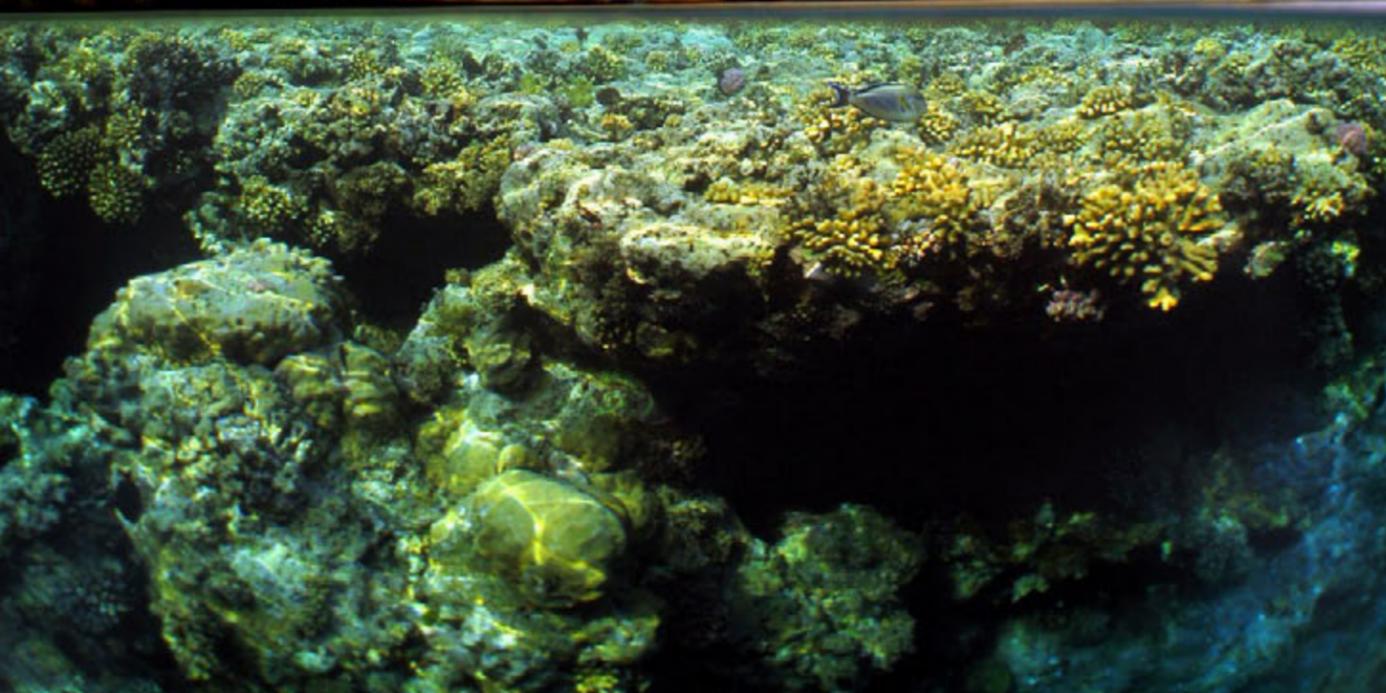




Red Sea Liveaboard
Brothers Islands

Text and photos by
Christopher Bartlett
Additional images
by Peter Symes



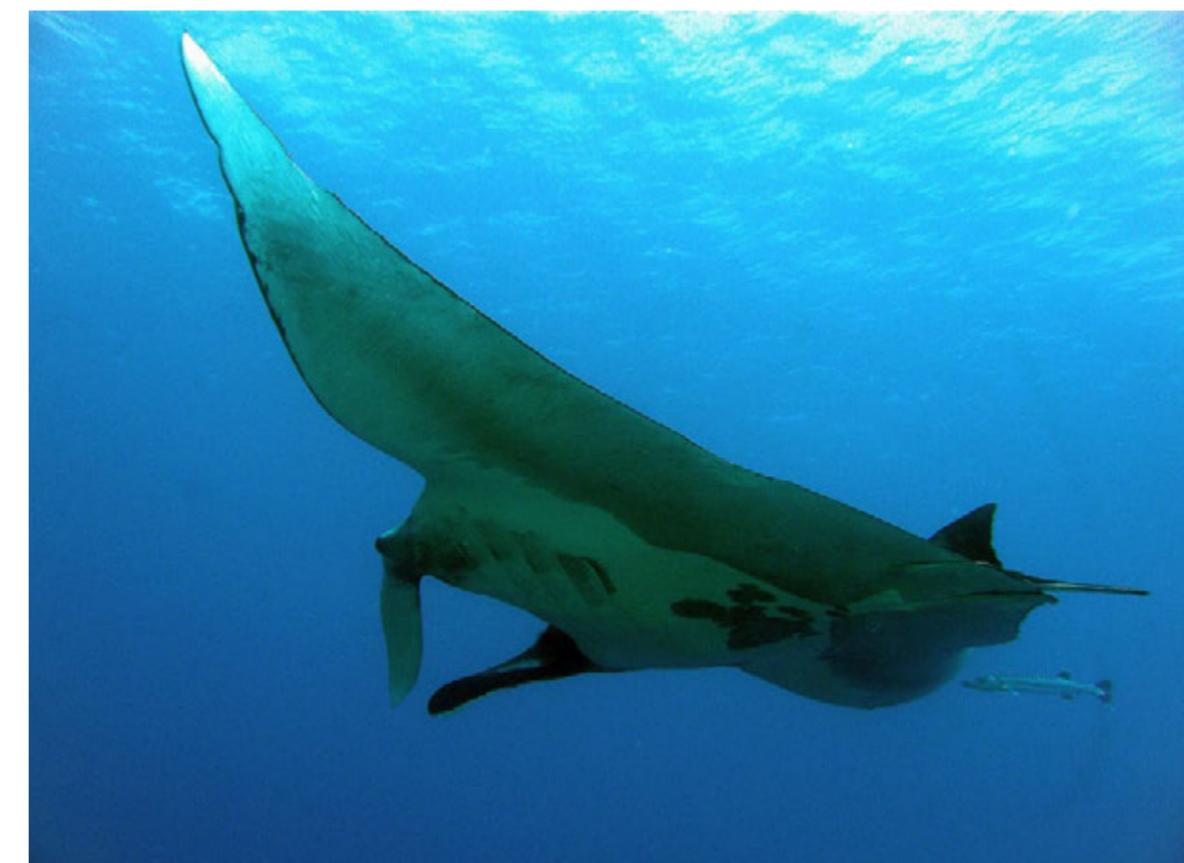
After six years of almost only diving from RIBs and spreading my clothes around my house, villa or hotel room, I decided it was time to see if I would enjoy a week on a boat with a bunch of strangers. As a frequent solo traveller, I wondered whether the close confines of a cabin with a random snorer would see me sleeping on the deck

by the second night. The allure of remote dive sites, unreachable by day boat, was strong enough for me to give it a go. Forty-two miles off the Egyptian coast, the Brothers Islands rise up from the floor of the Red Sea 800 metres below, forming two small, flat tabletops surrounded by steeply sloping fringing reefs.

The Brothers Islands have the only reefs around washed by strong nutrient-rich currents. I was attracted by their reported features combining soft corals, pelagics, sharks and two wrecks in good condition.

The larger of the two sea mounts—cunningly named Big Brother—is approximately 300 metres long and one kilometre away from its sibling. It has a lighthouse and a 12-man army garrison. It would be a great location for a back-to-basics television series, such as the reality TV show of the same name.

Split image with above and below surface views of Big Brother with lighthouse and garrison; Bannerfish and grouper (top right). PREVIOUS PAGE: Diver hangs in the void along a wall off Brothers



CLOCKWISE FROM TOP LEFT: Returning to *Blue Pearl* on RIB; Buddy James over soft coral; Longnose hawkfish on gorgonian; Giant manta on Big Brother

I was the last to arrive at the harbour in Hurghada the night before the departure of the liveaboard. All the other guests had gone to their cabins already. I was greeted and briefed by one of the dive guides, Mimo, with a shining pate and wide smile.

sooner had I littered the spare bed with camera bits, books and t-shirts, when I was introduced to Karim who kindly informed me that some dinner had been kept for me and was waiting for me in the dining area. Splendid.

Over a welcome glass of fresh fruit juice, he explained where to stow my dive gear and gave me some welcome news. The 20-guest boat only had 12 passengers, and so, I would have one of the eight below-deck twin cabins to myself. No

Covering six metres of the eight-metre width of the *MY Blue Pearl*, the mid-ship dining area was an open plan affair adjoining the lounge that led onto the outdoor dive prep area at the stern. In the wall towards the bow was a magic hatch through which Karim or his brother Karemi, the other steward, would receive platter after platter of food from Chef Wael in the kitchen. Before the bow on the 36-metre long main deck were the crew quarters and rope storage area, and a small deck used at prayer time.

After having a read the safety notices and emergency action plans pinned up



Brothers

in good condition, the briefings friendly but to the point.

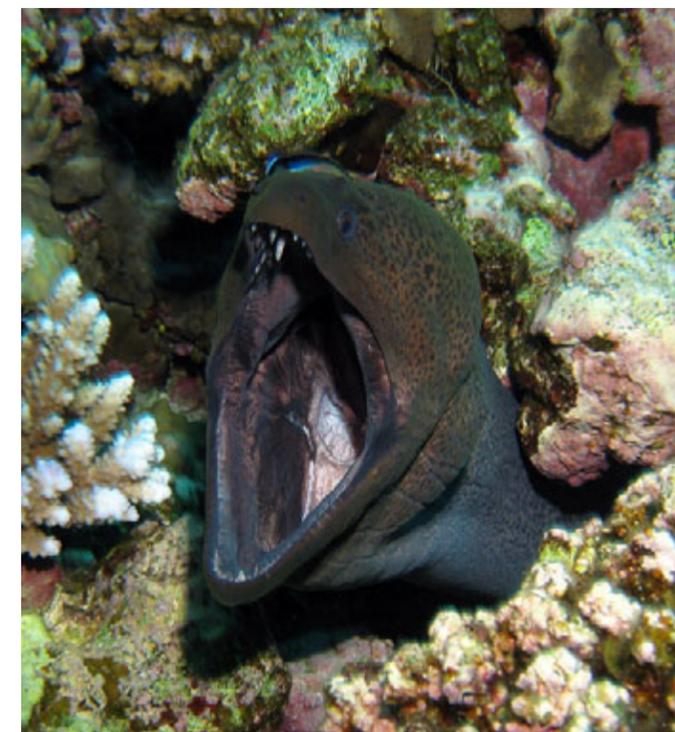
Pia laid out the itinerary in her “best Bavarian English, ja?” It was simple. Today would be spent on the coast diving at Gota Abu Ramada to check our gear, buoyancy and to get to know our buddies, as habitually strong currents off the

isolated Brothers Islands would be no place for faffing, and to do a night dive before heading east overnight.

