Sampling mobile macroinvertebrates: a role for light-traps?

**PROBLEM:** How to cost effectively sample and enumerate the ‘fish food’ component of marine biodiversity; both zooplankton and benthos.

Light-traps widely used for insects – potential in ocean?

**METHOD**
1 L bottle, with top inverted to form a funnel and chemical light stick inside, laid on seabed in < 5 m depth for 1-2 hours.

**RESULT**
- 10-1,000’s crustaceans sampled.
- In ca 20 samples collected 6 Phyla, 11 Classes and 12 Orders.
- Animals alive and in good condition for identification;
- No extraneous material in trap;
- No damage to habitat;
- Low cost $\$, easy to deploy and retrieve by hand (no boat).

Used in teaching – show diversity zooplankton and benthos.
Potential for monitoring biodiversity in space and time?

**Email us if you have experience with light-traps**

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**Zooplankton** = nauplii, cyprid, zoea, megalopa larvae, gelatinous zooplankton, calanoid Copepoda.

**Benthos** = Amphipoda, Cumacea, Isopoda, Myiacea, Ostracoda, Harpacticoida, Decapoda, Talitacea, Branchiopoda, Siphonostomatoidea (caligid fish lice), Stomatopoda, Pycnogonida, Chaetognatha, Gastropoda, Polyplacophora.

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