

Standing on the beach staring out at the deep blue water, it's hard to imagine a world so vibrant and full of life lying just a few meters away from our feet. My dive group and I shuffle slowly into the water, careful not to slip on the smooth black stones beneath our boots. With all our gear in place and a quick press of our deflators, we descend down into this beautiful wonderland hidden just below the surface.

Tulamben

Widely known as one of Bali's most popular diving destinations, Tulamben was put on the diving map after the discovery of the USAT Liberty wreck lying just meters offshore. Once a sleepy fishing village, it has now been transformed into a world famous dive destination, and for good reason too. Located in the North East of the island, Tulamben sits in the shadow of Mount Agung, Bali's highest volcano. Its name even derives from the word batulambih meaning many stones, a reference to Mount Agung's destructive past. It is these eruptions that have shaped the region into what it

Tiny juvenile clown frogfish near the Liberty wreck



31 X-RAY MAG: 61: 2014

TRAVEL



A local porter carrying dive equipment to the beach



The main street running through town is lined with flowering trees

through the middle with nothing more than a handful of restaurants, bars and shops, and of course, plenty of dive centres.

There is limited access to ATM machines, with only one located in the town so don't forget to bring enough cash for your stay or ask your driver to stop at one of the many moneychangers along the way. Most dive centres take payment by card for the diving but you will need cash when paying for meals in town or any other activities. As far as eating goes, there are a few options in the dive resorts and around town with restaurants and bars offering both local and western dishes to suit everybody's taste. Local

dishes such as Gado Gado, Nasi Campur and the various Satay sticks with delicious peanut sauce are all delicious and fantastic value.

Tulamben

If you find yourself with some free time when not diving, take a drive to the nearby temples and water palaces to take in some local history and culture, visit neighbouring town Kubu for some relaxing Spa treatments or even just take a walk in the hills behind the town to get a feel for the spectacular scenery. No trip to Bali is complete with out a stop off in Ubud, located high up in the hills on the way back to the airport and making a great stop off for a few nights before heading home. Visit the local markets and

is today and gives the landscape above and below the water a very distinctive feel.

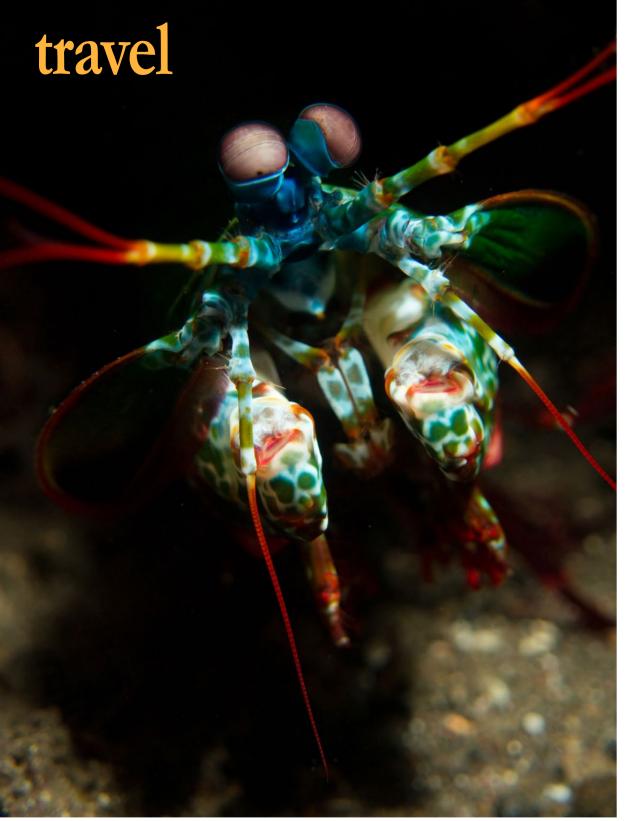
The fishing trade that once drove the town has made way for the diving industry leaving the protected waters in the surrounding area teaming with marine life. The many people who would have once played their part in the busy fishing scene now keep the booming diving industry heading in the right direction by carrying out important jobs such as expert dive guides, Jukong boat drivers and tank porters. These porters can often be seen carrying up to 3 full sets of equipment on the back of their bike or balanced effortlessly on top of their heads without even breaking a sweat, don't try that at home! The town itself still has that sleepy village feel, with one main road cutting



View looking down the bay towards Drop Off



X-RAY MAG: 61:2014



jewellers, take a scenic stroll through mile upon mile of rice paddies or even white water rafting for the more adventurous.