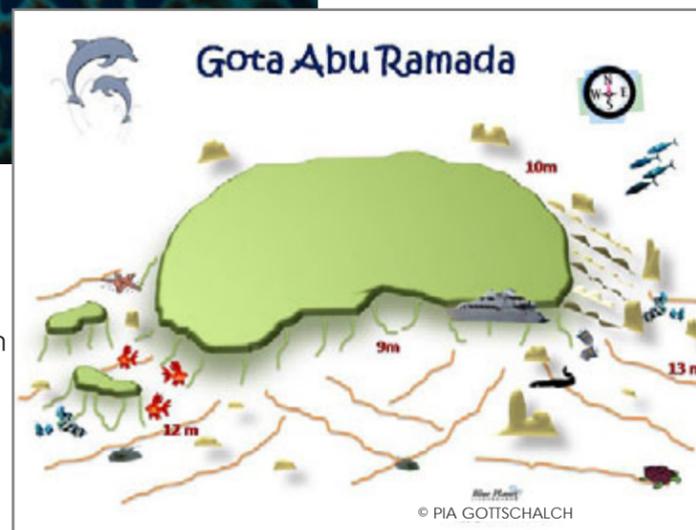
An artificial shark stuck on a knife—part

of blackspotted sweetlips and spotfin squirrelfish, morays, crocodilefish and a large school of yellowtail barracuda and goatfish upon which to get reacquainted with camera settings.

Gota Abu Ramada
Gota Abu Ramada is a shallow site, no deeper than 13 metres, with a large Australia-shaped reef with two large bommies off what would be the Perth coast (to the WSW). It was ideally suited to its purpose with no current, clear waters, small schools



CLOCKWISE FROM TOP LEFT: Gorgonian forests on Little Brother; *Numidia* wreck; Giant moray defends lair; Map of Gota Abu Ramada



© PIA GOTTSCHALCH

next to the flatscreen TV in the lounge, I went outside and up the stairs to the shaded rear chill-out deck, did a circuit passing the portside double cabin, the bridge, the front sundeck, the starboard double cabin, back astern and then further up to the flybridge. Even if I had had to share, there was actually plenty of room to find some personal space.

As Karim asked me how I would prefer my breakfast eggs the next morning, I took in my fellow shipmates, all liveaboard veterans and mostly return customers. We were an eclectic, if slightly Germanic, bunch—a German-Dutch couple, two German father-and-son combos, an

Austrian quartet made up of a father, his son, the son’s wife and a friend. The 12th man was James, a middle-aged, Libyan-based Scottish teacher, and naturally, my buddy.

Seated in the lounge, Pia, the trip leader and diving instructor, took us through the boat and dive safety briefings. Given that we’d be at least five hours from the coast, the equipment was reassuringly plentiful and

than 13 metres, with a large Australia-shaped reef with two large bommies off what would be the Perth coast (to the WSW). It was ideally suited to its purpose with no current, clear waters, small schools



Masked butterflyfish on Big Brother



Brothers

Two-bar anemonefish on Panorama, Safaga

absent from the surface, but we did a negative buoyancy entry and went straight down to ten metres, meeting up above the



ability to use an SMB competently.

The night dive was my first from a live-aboard and was enhanced by the deck lights on the boat, which created a full moon effect underwater, illuminating the bommies and the shark sculpture, hence providing visual markers for reference points.

After a warming shower to wash away the goose bumps from a third hour-long dive in 24°C water, we were greeted by the aromas of a giant buffet. Once dinner was over, the captain set a course eastwards, as some sat on the top deck watching the stars, and Karim and Karemi did a few card tricks in the lounge.

SS Numidia

I awoke to the sound of water lapping gently on the hull below my open cabin portholes, the early-morning light peeping in. From the deck, Big Brother and its Victorian lighthouse took on a red-brown hue as we boarded two RIBs and headed to the northern tip of the island.

The legendary currents appeared

beginning of the wreck of the SS Numidia, claimed to be one of the best wrecks in the Red Sea. She certainly looked huge and in good condition, given that she had spent more than a century exposed in her current-washed resting place.

Built in Glasgow in 1901, the 140-metre long, 6,400-ton Numidia was on her second voyage out of Liverpool bound for Calcutta with 7,000 tons of railway and general cargo. In the early hours of July 20, Big Brother's lighthouse was sighted off the port bow, and the captain ordered a slight change of course

to continue south passing alongside the island before retiring to his cabin. His orders were misinterpreted, and the ship ploughed straight into the northern tip

of the island. No lives were lost, much of the cargo was salvaged, but the ship went down, her keel digging into a rocky ledge. Now, she sits on a steep slope, her bow melded into the top of the reef, her stern some 72 metres below.

Hanging back, I let the other divers descend and incorporated them into a few shots to try to add some scale to my pictures. I captured the lifeboat davits and the remains of the foremast in the centre of the deck with a wide-angle lens, as the group inspected the remains of the bridge and the engine room. Yet, no image could convey quite how impressive this wreck was, dropping into the deep blue depths.

Descending to join the group and getting close to the wreck, I saw it was covered in soft corals and awash with burgundy and white striped Red Sea anthias and lionfish—accustomed to strong cur-



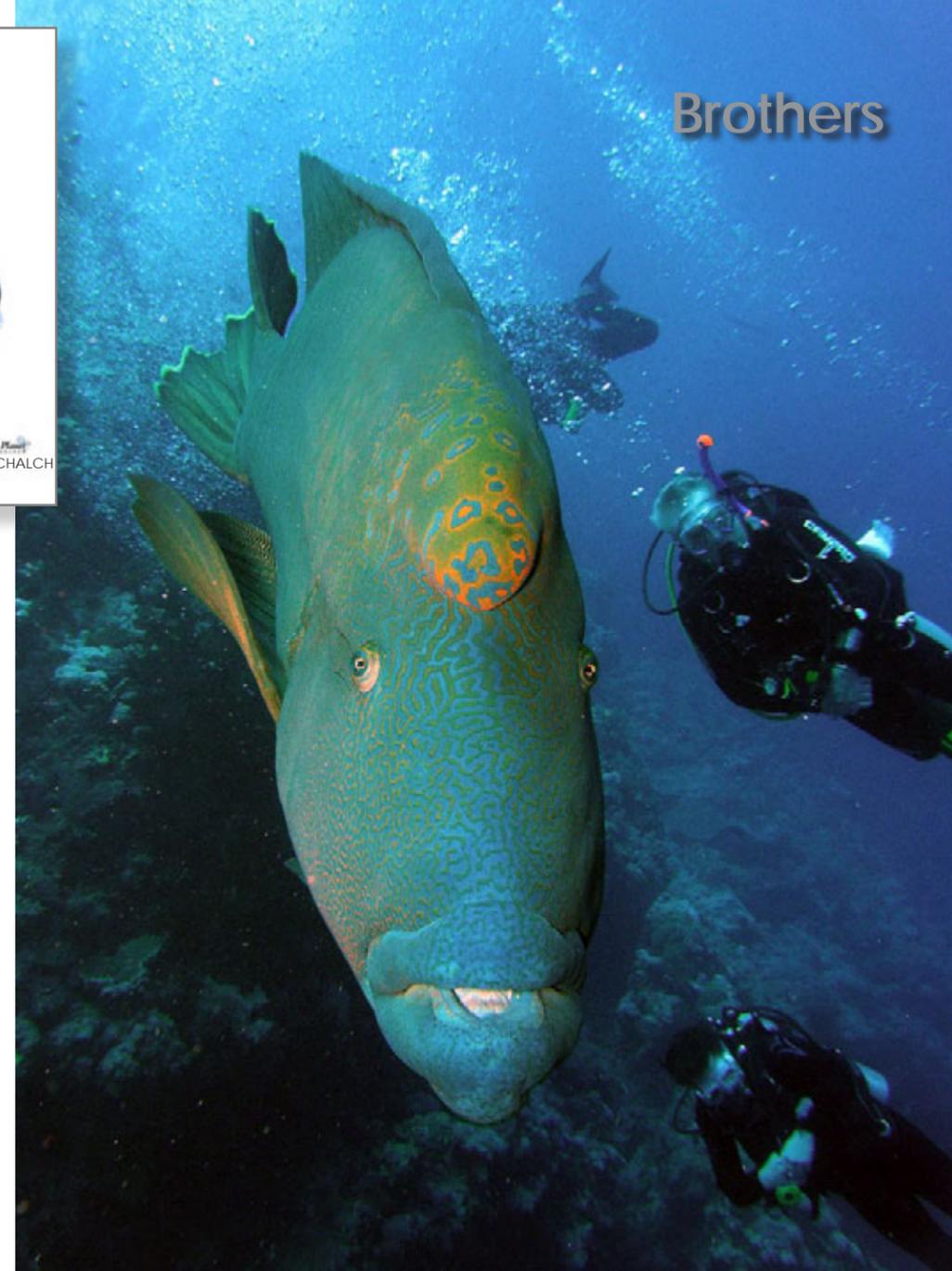
Thresher shark off Big Brother's southern plateau

Point of Big Brother, Blue Pearl moored, Little Brother in distance

of HEPCA's (Hurghada Environmental Protection and Conservation Association) shark protection awareness campaign—five metres below the surface also amused the divers, who took turns sitting on the sculpture's back during the safety stop once we had all demonstrated our



CLOCKWISE FROM LEFT: *Aida* wreck; Little Brother map; Male Napoleon wrasse and divers; Pregnant grey reef shark and oceanic whitetip with pilotfish at Little Brother



The plateau started at a depth of 20 metres and sloped down to 40 metres. It was a hot spot for thresher sharks. As we reached 25 metres, Mimo's arm shot out, finger extended

times before ascending to the top of the reef where we chilled out with the sohal surgeonfish before being invited to stuff ourselves again on board.

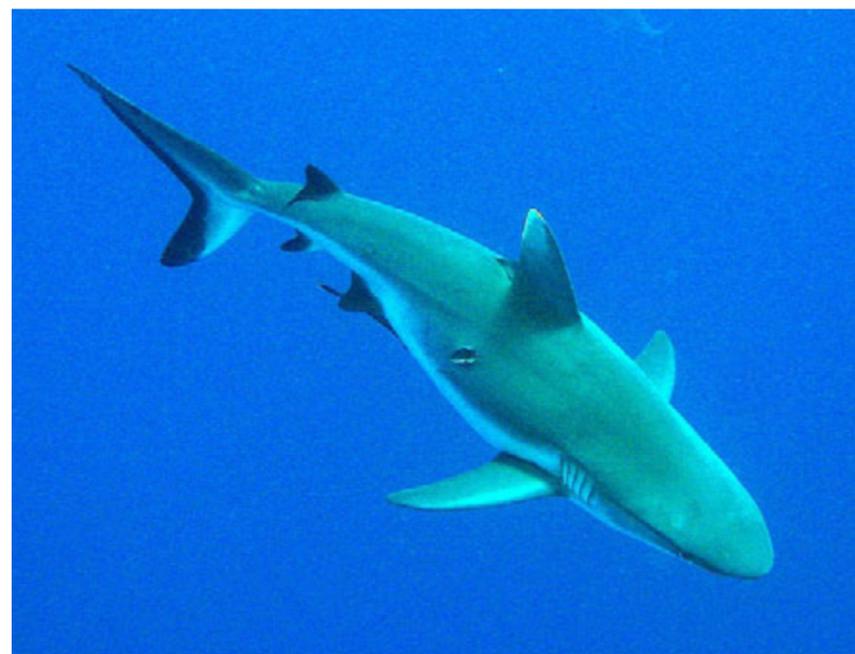
The next five days followed the same pattern: dive – breakfast – relax – dive – lunch – relax – dive – dinner – relax.

