**Data Type Hierarchy**

**Acronyms**

IODP - Integrated Ocean Drilling Program & International Ocean Discovery Program

ODP - Ocean Drilling Program

DSDP - Deep Sea Drilling Program

SOD - Scientific Ocean Drilling

ICDP - International Continental scientific Drilling Program

**Database which has ownership of data in an ideal setting**

**Paleobiology Database**

**Macrostrat**

**Required Data Type**

* DSDP/ODP/IODP &/or non-SOD sample ID
  + And/or various unique identifiers
    - DSDP/ODP/IODP
      * Data that flows from that unique identifier in the SOD setting (required in that it will always flow from SOD datasources)
        + Site

Site characterization (geologic setting)

Lat/Long

Water Depth

* + - * + Sample type (cuttings/core sample/etc)
        + Core Type (APC/XCB/RCB)
        + Lithology
    - ICDP
      * Depth (z-axis)
        + Similar collection that flows from Macrostrat if present from ICDP sources
    - Other core-based data
      * Depth (z-axis)
    - Outcrop
  + Site/location in non-SOD setting
    - Site characterization (geologic setting)
    - Lat/Long
  + Water Depth (core other)
  + Sample type (cuttings/core sample/etc)
* Age
  + Hopefully supplied through age model
  + Override button to tell macrostrat to go away - option for people to put in there own..and eventually could be added to Macrostrat (is this possible?)
* Taxa list
  + Counting methodology
    - Quantitative
    - Semi-quantitative (Present/Rare/Few/Common/Abundant/Dominant)
    - Biostratigraphic only
    - Presence/Absence only
    - Unknown (needed for legacy)
* Attribution for data
  + Publication
  + Shipboard/Post-cruise/Secondary Literature category

**Desired Data Type**

* Depth (Z-axis)
  + Depth scale type (mbsf/CCSF/etc)
    - Conversion to latest splice (automated by Macrostrat)
  + Depth to basement
* Lithostratigraphy (entered at the time of sample entering)
  + In a non-SOD setting
  + Soft Sed. v Indurated sediments (related to the preservation)
  + Will be housed by Macrostrat along with age models
* Zonation scheme
  + Will be taken by Macrostrat along with the age models
* Processing
  + Traditional Processing steps (foram/nannos/etc)
    - Should be possible to then autopopulate fields
  + Sieve size
  + type of treatment
    - QO
    - Boiling
    - Hydrogen-peroxide
    - etc
* Data pertaining to single Sample
  + Taxa
    - Count data
      * Abundance
      * Abundance scheme (required if abundance is used)
      * Overall abundance of group
      * Verified absence of species at site/sample (stored as 0)
      * Reworked individuals checkbox, etc
  + Preservation
    - Preservation Scheme
  + Sedimentological count data
    - Pyrite/
    - Glauconite/
    - etc
  + ‘Issues with sample’ checkbox
* Accessory Data
  + Drilling data
    - Date
    - Method
    - Driller
    - Logs available?
    - Where depth was measured (drill floor, ground surface, etc)
* Date stamps
  + Date collected
  + Date analyzed

**Optional Data Type**

* Description/Comments field
* Overall group abundance
  + Have a separate box for sum of total benthic/planktic
* Body size (with finer subdivisions)
  + Assemblage
  + individual

**For Taxonomy (very short discussion)**

* Ecology
  + Planktic
  + Benthic
  + sea-ice affinity
  + etc
* Species Size (mean size/holotype size)
* Informal taxonomy needs to be allowed