Diving

Most of the diving in Tulamben is done from the shore along the large curved bay making the cost of diving incredibly low. Prices start from as little as US\$20 per dive and most dive centres offer accommodation and diving packages to keep things easy. There are loads of dive centres in and around town to choose from, with most of them situated within walking distance of the beach. After seeming to spend most of my working career in the dive industry loading boats or trucks with dive equipment and

Peacock mantis shrimp (left) emerging from its burrow; Scorpionfish (right) resting on a sponge; Glosodoris atromarginata nudibranch (lower right) sitting the current

tanks, the ease of diving in Tulamben was a welcome surprise. With our masks, fins and cameras in hand, we followed our expert guide on foot to the various entry points at the beach and moments later, our gear would arrive balanced on the head of one of the porters or piled up on the back of a motorbike ready to go diving. When we were done, we simply left our tanks lined up at the beach and our guide would call out to a passing porter on the short walk home, and the aear would then arrive back at the dive centre ready for a full tank of air for the next dive.

The entries can be a bit wobbly and thick-soled div-





Crinoid squat lobster



ing booties are recommended to protect your feet while getting in and out. I had my camera passed to me once I was in the water and fully kitted up to minimize the risk of it being dropped while getting in. Wading out just a few meters however, the seafloor slowly sloped off into the distance making for an easy relaxed descent. At around 6m the stones give way to a black volcanic sandy sea floor, which is home to the huge variety of fish and critters that make

Tulamben so popular with underwater photographers. The bay itself is home to many dive sites, most of which are accessible from the beach, the most famous being the Drop Off, Coral Garden and of course the Liberty Wreck. Conditions at these dive sites



33 X-RAY MAG: 61: 2014 EDITORIAL FEATURES TRAVEL NEWS WRECKS EQUIPMENT BOOKS SCIENCE & ECOLOGY TECH EDUCATION PROFILES PHOTO & VIDEO PC







LEFT TO RIGHT: Huge frogfish lying in wait for its next meal; Ornate ghost pipefish; Longnose hawkfish on the wall at Drop Off

cater for most divers experience levels, with generally mild currents and great visibility and all sites can be dived at various depths.

Coral Garden.

Lying in the centre of the bay, the Coral Garden hosts a huge coral reef spanning over 100m across the sea floor at depths of 5–12m and provides plenty of photographic opportunities, both macro and wide angle. With its sheer size and abundance of marine life, you can spend dive after dive swimming between the beautiful coral formations.

This area of reef gives everyone something to see, whether that is sitting back and watching the schools of snapper and sweetlips dance their dance or get your face right in close to search for the smaller things the reef has to offer. Keep

an eye out for cuttlefish impressively camouflaging themselves with their surroundings, or catch a glimpse of the stunning blue and yellow ribbon eels.

These delicate little eels are usually seen with their heads poking out of their burrows, but it's easy to see how they get their names when you see one swimming freely along the reef. I found myself momentarily mesmerised by a small black and yellow object fluttering towards me just like a ribbon on the end of a stick. It wasn't long before it disappeared into a small crack in the reef and my brief hypnosis came to an end and it was time to catch up with the group.

Have a look out into the blue every now and again to have a chance at seeing some of Tulamben's rare sightings like the occasional blacktip reef shark and Napoleon wrasse.

