

MCMCA Plankton Sampling Protocol

Supplies (sent to Hurricane Island)

- Small sampling bucket w/ line
- 1 L sampling bottles (x2)
- 28 μ m concentrator
- 5% Lugols Solution w/ SDS
- Gloves and goggles
- Sharpies, lab tape, parafilm pieces, small baggies
- White filtration “sock”
- 1 gallon Nalgene bottle for filtered seawater storage
- Filtered seawater squirt bottle
- 10 L carboy with DI water
- DI water squirt bottle
- Flat of 50 mL conical tubes
- Tube holder
- Small cooler with techni ice for keeping conical tubes cold on boat
- Clip board
- Milk crate

Safety

Always wear a PFD

Be aware of any lines under tension

Wear gloves and goggles when handling Lugols

- If skin contact occurs, wash with plenty of soap and water
- If there is eye contact, rinse cautiously with DI water for several minutes. If wearing contacts, remove and continue rinsing

Be sure to tie off the bucket before sampling

Do not sample from a moving ship

Procedure

1. Complete sampling datasheet
2. Label sample tube including date, time, location name (Hurricane, Smith Cove, or Islesboro) and name of person sampling
3. Rinse bucket and sample bottle 3x with surface water
4. After rinsing, collect surface water and pour into sample bottle
 - a. If using 1L sampling bottles, fill to middle of neck
5. Concentrate 2L sample over 28 μm filter concentrator
 - a. Gently backwash concentrator using 25 mL of filtered seawater; collect the rinse in a labeled 50 mL conical tube
 - The 50 mL conical tube can be used to estimate rinse volume
6. Wearing gloves and goggles, preserve sample using Lugol's solution (~2 drops per 10 mL sample)
 - a. Sample color should look like a dark iced tea (approximately 5 drops)
 - b. Wrap parafilm tight around cap to prevent spilling
7. Store samples in cooler
 - a. Once back on shore, samples should be stored in a refrigerator (4-5°C in the dark)
8. Rinse concentrator well (front and back) with DI water between samples

To make filtered (1 μm) seawater

1. Pour seawater into filtration "sock" and collect filtrate
 - a. For long-term storage, keep filtered seawater in a refrigerator (4-5°C in the dark)

Plankton Monitoring Sampling Datasheet

Name(s):

Date:

Location	Lat. / Long.	Time	Weather	Sample Vol.	Rinse Vol.	Notes
Smith Cove						
Islesboro						
Hurricane Island						

Comments:
