On the Wreck of the Caribsea
North Carolina’s Sand Tiger Haven

Curacao’s East End
Dive Rite’s CCR XT Wing
Indonesia’s Lembeh Straits
Explore, Discover, Challenge

CONTENTS

Pg 4  Indonesia’s Lembeh Straits
       - Muck diving at its best

Pg 16 Wreck of the Caribsea
       - North Carolina’s sand tiger haven

Pg 29 Curacao’s East End

Pg 59 Dive Rite’s XT CCR Wing

Pg 66 Freeze Frame: Curious George

Cover: Rebreather diver with large sand tiger shark in the waters off North Carolina. Shot with Nikon D300 DSLR camera and Tokina 10-17mm fisheye zoom with exposure setting 200 iso, shutter speed 1/125 sec. at f11, dual strobes at 1/4 power for additional lighting  Photo: © Walt Stearns
It Came From the Muck!

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Eco-Photo Explorers
The title of a horror movie?
Hardly. But when it comes to diving the muck in Indonesia’s Lembeh Strait, what you will find is a gold mine of diminutive creatures from the colorful to the truly strange and cryptic.
The bottom was a grey, featureless expanse of sand and silt, punctuated by occasional islands of debris and detritus. Looking across this apparent desert, our thoughts drifted to the surface of the moon – lifeless, dreary, and mysterious. This is what we traveled halfway around the planet to see?

Suddenly, our eyes spotted something – a pair of eyes poking out of the silt. We approached warily: what monster lurked below? Using a slight wave of our hand, we cleared some of the silt to reveal the horrible creature below. With a fearsome grimace, a Stargazer stared towards the surface, its jagged, toothy frown of a mouth waiting for its next meal to drift by.

With its fearsome grimace befitting the horror movie extra, a Whitemargin Stargazer (*Uranoscopus sulphueus*) sits half buried in the gray sand bottom.
To a newcomer to Indonesia’s Lembeh Strait, the transition from looking to really seeing will first start off slow. Then you begin to see a small shape or spot of bright color that looks slightly out of place. And it moves! Before long, you start to notice every meter of bottom from nondescript sand and rubble to lone rock or coral head is host to more varieties of marine organisms than thought possible – and the very essence as to why divers would endure travel to reach this distant location.

An undescribed, but beautiful, Arminid Nudibranch
A day under our belt our senses have really started to adjust to this unique type of diving; we began to spot more and more frightful and amazing creatures: a Spiny Devilfish (*Inimicus didactylus*) crawling like a demon across the mucky ocean floor, a venomous Stonefish lying in wait alongside a small log, a Pygmy Frogfish resting alongside a Hairy Frogfish or the Black-Finned Snake Eel (*Ophichthus melanochir*), with its head poking skyward from the mud. And there is the Moon-headed Sidegill Slug (*Euselenops luniceps*) that is just too strange for words!
Lembeh is unparalleled as a muck diving destination. Here, in the waters of North Sulawesi, divers can encounter any number of beautiful and strange creatures – most of them existing on a tiny scale. Macro photography is predominant here as shooters attempt to document Pygmy Sea Horses, Dwarf Cuttlefish, Mimic Octopus, and so many varieties of nudibranchs that it is difficult to keep track of them all.

Our base of operations in Lembeh was the renowned Kungkungan Bay Resort & Spa (KBR), which is located so close to some of the most spectacular dive sites that boat rides are often as short as 3-4 minutes!
Muck diving here consists of descending to 60 feet / 18 meters or so and searching these otherwise uninteresting stretches for the tiniest of nature’s marvels. The dive guides at KBR are experts at finding these extremely small creatures. You can even dive with Liberty, the local dive guide who discovered a previously un-described species of Pipe Seahorse. Indeed, divers at Lembeh tend to turn into amateur biologists, with post-dive conversations escalating into animated discussions conducted while pouring over illustrated marine life guides!

Our dives in Lembeh never failed to amaze and inspire, and our eyes quickly became attuned to the tiny world. Before long, we were spotting the tiniest of creatures even without the aid of our guides. Brilliantly colored crabs, fascinating species of shrimp and myriad types of invertebrates occupied our photographic attention constantly.

One special night was spent watching and waiting atop a pile of coral rubble for the shy and elusive Mandarin fish mating dance. We descended to about 10 feet / 3 meters, and waited motionless for well over an hour until, finally, we glimpsed the gaudy fish as they furtively peeked out of their protective crevices. Suddenly, in a flash of color in our dive lights, a pair raced together 1-foot / .3 meters above the bottom, mated for 2-3 seconds and disappeared. The dive was over, the image captured and a new memory created forever.
Scarcely more than an inch across, the yellow/orange coloration of this little Orangutan Crab (*Achaeus japonicus*) is almost conspicuous against the contrasting hue of the sea floor.