Drop Off. Head towards the southeast corner of the bay, you will find the Drop Off, a stunning selection of lava flows



Brightly coloured ribbon eel



34 X-RAY MAG: 61: 2014

EDI

Hypselodoris infucata nudibranch

FEATUR

TRAVEL

WRECK

QUIPMENT

SCIENCE & ECOL

CH

DUCATION

PROFILE

PHOTO & VIDE

PORTFOLIC



jutting out into the bay. You can either enter from the beach or rent one of the many Jukong boats to take you a little further round the headland for a change from the usual shore dive. When entering from the shore, we usually started from an area know as The River, which for most of the year is a dry riverbed running down from the hills and out into the bay. During the wet season, this is the main source of the sediment that settles on the seabed.

This area at the start and end

of the dive is famous in itself for the infrequent sightings of the bizarre critters like mimic octopus, skeleton shrimp and tiny juvenile frogfish.

Descending down past this sandy plateau you soon find yourself staring down over the Drop Off. Depths here vary from the shallow reef down to 12m, before a sheer vertical wall drops down well in to technical diving ranges. It is here where you will find a vast array of fish and stunning scenery along the face of the steep



Frogfish (left) on an artificial reef at Seraya Secrets; Anemone shrimp (above) in its protective home; Tiny pygmy seahorse blends perfectly with its surroundings (right); The brightly coloured Nembrotha cristata nudibranch (lower right)

sloping rock faces that plummet down to the depths below you.

Scour the rocks as you slowly swim along for longnose hawkfish, hairy squat lobsters, soft coral crabs and leaf scorpionfish among many other things. Look carefully in the huge sea fans to find the elusive pygmy seahorses that without the expert guidance of our guide, Komang, we would have easily missed.

Once presented with a large gorgonian sea fan, he gestured to us to search the fan ourselves to see if we could spot them. After a few minutes of staring cross-eyed we finally found one,



Leaf scorpionfish on the wall at Drop Off





camouflaged almost perfectly with the fan behind it.

Ecstatic and very proud of ourselves, we turned to Komang who sat quietly giggling to himself while signalling to us that there were another five living I the same sea fan. Admitting defeat we invited him closer to effortlessly point them out for us.

Travelling a little further South, Seraya Secrets is a must see for any real macro enthusiasts, accessible by car only a short drive from the main town. With no real major coral formations, the gently sloping black sand is home to some of the amazing critters that make the area famous for macro diving. Seahorses, nudibranches, frogfish,

Coleman's shrimp and harlequin shrimp are amongst some of the marine life you are likely to see while exploring the sandy ridges. The rich abundance of macro life makes this many divers' favourite site in the area, providing many interesting macro photography opportunities.



35 X-RAY MAG: 61: 2014 EDITORIAL FEATURES TRAVEL NEWS WRECKS EQUIPMENT BOOKS SCIENCE & ECOLOGY TECH EDUCATION PROFILES PHOTO & VIDEO PORT



Tulamben



The wreck

:HRISTIAN LOADER / SCUBAZOC

Without a doubt the most popular dive site in the area, the USAT *Liberty* wreck is what made Tulamben famous as a dive destination and really put it on the map, drawing people from around the world to come and dive it.

Once a United States Army transporter, she was torpedoed by the Japanese in 1942 during WWII. In an attempt to save the ship from sinking, it was towed towards land but had to be beached before it reached port after taking on too much water. This is where she sat until 1963 when Mount Agung's most recent and violent eruption drove her into the sea to where she lies today.

Lying on her starboard side just 40m off the beach, the wreck is very easily accessible to all divers and even snorkelers. Walking in off the beach, we were led down a small valley in the sand until the stern of the wreck appeared in front of us, instantly recognizable by the intact rudder sticking out of the black sand. Looming over us, the wreck shows clear signs of its disastrous history, with large pieces of its thick metal hull twisted and broken where it lies in its final resting place.

Due to the healthiness of the water, the entire structure is now encrusted with corals and sea fans, and if it wasn't for the recognizable features that our still visible, it would

be very easy to forget that you are diving on what used to be ship.

Making your way down its side, you quickly get an idea of the sheer size of the wreck. Lying on her side at depths ranging from 5m all the way down to 30m, and being over 120m long, it can take a few dives too really see the whole thing.

