





Mimic octopus (left), with an exposure of ISO125, f/16, 1/60s, and pair of emperor shrimp on sea cucumber (above), with an exposure of ISO160, f/25, 1/80s, were photographed using a Nikon D200 camera with a Nikon 105mm macro lens, Hugyfot housing and two Ikelite D125 strobes.

PREVIOUS PAGE: Pair of gammarids, Lake Baikal, Siberia, Russia. Photo by Peter Symes.



Robust ghost pipefish pair (above). Exposure: ISO125, f/29, 1/60s. Gear: Nikon D200 camera, Nikon 60mm macro lens, Hugyfot housing, two Ikelite D125 strobes.

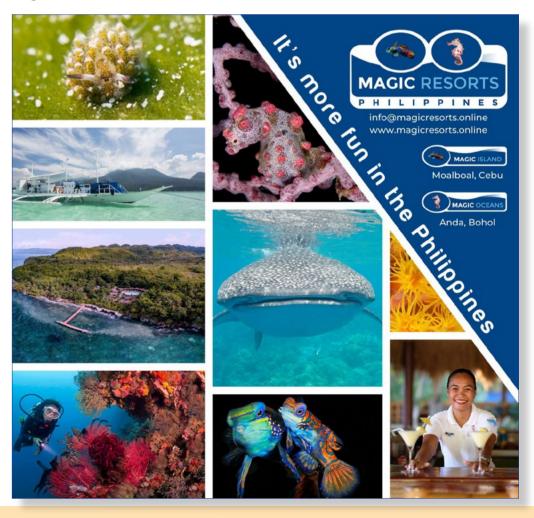
Puri Jati, Bali, Indonesia

Text and photos by Scott Bennett

Situated on Bali's northern coast, Puri Jati features a slope of volcanic sand easily accessible from shore. Although desolate in appearance, looks are deceiving. This is critter heaven, home to a bewildering array of the weird and wonderful creatures. I spent three memorable days here, with each dive revealing photo subjects galore. Lone anemones hosted blacksaddle anemonefish, porcelain crabs and commensal shrimps, while a sea cucumber carried two colourful hitchhikers: a pair of imperial partner shrimp.

Octopus species abound, and I giddily checked two off my bucket list on one dive: the wonderpus and mimic octopus. Be aware of your surroundings, as the substrate is alive with Ambon scorpionfish, devil scorpionfish dwarf scorpionfish, cockatoo waspfish and dwarf lionfish. Need more? Throw in nudibranchs, painted frogfish, finger dragonets, ornate and robust ghost pipefish, seahorses and cuttlefish and your shutter will blast into overdrive.

With depths generally less than ten metres, dive times can easily exceed an hour. As a photographer, your battery power will run out long before your air! Visit: xray-mag.com/contributors/ScottBennett



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Tufi Resort's dock, Oro Province, Papua New Guinea

Text and photos by Larry Cohen

Just a 15-minute boat ride from Tufi Resort's dock in Papua New Guinea are some of the most stunning reefs in the world, but one of the best sites is the dock. This



Pair of ghost pipefish (left); Squat shrimp (above); Mantis shrimp (right). Camera gear: Olympus OM-D E-M1 camera, Olympus M.Zuiko 60mm f/2.8 macro lens, Aquatica AE-M1 housing with flat port, Sea&Sea YS-D1 strobes.

wharf area was a PT boat base during WWII and offers world-class muck diving. It is littered with machinery and bottles that shelter marine life. There are plenty of creatures to observe in less than 10m (33ft) of water. Diving double tanks, my dive partner, Olga Torrey, and I did multiple

three-hour dives here and were never bored. Three of my favorite subjects include a squat shrimp, a pair of ghost pipefish and a mantis shrimp. To capture these images, I used the Olympus M.Zuiko 60mm f/2.8 macro lens on the Olympus OM-D E-M1 camera. The camera was in the Aquatica AE-M1 housing with the flat port. For lighting, I used Sea&Sea YS-D1 strobes. Please visit: liquidimagesuw.com

Technical tips for shooting macro

Text by Larry Cohen

One of our responsibilities as photographers is to pick the correct ISO, aperture and shutter speed for the images we are creating. There are many factors to consider. First and foremost is the amount and quality of the light. When shooting in relatively shallow water on a bright day: The lower the ISO, the less digital noise we have in our images. In dim light, you have to use a higher ISO.

