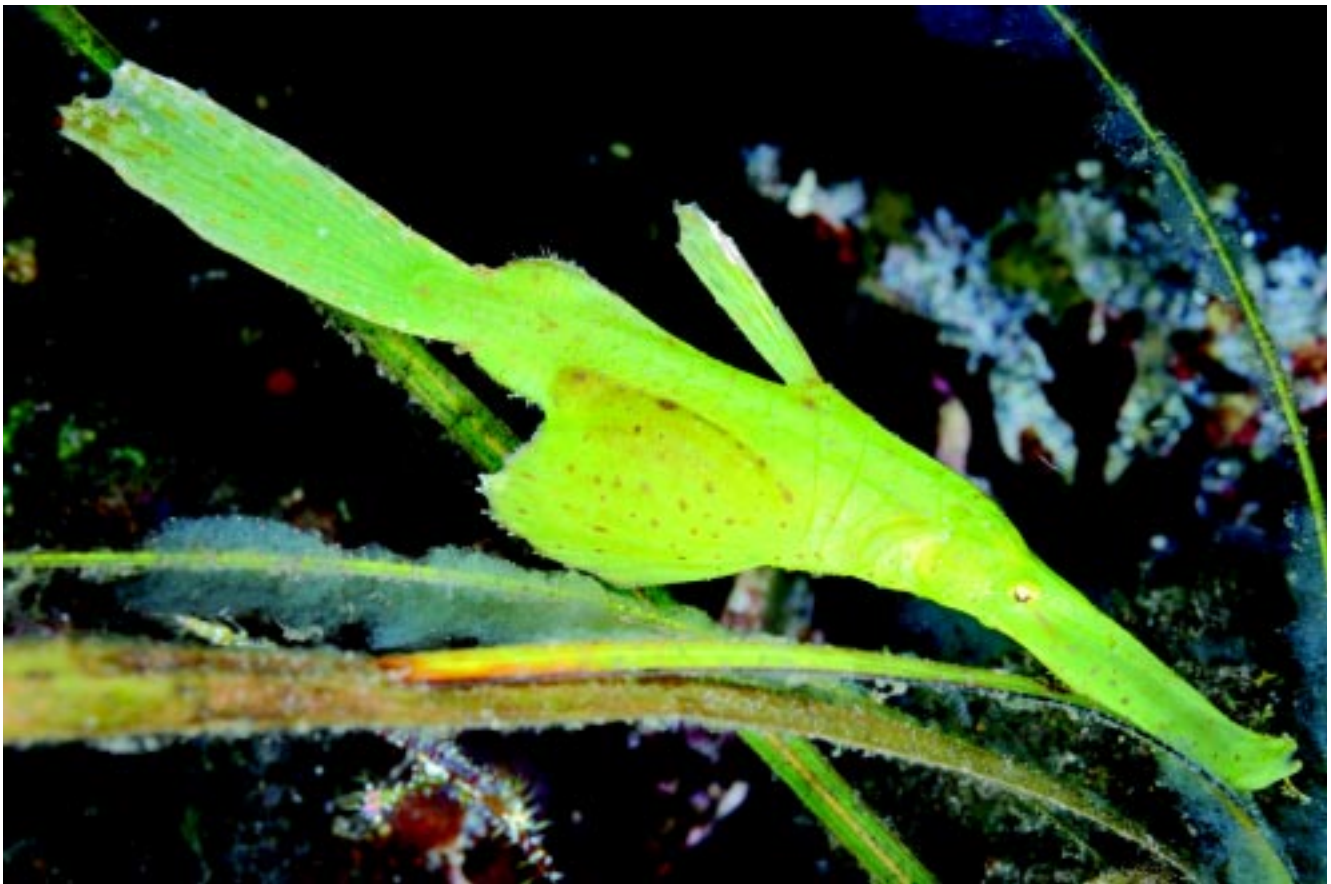


More Muck Diving



Gordon MacSkimming enjoyed Lawson Wood's article on diving the wreck of the *Tulamben* and it sparked memories of previous trips to Bali and the fantastic marine life he encountered there ...

MUCK DIVING? No problem I have plenty of images and I am sure that if we need something extra I can nip up to Loch Long and grovel around on the sea bed for an hour or so, that always churns up some good muck, in fact you sometimes have to swim through 30 metres of muck before you get to the sea bed.

"No!" exclaimed the Editor, "I want Indonesian muck, that's where muck diving was invented." I think to myself "No it wasn't," we were doing this sort of thing long before some tourist with an underwater camera managed to scrape

together the air fare to a nice warm water exotic location, we just didn't call it muck diving.

