



Homemade Sampling Gear: Plankton Tow

Materials (for each net):

- 1 nylon (thigh-high) stocking
- 1 wire coat hanger
- 50' nylon string
- 3 wire leaders with swivels and snaps
- 1/4-3/4" snap ring
- masking or duct tape
- small plastic vial or bottle (opaque, travel size shampoo bottles work great)
- rubber bands

Tools

- wire cutters (enough for everybody)
- split ring pliers
- nylon sewing thread

Directions:

1. Cut wire hanger on both sides of wrap and hanger hook, straighten out and bend into circle with 4"-6" diameter
2. Cut small slit on upper seam/hem of stocking.
3. Put tape over end of wire, and thread that end into slit on hem, thread entire hanger into hem of stocking. Wire hanger should form circular frame around opening of stocking.
4. Using nylon thread and needle, stitch the opening closed and thread sewing thread through stocking around wire frame. [Note: this step can be omitted in the name of time. HOWEVER, the net is not as durable, and opening may not stay open!]
5. Place vial or bottle inside stocking and place in bottom (toe) of stocking. Wrap the rubber band on the outside of the stocking around the vial's opening.
6. Clip each of the three wire leaders on the wire frame of the net, around the opening.
7. Thread of the ends of the leaders onto the split ring. Once done, the net should hang evenly below the split ring.
8. Tie 20-50 feet of nylon string or cord to main split ring.

To use net:

1. Toss from shoreline, dock/pier or boat. [CAUTION: DO NOT TOW NET FROM MOVING BOAT!]
2. Retrieve slowly.
3. Raise net from water and rinse contents of inside of net into vial.
4. Holding vial from outside of stocking, remove the rubber band.
5. Raise vial (without spilling contents) up through stocking opening.
6. Contents of vial can be viewed under a microscope or with a hand lens.