When shooting macro images, we have shallow depth of field. If we want the whole subject sharp, we need to use a smaller aperture opening (larger f/stop number). Some images may look better by using a larger aperture opening (smaller f/stop number) to have the background and/or part of the subject out of focus. Having part of the subject out of focus can be effective as long as the eyes are sharp.

Camera shake that causes blurred images is magnified when shooting macro. For this reason, it is best to use a fast shutter speed. When shooting most macro photos, the background is close to the subject, so your strobes will light both the subject and background. In this case, controlling the ambient light with the shutter speed is not important.



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Punta, Dumaguete, Philippines

Text and photos by Brent Durand

I have had a number of favorite macro dives but would have to say that one particular dive in the Philippines last year stands out. I was visiting Atlantis Resort Dumaguete for work, getting familiar with the resort and diving as part of my new job. I had heard about Dumaguete for years and really wanted to (personally) see if the critter abundance and biodiversity was indeed on par with other famed macro hotspots. On this particular dive at Punta, we moved from great subject to great subject... and I was dialed in, getting the shots. Photographers, you know how that feels. I surfaced with a huge smile, confirming in my own head what so many divers already knew—that Atlantis truly deserves such a stellar reputation and that the macro diving in Dumaguete is off-the-charts excellent! Visit: tutorials.brentdurand.com

Golden gobies (Lubricogobius ornatus). Exposure: ISO 200, f/29, 1/200s. Camera gear: Canon 5D Mk IV camera, Canon 100mm f/2.8L macro lens, Sea&Sea MDX-5DMKIV housing, one Sea&Sea YS-D1 strobe and DIY snoot (above)

Pink-eared mantis shrimp (Odontodactylus latirostris). Exposure: ISO 200, f/25, 1/200s. Camera gear: Canon 5D Mk IV camera, Canon 100mm f/2.8L macro lens, Sea&Sea MDX-5DMKIV housing, one Sea&Sea YS-D1 strobe and DIY snoot







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Lined seahorse or *Hippocam-pus erectus* (above). Exposure: ISO 250, f/14, 1/250s. Camera gear: Nikon D5 camera, 105mm lens, Nauticam housing, Inon strobes.

Scaly-tailed mantis shrimp or *Lysiosquilla scabricauda* (right). Exposure: ISO 400, f/18, 1/250s. Camera gear: Nikon D5 camera, 105mm lens, Nauticam housing, Inon strobes.

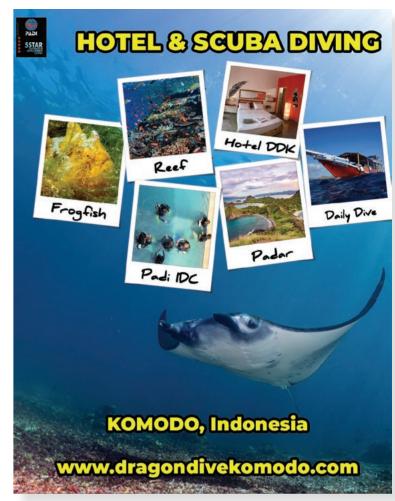


Striated frogfish or *Antennarius striatus* (right). Exposure: ISO400, f/13, 1/250s. Camera gear: Nikon D5 camera, 105mm lens, Nauticam housing, Inon strobes.