So what is muck diving and why Indonesia? The definition of muck in this context seems to cover diving on any site that contains no clean sand, no extensive coral or rock reefs etc. The usual characteristics include mud and silt or possibly both often mingled with sand or gravel. Frequently this is enhanced by trash discarded by humans into what many perceive to be the world's biggest garbage can. As for

Indonesia the answer is simple, it is one of the few countries which sits at the epicentre of marine species diversity.

So have I dived extensively in Indonesia? No, I don't have the time or the money to cover all that coastline, but I have been diving in Bali. Have I dived extensively around Bali? No, but I have been diving at Tulamben on the north east coast of Bali. Have I dived extensively at Tulamben and is there any 'muck diving' there? Oh yes!

In the previous edition of **SCOTTISH DIVER**, Lawson Wood told the story of Tulamben's *USAT Liberty Glo* wreck, an outstanding marine habitat. In this issue I am going to take you off the wreck to look at some of the fascinating marine life that has established itself on the sea bed nearby and up to a few kilometres away at Seraya. Seraya has become extremely popular with underwater photographers in recent years and the

Main image: Divers easily overlook the robust ghost pipefish (Solenostomus cyanopterus), hardly surprising given that it looks like just another piece of sea grass passing in the tide. At Tulamben you often see half a dozen or so small sprigs of coarse terrestrial grass sticking

out of the boulders in a few metres of water. This is a set up used by the dive guides to attract robust ghost pipefish. It works, the fish move in align themselves with the grass gaining protection from predators while guaranteeing that the guides can impress their customers

local resort has played host to numerous visiting photography groups and courses.

The underwater topography just off the beaches at both Tulamben and Seraya is fairly similar. A gently sloping cobble and boulder sea bed gives way to much finer volcanic sand slopes at depth. Fingers of what appears to be harder substrate, still covered in volcanic sand, extend seaward to give a gentle rolling profile which runs more or less perpendicular to the shoreline. At Tulamben coral growth has been extensive enough to establish areas of patch reef on some of the shallow slopes. Deep water lies close inshore and divers can find depths exceeding 30m just a few minutes swim from the shore. The beaches at Tulamben and Seraya are separated by a stretch of coastline dominated by rocky promontories.

At a glance the silty dark volcanic sand slopes appear quite barren but quickly it becomes apparent that any boulder or the occasional debris abandoned by man has become habitat. Larger boulders provide solid foundations for soft corals which in turn provide hiding places for crabs and small fishes. Feather stars also known as crinoids clamber over the soft corals, over the pebbles, over the boulders and on to anything else that will allow them to project their arms into the water column to feed. Holes in the sand often mark the residence of the spearing mantis shrimp, a crustacean with serious attitude. Sea pens extend from the softer substrates in deeper darker areas. Stones sitting just below the seabed provide anchor points for anemones of dinner plate proportion.

The anemones often play host to clownfish, shrimps and porcelain crabs. Sometimes a solitary sea slug can be found traversing the open sand as it seeks out a suitable food source. Where boulders have become encrusted with sponge frogfish set up home blending into the background and waiting in ambush. The list goes on and on with everything living on and around everything else in a state of complete interdependence.

If you enjoy rooting around looking for what our friends across the water call 'critters' (I feel that 'wee beasties' is a more appropriate term) then this is a dive destination deserving serious consideration. Diving is carried out from the shore usually but not necessarily in the company of a local dive guide. The dive guides are extremely knowledgeable and know exactly where some of the more unusual creatures hang out. If you are a photographer you will find their services indispensable, while you are busy framing up that third shot of some colourful shrimp, they are tapping their air cylinder alerting you to the presence of yet another worthy subject.

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Above: This image shows a typical 'off the reef' scene where invertebrate marine life has colonised some stones on a volcanic sand slope. Dominating the scene is a large orange coloured soft coral with a nearby sea whip and some crinoids (feather stars) in a supporting role. Each of these invertebrates in turn may play host to a number of additional smaller creatures and each deserves a minute or two of close inspection by the passing diver. Check out the examples elsewhere in this article.

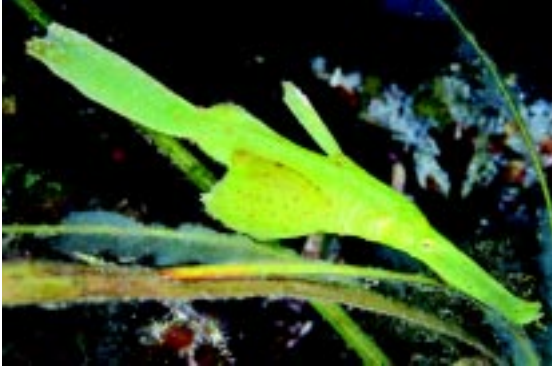


Above: Now if you were a starfish and you bumped into a couple of these guys it would not be good, basically it would be time to part with a limb. That is exactly what has happened here as two harlequin shrimps (Hymenocera elegans) tuck into a main course of starfish arm.

