

First Entity: Enclosure

The enclosure has these attributes:

- Enclosure Number
- Habitat Type
- Size (square metres)
- Main Feature (e.g., stream, cave)

And each Enclosure will have:

- Multiple Animals
- Can be assigned multiple Species (through a species assignment table)

Second Entity: Animal

The animal has these attributes:

- Animal ID
- Name
- Date of Birth
- Diet
- Description

And each Animal will have:

- One Species
- Can be placed in multiple Enclosures over time (with start and end dates)
- Multiple Notes (made by zoo keepers)

Third Entity: Species

The species has these attributes:

- Species Name
- Description
- Habitat Type

And each Species will have:

- Multiple Animals
- Can be placed in multiple Enclosures (with a max number of animals per enclosure)
- Compatibility with other species (through the Species Compatibility table)

Fourth Entity: Species Compatibility

The species compatibility table has these attributes:

- Species A Name
- Species B Name
- Compatibility Rating (1-5)

And each Species Compatibility record will have:

- Compatibility rating for two species

Fifth Entity: Animal Note

The animal note has these attributes:

- Note ID
- Date
- Note Text (e.g., health observations)

And each Animal Note will have:

- One Animal (to whom the note applies)

Sixth Entity: Species Enclosure Assignment

The species enclosure assignment has these attributes:

- Enclosure Number
- Species Name
- Maximum Number of Animals (allowed for the species in that enclosure)

And each Species Enclosure Assignment will have:

- One Enclosure
- One Species (with a defined max number of animals)