

Ecological and Economical Rehabilitation

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Major - Agricultural Sciences



Photo by : Daniel Gonzalez.

Background

The wide impacts of the environmental changes ranging from human construction development, to global warming and even to natural disasters contribute to the degradation of biodiversity, specifically the mangroves. During our bird surveillance project in La Pitahaya, we were able to identify the endangered yellow shoulder black bird as well as some of their eggs. It is of high importance that we preserve these ecosystems since they are at high risk of extinction.

Location: La Parguera, Puerto Rico

Puerto Rico is home to all 4 different species of mangroves however, extreme weather such as hurricanes and heavy winds are also common. About 85% of all mangroves in Puerto Rico were wiped out during hurricanes Irma and Maria in September of 2017. Due to local community involvement we are just barely seeing a slight increase of biodiversity right after a devastating pandemic.

Ecological: Bioluminescent organisms

- Mangroves aid heavily in the process of creating bioluminescent organisms in the water
- Bioluminescent bays are a favorite tourist attraction that brings financial support to the local community
- Without mangroves there would be no bioluminescent tours or natural habitats for many different species of animals as well as plants

Economical: What can we do to help?

- One way to help preserve ecosystems in Puerto Rico is by donating using the link below.
<https://preserve.nature.org/donate/caribbean>
- Getting Educated! Being involved in, or just even knowing any drastic changes that puts foreign or local ecosystems at risk as well as learning how to combat them - links below
[youtube.com/watch?v=iX678](https://www.youtube.com/watch?v=iX678)
[youtube.com/watch?v=t0t3G](https://www.youtube.com/watch?v=t0t3G)



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Ecological : Yellow Shoulder Black Bird

- Conservation Status / Population is Endangered
- Habitat - predominantly black mangroves
- These birds produce about 2-5 eggs during mating season and are very protective of their hatchlings
- Approximately 1-2 eggs get the chance to hatch however, the hard truth is that it's very rare that both hatchlings get to become an adult and usually 1 or if not none survive
- When yellow shoulder black birds hatchling's are hungry they make lots of noise, which makes them a prime target for predators in the vicinity