Due to the normally strong currents, the isolated nature of the location and the considerable presence of sharks, there was no night diving on the Brothers. In fact, on most nights we didn't need to get in the water to see them anyway.

Whether you agree or not, it is accepted practice on liveaboards to throw organic waste overboard in the evening, and the sharks seemed to be in on it, especially at Little Brother. Leaning over the side rails with the crew after dinner, we often saw oceanic whitetip and silky sharks patrolling around the boat.

Aida

Big Brother's other iconic dive site is the wreck of the *Aida*, a 75-metre supply vessel built in France in 1911, which sank on 15 September 1957 when resupplying the lighthouse and Egyptian army garrison stationed there. Approaching the jetty in heavy seas, she was slammed onto the rocks and abandoned immediately. After drifting north slightly, she went down south of the *Numidia*, just past the end of the island. Her bows no longer exist, but from her midships at 25 metres to her stern at 60, she is excellent condition,



rents—sheltered inside. On this day, there was no need. With no current and good viz, conditions were ideal, and we spent the whole dive there, ascending past some coral-encrusted rolling stock bogies at ten metres, before being picked up by the RIBs and taken back for breakfast.

After catching a few rays on the sun-deck, Pia and Mimo said it was time for a shark hunt on the southern plateau. As we were moored off the southern tip where there was no current, we would giant stride off the rear deck and return to the boat at the end.

towards the unmistakable scythe-like tail of a thresher shark swimming through a school of fusiliers. It stayed within view for a couple of minutes before we lost it.

We hung around 28 metres as long as our 30 percent nitrox mix would allow us, spotting a distant Thresher two more





PETER SYMES



PETER SYMES

THIS PAGE: Scenes from *Aida* wreck

adorned with purple soft corals and hard corals, anthias, morays and the usual reef dwellers.

The *Aida* was the last dive of the second day, and the first dive the next morning when a gentle current helped us onto the *Numidia* and then along the wall past a large school of black snapper hanging on the corner of the reef.

The walls of Big Brother were also home to a friendly, 90-centimetre female Napoleon wrasse called Mousie. After another successful Thresher-spotting trip over the southern plateau, Mousie and I flirted for a few minutes, as if eyeing each other across a bar, until she sidled up, posing, tilting onto one side like she wanted to be petted. Our 15-minute infatuation was sadly cut short by my dive computer and my

buddy's air consumption dwindling. On our last Big Brother dive, we had a slightly stronger south to north current. No sooner had we dropped in when we were greeted by a juvenile giant manta, approximately four metres across, riding the current and flanked by a barracuda, closely followed by three grey reef sharks. But the action wasn't over yet.

As we loitered expectantly, a 1.2-metre male Napoleon came amongst the divers creating a scene akin to a publicity-starved celebrity (quite appropriate given the location) willingly posing for the paparazzi. He left abruptly, diving fast to chase off a small grey reef shark sniffing around his patch.

As we slowly moved north, corner fish hugged our tanks, using us for streamlining and cover, as they

WHEN TO GO
 September and October are the busiest months of the year with warm seas. Even remote reefs can have several boats on them. May and June are the next busiest months, for the same reasons.
 July and August are quiet due to hotter ambient temperatures. However, this is also when the water is warmest, and there is often a cooling breeze on deck. Boats are fully equipped with air-conditioning throughout.
 March and April are also quiet, and with water temperatures in the mid-20s at the Brothers, it is a good time to go.
 During the quiet months of March, April, July, and August, solo travellers and unromantically involved pairs have a good chance of being given a cabin to themselves on arrival. ■



CLOCKWISE FROM LEFT: Pipefish; Blackspotted sweetlips; Scribbled filefish; Foster's hawkfish on reef at Little Brother; Spotfin squirrelfish

gorgonian forest, home to a longnosed hawkfish, round the corner from a section of wall festooned with broccoli-like soft corals. In the normally washing machine-like shallows, we off-gassed with black-tongue unicornfish having parasites removed by cleaner wrasse, pufferfish, moray eels, orangespine unicornfish, barracudas and an octopus, thanks to the remarkably still waters. The icing on the considerable cake was provided by an oceanic whitetip and its accompanying

pilot fish that came by to say hello.

It would've been unfair to expect the final day's diving in Safaga to compare, but Panorama reef had interesting seven-metre high, mountain-like dome coral

Brothers

formations, anemonefish and two turtles. The snorkelling boats at Tobia Arba'a (a.k.a. The Seven Pillars) also provided much amusement from above and below the surface, and the shallow waters of the goldie-covered coral bommies were also home to blue spotted stingrays and lionfish. Rather than being a let-down, these two sites, two of the best in the area, served as a reminder of how spoilt we had been.

The whole experience had been excellent. There was plenty of room on the boat and I spent so little time in my cabin awake that sharing would have been no problem. The constant sound of the ocean was soothing and we never had to share a dive site with another group. In fact each buddy team often went at its own pace and James and I were frequently alone at the end of a dive, hanging out with the fish. In short, I can safely say that I am a liveaboard



convert and would thoroughly recommend a trip to the Brothers.

Christopher Barlett travelled with Oonas Divers. www.oonasdivers.com

it did not disappoint. After an uneventful 15 minutes deep in the blue looking for sharks, we moved closer to the wall. A quarter of an hour later, we had seen a male grey reef shark, two threshers, a curiously unshy silky shark, and an obviously pregnant grey reef shark, and had been entertained by an even bigger male Napoleon wrasse.

The last four dives were just as impressive. The

male napoleon wrasse was often under the boat waiting to tag along on a dive, the pregnant reef shark (*Carcharhinus amblyrhynchos*) seemed to live near the mooring site, threshers milled around to the south below a magnificent

looked for prey to ambush amongst the schools of anthias while we found pipefish amongst the gorgonians. As we moved closer to the surface, a manta cruised along below to bid us farewell. Big Brother had been excellent—could Little Brother follow suit?

Little Brother

It had two days to outdo its sibling, and



fact file

Brothers Island



SOURCES: US CIA WORLD FACT BOOK, SCUBADOC.COM, E-MED.CO.UK

History One of the world's great civilizations developed in Egypt fostered by fertile lands and regularity of the annual Nile River flood, as well as the relative isolation found between the deserts to the east and west. Around 3200 B.C., a unified kingdom evolved, followed by ruling dynasties reigning in Egypt for the next 3,000 years. In 341 B.C., the Persians conquered the last native dynasty. Then came the Greeks, Romans and Byzantines. It was the Arabs who, in the 7th century, introduced Islam and the Arabic language. They reigned over Egypt for the next 600 years. Then, around 1250, the Mamluks, a local military caste, took control and continued to govern after the Ottoman Turks conquered Egypt in 1517. In 1869, Egypt became an important world transportation hub after the Suez Canal was completed, but also accrued a lot of debt. In order to protect its investments, Britain took control of Egypt's government in 1882. However, allegiance to the Ottoman Empire continued, in name only, until 1914. Egypt was partially independent from the United Kingdom by 1922, and in 1952 the country got full sovereignty after the overthrow of the British-backed monarchy. In 1971, the completion of the Aswan High Dam and the creation of Lake Nasser altered the long-held role

of the Nile River in the ecology and agriculture of the country. Resources were overtaxed and society stressed as the population experienced rapid growth. In addition, there was limited arable land and continued dependence on the Nile. In order to face these challenges, the government implemented economic reform and major increases in investment in physical and communications infrastructure. Events in Tunisia leading to overthrow of the government there, inspired the Egyptian youth and opposition groups to protest. They organized a "Day of Rage" campaign on 25 January 2011 (Police Day) involving non-violent demonstrations and marches, as well as labor strikes in Cairo and other cities across the country signalling what is now known as the Arab Spring. Government: republic. Capital: Cairo

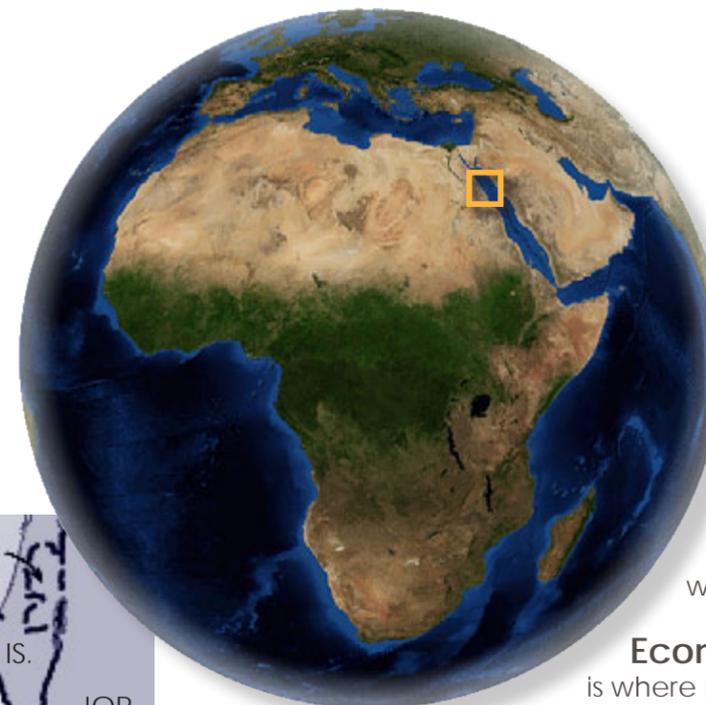
Geography Egypt is located in Northern Africa. It borders the Red Sea north of Sudan and the Medi-

terranean Sea, between Libya and the Gaza Strip. It also includes the Asian Sinai Peninsula. Coastline: 2,450km. Terrain: Cut in half by the Nile valley and delta, Egypt is primarily a vast desert plateau. Lowest point: Qattara Depression -133m. Highest point: Mount Catherine 2,629m. Note: Egypt controls the Suez Canal—a sea link between the Indian Ocean and the Mediterranean Sea—as well as the Sinai Peninsula, which is the

RIGHT: Location of Brothers Islands on global map
BELOW: Location of Brothers Islands on map of Egypt



only land bridge between Africa and the edge of Eastern Hemisphere. Natural hazards: droughts; earthquakes; flash floods; landslides; dust and sand storms; and *khamsin*—a hot, driving windstorm that occurs in spring. Environmental issues: urbanization and windblown sands decreasing agricultural lands; soil salination increasing below Aswan High Dam; desertification; coral reefs, beach-



cal Timber 94, Wetlands.

Climate Egypt has a desert climate—hot, dry summers with moderate winters

Economy Nile valley is where most economic activity takes place. Highly centralized during the rule of former President Gamal Abdel Nasser, Egypt's economy opened up significantly under former Presidents Anwar El-Sadat and Mohamed Hosni Mubarak. From 2004 to 2008, Cairo pursued economic reforms aggressively in order to attract foreign investment and foster GDP growth. However, living conditions for the average Egyptian stayed poor and exacerbated public discontent despite the increase of economic growth in recent years. Unrest took place in January 2011 and the Egyptian Government dramatically increased social spending to ease public dissatisfaction. However, economic growth slowed significantly due to political uncertainty, which reduced government revenues. The hardest hit sectors were tourism, manufacturing, and construction. Economic growth is most likely to stay slow through 2012. Foreign exchange reserves are being used by the government to support the Egyptian pound.