Below: When the local dive guides see a deep vertical excavation in the sea bed they often drop a small pebble in. Whether in the interests of good housekeeping or out of pure bad attitude the mantis shrimp will rapidly eject the pebble and then hang around to see what is going on. This is the time for divers to ensure that their fingers are nowhere close as this giant mantis shrimp (Lysosquilla lisa) can extend its spiked claws and strike with astonishing speed and power.



More Muck Diving



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I could ask you to guess the common name of this beastie but I don't think that it would be too much of a challenge. At just over a centimetre long it is an orang-utan crab (Achaeus japonicus).



Frogfish are real masters of camouflage and this specimen was much more difficult to find than the camera would suggest. It is a painted frogfish (Antennarius pictus). The colour pattern of this species is variable and always determined by the colour pattern of the sessile invertebrate life that form its habitat. It is an ambush predator and will use small movements of a stubby antenna on its forehead to entice prey into gulping range.



This is the elegant or crinoid squat lobster (Allogalatea elegans). It is fingernail sized and spends its life hidden among the arms of feather stars.



Here a sea whip goby (Bryaninops yongei) holds station on its host. It will make brief excursions into mid-water to feed on passing plankton.

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More Muck Diving

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At first you think it is your imagination and then you realise that it really is a fish with a near perfect colour match to its host soft coral (*Dendronephthya* sp). This is a soft coral ghost goby (*Pleurosicya boldinghi*).



FACTFILE

ALTHOUGH LOCATED well away from the tourist hot spots in the south of Bali the Tulamben area has a good infrastructure which is well geared up to support visiting divers. The best time to visit is probably between July and October, when you can also schedule in some away days to dive with Bali's famous sunfish. A well travelled Australian diving buddy reckoned that the *Tulamben* wreck was the busiest dive site in SE Asia and he could well be right, divers are bussed in from all over Bali during the day.

By staying in the village you can optimise your diving to dodge this crowd. By diving the wreck first thing in the morning you can often have it to yourself. During the day while everyone else is on the wreck it is the time to dive the other local sites, some of which are covered in this article. At around 4pm or later it is time to visit the wreck again.

For flights to Bali, or anywhere else in this region, I would recommend Singapore Airlines who consistently provide a very high standard of in-flight service. Add to this their new Airbus A380-800 flights from London to Singapore, easily the best economy seating of any airline

that I have experienced. Their 13 hour flight to Singapore was a pleasure compared to a recent 4 hour short haul to the Canary Islands.

Economy return flights to Bali from Glasgow via London and Singapore come in at around £800 when booked online with Singapore Airlines (based on September - October 2009 departure). Travelling time is around 22 hours. See www.singaporeair.com.

A visa is required and can be purchased on entry this will cost US \$25 for 30 days. Exchange rate at time of writing £1 = 17,000 Indonesian rupiah

For diving and accommodation I can recommend Tulamben Wreck Divers run by Tony Medcraft and Wayan Ambek along with their very knowledgeable and helpful staff. All diving kit can be hired and both air and nitrox fills are available. They are based in the centre of Tulamben a short walk from all of the dive sites and a few minutes drive from Seraya. Their accommodation is located just behind the dive centre and also on the coast just outside the village. It is of a very high standard and provided on a B&B basis. Typical prices for a package of 7 days/6nights B&B including 14 dives are US \$

550 (about £381) for a twin/double or us \$620 (about £431) for a single. See www.tulambenwreckdivers.com.

Tulamben Wreck Divers also retains a very experienced underwater photographer. Australian Jeff Mullins can provide tuition at very reasonable rates. If you have little knowledge of underwater photography but would like to achieve results similar to those shown in this article then Jeff will get you there in very short order. See www.reefwreckandcritter.com

Good quality meals are very affordable and there are a number of restaurants in the village covering everything from snacks to 'posh nosh'.

Finally you will find that the local people are extremely friendly maintaining that almost legendary Balinese reputation for hospitality. This quality extends to the dive guides whose good humoured banter kept me well entertained during the surface intervals. In particular I am grateful to Wayan Giseh for his quiet enthusiasm, for his knowledge and for his eyes, without them I would have missed many of the beasts which lurk on the seabed around Tulamben.

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