



dive guides make finding them a doddle



unung Klabat, a large of Sulawesi. volcano, provided a postcard-perfect backdrop that morning as we boarded the dive boats. The sea was calm and inviting in the early morning light, the only sounds the gentle slapping of water against the hull and the happy banter of the Indonesian crew as they prepared to push away.

It was day three of an eight-day muck diving sojourn in the Lembeh Strait, a narrow neck of water that separates the island of the same name from the northeastern tip of the Indonesian island

Muck diving is a term defined by Bob Halstead, the godfather of liveaboard diving in Papua New Guinea, as diving that takes place at any site which does not have beautiful underwater scenery.

Simply stated then, diving in the Lembeh Strait is not for everybody – if you prefer warm, clear blue water with reefs and schooling pelagics, then this is not your sort of place. There are sites like that not too far away, but unless you ask specifically, resorts here will play to their strengths as Lembeh Strait is Asia's epicenter for muck diving, with an unparalleled reputation for the most "What would you like to see today?"

astonishing variety of weird and wonderful creatures, or critters, as divers call them.

The previous two days had been spent diving some of the sites I had heard so much about from friends who had been to Lembeh many times. I had not been disappointed. Hairball, Nudi Falls and the Police Pier had all been top notch, not least because of our secret weapon: Andreas, our dive guide.

He was his usual cheerful self that morning as we handed our cameras over to the crew as we clambered aboard, so cheerful in fact that I thought he must be pulling my leg when he casually asked,

credentials as an alpha male dive guide over the last two days, searching out critters that my buddy Bruce Yates and I would have swam right past, but I now wondered if Andreas was getting just a little bit too cocky. Could he really find critters on demand?

scientific term used to describe a huge variety of unrelated underwater creatures. Typically they are small (often truly tiny). Beyond that, anything goes. Some have an amazing aptitude for disguise; others are so eye-wateringly flamboyant in colour and form that they might as well scream "I'm over here!" Intense beauty frequently rubs cheeks with brutal ugliness.

particularly by underwater photographers who see them as trophies to add to their image collection. Besides their photogenic attributes, many critters endear themselves to photographers by usually staying still, appearing totally confident in their ability to camouflage themselves.

One such critter is the hideously ugly and extremely venomous stonefish which can be almost impossible to spot as it lays

He had firmly established his completely immobile, and often partially buried, among a cluster of real stones on the seabed. Similarly, the giant (house cat-sized) frogfish's game plan is to look as much like a sponge as possible. Its colouration, shape and skin texture blend in so well with its surroundings that when initially pointed out, you can easily look Critter is a generic, totally non-straight at them and wonder why your guide is so excited about a sponge.

Often Andreas would signal for our attention when underwater by emitting a high-pitched hum, and Bruce and I soon learned that variations in the pitch of this humming indicated his level of excitement. This turned us into underwater versions of Pavlov's dogs, ignoring low-pitched hums to concentrate Critters are highly sought after, on the current subject in our viewfinders, while dropping everything when ultrahigh pitched squeals came in.

> There was clearly only one way to find out if Andreas could deliver on his offer to find whatever we wanted to see: put him to the test. So that morning I responded by saying that I'd like to see an orange rhinopias, as the only ones I had seen up to that point were the green variant. Quick as a flash Andreas was on his cell the dive guide network.

FACING: Gunung Klabat looms over the bay where the diveboats swing at anchor. ABOVE: Andreas, our genius diveguide. **BELOW:** Our charming chariot for the day.

phone, accessing another of the intriguing aspects of diving this part of Indonesia -

To comprehend the value of this resource, first picture a place where nature has created the ideal conditions for critters to flourish and which, because of it's sheltered location, can be dived virtually any day of the year.

Then picture an array of resorts all offering escorted diving to the 20+ sites where these critters can be found. Each resort has a roster of dive guides: locals who dive these sites five or six days a week, with many of them having literally thousands of logged dives in the area. Each is a considerable store of knowledge in their own right. But if you connect them all together through their common interest in the critters and in ensuring their diving guests leave with a good story



to tell about Lembeh - then you have the true power of the dive guide network.

It took Andreas two calls to pinpoint the best location to see an orange rhinopias, with a confirmed sighting just the previous afternoon. Then off we went and sure enough, an hour later, I was face-to-face with a fine specimen of this unique, highly sought-after and very photogenic scorpionfish!

That also brings to mind another thing to note about critters: that at typical depths of 8-15m, they often look their best only in the millisecond that they are illuminated by a camera's strobe or flash. The balanced light brings to life the colours that remain otherwise unseen in the wavelengths of natural light available down there. In other words, my orange rhinopias looked a lot like the green variety I had already bagged when not seen through my viewfinder.

goldmine for critters?

When something dies in the ocean, it usually sinks to the bottom. This detritus of the sea, rich in phosphorus and nitrogen from decaying organisms, remains on the bottom in most cases. In the waters off the eastern coast of Sulawesi however, this pattern is disturbed by the Indonesian



A cheeky crowd of young onlookers gather to watch the action as the boat is loaded.

