ER Diagram

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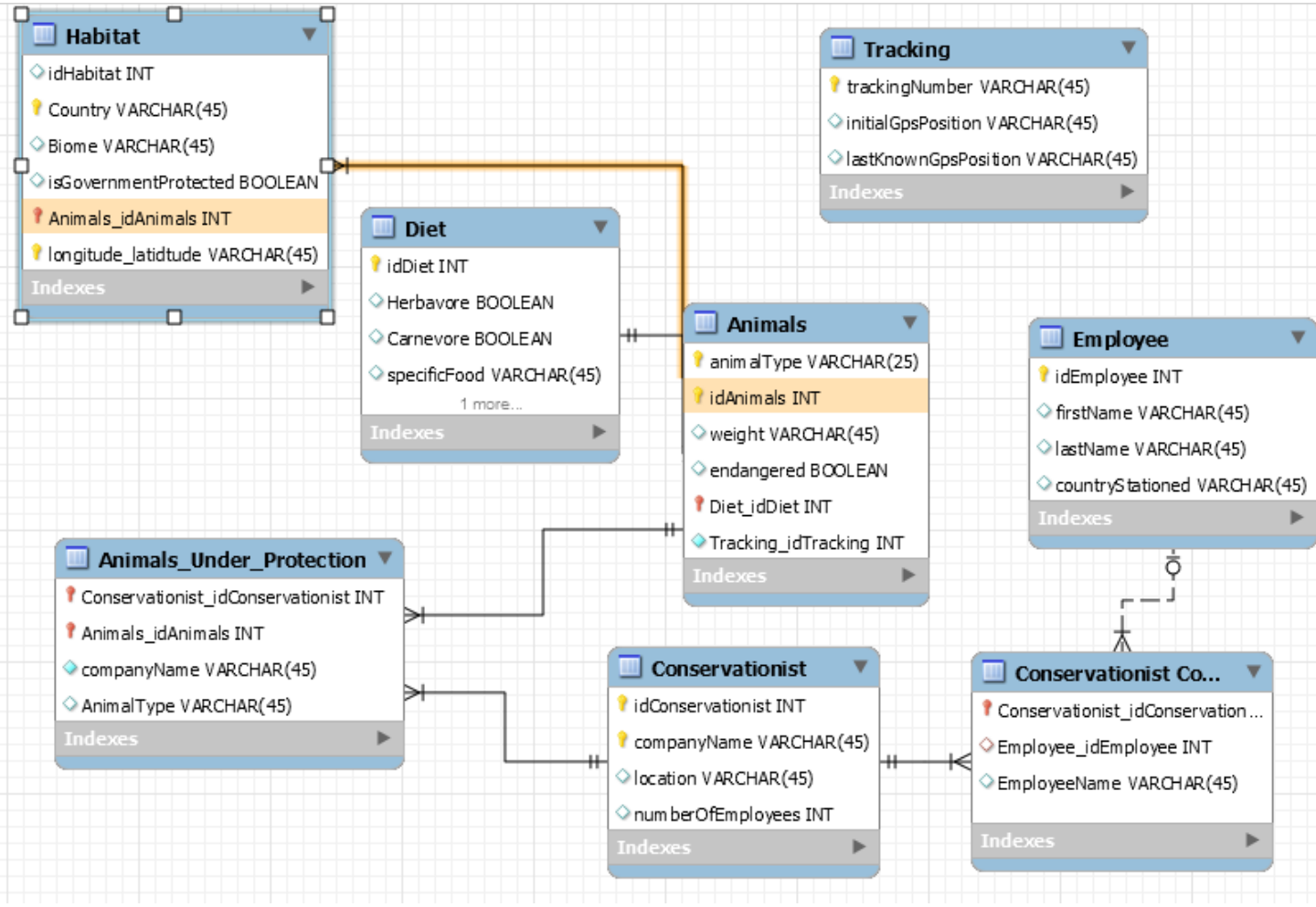

2 Overview

For my ER Model I chose to do field biology in the form of a conservationist effort. There are a few things needed for such a model. The conservation, and the animals are the most important things. The animals have a diet, a habitat, and a tracking device with a unique ID. The conservation need employees, a company or non-profit associated with it, and a location around the world they are working from. Each employee also has a one to many jobs it performs. This can be any number of things such as local veterinarian, caretaker, ect.

3 Entity Types

Habitat($\underline{country}, Biome, IsGovermentProtected, \underline{longitude_atitude}, \underline{Animals_idAnimals}$)

Diet($\underline{idDiet}, Herbavore, Carnavore, SpecificFood, foodLocal$)

Animals($\underline{animalType}, \underline{idAnimals}, weight, endangered, \underline{diet_idDiet}, \underline{trackingID}$)

Tracking($\underline{trackingNumber}, initalGpsPosition, lastKnownGpsPosition$)

Employee($\underline{idEmployee}, firstName, lastName, countryStationed$)

Jobs($\underline{IdJob}, JobTitle, JobDiscription, EmployeeId$)

Most keys were pretty simple habitat key is a combination of physical location on the globe and a country name since that will always be unique. Diet and animal have a foreign key of animalID and animalType. Animal has a combination of ID and animal type for its keys. Tracking makes sense as a unique number since that is what it would be in the wild. Each employee would have an ID, and personal information like a first and last name, SSN that could be used as a key.

4 Relationship Types

Conservationist Company ($\underline{conservationist_idConservationist}, \underline{employee_idEmployee}, employeeName$)

Animals_under_protection($\underline{Conservationist_idConservationist}, \underline{Animals_idAnimals}, companyName, AnimalT$

5 Alpha Contributions

1. An Animal has a Diet. it can eat one to many things, and the animal has total participation.
2. An animal may live in many different locations, and a habitat might house many different animals.
3. An animal has a diet, a habitat, and may have a place in which its under protection
4. An animal might have protection of a conservation, or need protection of a conservation.
5. An employee has a job or many jobs.
6. The diet table has many values that are only boolean.
7. Since an employee can have multiple jobs, this would be multi-valued.

6 Beta Contributions

I did the project solo, so I did all the contributions myself.