Blue Heron Bridge, Florida, United States

Text and photos by Jennifer Idol

Blue Heron Bridge in Florida is known for its world-class macro dives. I have been there a few times but I will always remember diving there with fellow photographer Suzan Meldonian as she shared her treasure. Tides limit dive times, but we were able to dive early mornings this past winter. We worked to find a seahorse, and fortunately found one in the first half of the dive. This was the first seahorse I saw at the bridge, which is now protected from specimen collectors. So as not to stress our feeding seahorse, we spent the rest of the dive finding other worthy subjects such as froafish and eventually even a mantis shrimp. I was shocked to see the mantis shrimp as I did not realize they lived in Florida waters. These images were taken with a Nikon D5 camera with a 105mm lens in a Nauticam housing with Inon strobes. Please visit: theunderwaterdesigner.com





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Purple lady nudibranch (below)—a seldom-seen nudibranch photographed using a snoot torch to light just the nudibranch, highlighting its beautiful colours against a black background. Exposure: ISO 160, f/8.0, 1/200s. Camera gear: Sony A6400, Zeiss Touit 50mm macro lens, Fantasea FA6400 housing and MiniGear MS03 snoot torch.

Basket star on sinuous sea fan (bottom). This is one of the delicate baby basket stars for which this reef is named. Exposure: ISO 100, f/5.6, 1/250s. Camera gear: Sony A6400 camera, Zeiss Touit 50mm macro lens, Fantasea FA6400 housing, and two Sea&Sea YS-D1 strobes.



Orange gasflame nudibranch—a huge nudibranch measuring about 10cm in length, photographed using a snooted strobe to light just the nudibranch and to separate it from the vibrant reef upon which it can be found. Exposure: ISO 200, f/18, 1/250s. Camera gear: Sony A6400 camera, Sony 90mm macro lens, Fantasea FA6400 housing and Inon Z240 strobe with lardino's snoot.

Sterretjies Reef, Gordon's Bay, Cape Town, South Africa

Text and photos by Kate Jonker

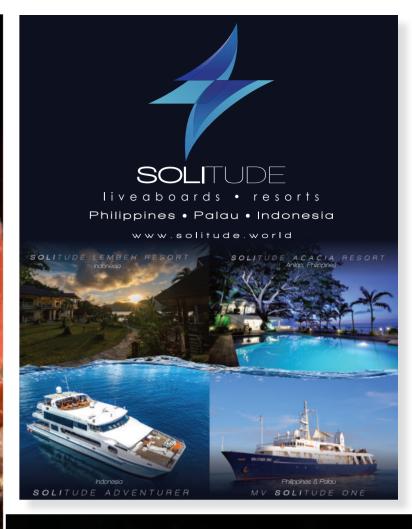
A new reef. Never before seen by human eyes! As we descended, a magnificent reef rose to greet us, revealing spectacular rugged ridges and gently sloping valleys. The ridges were adorned with vibrant pink and yellow soft corals. Rare nudibranchs and tiny blennies peered out from the dense marine life. The sloping valleys were home to forests of huge orange sea fans and the seafloor was softly carpeted with yellow sponges. Tiny baby basket stars clung to the sea fans and lazy puffadder shysharks snoozed on their yellow sponges. I spent an exciting 50 minutes exploring this uncharted reef and photographing marine life I had not seen for years. We named the reef "Sterretjies," which is Afrikaans for "Small Stars," for the many tiny basket stars that had made this reef their home. Besides the emotional attachment of discovery, Sterretjies has remained my favourite macro dive site due to its incredible diversity of marine life. Please visit: **katejonker.com**











Red paddle-flap scorpionfish (*Rhinopias eschmeyeri*) with an exposure of ISO 200, f/22, 1/125s (above), and with an exposure of ISO 200, f/20, 1/250s (top right). A mating pair of the small but venomous blue-ringed octopus species, photographed with an exposure of ISO 200, f/16, 1/125s (right). Camera gear: Nikon D810 camera, Nikon 105mm lens, Subal housing, two Sea&Sea YS-250 strobes and DIY snoots.

Goby Station, Lembeh Strait, Indonesia

Text and photos by Matthew Meier

One of my favorite macro dives occurred last fall while diving with Solitude Lembeh Resort at a dive site called Goby Station, in Lembeh Strait, Indonesia. On this one dive, I was able to photograph two species on my bucket list of rare creatures. We set out in search of red, yellow and purple Rhinopias, or paddle-flap scorpionfish, that had been seen at this site and instead, the first critter my dive guide Purry located, was a mating pair of blueringed octopuses! My mind was blown 10 minutes into the dive and it only got bet-

ter as we subsequently located three Rhinopias, all of the red variety. The photos were shot with a Nikon D810 camera and a Nikon 105mm lens in a Subal housing, with two Sea&Sea YS-250 strobes and snoots fashioned from the "underwater department" at Home Depot.

