There are five data tables in Rigbase: tbl_DIVE, tbl_TRANSECT, tbl_FISH, tbl_HABITAT, and tbl_depth. There are also data value lookup tables: names_transect_type, names_bottom_type, names_fishcodes, names_region, and names_sites which list and describe the possible values for some fields. The first four data tables, and the names_fishcodes table have defined relationships, which be viewed in the database relationships view:
Table Descriptions:

1. **tbl_DIVE**
   - Each record represents one submersible dive, and is identified by a unique number called “dive.” The remaining fields contain information which applies to an entire dive, such as vehicle, observer, general location, etc. Detailed descriptions can be seen in the design view of the table:

   ![Design View of tbl_DIVE Table]

2. **tbl_TRANSECT**
   - This table is related to tbl_DIVE in a one-to-many relationship based on the field “dive.” So, for every dive number in tbl_TRANSECT there is a corresponding record in tbl_DIVE containing general dive information. During each submersible dive, from zero to many transects were conducted. Occasionally there were interruptions in a transect, and so multiple segments were created. Each record in tbl_TRANSECT has a unique combination of “dive” “transect” and “segment” and the records in the
table contain general information pertaining to that segment. Fields include start and stop times, segment length and transect type. If there is only one segment, then “segment length” would equal the length of the entire transect. Details describing fields can be found in the design view of the table:

3. tbl_HABITAT
This table is related to tbl_TRANSECT based on the fields “dive” “transect” and “segment,” and related to tbl_DIVE based on “dive.” For each natural reef transect segment, habitat was assessed, and data entered. Each record in the table is one habitat patch with start and stop times, bottom types, patch length, and depth information. The field Patch_ID has been set up to facilitate connection with tbl_FISH, but measures* may be used as well to find out which habitat a fish was seen in. More detail can be seen in the design view of the table:
4. **tbl_FISH**

This table is related to tbl_TRANSECT based on fields “dive” “transect” and “segment,” and related to tbl_DIVE based on “dive.” It contains records of individual sightings of fish or groups of fish. Each record has a unique “dive”, “transect”, “segment”, “real time”, “fishcode” and “size_class”. If different species, and/or different sized individuals of a species were seen in a group, they were entered in different records. The variable “frequency” indicates how many of an individual were sighted. Just as “size_class” describes the size of an individual, “weight” describes the weight of an individual, and thus would need to be multiplied by “frequency” to obtain biomass. More detail can be seen in the design view of the table:

![tbl_FISH table design](image)

5. **tbl_depth**

Although depth information has been incorporated into tbl_FISH and tbl_HABITAT, depth information for all transects can be found in this table as well. Although there is no relationship established in the database between this and other tables, values such as dive, transect, segment, and measure* correspond to similarly named values in other tables, and so relationships may be set up for query purposes.

*It has been our experience that because of the format in which the Microsoft Office products store time of day values, it is much more reliable to use the integer field we have created, “measure” to make time based queries.

**LOOKUP tables:**
names_fishcodes—lists species codes used for variable “fishcodes” in tbl_FISH, and gives corresponding species information
names_regions—lists names of general dive “region” listed in tbl_DIVE
names_bottom_types—lists and describes codes used for “bottom_type_1” and “bottom_type_2” in tbl_HABITAT.
names_sites—lists dive site names for “site” in tbl_DIVE.
names_transect_type—lists types of survey transects for “transect type” in tbl_TRANSECT.