## **Ocean Drifters Shooting Tips**

Jellyfish, small shellfish and larval fish start their lives drifting in the ocean. Let's have a lesson of a professional photographer to capture those ocean drifters with emerging a silhouette of transparent body.

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After working as a local dive
instructor based in Osezaki,
Shizuoka, Japan, he started
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pictorial book of marine crustacean Marine

Crustacean in 2000 and
Coral Reef Shrimps of Indo-West Pacific in 2013
both from Bun-ichi Co., Ltd. His current interest is
shooting marine plankton including jelly-fishes not
only in Japan but in the U.S. and Southeast Asia.
http://www.seacam.jp



The jellyfish-rider associated with Nausithoe punctata Phyllosoma larvae of the Scyllaridae



The hyperiid amphipod Platyscelus armatus



#### Ocean drifters?

Generally they are referred to as plankton and is swept away or drift with the tide as they have limited swimming ability. Most of them are rarely seen during standard leisure diving scene and majority are jelly fishes, baby invertebrates and young fishes and squids living in deep sea as well as in

shallow water.. It is really interesting to see and photograph these subject as some are transparent and some are very particular in shape - a far cry form their adult appearance. We can see them during the day from just under surface up to 10m depth and some of them can be observed during night by

using their light-harvesting characteristic with a torch. There are varied in size from a few millimeters to tens of centimeters. So required technique and gears are something different from standard underwater photography as a photographer has to drift with good buoyancy control as well.



### What equipment we need?

The first thing we have to consider is the balance of an underwater housing. When shooting these ocean drifters diving skill of neutral buoyancy is a must and it is also important to make underwater weight of camera equipment not too heavy and not too light. It would be ideal if we can comfortably hold a housing with single hand without feeling wrist srtain. I manage this with my INON X-2 for EOS60D combined with Multi Ball Arms with Stick Arm Float S and Mega Float Arms to lighten total underweight of the housing. The

INON X-2 for EOS60D housing with S-2000 strobe combined with Snoot Set for S-2000. Stick Arm Float S and Mega Float Arms are being used



configuration of bouyancy devices can be adjusted to get neutral balance on horizontal axis as well to operate housing comfortably.

The net decision is what lens to use. As with any subject, there si variety of shooting style including wide and macro. We can use a wide lens at close focusing distance shooting ocean drifters with seascape behind or a macro lens to capture micro world in detail.

normally use Canon EF50mm F2.5 compact macro lens and EF8-15mm F4L Fisheye USM for shooting ocean drifters. When using the EF50mm F2.5 compact macro lens with EOS60D which is a crop camera, focal length is approx. 75mm and reproduction ratio is 3:4. Minimum focus distance is 23cm which is best suited shooting distance to shoot most ocean drifters.



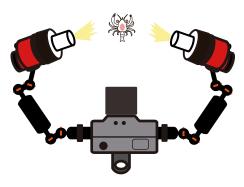
Canon EF50mm F2.5 compact macro lens



## Lighting technique without backscatter

The last technique but not least important is lighting. For silhouette image with black background, we use fast shutter speed and small aperture to appreciate deep Depth of field (DoF). When shooting transparent marine life on black background, small particles around the subject also illuminated. Normally strobes are positioned on either side of a camera but this would create white dots when suspended

particles exist between a strobe and subject or background to blow up results. In such situations, dark field imaging technique (more specifically incident-light dark field imaging) for photo microscopy is useful. Attach a snoot on an INON strobe to narrow down the beam coverage and extend it with strobe arm to light just to the right of the subject. This lighting technique can reduce backscatter.

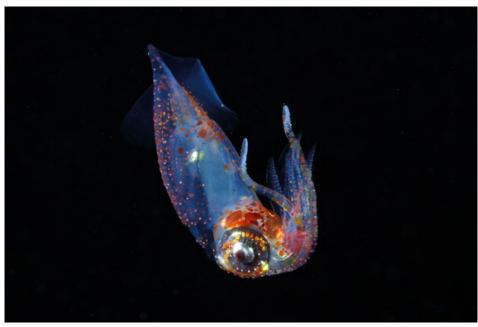


Deliver narrow strobe light by a snoot from bit near from right beside of a subject



# Focusing technique

Needless to say, using narrow strobe light makes it extremely difficult to focus on moving subject. So it is better to use manual focus to pre-focus the lens to a certain distance. Put your finger in front of a lens to take sample shot and make sure that the finger is lit up by a strobe as well. Next, make a composition for actual subject and move camera back and forth to get satisfactory focus and then press the shutter release. This pre-focus technique is unique to the combination of EOS 60D and Canon EF50mm F2.5 compact macro lens which provides larger DoF comparing to a life size macro lens.



A species of Enoploteuthis

