Birds In Analyzing The World’s Crisis Of Biodiversity

Birds are a good organism to analyze when looking at the world’s crisis of biodiversity because birds can virtually be found anywhere around the world and live in almost every environment. Also, birds have been studied for a long time and they are very well known and have very accurate information about them which may cause a scientist to choose birds over an animal with less known research. Since bird patterns are so easy to observe, scientists observe birds because they're patterns also connect to other species. Using birds as an organism to study costs way less and are far easier to study than other animals.

Birds species are massively depleting and causing an extinction crisis, birds are getting extinct due to effects caused by us humans such as poaching, being killed for their body parts, habitat loss, degradation, many other human disturbances and decreasing food population. Not all birds are going into extinction because of this, but if it continues then they will be on their way to extinction. Already one-fifth of the bird population has been considered a global concern.

- GEDIZ DELTA, TURKEY: Gediz Delta is home to many water birds that make up their bird population. Right now, they are threatened by a bridge project which would result in the loss of the area for the birds and would cause many problems for them.
- BOEUNG PREK LAPOUV, CAMBODIA: This area in Cambodia is one of the last wet grassland areas in the area and is home to half of the Sarus crane population. These Cranes are threatened by the new irrigation scheme that has massively reduced the cranes eating habits.
- MAR CHIQUITA, ARGENTINA: Mar Chiquita is the largest wetland in South America and is an important area for hundreds of thousands of water birds. Mar Chiquita is protected now but is facing many problems including agricultural expansion, deforestation, water extraction and lack of management capacity.
- KWENIA, KENYA: The Cliffs in Kwenia, Kenya are one of the most important breeding areas for the endangered Ruppel's Vulture Gyps rueppelli. The area is under serious pressure from a wind farm less than fifteen kilometers away which could constitute a collision risk to the vultures.
- CHRISTMAS ISLAND, AUSTRALIA: Christmas Island in Australia is home to five species of bird species which include Abbott's Booby Papasula abbotti and Christmas Frigate bird Fregata andrewsi. These birds are under pressure by phosphate mining which destroys breeding habits and can increase the number of invasive species.

Bird populations are diminishing at a rapid rate and the biggest factor affecting the population is agriculture. When farmers grow crops, they use many pesticides and chemicals to get rid of any insects and animals, because of these pesticides many of the birds cannot eat their prey anymore. Some ways the bird population is affected in our community is through residential and commercial development. Due to our city being heavily urbanized, major parts of land that used to have an abundant population of birds have been destroyed and replaced with residential developments ruining their whole cycle.

Neonicotinoids are insecticides that agriculture farmers are using to prevent birds from eating their crops. Neonicotinoids are deadly to birds and can cause loss of body mass, impair

reproduction, and disrupt their migratory pathways. Many farmers are now planting their seeds with neonicotinoids and are posing a huge threat for the bird population and there has already been a massive decline in the seed-eating bird's population due to neonicotinoids. We should be concerned about neonicotinoids because the effect will not only impact the birds, the whole food chain will be disturbed which could also cause a loss of food for other animals and disruption of their cycle.

When increased logging intensity occurs mammals and amphibian species rapidly decrease. Invertebrate species decrease gradually with time. On the contrary Bird species increase with logging intensity because of the inflow of habitat generalists. Comparing the Bird species to the other living organisms' birds are not particularly affected as bad as the other organisms in logging intensity, in fact, birds can be even better with logging intensity.

Invasive Alien Species can have disastrous effects on the bird population and have already caused the extinction of one hundred and twelve bird species. Invasive Alien Species (IAS) are species that are not native to an area but have a certainty to spread which can cause many negative effects. Some examples of IAS species in my region can include, mice and cats.

In the histogram shown on the right side of the page, it shows the interactions of fish between different fishing gear. It also compares all the different fishing gear in terms of the amount of fish caught and interactions. This histogram can be important for fisheries so they can find which fishing gear is the most efficient or the government to try and save endangered fish species by banning the fishing gear which catches the most fish.