Puerto Rico Wildlife Database	Author: Diego A. Santiago Uriarte	Date: 1/26/2023

Problem Background

There is a great amount of diversity of wildlife native to Puerto Rico. Currently there exists no database listing all the animals native to Puerto Rico. People seeking to find information about an animal found on the island do not have a centralized resource they can use to help identify the animal. They instead resort to searching on the internet hoping to find the animal from the region which might result in erroneous information being obtained. Currently, Humans are responsible for the death of many animals from fear of the animal being dangerous. Having a Database web application will help researchers and non-researchers alike to learn information about a given animal from a given region.

Target

- Researchers have a centralized source of information relative to native wildlife of Puerto Rico
- Civilians interested in learning information about a specific animal can easily find it.
- Educators can easily explain similarity of animal attributes to students. Such as a list of all vertebrate animals.

Causes

Problem: There is no digital database in which all animals native to Puerto Rico are listed.

Why: It is a lot of data that is not digitalized nor found in a single document.

Why: Much of the wild life listed is divided by which sector or habitat the animal is native to. Example : all animals native to el Yunque.

Why: It is more convenient for researchers and administrators of natural resources to tabulate the animals found in a given sector.

Why: Rangers in forest need only be concerned with the animals of the forests they manage.

Why: To manage a certain region inhabited by specific animals it is not necessary to learn about others. This could lead to some confusion and its best to simply know the ones pertaining to the region.

Countermeasures

- Deploy web application which lists all animals found in Puerto Rico with information used to classify them. The attributes to be listed are: scientific name, visual description, habitat, vertebrates/invertebrate, carnivore/herbivore/omnivore, class (mammal, bird, fish, reptile, amphibian, arachnid, insects, etc.)
- Filter to separate animals from a given kingdom, phylum, class, order, family, domain, genus or species and by endangered status.
- List popular Forests in Puerto Rico and the animals native to the forest.
- Links to more information about a specific animal.

Check/Evaluate

- The web application will include a special field for reporting that information in the database is erroneous. This report can be fact-checked by an expert.
- The number of human intervention of ecosystems will decrease because they will know the information of the animal they are dealing with.

Act/Standardize

- Add animals not previously in the database.
- Eliminate animals that are found to no longer exist in Puerto Rico
- Prompt user of the reason why they used the service and add more information that is relevant to the users based on the responses. Example: if most users are park rangers, then add more information that is relevant to them.
- Add categories of animal classification