Population 83,688,164 (July 2012 est.) Ethnic groups: Egyptian 99.6%. Religions: Muslim (mostly Sunni) 90%, Coptic 9%, other Chris-

tians 1%. Internet users: 20.136 million (2009)

Currency Egyptian pounds (EGP)

Language Arabic (official), English and French

Health There is an intermediate degree of risk for food or water-borne diseases such as bacterial diarrhea, hepatitis A, and typhoid fever; vectorborne disease such as Rift Valley fever; and water contact disease such as schistosomiasis. H5N1 avian influenza has been identified in the country but poses low risk to tourists.

Decompression Chambers

SHARM EL SHEIKH Sharm International Hospital (+20) 69 366 0318
Hyperbaric Medical Center (+20) 12 212 42 92

DAHAB Hyperbaric Medical Center (+20) 693 640 536 / 101 433 325
Dahab Deco International (+20) 12 219 0372

HURGHADA
Naval Hyperbaric Medical Center (+20) 65 3449 151 / 065 449 150
Hypermed (+2) 12 218 7550

SAFAGA Safaga General Hospital (+20) 122 190 383

MARSA ALAM Port Ghalib Hospital (+20) 122 190 383 / 653 700 122
Marsa Alam Baromedical (+20) 12 436 2222

Web sites
Egypt Tourism
www.egypt.travel ■

Red Sea Safari

Journey from Cairo to El Quseir



Text and photos by Barb Roy

Octopus (left); Beduin led camel train in Dahab (above)

In spite of Egypt's current turmoil, I feel this exceptional country is still a place of interest and worth while including in anyone's holiday itinerary. I recall enjoying the opportunity to tour many of the countries monuments, museums and being able to touch one of the huge pyramids that have surpassed the adversity of historical challenges. The beautiful

golden glow of desert sunsets, the fertile green fields of the Luxor valley and the enchanting Nile River scenes as breaking dawn begins another serene day still stir in my mind. But most of all, I was captivated by the beauty and diversity of the marine inhabitants that flourished within the Red Sea.

My journey

When I found out I would be travel-

ing to Egypt for three weeks in June, I immediately began making regular visits to a local sauna to prepare my body to withstand the heat for which northern Africa is famous. Coming from British Columbia, Canada, blessed with mild climate and cool temperate water, I knew this trip to Egypt would be a very different experience.

In New York, I met up with adventure videographer Gary Knapp, who creates and produces dive travel DVD's for sale, all filled with helpful tips, activities and an underwater glimpse of what





Red Sea Safari



Sharm El Sheikh

Sharm El Sheikh is a popular dive destination on the southern tip of the Sinai Peninsula. From Cairo, it took around 50 minutes to fly on Egypt Air. The view from the plane showed how remote this hub, with a population of approximately 35,000, really is.

Steve arranged our first dive on a local dive boat, Abu Hara, operated by Pharaoh Divers. Since first dives are also checkout dives, travelers have the opportunity to become

familiar with rental gear or for adjusting their buoyancy and weights to the Red Sea's higher salinity levels. With current airline restrictions on baggage, I always like to use rental gear from a reputable dive facility. Most dive operations throughout Egypt provide cylinders and weights anyway, with other items available upon request.

The water was warmer than expected, but my thin shorty wetsuit worked fine

CLOCKWISE FROM ABOVE: Scenes from the journey through Egypt — Russian Friendship Monument on the Nile River at Aswan; Riding camels at the Pyramids; Pyramid at Giza; Veggie stand in Hurghada; Areas of Sharm el Sheikh and nearby mountain range

explore the various dive holidays offered to entice traveling divers.

Our host for the journey was Steve Rattle, owner of Pharaoh Dive Club in El Quseir (on the Red Sea). Steve and several other industry associates have formed a group allowing them to offer a unique experience for traveling individuals and groups while in Egypt as a whole.

"From the time a diver lands in Cairo," said Steve, "We take care of everything, including airport transfers, land tours, accommodations, diving and all domestic flights, until the time they depart."

With the help of Afifi El Shimy, from Learning Through Travel, the Cairo portion was a breeze. A majority of visitors arrive in Cairo when coming from North America and many from Europe. Afifi

El Shimy arranged for Gary and I to visit the Giza Pyramids within two hours after landing! Camels were actually added into the equation for Gary, giving into the hungry faces of the younger Egyptian entrepreneurs. Needless to say, I pulled out my camera to take advantage of the opportunity while Steve laughed at us both.

Cairo is a city full of history and intrigue, but with over 16 million people, you can

imagine what traffic is like. Visitors should always try to arrange their tours before arriving, if possible, to save time, sanity and to make things hassle-free, especially if you don't speak the language or know your way around. After hearing nonstop honking in the streets and observing only a handful of stop signs and lights, I would advise the hire of a driver or taxi, no matter where you want to go.

The Cairo Museum, in Tahrir Square, was one of my favorite places because of the antiquity collection it contains, totaling over 120,000 items. Although taking pictures and video is no longer permitted, just walking among the towering statues in the exhibit halls gives a glimpse of what life might have been like when Cairo was in its infancy.

familiar with rental gear or for adjusting their buoyancy and weights to the Red Sea's higher salinity levels. With current airline restrictions on baggage, I always like to use rental gear from a reputable dive facility. Most dive operations throughout Egypt provide cylinders and weights anyway, with other items available upon request.

The water was warmer than expected, but my thin shorty wetsuit worked fine



Red Sea Safari

waved back and forth in the mild flow, creating pleasant background settings for wide-angle shots when photographing dive partners. Clusters of hard corals growing in all shapes and sizes were dispersed on the sloping reefs from nine to over 30 meters (30-100 feet) in depth. On many occasions, Steve pointed out turtles, stingrays and other large colorful fish cruising by us while diving on the walls. Like giant bouquets of flowers, orange, yellow and purple soft coral branches were at most sites, adding to their artistic picturesque surroundings.

Between dives, Steve explained that he and Osama Rushdie, originally opened Pharaoh Divers

THIS PAGE: Scenes from dive sites near Dahab; Fish on reef (above); Banded anemone fish (right); Giant clam (far left)

to keep me warm in the 26°C (80°F) degree water. Like many coastal places, the Red Sea is subject to currents, which provide nutrients to an assortment of life. As a photographer, the colorful resident lionfish and odd-looking crocodilefish made perfect models because they rarely moved far. Millions of tiny orange, yellow and red fish seemed to encompass each coral head throughout the reefs, with noctur-



Sea star

nal fish crowding for space under the overhangs.

Ras Umm Sid, the Temple and Jackson Reef in the Straits of Tiran were our next three dives over a period of two days. Here, colorful gorgonian sea fans gently

over 17 years ago in Sharm. Since then, Steve and his wife Claire moved to El Quseir five years ago and opened Pharaoh Dive Club. Osama still runs the Sharm operation though, working with Steve to provide visiting divers with a variety of locations to explore.

When asked why El Quseir, Steve





A pair of masked butterflyfish (left) on reef near Sharm el Sheikh; Diver and moray eel on reef (below)

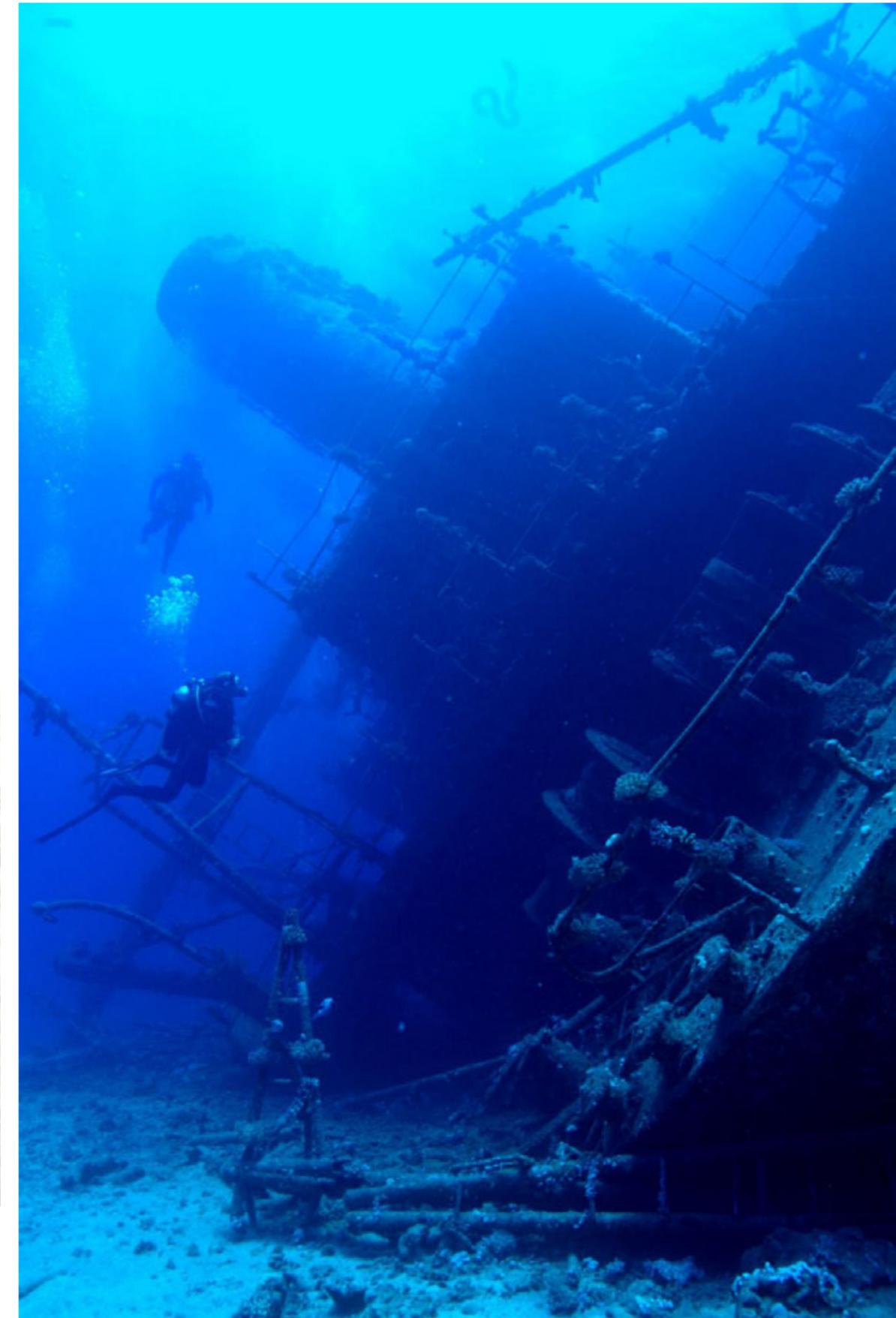
Trainer, Leah Cunningham, from the United Kingdom, before leaving Sharm. He informed me that there were many deeper dives offered with several wrecks available as well. Apparently, most facilities offering technical diving and boat operators catering to this group can provide gear and appropriate gas blends. After hearing Leah talk about a half dozen deep wrecks, walls and pinnacles frequented by local tech divers, I yearned for my deep diving gear.

