

Finsbury Happy Zoo's concept is to show animals together in their habitats. They have a number of **enclosures** of different **habitat types** (such as forest or tundra), **different sizes** (square metres), each having a **main feature** (such as a stream or a cave). **Animals** of different species share the same enclosure. Each enclosure has a **unique number** and there can be several enclosures with the same habitat but with a different main feature or of a different size. Each animal has a **unique ID, and their name, date_of_birth, diet and description** are stored. When an animal is put in an **enclosure**, the **start date** is recorded, and if they are transferred to another enclosure the **end date** is recorded. Zoo keepers may need to make a **note** about a particular animal, for example "not eating well today" and this is recorded **along with the date**. To make sure the animals don't eat each other a **species compatibility table** is maintained which has the following information; **speciesA, speciesB, compatibility_rating** (5 for happy neighbours to 1 for bitter enemies). **Species** are identified by their **name**, and a **description of the species** and their **habitat type** are recorded. **Species are matched against enclosures** by Zoo staff, and if suitable the **maximum number of animals** of a particular species for a particular enclosure is recorded to prevent overcrowding.

Entities:

Enclosures

Enclosure_ID (Primary Key)

Habitat_type

Size

Main_feature

Animal

Animal_ID (Primary key)

Name

Date_of_birth

Diet

Description

Animal_note (Candidate key)

Animal_note_date

Enclosure

Enclosure_name (Primary key)

Animal_ID (Foreign Key)

Start_Date

End_Date

Compatibility

Species_A (Foreign Key)

Species_B (Foreign Key)

Compatibility_rating

Species

Species_name (Primary Key)

Description

Habitat_type

Species match against enclosures

Species_name (Foreign Key)

Enclosure_name (Foreign Key)

Maximum_number_of_animals