So just why is it that Lembeh is such a water per second. One way to visualise this flow is to imagine a river 100m wide, 10m deep, flowing at four knots. these upwellings, it also provides the Then multiply that by 500 – that's one Sverdrup. The Indonesian Throughflow is estimated to amount to 20-22 Sverdrups, or approximately 10,000 of those rivers!

> The throughflow is the result of monsoonal weather patterns and oceanic

basins to the north of Indonesia.

The Lembeh Strait not only channels other criteria required for critters to flourish: sheltered coves and bays, which allow them to thrive in relative safety, and freshwater run-offs which provide additional nutrients. This troika then is the key to understanding why Lembeh Strait is the mother of all critter hotspots.

I can vouch for the results. Over that eight day period in June, diving three or four times a day, I saw a huge variety of critters: which included numerous frogfish, robust and ornate ghost pipefish, multiple varieties of devilfish, leaf scorpionfish, pygmy seahorses, snake eels, blue ring octopus, rhinopias, harlequin shrimp and numerous rare crabs.

It was without doubt the most photographically productive trip I have ever done. The reason it was there at all was down to Mother Earth of course, but it was Uncle Andreas I had to thank for guiding me to it. $\Delta\Delta$

SURE ENOUGH, AN HOUR LATER, I WAS FACE-TO-FACE WITH A FINE SPECIMEN OF THIS UNIQUE. HIGHLY SOUGHT-AFTER AND VERY PHOTOGENIC SCORPIONFISH!

Throughflow – a phenomenal current that flows from the Pacific to the northwest of Indonesia, into the Indian Ocean to the south of the archipelago.

This flow is larger than traditional measurements of volume can easily deal with and so a Norwegian scientist, Harald Sverdrup, came up with a unit now named after him. One Sverdrup is a flow of one million cubic metres of

currents that combine to move water of higher temperature and lower salinity out of the Pacific Ocean, south- and westwards to the Indian Ocean. Along the way of course, they pick up and carry with them all those deposited nutrients.

The shores of North Sulawesi, together with Halmahera and Irian Jaya, are where this flow from the Pacific meets coldwater upwellings from the deep trenches and



74 ACTION ASIA JAN/FEB 2009 JAN/FEB 2009 ACTION ASIA 75



The porcelain crab loves carpet anemones, but lacking those will make a home in many other sorts of niches on the reef.

The pygmy seahorse, a critter beloved of underwater photographers everywhere:



76 ACTION ASIA JAN/FEB 2009 ACTION ASIA 77



Small and docile it might be, but the blue-ringed octopus is one of the most venomous animals in the world.

The scorpionfish family has numerous species, several of which come in different variants or phases. This is a bandtail scorpionfish in orange phase.



78 ACTION ASIA JAN/FEB 2009 ACTION ASIA 79

PRACTICALITIES



Bumblebee shrimp are common throughout

Getting there

Manado is the main airport in North water temperature is about 26°C (79°F) Sulawesi and is reached from Singapore on Silk Air - currently flights are on Monday, Wednesday, Friday and Saturday - plus there are numerous domestic flights from Jakarta, Makassar (Ujung Pandang) and Denpasar in Bali.

The flight from Singapore is 3.5 hours and it takes about 90 minutes from the airport to Bitung, the main town on the around 90 minutes.

Rp 75,000.

When to go

Being equatorial, Lembeh's temperatures and seasons are very predictable with an average of 32°C (89°F) during the day and around 24°C (75°F) at night. The straits are also narrow enough to keep you well sheltered from bad weather so they can be dived all year round. The wet season is November to April and the dry season is May to October.

There are seasonal highlights throughout the year but September and October are generally considered to offer the best combination of dive conditions and critter activity. August is reported to have the highest number of critters but the worst visibility of around 8-10m instead of the more normal 12-15m.

What to take

Those same cold water upwellings that create the great conditions also mean

you need a wetsuit, as the average throughout the year.

All the resorts have rental dive gear available. Photographers will definitely need their macro lenses and plenty of capacity on their memory cards!

Safety

The biggest potential danger in North Sulawesi is probably from mosquito Lembeh Strait. All the resorts in the area bites as both malaria and dengue fever offer airport transfers which also take are endemic there. Sea breezes minimize the number of mosquitoes however and Manado international departure tax is standard precautions used in any tropical area are sufficient to deal with this.

> There is a well-maintained recompression chamber in Manado run by an Australian-trained doctor.

Operators

All the resorts in the area offer guided dives as a standard part of their packages, but note that more than two or three people per guide can become frustrating as queues form to see and photograph critters. It may even be worthwhile paying extra to make sure you receive personal attention: while you are shooting, your guide can be scouting for the next highlight on your shopping list.

Suggested operators:

Bastianos, www.bastianoslembeh.com Black Sand Divers, www.blacksanddive.com Divers Lodge,

http://nl.diving-on-sulawesi.com Kungkungan Bay Resort, www.divekbr.com

Lembeh Resort, www.lembehresort.com



80 ACTION ASIA JAN/FEB 2009 JAN/FEB 2009 ACTION ASIA 81