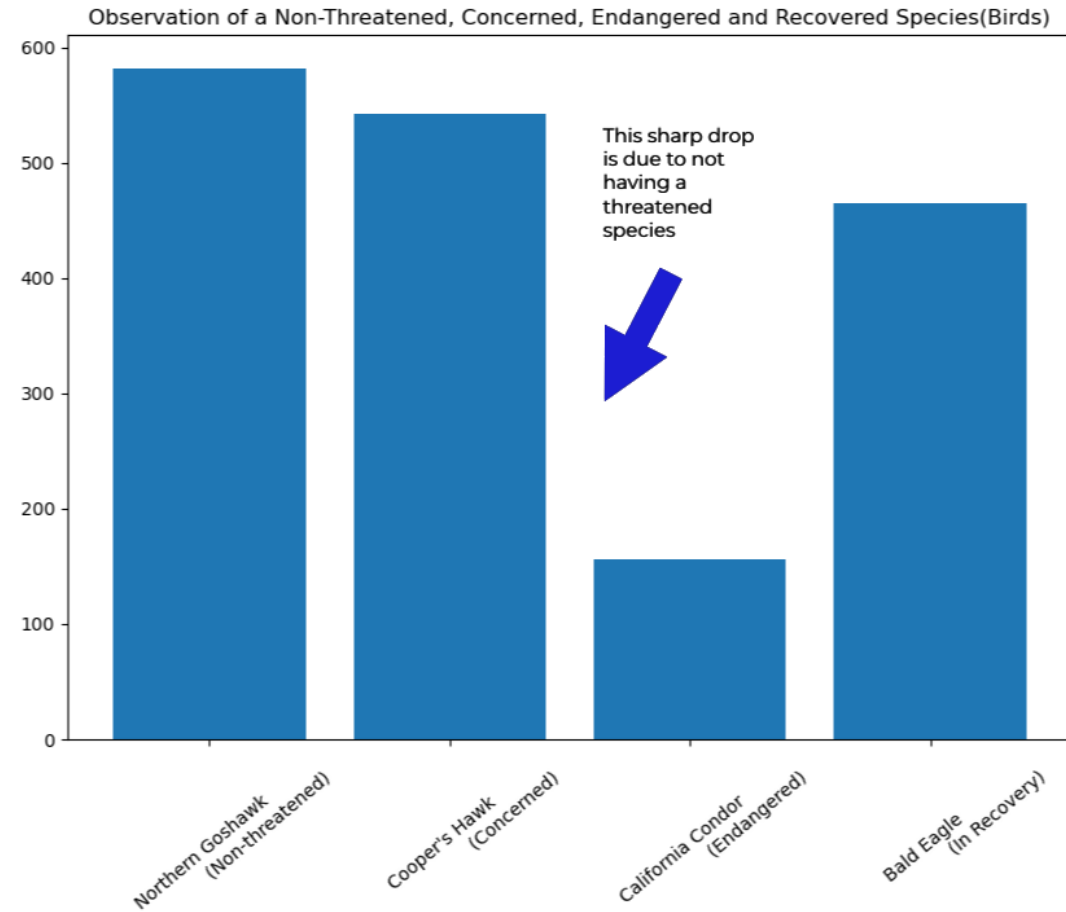


Observations on endangered birds

- Here we only focused on two variations of hawk, the [Northern Goshawk](#) and the [Cooper's Hawk](#). The goshawk is not endangered in anyway while the Cooper's Hawk is a concerned. We can see from the chart that the number of observations are very close. Does this trend continue into the other categories?



Here we have four species of bird that are in different groups. As we can see here there is a large drop but this can be partially attributed to lacking a threatened example. But the definitive data we can correlate from this is that the recovering Bald Eagle is still not up to even the observations of the '**Concerned**' Coopers Hawk.



Conclusions

- As we can see here the correlations between recovering and endangered species is high and even through these species are considered recovering they are still very much in danger.
- It is easier to help conserve these species than it is to pull them back from a brink they may still tumble into.

Appendix

All links provided by [Wikipedia](#). The full datasets are available [here](#), as are full versions of all graphics included in this slide show. The data for the datasets was provided by the [National Parks service](#). Thank you for your interest and any feedback is appreciated. My email is brujah138@gmail.com.