WATER COLUMN TIME SERIES PROTOCOL
Sampling Protocol for Phytoplankton Preservation and Enumeration
Moorea Coral Reef LTER

GET TOGETHER:

1. 20% formaldehyde buffered with hexamine.(In cupboard)
2. 1 ml pipetter

SAMPLE PRESERVATION:

1. Collect the phytoplankton samples as described in the Protocol for Water Column Field Collection in 60 ml bottles
2. Decant sample to shoulder of bottle (if you overdo it, you can use leftover water from cryovial falcon tubes)
3. Add hexamine buffered formalin to each sample for a final concentration of 0.4 % (4 ml in 200 ml sample). Add 1.2 ml to a 60 ml bottle.
4. Cap bottle tightly and shake gently to ensure rapid fixation of phytoplankton. Store in a refrigerator.
5. Record samples information on log sheet

SAMPLE ENUMERATION: (done in Santa Barbara)

1. Settle each sample for 48 hours in a 50 or 125 ml settling column.
2. Count the samples with an Inverted Microscope, counting enough transects to total at least 300 cells. Identify cells to major taxonomic groups. Calculate abundances based on the volume settled, the number of fields counted, and the magnification used.