

Marshall's Mysteries 14

A

© Colin Marshall / Alamy



Bali, Indonesia

image about 2 cm across

C

© Colin Marshall



Lembeh, Sulawesi, Indonesia

image about 3 cm across

Do you know
what these
animals are,
or what they
are doing?
Have a guess
– answers on
page 78

B

© Colin Marshall / Biosphoto



Bali, Indonesia

image about 6 cm across

D

Match the juveniles (left) with the adults (right)

© Colin Marshall / Biosphoto

D¹



© Colin Marshall / Ardea

D²



© Colin Marshall / Ardea

D³



D⁴



© Colin Marshall / Biosphoto

D⁵



© Colin Marshall

D⁶



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SET of Sea & Sea YS 250 PRO, incl.diffusers and TCL ball mounts, 2x batteries, 2x chargers (EU and UK). 5-pin Dual Sync cord-1pc, 5-pin Sync Cord N-2pc, 2sets - Double Ball Arm L and M, YS-TTL Converter, spare ... [More >](#)



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Aquatica Macro Port (Manual & Autofocus) for any DSLR Aquatica housing with the 4 lugs bayonet fitting. £180. Sea & Sea YS -120 Duo Strobes with instructions & one Diffuser they are in good used condition and in full working ... [More >](#)



FOR SALE – Nauticam Na-d800 Housing for Nikon D800

Nauticam Na-d800 Housing for Nikon D800 Excellent condition. Full overall by Nauticam in December 2017, not in the water since. Vacuum check; electronic monitoring circuit installed, no vacuum system. 2000 euros + shipping ... [More >](#)



FOR SALE – Nauticam flat ports and lenses Sony 28mm and 90mm

Nauticam flat port for Sony 28mm + sony lens 28mm +Nauticam flat port for Sony 90mm + sony lens 90mm+Nauticam trigger flash for sony. SOLD Can be sold separately. Total price 1260€ (does not include insurance and shipping) ... [More >](#)



FOR SALE – SEA & SEA MM2 U/W CAMERA WITH ACCESSORIES

SEA & SEA MM2 U/W CAMERA WITH ACCESSORIES: - Yellow SUB 50 TTL strobe / arm extension - SEA & SEA 16mm Wide angle lens MM-2 - SEA & SEA Macro lens ML-2/3T plus attachments - Removable view finder - ... [More >](#)



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This one year old set of equipment is in excellent working condition and will serve great to a new owner. The reason for sale is a switch to a new equipment. Nikon D500 (19k clicks). Sigma 10mm F2.8 Fish Eye. 128Gb XQD Lexar ... [More >](#)

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Marshall's Mysteries 14 - Answers

A



Swimming larval Sea Snail, aka a Veliger, likely from the Tonnoidea Superfamily. Images below show the rounded flap and 4 long velar lobes to keep the planktonic snail moving and to sweep food into the mouth. Eventually the snail will settle on the sea floor, re-absorb the lobes, and metamorphize into a juvenile snail.



All these images were taken on normal night dives, ie not special blackwater dives. The snails were seen mid-water, nearer the surface than the sea bed.

B



Group of Ctenophores, aka Creeping Comb Jellies, *Coeloplana* sp (due to be described in next couple of years), casting feeding tentacles on Luzon Sea Star (*Echinaster luzonicus*) to catch plankton.

Less Ctenophores are usually seen on sea stars, as shown below (with extended tube feet on starfish).



The figure below shows an overhead view of the same sea star, regenerating from a single arm, with a different Ctenophore, *Coeloplana astericola*.



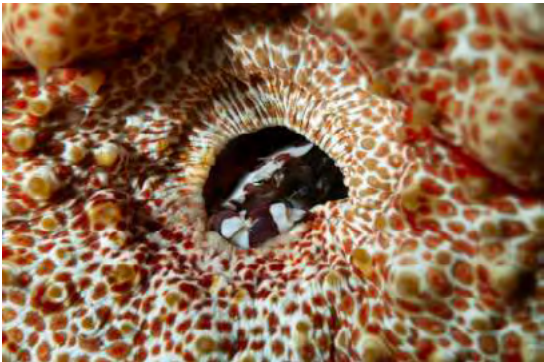
Bali, Indonesia

Details on this starfish, cucumber & crab can be found in the book "Starfish and Other Echinoderms of the Tropical Indo-Pacific" by Andrey Ryanskiy on pages 28, 86 & 90 respectively.

C



Sea Cucumber Swimming Crab (*Lissocarcinus orbicularis*) in Royal Sea Cucumber (*Thelenota anax*) anus. Image below shows the crab when the anus has contracted. The crab lives commensally with the cucumber, causing no damage to the cucumber, whose toxicity protects the crab inside the host.



Full length of Royal Sea Cucumber shown below. These cucumbers are fished commercially as food and for their medicinal properties.



Alor, Indonesia

© Colin Marshall / Ardea

Lembbeh, Indonesia

© Colin Marshall

Lembbeh, Indonesia

© Colin Marshall / Ardea

Bali, Indonesia

© Colin Marshall / FLPA / Minden

Lembbeh, Indonesia

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D All these fish are Pufferfish, famously highly poisonous (contain tetrodotoxin, a deadly toxin). The juveniles need to rely on camouflage, as their smaller size means they are likely not so poisonous as adults, which predators have learnt are not for eating. Furthermore, the Pufferfish do not immediately produce tetrodotoxin; it is produced by endosymbiotic bacteria that the fish eats.

The correct juvenile – adult matches are shown below, with some intermediate stages shown.

Star Puffer (*Arothron stellatus*)

All images © Colin Marshall

D¹



D⁵



Note the juvenile lines gradually transforming into dots as shown in the second image, the spots gradually getting smaller as the fish matures.

White-spotted Puffer (*Arothron hispidus*)

D²



D⁶



Note the pufferfish gradually changes from being oval-shaped to a more elongate shape.

Map puffer (*Arothron mappa*)

D³



D⁴



Note how the pufferfish pattern changes from spots to scribbled maze-like markings.

If you think any of the identifications or information above is wrong, please let me know at colintrmarshall@yahoo.com. Feel free to send me any images of anything you'd like some help in identifying – any particularly interesting mysteries may be included in future Underwater Photography issues.

Guidelines for contributors

The response to UwP has been nothing short of fantastic. We are looking for interesting, well illustrated articles about underwater photography. We are looking for work from existing names but would also like to discover some of the new talent out there and that could be you! UwP is the perfect publication for you to increase your profile in the underwater photography community.

The type of articles we're looking for fall into five main categories:

Uw photo techniques - Balanced light, composition, etc

Locations - Photo friendly dive sites, countries or liveaboards,

Subjects -, Anything from whale sharks to nudibranchs in full detail

Equipment reviews - Detailed appraisals of the latest equipment

Personalities - Interviews/features about leading underwater photographers

**If you have an idea for an article,
contact me first before putting pen to paper.
E mail peter@uwpmag.com**

How to submit articles

To keep UwP simple and financially viable, we can only accept submissions by e mail and they need to be done in the following way:

1. The text should be saved as a TEXT file and attached to the e mail

2. Images must be attached to the e mail and they need to be 150dpi

Size - Maximum length 20cm i.e. horizontal pictures would be 20 cm wide and verticals would be 20cm high.

File type - Save your image as a JPG file and set the compression to "Medium" quality. This should result in images no larger than about 120k which can be transmitted quickly. If we want larger sizes we will contact you.

3. Captions - **Each and every image MUST have full photographic details** including camera, housing, lens, lighting, film, aperture, shutter speed and exposure mode. These must also be copied and pasted into the body of the e mail.