Dahab

Dahab was our next stop, located in north Sinai. Rather than using boats, most of the diving in this area was from shore. In some locations, camels were used to transport people and dive gear

Red Sea Safari

Diver explores *Ghiannis D* wreck (right)



(originally from the United Kingdom) replied, "I've been diving all over the world and keep coming back to the Red Sea. I just liked the feel of El Quseir, and the area has some of the best diving around. There's great diving in the Straits of Terran and in Dahab, but our area is extraordinary."

That evening, we met up with Osama for dinner. Being Egyptian, he knew the best restaurants in town. Osama selected a freshly caught snapper from a display table and told the cook how it was to be prepared. When traveling to a new country, part of the total experience should include local cuisine, spices and drink. This Egyptian seafood feast was unforgettable!

A few days later, Abu Hara

took us to Ras Mohammed, a national park with steep cliffs stretching high above azure blue waters. Although Steve warned us of possible currents, none were present during our dive. The terrain reminded me of the majestic structures found in many of Egypt's temples.

We descended down to the wall to discover more large anemones, each with their own pair of brave little anemonefish to match. Some pairs were bright orange and white, while others were tan and white. The highlight of the dive was finding an immense sea fan, at least ten feet across and six feet high!

Curious if there was any tech-



nical diving offered in the area. I had the opportunity to interview Technical Dive Instructor

for an interesting experience across a stretch of desert to reach choice beaches. Some



Red Sea Safari



CLOCKWISE
TOP LEFT: World
Heritage Site
Saint Catherine's
Monastery at
Mount Sinai;
Camp; Pharoah
Dive Club boat,
the *Amelia*; Roots
by Stuart

sites have tents set up to provide shaded rest areas, offering beverages for sale and restroom use for a nominal fee.

On the outer wall of the Blue Hole, Gary and I found several pairs of anemone fish, nudibranchs, young giant clams and numerous moray eels. Although the life seemed small, it was abundant in the variety of invertebrates. The tiny white and pink hydrocorals were exceptional for a 50mm macro lens.

The Canyon was a calm-water dive site, clear and full of hard smaller invertebrate residents. Like the name suggests, the reef structure forms a narrow passage where a diver can enter at around 20m (65ft) and



swim down to 30m (98ft) along the 'canyon'. For a photographer, the silhouetted shots can be incredible when using the jagged edges of the reef to frame a diver swimming above. Add in a few colorful fish and the setting is awe-inspiring.

One of my favorite dives for close-up shots was at a place called The Islands, where numerous submerged islands of hard coral covered a wide stretch of ter-

rain, providing a maze-like setting. This also provided shelter for stingrays, larger eels, fish, more anemones and nudibranchs.

Before leaving Dahab, Steve took us to Saint Catherine's Monastery at the foot of Mount Sinai, which is now a World Heritage site and one of the oldest Christian working monasteries in the world. Now a major tourist attraction, the place reminded me of a movie set. Even the trip to get there through the mountains was pleasing to the eye, as it revealed a colourful geology and more roadside vendors.



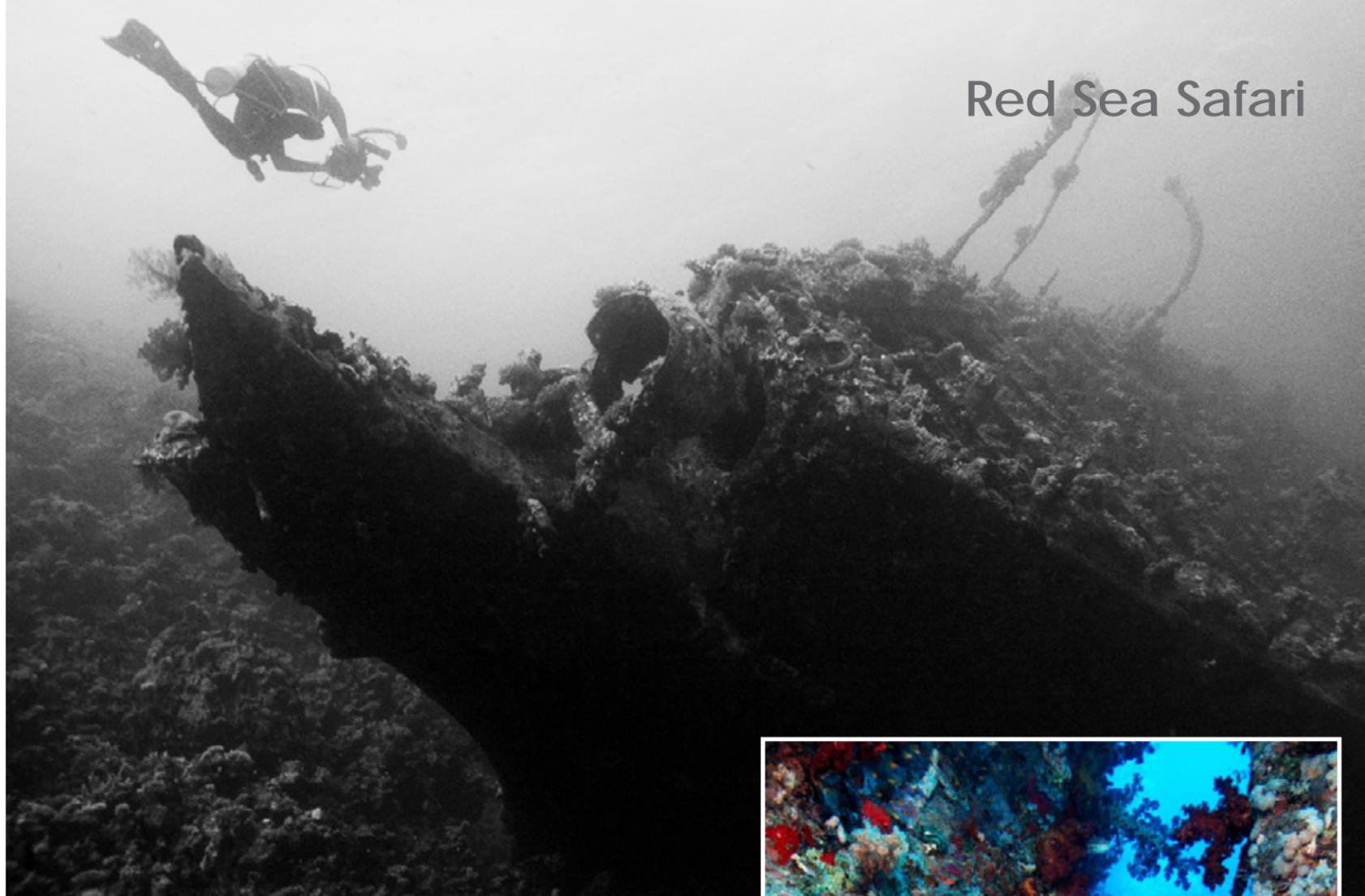


COUNTER-CLOCKWISE FROM LEFT: Diver on *Thistlegorm* wreck; BSA motorbikes on *Thistlegorm* wreck; *Dunraven* wreck; *Carnatic* wreck

to and from the sites.

I greatly enjoy the history of the shipwrecks, often told by the dive-masters giving the briefings, but covered more in depth by dive books like Lonely Planet's *Diving & Snorkeling the Red Sea*. Topside photography of the wildlife and coastal shoreline proved to be as rewarding as the underwater opportunities.

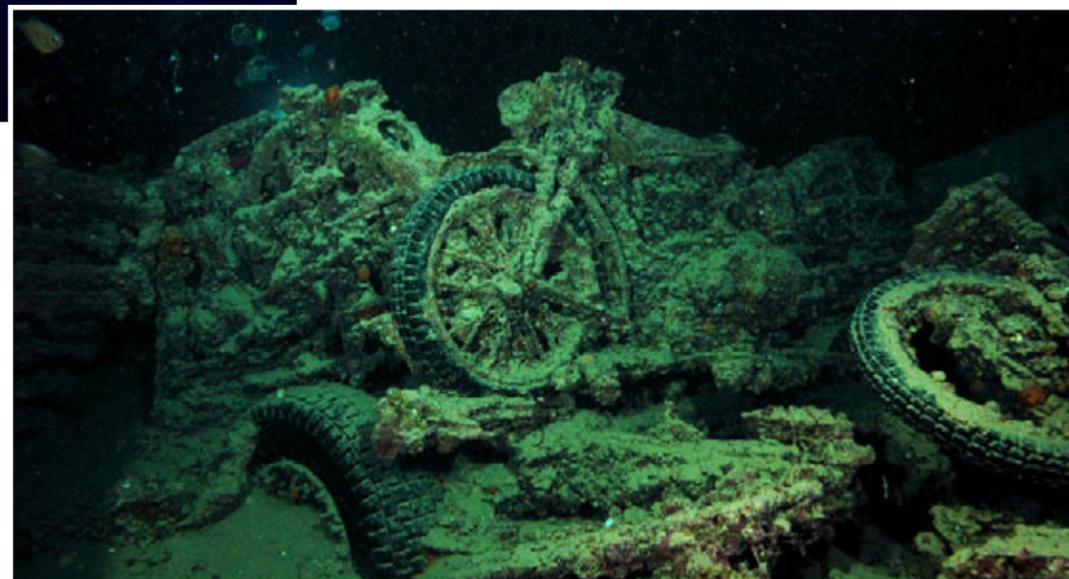
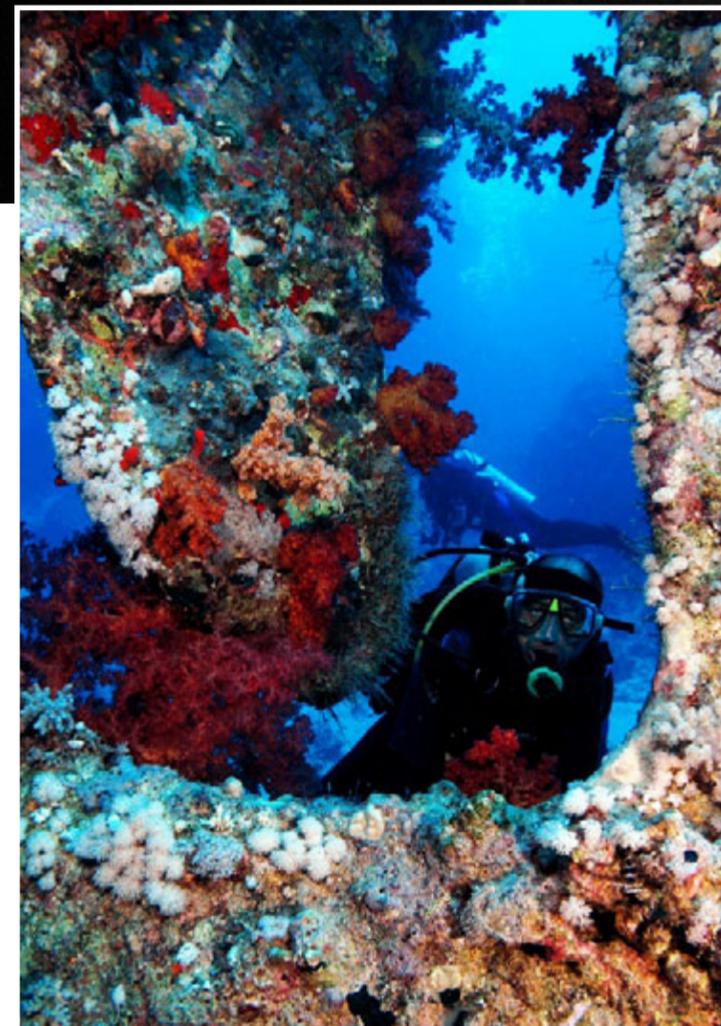
At one of the larger wrecks, I remember sitting on the sand with my camera in about 80 or 90 feet of water, looking up in awe at this massive ship lying on its side before me. Visibility was good enough to allow a full view of the wreck. Tiny divers hovered about at varying depths checking it out. I turned my strobes off and changed the settings on my camera to accommodate natural light. It was truly a tranquil feeling.