The snoots are just lightweight plastic reduction tubing that I found in the plumbing or gardening aisle, and which happened to fit snug-

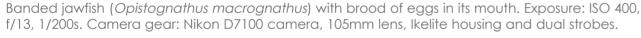
gly over the end of my strobes. I had the strobe with me in the store to test the fit. I also added a tether so I can remove them for a shot and they will stay attached to the strobe and not float away. The opening at the end is about two inches, down from the original strobe width of over 3.5 inches. Visit: MatthewMeierPhoto.com





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Bianca, Lembeh Strait, Indonesia, and Blue Heron Bridge, Florida, **United States**

Text and photos by Brandi Mueller

Lembeh Strait in Indonesia is a famous destination for macro photography with so many of my favorite critter-hunting dive sites. One that never disappoints is Bianca. For someone who has not been there before, when the dive boat arrives, pulling up near derelict-looking boats, it is easy to question why anyone would dive here. Even when you first jump in and see mucky black sand below, and usually more garbage than any diver wants to see on any dive, the site seems questionable. But once

you get closer to the sand (and have the help of an excellent dive guide), you will find endless macro opportunities—different colored seahorses, frogfish, tons of anemonefish, and on my last dive there, even a nudibranch laying eggs.

In contrast, shooting macro photography under the Blue Heron Bridge in Florida is one of my favorite spots because it is so unexpected. One would never guess in depths as shallow as two to three meters, there are octopus, seahorses, jawfish, nudibranchs, flying gurnards, juvenile fish of so many species and more. It is an easy-to-access shore dive (although you have to time your dive by the tides), and you can spend up to two hours shooting macro to your heart's content. Please visit: **brandiunderwater.com**



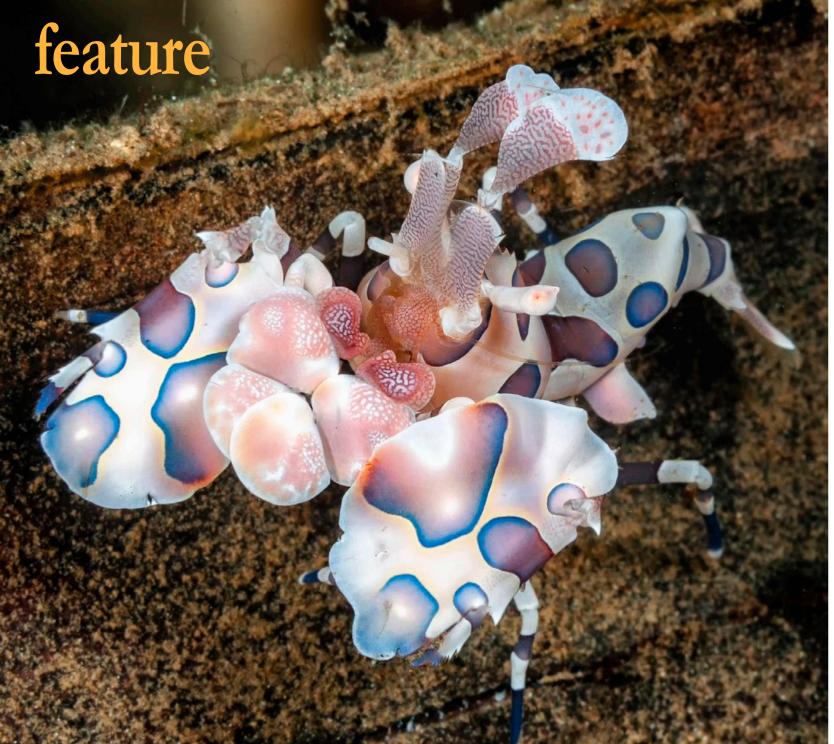




Chromodoris nudibranch, Chromodoris kuniei, (top center). This beautiful nudibranch is always a treat to photograph, and after I snapped a few photos, I noticed it was laying eggs! I tried to get some of the vivid orange eggs it was laying in the shot. Exposure: ISO 200, f/22, 1/200. Camera aear: Nikon D850 camera, 105mm lens, Ikelite housing, dual strobes.

