**Field study planning and data management**

**Debriefing:**

* **Review** field **data:**
  + Variable names, definitions, formatting and contents (especially qualitative variables).
  + Index key variables (i.e. those used to link different data sets) should be well-defined.
  + Comment clarifications and corrections.
  + Basic plots for variables of interest.
* Note any missing **modifications** that were made to the **fishing** or **sampling protocols**.
* Discuss possible **impacts** that these modifications or other issues encountered during the study.
* Make **recommendations** for next iteration of study.
* **Transfer data** and **metadata** to study repository.

**Field observations:**

* Actual **sampling locations**, **fishing gear** and **vessel**. Include any changes to the original sampling protocol and explain why and how they were changed.
* List of field **technicians** and brief description of **duties**.
* **Issues** encountered which may have affected the experimental design or the data.
* **Event times** (e.g. trap setting and retrieval times).
* Some **photos** of gear, activities, measurements, and specimens.

**Sampling protocol:**

* Summary of study **goals**.
* **Experimental** or **sampling design** (e.g. sampling locations, variables to measure, fishing gear, …).
* Data **field descriptions** and **code definitions** (e.g. hepato-colour codes).
* **Instrument list** and settings (e.g. La\*b\* setting on colorimeter).
* **References** for background studies, e.g. previous reports or studies using the sampling protocol.
* **What** do you want to know? Provide and prioritize main research questions and goals.
* **Why** do you want to know? What is the intended purpose of the results?
* **When** and **where** are you going to conduct the study? Explain why these locations and times were chosen.
* **List observation variables** and experimental treatments and map out their relationships (i.e. hierarchical diagram of causes and effects).
* **List confounding variables** and discuss their possible impacts on the proposed observations, based on their likely relationships with other variables.
* **How** are you going to answer your research questions? Will the data collected be able to answer your research questions? Outline the analytical strategy that will be used.
* **Build** a working example of what you expect your data to look like (i.e. simulate data) and analyze the simulated data set. Try alternative assumptions. Does this model yield expected results? **Review the study plan**.

**Planning:**