Red Sea Safari

Another immense wreck was the *SS Thistlegorm*, sitting upright in 30 meters of water. The 126-meter-long (415-foot) ship was hit by a German bomber in 1941, with a hold full of military supplies. Some areas of the ship have been damaged, but most are still intact, complete with old cars and motorbikes stored below deck. While exploring the outer decks, Gary and I found a crate of ammunition, large metal bowls and more fish than we could count. Even a truck fuel tanker trailer was sitting on the outer deck.

Of all the wrecks though, I really enjoyed a shallow un-named wreck towards the end of the boat adventure. Most of the wreck had collapsed in on itself leaving the hull and some railing left. But what was left was literally covered in colorful marine life. On the outside of the wreckage, we found a small brown octopus that stayed



Liveaboard dive boats

Part of our journey was to experience what a liveaboard dive vessel on the Red Sea was like. Steve arranged for Gary and me to try a week aboard the *Bella* while on a shipwreck tour.

We both found the food onboard to be outstanding and the boat crew very helpful, friendly and fluent in English. The cabins each had toilets, showers and two beds. The dive area was adequate for preparing gear, with nitrox available upon request for an additional fee. A small inflatable boat was used for transporting divers



Red Sea Safari

Hurghada, where the airport is. Seeing all the street vendors with their wagons, carts and donkeys brought a humble smile to us, as we headed down the road.

Located south of Hurghada and east of Luxor on the Red Sea, El Quseir is a quaint laid-back area offering visitors reasonable prices, good local food and friendly people.

Our first dive yielded a small



with us for as long as we wanted to film or photograph it.

On the top of the hull and inside the wreck were three scorpionfish! Although dangerous if you land on one due to faulty buoyancy on the part of the diver, they are actually easy subjects to photograph. They are large enough to use a wide-angle lens and place a diver behind for a different effect. You can also do this with moray eels, lionfish and any other large critter hovering or resting on the edge of a wreck.

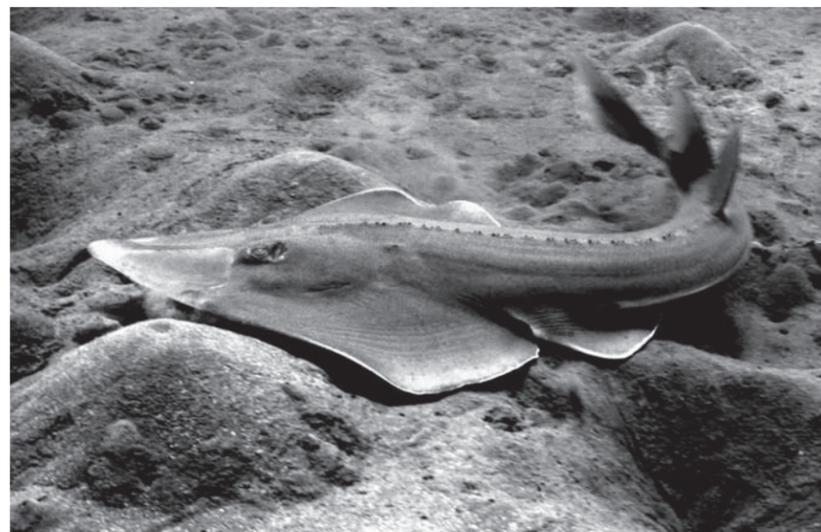
One last note I will add about my liveboard experience and some trouble I had with the two divemasters/guides. Quite often, they did not stick to the briefing plan or would change things in-water. As a photographer, this proved hard to adapt to. They would also become upset when I chose not to enter the wrecks,



feeling many of them were unsuitable without proper gear. Later, Steve informed us for future trips visiting divers can request European divemasters. Other than that, the trip was worth seeing all of the wrecks.

El Quseir

The last part of our journey was spent in El Quseir, where Steve and Claire treated us to an array of boat and shore diving after a short stint touring



group of dolphins who spent over 20 minutes playing with us. They must have been

THIS PAGE: Scenes from El Quseir COUNTER-CLOCKWISE FROM LEFT: Hawksbill turtle; Scorpionfish; Dolphin play; Shovelnose shark; Diver enjoys colorful reef near El Quseir



Gary Knapp filming dolphins (left); Coral gardens from Dahab (right top and bottom); Little egret on the Nile River (bottom left)

and shallow pinnacles with a healthy variety of colorful soft and hard corals. Claire was gracious enough to act as my model at most of the sites. Although a close-up lens would have worked, I found the wide-angle lens to be the most versatile. Visibility was excellent in most places, and the water temperature was always in the low 80's.

When asked about expanding his business, Steve told us that they have. "Yes," he said,

"We are now embedded in Roots Luxury Camp just north of El Quseir. The diving is the same as El Quseir, as we use the same boat, zodiac and shore sites, but it offers an easy, unlimited access to a house reef for guests.

"The *camp* is not really a camp. We have two types of accommodations—modern Hill Side Chalets with views of the sea and Eco Huts, which have mountain views. The camp has been in operation for five years, but we have taken it over completely and have made many changes including doubling the staff, improving the food quality by bringing in an excellent chef. By doing this, we are about to expand from 24 to 40 rooms."

El Quseir was our last dive destination before returning inland for a brief stop in Luxor, then onto Cairo to return home. Overall, I would say this was an enjoyable journey around the northern part of Egypt. During my return visit, I hope to see more of the southern part of the country with even more diving and topside exploration.

"I hope you don't expect every dive to be like that," Steve told us. "We have some pretty good diving here, but seeing dolphins was a special treat."

Indeed it was special, but I thought the other shore dives were just as nice, especially the dive in front of their shop. Claire found scorpionfish, stonefish, crocodilefish, blue-spotted sting-rays and several pairs of angelfish for me to photograph and Gary to videotape.

At another shore dive, we were able to dive with five different turtles, as they grazed upon patches of lush green eelgrass on a sandy bottom in six meters (20ft) of warm water. While checking out a small stretch of reef, a guitarfish swam over to see what we were. Since it was my first, I followed it to observe what it was up to and, of course, get a few shots. A long silver fish joined it, and the pair went off feeling for things in the sand. Every now and then, it would scare up a fish or two to eat.

During the boat dives, we were introduced to both deep

Red Sea Safari



What to bring

If you are comfortable with a particular dive mask, bring it, especially if it has prescription lenses. Memory cards can be expensive and selections limited, so bring two to three times what you think you will need. Check the tourism website for electrical hook-up and current exchange rates. They will also list what travel documents and which airlines fly into Egypt. Bring plenty of sun block and don't drink the water. Most of the hotels offer bottled water, and if you do come down with 'Pharaoh's Revenge', just pop into a pharmacy and explain your symptoms for some quick acting relief. Stay safe and good diving. ■

REFERENCES
 • DIVE TRAVEL DVD'S BY GARY KNAPP
 • LONELY PLANET'S BOOK DIVING & SNORKELING RED SEA



fascinated with my camera and Gary's video system, because they seemed to be looking at their reflections in the housing ports. Swimming alongside of them, I never knew they could be so big! They left as quickly as they arrived leaving us with a very delightful first dive.