While the wreck is home to a huge amount of macro life, it's the big stuff that a lot of people come to see, such as Napoleon wrasse, barracuda and the resident school of bumphead parrotfish. These bizarre giants arrive late in the afternoon and rest on the wreck overnight before heading off into the depths again early in the morning.



THIS PAGE: Scenes from the wreck of the USAT Liberty



36 X-RAY MAG: 61: 2014

EDIT

FEATUR

TRAVE

WRECK!

EQUIPMENT

SCIENCE & ECOLOC

TECH

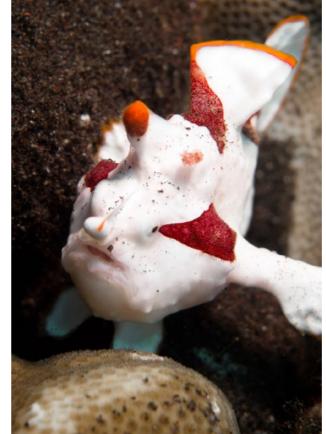
EDUCATIO

PRO

DHOTO 9 V

TO & VIDEO PORTE









Night dives and dawn dives are a must on the wreck, get up early to avoid the crowds, enjoy a nice long dive and be back at the resort in time for breakfast. The day trippers arrive later in the morning so make this the first dive of the day and enjoy peaceful dives at some of the area's other dive sites for the rest of the day.

Even safety stops on the wreck are interesting with a large colony of garden eels living in the sand that has built up against the stern of the ship. These shy little creatures look like a field of grass in the distance

but duck away as you approach them, leaving nothing but tiny holes in the sea floor, making photographing them a fun challenge.

When to visit

Diving in the area can be done all year round, however, from April to November the conditions are generally at their best, with great visibility and

amazing marine life. Water temperatures range around 27-29°C, and temperatures do not drop as much as other areas of Bali so a 3mm suit is perfect.

Timing your trip right means you can combine your trip with some of Bali's other great dives such as the mola mola (sunfish) season in Nusa Penida from July to October. Nusa Penida is also one of the best places to see manta rays year round at the aptly named Manta Point and Manta Bay.



Getting there

With Bali being such a popular destination for tourists and backpackers from around the world, there are many flights landing in the islands main airport in Denpasar everyday, making getting there easy from most countries.

Tulamben is a three-hour drive from the airport; you can either take a taxi or arrange a pickup from the airport through your resort in advance. With spectacular views of the ocean, rice



CLOCKWISE FROM TOP LEFT: Bumphead parrotfish descending on *Liberty* wreck, late afternoon; Clown frogfish with colourful markings; Well-camouflaged soft coral crab; *Mexichromis multituberculata* nudibranch; Bright orange frogfish stands out against the dark sea floor; Spearing mantis shrimp

paddies and if you are lucky, even a few monkeys, the drive is a mini adventure in itself, so have your camera to hand for any photo opportunities along the way.

Nick Shallcross is a British underwater photographer based in the Gulf of Thailand. More of his work can be seen at www.nickshallcrossphotography.co.uk

The second

37 X-RAY MAG: 61: 2014 EDITORIAL FEATURES TRAVEL NEWS WRECKS EQUIPMENT BOOKS SCIENCE & ECOLOGY TECH EDUCATION PROFILES PHOTO & VIDEO PORT



SOURCES: U.S. CIA WORLD FACTBOOK. WIKIPEDIA D SILCOCK

History Originally populated by Chinese migrants, the island of Bali has had a heavy influence from Chinese, Indian and Hindu cultures. The Dutch East India Company ruled Bali after their invasions of Indonesia in the 1800s. until World War II when the island fell to the hands of the Japanese. Shortly after the end of the war, Indonesia got its independence, which was officially recognized by the Dutch in 1949. Strife continued in Indonesia's unstable parliamentary democracy until President Soekarno declared martial law in 1957. Soekarno was removed from power following a fruitless coup in 1965 by alleged Communist sympathizers. President Suharto ruled Indonesia from 1966 until 1988. Suharto was toppled in 1998 following a round of riots, and in 1999, free and fair legislative elections took place. Indonesia is the world's third most populous democracy, Government: Republic, Capital: Jakarta.

