



Field Collection and Sample Documentation for Sponges

Robert W. Thacker

Careful attention to documentation and preservation will ensure that collections, some of which are once in a lifetime, will have maximum value.

Field Collection and Documentation

- A) On your snorkel or dive, take an underwater camera, labeled specimen bags, and a slate/clipboard. A tape measure or ruler is also useful.
- B) Photograph the specimen in situ before disturbing it. If the specimen displays distinctive characteristics when cut or handled, document these with additional photographs and notes (e.g., differently colored interior and exterior surfaces).
- C) Portions of both ectosome and choanosome should be sampled and preserved. These are often of different consistency, and important for identification.
- D) Place the specimen into a labeled plastic bag.
- E) It is useful to photograph the labeled bag containing the specimen as a way to track digital photographs. Any written notes made on a slate/clipboard can also be photographed.

Further Documentation Back "On Deck" or "In Lab"

- A) Photograph the specimen, specifically targeting any special morphological features. Photographing or including the label helps in keeping track of photos.
- B) Complete a specimen data sheet for each sample (see example below).
- C) It can be very helpful to record a Collecting Event ID. At each collection location, record:
 - i. Date of collection
 - ii. Names of collectors
 - iii. Locality name
 - iv. GPS coordinates
 - v. Depth (meters)
 - vi. Collecting notes
 - 1. Substrate/orientation of substrate (e.g. sand; vertical reef wall)
 - 2. Environmental characteristics (light availability, sediment load)



- D) Several field characters should be recorded for each specimen, including:
 - i. Specimen ID number
 - ii. Growth form (size and shape)
 - iii. Color: external and internal
 - iv. Number and arrangement of ostia and oscula
 - v. Surface texture
 - vi. Consistency (e.g., compressible, rigid, elastic, hard)
 - vii. Presence/absence of exudates, mucus, odor
 - viii. Neighboring organisms / obvious interactions
 - ix. Tentative identification, if possible

This protocol is adapted from previous work by the Porifera Tree of Life project (www.portol.org).