Elphinstone

Text and photos by JP Bresser

Grand Canyon of Southern Egypt

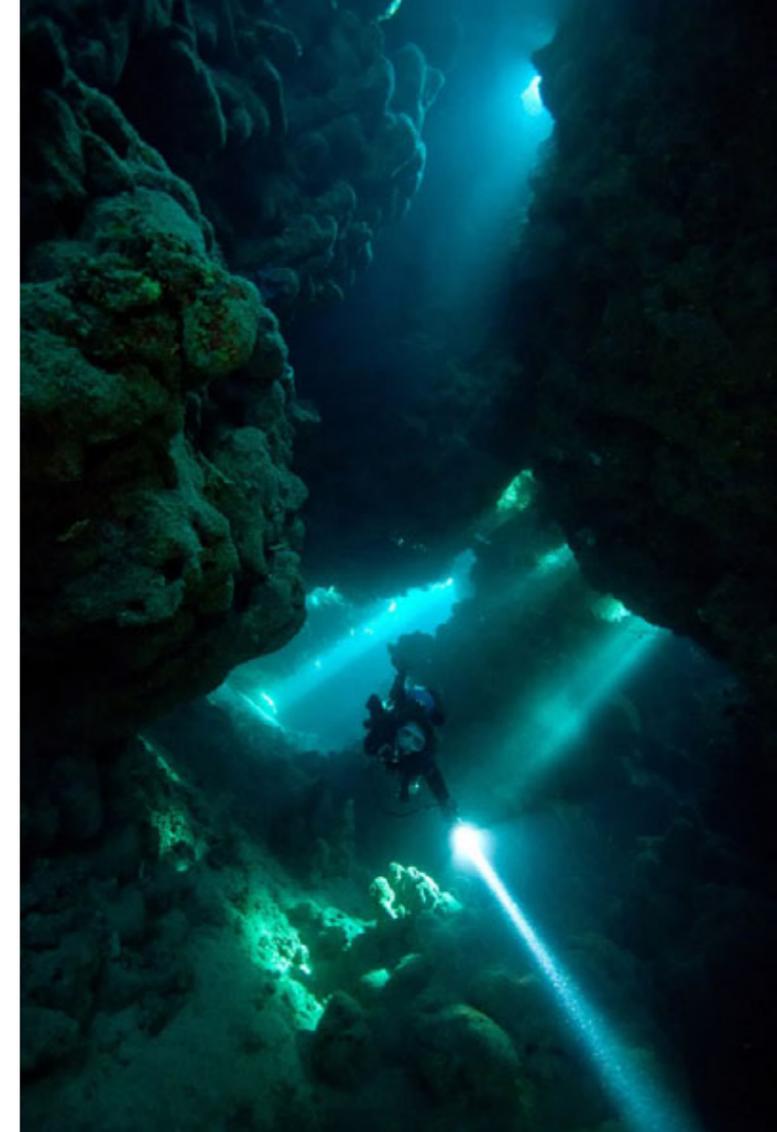
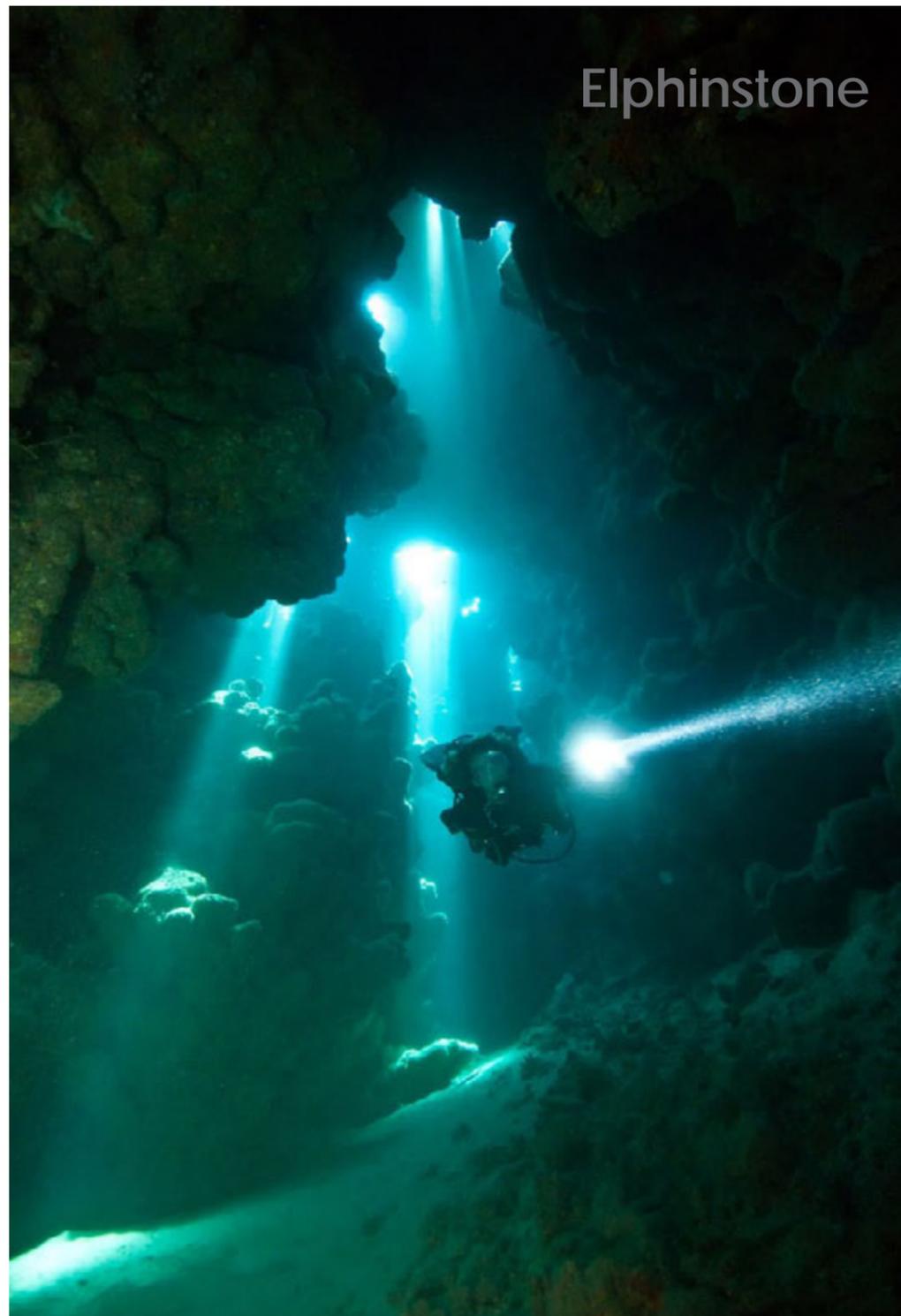


THIS PAGE: Diver entering the the secret cave chambers and exploring its "canyons"

We started talking about technical diving and cave diving, and I showed him some of my photographs on the display of my dripping underwater housing. "So, you like caves, eh?" he asked, obviously unaware about my regular sub-terra activities. I decided to keep a low profile and just tell him that I did. He started looking around, moved a little closer while lowering his tone and whispered, "Are you interested in a very special dive?" I almost felt like I was being



It was 6:30 in the morning, and my dive buddy and I were hauling our gear back from the big zodiac speedboat after a thrilling midnight dive on the famous Elphinstone reef in the Red Sea near Marsa Alam, Egypt. While rinsing my gear, Ahmed—the local dive guide—started talking to me because I was diving a back plate, wing and long hose just like him, and he probably felt some kind of connection.



offered an indecent proposal, but I responded that as an editor for several dive magazines I was always interested in very special dives.

"I will talk to the management and see what I can arrange," whispered Ahmed and walked away in the direction of the dive

manager's office leaving me and my buddy behind with about a 100 questions unanswered.

Later that evening, Ahmed sneaked up to us during our dinner and told us to be at the jetty at 8:30AM the next morning with all our gear assembled. He would take us to an unknown reef he used to dive

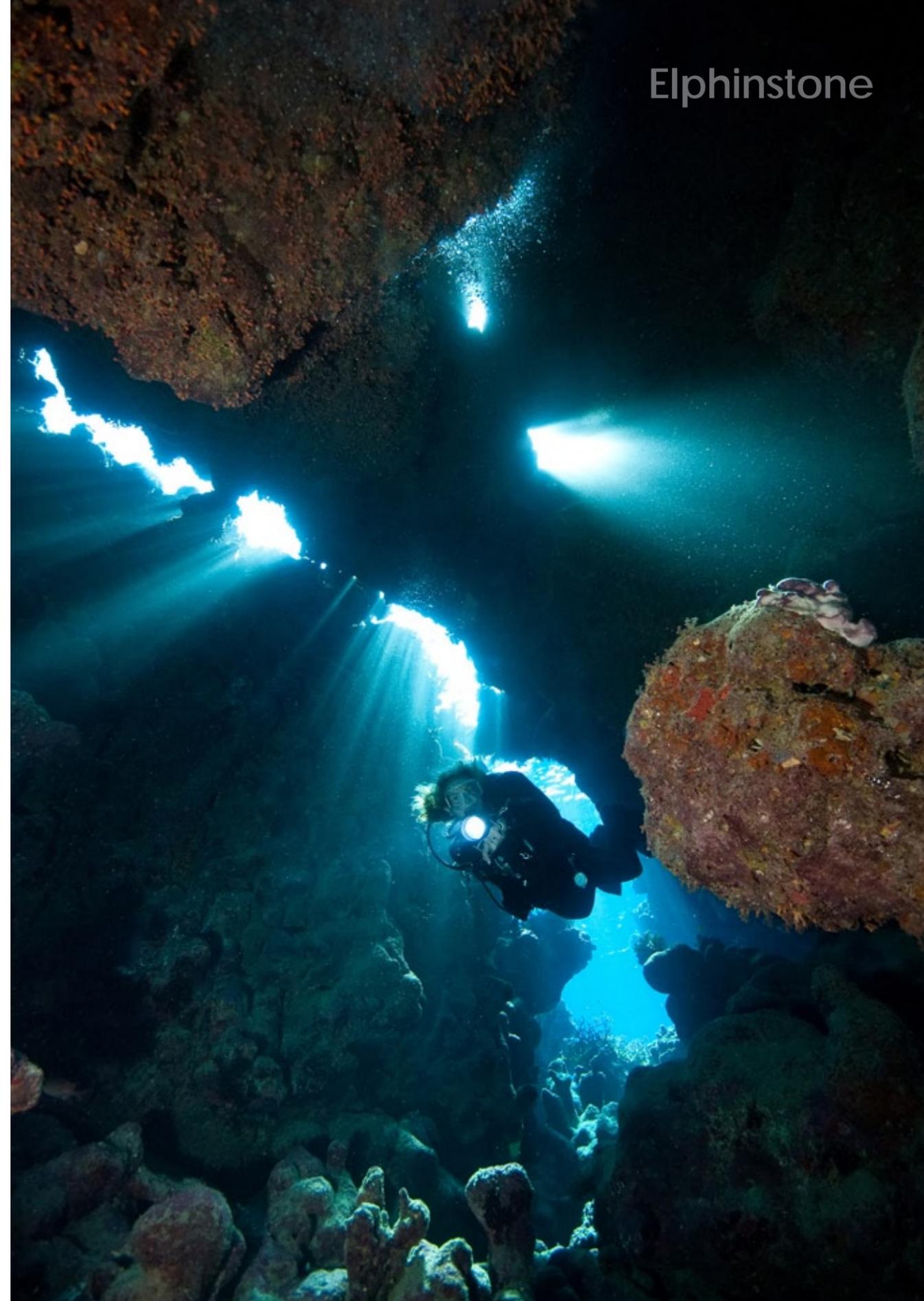
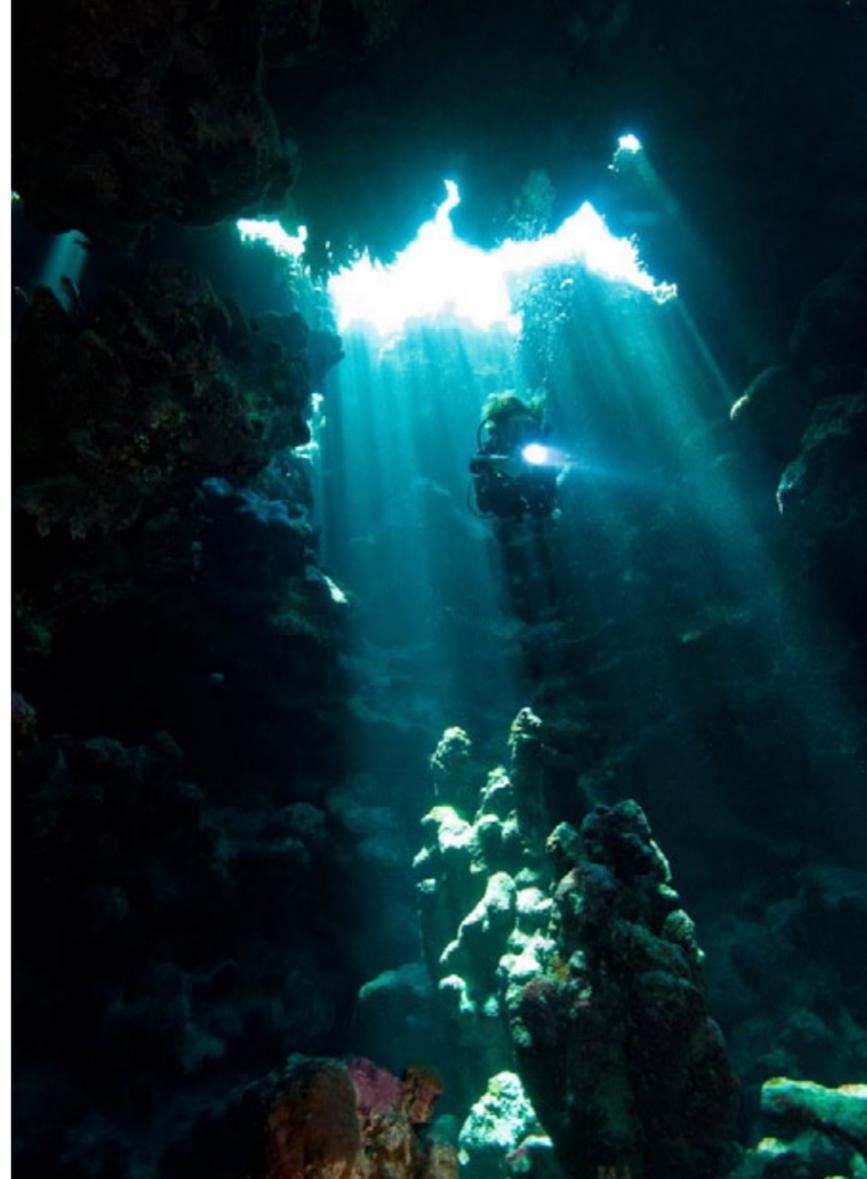
occasions, he said he took some very skilled divers out there to amaze and impress them with his secret location, and we were the lucky ones.