Other dives were spent photographing Mimic Octopus, and their almost identical relation the Wonderpus. Telling them apart is a challenge—hint: pay attention to the coloring, there’s a subtle difference.

In addition, we spotted Porcelain Crabs, Orangutan Crabs, Sea Spiders, Ghost Pipefish, and Flamboyant Cuttlefish. Blue Ribbon Eels were frequently encountered in their adult blue phase as well as the juvenile black and sub-adult yellow. In fact, in this one excursion, we were able to check off many of the species that had long been on our own “bucket lists!”
Indonesia’s Lembeh Strait is a small stretch of water between the islands of North Sulawesi and Pulau Lembeh. It is, in fact, a busy waterway and yet it is home to an unbelievable assortment of creatures, many of which are endemic to this area alone and some of which still remain un-described scientifically. As beautiful as the creatures are, the diving here can be challenging. Strong currents are frequent and it is best to heed the advice of the dive guides and dive where there is slack water. And divers who come here expecting ravishing coral reefs will be disappointed. Although there are some colorful outcroppings of coral, the beauty of Lembeh lies in the muck. For shipwreck enthusiasts, the Mawali wreck offers a terrific diversion. The most commonly dived wreck in the Strait, this 270-foot / 90 meter long Japanese freighter from WWII sits in 90 feet of water on her port side. With 30 feet, the Mawali makes for an interesting dive for those who are comfortable diving on shipwrecks. Other wrecks in the area include the Bimoli, Indah and Kapal Ikan.
Lembeh deserves protection so that future generations can enjoy this special place and the wonderful collection of weird and beautiful creatures that reside here.

The best way to ensure this is for divers to continue to come here. Divers experience, photograph and share stories with others, who will in turn marvel at the plethora of amazing animals to be found at Lembeh.

So next time you hear divers talk up about the strange and the weird cryptic critters that come from the muck, don’t take it as sounding like the makings of a B-horror movie with a cheesy title, think something between a beautiful symphony and a carnival. Yes, it can be that fun, and we couldn’t be happier to have had our chance to play in the muck!

- CW & MS
Getting There
Most of the destinations within Indonesia are accessible from international airports in Bali, Hong Kong, Japan, Philippines, Singapore and Thailand. One of the better routes to Lembeh is from Singapore (SIN) via Silk Air to Sam Ratulangi International Airport (MDC) in the city of Manado situated on the very northeastern tip of Sulawesi.

Baggage: Baggage allowances vary for each international carrier so check before you leave.

Documents: A valid passport is required for entry, with enough blank pages for the mandatory tourist visa, which is purchased on arrival, and must be valid for 6 months after arrival.

Immunizations & Medicine: Make sure all your vaccinations are up to date! All travelers should visit their personal physician or a travel health clinic to discuss what vaccinations (Hepatitis A, Hepatitis B, Malaria, Typhoid, and Tetanus-diphtheria) and travel medicine are recommended. All medicine should be packed in their original, clearly labeled containers. Having a signed and dated letter from a physician describing your medical conditions and medications is suggested.

Note: Travel health clinics usually provide more detailed health protection measures since they specialize in travel medicine. Beware of travelers’ diarrhea, which is the most common travel-related ailment. Insect protection is a must and essential.

Culture: There are a number of different religions that are practiced in Indonesia, Muslim being the most predominate at about 87 percent. Although Christianity is a minority religion in Indonesia, it is not evenly spread throughout the region. It is important to note, Indonesia is a conservative nation and appropriate attire, and cultural sensitivities are important. Check with guidebooks for specific tips on how to best to avoid offending the local population.

Currency: The local currency is the Rupiah (Rp) but US Dollars are often accepted at all resorts.

Weather: Indonesia has an equatorial tropical climate. October through April is the wet season. May through September is the hottest time of the year, with temperatures in between 80 and 90 Fahrenheit (27ºC - 32ºC) each day. Tropical downpours are common, although severe storms such as pacific typhoons are very rare.

Electricity: Power voltage used in Indonesia is 220Volts (50 Hz). Be sure to double-check your appliance’s compatibility before plugging them in. Converters / adaptors are usually available upon request at your hotel front desk.
Curious George

An inquisitive hawksbill sea turtle on Turkey Beach at Wakatobi Dive Resort, decides to set the record straight with an underwater photographer by showing who can be pushy.

Camera: taken with a Canon 7D with Tokina 10-17mm lens at 13mm inside a Subal housing
Settings: RAW ISO 200, 1/80sec at f6.8, lighting by two Sea & Sea YS-250 strobes at half power.