Geography Located in Southeastern Asia, Indonesia is an archipelago situated between the Indian and Pacific Oceans. One of Indonesia's thousands of islands, Bali lies in the tropical Indo Pacific region, giving it huge ecological diversity. Mount Agung, Bali's highest point at 3,142m has shaped the island over the years

with its many volcanic eruptions. The 1963 eruption saw the death of thousands and the displacement of many others to other parts of Indonesia. Terrain consists primarily of coastal lowlands. with interior mountains on larger islands. Coastline: 54,716km.

Climate Tropical.

hot and humid.

ple prefer 3mm.

with more moderate climate in the highlands. The water temperature is normally 28-29°C (84-86°F) year round, with an occasional "chilly" 27°C (82°F) spot. Most divers use 1mm neoprene suits. However, some peo-

Environmental issues

Challenges include industrial waste water pollution, sewage, urban air pollution, deforestation, smoke and haze due to forest fires. Logaing—the rainforests within the combined West Papua/ Papua New Guinea land mass are second in size only to those of the Amazon, making it 'the lungs of Asia'. In 2001, there were 57 forest concession-holders in

operation around the country and untold other forest ventures operating illegally. Mining—tailings from copper, nickel, and gold mining are real threats.

Economy A vast polyalot nation, Indonesia has experienced modest economic growth in recent years. Economic advances were made with significant financial reforms. In 2009, when the global financial crisis hit, Indonesia fared well compared to its regional neighbors. It was one of the only G20 members posting growth in 2009, alongside China and India. However, the government still faces ongoing chal-

insufficient infrastructure, labor unrest over wages, and high oil prices affecting fuel subsidy programs.

Currency The local currency is Indonesian Rupiah, although U.S. Dollars, Euros and Visa cards are also widely accepted around the island. ATM machines usually offer the best exchange rate and the use of traveller cheques is becoming harder except in the main banks. Exchange rates: 1EUR=16,071IDR; 1USD=11,811IDR; 1GBP=19.785IDR: 1AUD=10.946IDR: 1SGD= 9,398IDR

lenges of improving the country's

RIGHT: Global

BELOW: Location

BOTTOM RIGHT: Pair of

ornate ghost pipefish

of Bali on map

of Indonesia

map with location of Bali

> Internet users: 20 million (2009) **Language** Bahasa Indonesian is the official language, plus English, Dutch and local dialects are spoken. In tourist areas, English, Spanish and German are spoken.

Health There are no major health risks in this region of Bali. Stomach upsets can be common due to food and water, and it is not recommended to consume

Population

251,160,124 (July

2013 est.) Ethnic

groups: Javanese

40.6%, Sundanese

15%, Madurese 3.3%.

Minangkabau 2.7%,

Banjar 1.7% (2000 cen-

86.1%, Protestant 5.7%,

sus). Religions: Muslim

Roman Catholic 3%,

Hindu 1.8% (2000 census). Note:

country in the world. Visitors are

Indonesia is the largest Muslim

encouraged to respect local

traditions and dress modestly.

Betawi 2.4%, Bugis

2.4%, Banten 2%,

tap water for health reasons, so stick to bottled water. Check with the WHO for up to date vaccination recommendations for the region.

Decompression chambers

Bali Hyperbaric Chamber, Sanglah Pubic Hospital, Jalan Diponegoro, Denpasar tel 62-361-227911

Travel/Visa/Security

For most nationalities, including the United Kingdom, United States and Australia, you pay for your Visa On Arrival at the airport at a cost of US\$25 for a 30-day tourist visa and a passport with at least six months validity is required. Bali has a history of terrorist attacks targeted at tourists, however the situation is much more stable and security is at a high level nowadays. It is worth noting that Bali has very strict laws on narcotics and extreme sentences apply to anyone caught in the possession of drugs.

Web sites Indonesia Travel www.indonesia.travel/en





X-RAY MAG: 61: 2014 TRAVEL