Thorny seahorse. Hippocampus hystrix (left). With its tail wrapped around some greenery, this seahorse was very camouflaged Getting very low, I tried to be on the same plane as the seahorse to get a straight shot of it. Exposure: ISO 200, f/22, 1/200s. Camera gear: Nikon D850, 105mm lens, Ikelite housing, dual strobes.

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Harlequin shrimp or Hymenocera picta (top left). Exposure: ISO 200, f/20, 1/250s. Camera gear: Nikon D300 camera, Nikon 70-180 macro zoom lens, Subal housing and Sea&Sea YS90 strobes.

Ocellated frogfish or Antennarius ocellatus (left). Camera gear: Nikon F100 film camera, Nikon 70-180 macro zoom lens, Subal housing and Sea&Sea YS90 strobes.

Dinah's Beach, Milne Bay, Papua New Guinea

Text and photos by Don Silcock

My favorite macro site is Dinah's Beach on the northern coast of Milne Bay in Papua New Guinea, which besides being a great critter dive, is also the home of muck diving. "Dinah" refers to Dinah Halstead, the first wife of the late Bob Halstead, the pioneer of liveaboard diving in Papua New Guinea. The

beach is right in front of Dinah's home village of Lauadi, and it was here that Bob first persuaded a group of well-heeled American divers to try what he christened as "muck diving." Defined as diving where there is

no pretty scenery, the Americans were not easily convinced, and suspected Bob was simply trying to save on fuel. But they changed their minds once they saw the array of critters waiting for them! Like all good critter sites, what you will see

varies with the time of the year and the water temperature. But there is always plenty to see and I have never had a bad dive there. You can read more about Dinah's Beach at: indopacificimages.com

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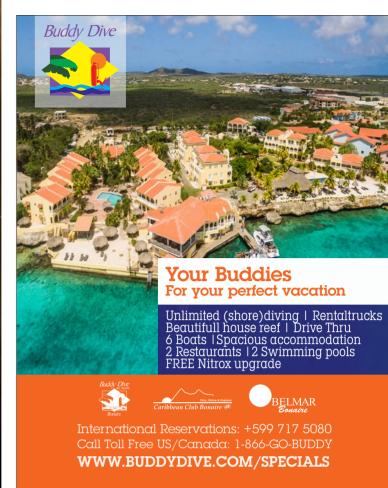


Text and photos by Olga Torrey

Since I come from the Ural Mountains in Siberia, Russia, one of my favorite dive loca-

tions is the cold waters of Port Hardy in British Columbia, Canada. Browning Pass Wall is one of the best sites for both macro and wide-angle photography. Every inch of this wall is covered with life. Diving sidemount, the captain of the *Nautilus Swell* commented that my dive partner, Larry Cohen,





Alabaster or white-lined dirona nudibranch (above); Pair of opalescent or flame-tipped nudibranchs (left); Juvenile wolf eel (right). Camera gear: Olympus OM-D E-M5 camera, Olympus M.Zuiko 12-50mm f/3.5-6.3 EZ Micro lens, Nauticam NA-EM5 housing, Sea&Sea YS-D1 strobes.

and I did the longest dives and stayed within a 3m (10ft) area. The problem was what lens to bring? I enjoy using the discontinued Olympus M.Zuiko 12-50mm f/3.5-6.3 EZ Micro lens on my Olympus OM-D E-M5 camera. This unique lens has a button that puts it into macro mode. The lens does not produce a true 1:1 macro image but does provide a 1:2 half-life-size image. This is perfect for many of the small creatures on this site. Nauticam has a flat port and special ring, so one can

access this button during the dive. This way, I could capture close-up and medium-wide images with my Nauticam NA-EM5 housing. I really enjoyed photographing this Alabaster Dirona, opalescent nudibranch and juvenile wolf eel. For lighting, I used Sea&Sea YS-D1 strobes. Please visit: fitimage.nyc





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