Objectives:

1. Collect larvae for use in behavioral experiments
2. Collect DMS samples for comparison of [DMS] to larval influx

Sampling Schedule:

**Monday, 20th**

* Flood starts ~1015pm

**Tuesday, 21st**

* Flood starts ~11

**Wednesday, 22nd**

* Flood starts ~midnight

**Thursday, 23rd**

* Flood starts ~1245

**Friday, 24th**

* Flood starts ~130am

**Saturday, 25th**

* Flood starts ~215am

**Sunday, 26th**

* Flood starts ~3am

# **New Moon – Sunday, Feb 26th**

Sampling Procedure:

1. Gather equipment from the lab

* Channel net (with flow meter attached)
* Light traps (with cod end + flashlight + line to tie to dock)
* 3 to 4 buckets
* Flashlight (head lamp is easiest for sorting fish)
* Small plastic cups
* Cooler full of ice
* 4 labelled syringes
* Notebook to recording observations
* Phone or watch to watch time

1. Take equipment to the dock on a cart
2. Set up equipment for sampling

* Tie channel net to far-right cleat of dock
* Record the value of the flowmeter
* Attach light traps to cleats on the right-side floating docks
* Put cooler in an area protected from the wind
* Tie the free end of the channel-net’s line to a bucket with enough line to reach water

1. Collect a water sample in syringe (from far left floating dock). Remove air bubbles. Wrap in black plastic and return to cooler. Record the time the sample was collected.
2. Drop the channel net and light traps into the water. Record the time. Wait 40 minutes.
3. When the 40 minutes are over, take a 2nd water sample. Record the time. Wrap the sample in black plastic and place into the cooler
4. Using the line-attached bucket, collect water and pour into a non-attached bucket. Repeat. You will need:

* One bucket to store fish larvae
* One bucket to place the cod end of the channel net in
* One bucket to pace each of the light trap cod ends in

1. Record the time, then pull the channel net from the water and place the cod end into a bucket of water. Carefully empty the content of the cod end into the bucket. Record the number on the flow meter.
2. Pull each light trap from the water and place the cod ends into buckets of water. Turn off the lights. Carefully empty the contents of the cod ends into the buckets.
3. In the order they were pulled, go to each bucket and look for larval fish. Collect them with a small plastic cup and transfer them to the bucket designated for fish larvae. Record what you caught and which net /trap it came from. Record any other details (e.g., lots of crabs, lots of seagrass, slow/fast current, strong winds, etc.)
4. Ensure that all lights have been turned on and all cod ends are attached. Repeat steps 5-11 two times.
5. Break down the equipment

* Rinse the channel net and light traps with the hose at the dock
* Rinse all bucket except for the fish larvae storage bucket
* Load the cart with all gear and park it next to the lab door near the bathrooms
* Move the cooler to the sink of the dry lab
* Move the buckets into the wet lab and sort the contents of the fish larvae bucket

1. Sort the fish larvae into black tubs

* Tub 1: Stegastes only – write a note with the numbers and likely species
* Tub 2: Other hardy reef fish larvae (e.g., snappers, other pomacentrids, etc.) – write a note
* Tub 3: Things unlikely to be useful (e.g., eels, puffers, mojarra, gobies) – write a note

1. You’re done!