As we retired to our lodgings that night, my partner and I talked and fantasized about the dive to come. I already had images of big underwater canyons with radiating beams

regularly when he was working for another dive center. He told us that he had been keeping it kind of private because it was an easy place to damage and stir up. On rare

of light streaming through, but we decided that this secret site would probably be another silty and sandy cavern area somewhere in the middle of nowhere.

At 8:30 the next morning, we were at the jetty. We got our briefing. The reef was six miles away and two miles out from the coast. It consisted of several connected pool areas. The connections between those pools were sort of like canyons, which could differ in size from really small to ballroom dimensions. Ahmed told us that the tour through the canyons would last at least 45 minutes. My buddy and I looked at each other, imagining what swimming for almost an hour



through coral canyons would be like.

The very bumpy, high-speed zodiac ride lasted for about 30 minutes when we reached a shallow reef in the middle of the sea. The water was crystal clear, and the submerged reef sparkled with an array of colors. After our checks, we rolled backwards into the warm water of the Red Sea and followed Ahmed through a small entrance into the reef.

The beginning of our little journey was quite restricted, and we took our time working through the small tunnels trying not to touch any part of the environment. Occasionally, Ahmed stopped us and pointed to a corridor, or room, which was of exceptional beauty. I looked for a good position and directed my partner to where I wanted her to position herself as a

model in the next shot.

The light, entering from all sides, was spectacular and a real challenge for me to capture on the CCD (image sensor) of my digital SLR camera. A huge room led into another one, and the light effects were starting to have an almost hallucinating affect upon us. I had flashbacks from my cave dives in Mexico where some of the cenotes offered a similar sensation.

After about an hour of playing hide and seek in the hidden labyrinth, we exited the canyons and swam with our eyes half closed to protect them from the sudden sunlight. We were drifting over a very healthy and pristine coral reef covered with huge shoals of tropical fish. It was the icing on the cake of a magical dive.

Back on board the zodiac, we

thanked Ahmed from the bottom of our hearts for this amazing experience and promised him that we would keep this location a secret.

On one hand, it's a shame that I can't share this location with others. On the other hand, imagine the excitement you will feel if one day you are approached by a dive guide who starts whispering in your ear about a special secret dive. ■

Read the whole story of JP Bresser's trip to southern Egypt in an upcoming edition of X-RAY MAG. Bresser is a Dutch cave diver and member of EKPP—a European cave exploration team. He is also a Technical Course Director for NAUI Netherlands and active as an Instructor for GUE. Find more photographs at: www.jpbbresser.tv

THIS PAGE: Scenes from the secret cave chambers and canyons

Text by Robert Osborne
Photos by Debbie Stanley
and George Sharrard

Just knowing that Vikings started a settlement here a thousand years ago and that the first fishermen from Europe began arriving in the 1500's adds to a sense of history that cloaks the Canadian province of Newfoundland and Labrador. It's a sense that I'm acutely aware of on this sunny day in June on board the vessel, *Ocean Quest*, as the skipper, Bill Flaherty, navigates across Conception Bay towards Bell Island. I'm on my way to dive on what are known as the "Bell Island Wrecks". These are not artificial reefs. These are ships that were part of a catastrophic historic event, four World War II cargo ships that were sunk by German U-boats. It's a history that Bill is only too happy to talk about as we motor along.

The incident began on 4 September 1942. On a moonless night, *U-513* crept into the convoy anchorage in Conception Bay. How it got in is reminiscent of a plot from an old Hollywood war movie. *U-513* tucked itself under the stern of the *SS Evelyn B* and followed her into the anchorage.

Ships came to this harbor to load up on iron ore from the mines on Bell Island. The cargo was important for making steel crucial for the war effort. Naturally, German U-boats were interested in stopping that effort.

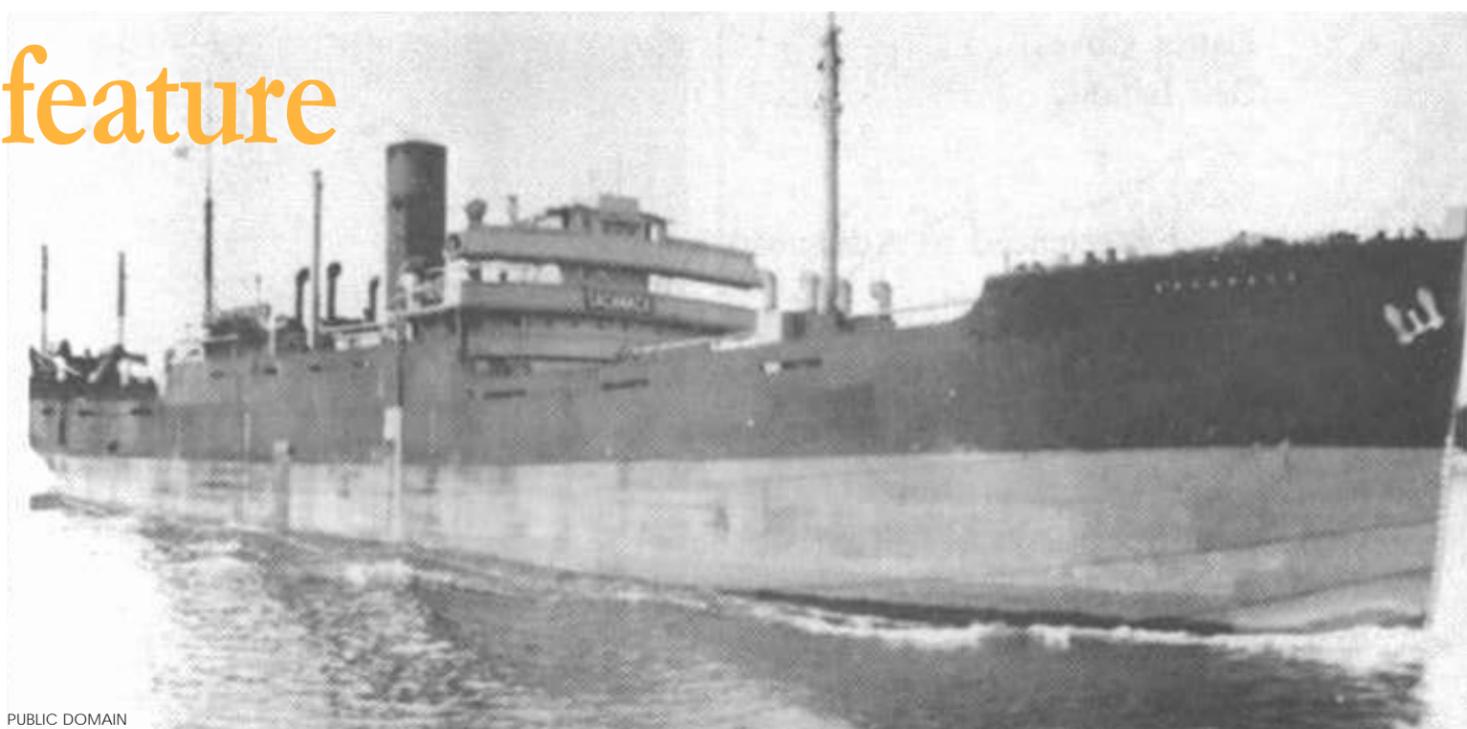
Bell Island in
Conception Bay

WWII Battles in Conception Bay

Bell Island Wrecks

DEBBIE STANLEY





PUBLIC DOMAIN

CLOCKWISE FROM LEFT:
The SS Saganaga; Diver in tor-
pedo hole in the side of the
wreck of PLM-27; U-513; U-518;
Captain Rolf Rueggeberg

went down in minutes.

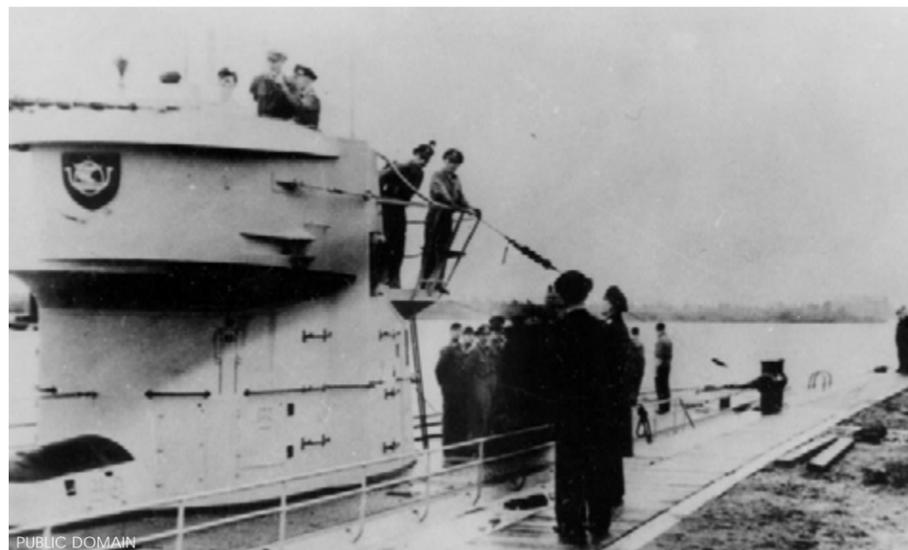
The water was now teeming with injured sailors—the anchorage filled with their cries. Shore guns, ineffectively positioned, attempted to come to bear on the action. Ships were still trying to get out of the bay even as small boats were setting out from Bell Island to rescue survivors. In the confusion, *U-513* slipped out into the Atlantic and disappeared.



PUBLIC DOMAIN

Evelyn B, the same ship *U-513* had followed into the harbour. The *Evelyn B* opened fire with its deck gun, forcing *U-513* to dive. From its submerged position, *U-513* selected another target—the *SS Saganaga*. She fired quickly. This time, there were no mistakes. Both torpedoes hit the ship. Filled with iron ore, the *Saganaga* went down in minutes.

The entire anchorage erupted in chaos. Ships were frantically trying to get underway to escape the U-boat. Rueggeberg selected another target. But in the confusion of the battle, as *U-513* maneuvered to get into position, the ship it had targeted—*SS Lord Strathcona*—swung around and hit the U-boat's conning tower. Though slightly damaged and



PUBLIC DOMAIN

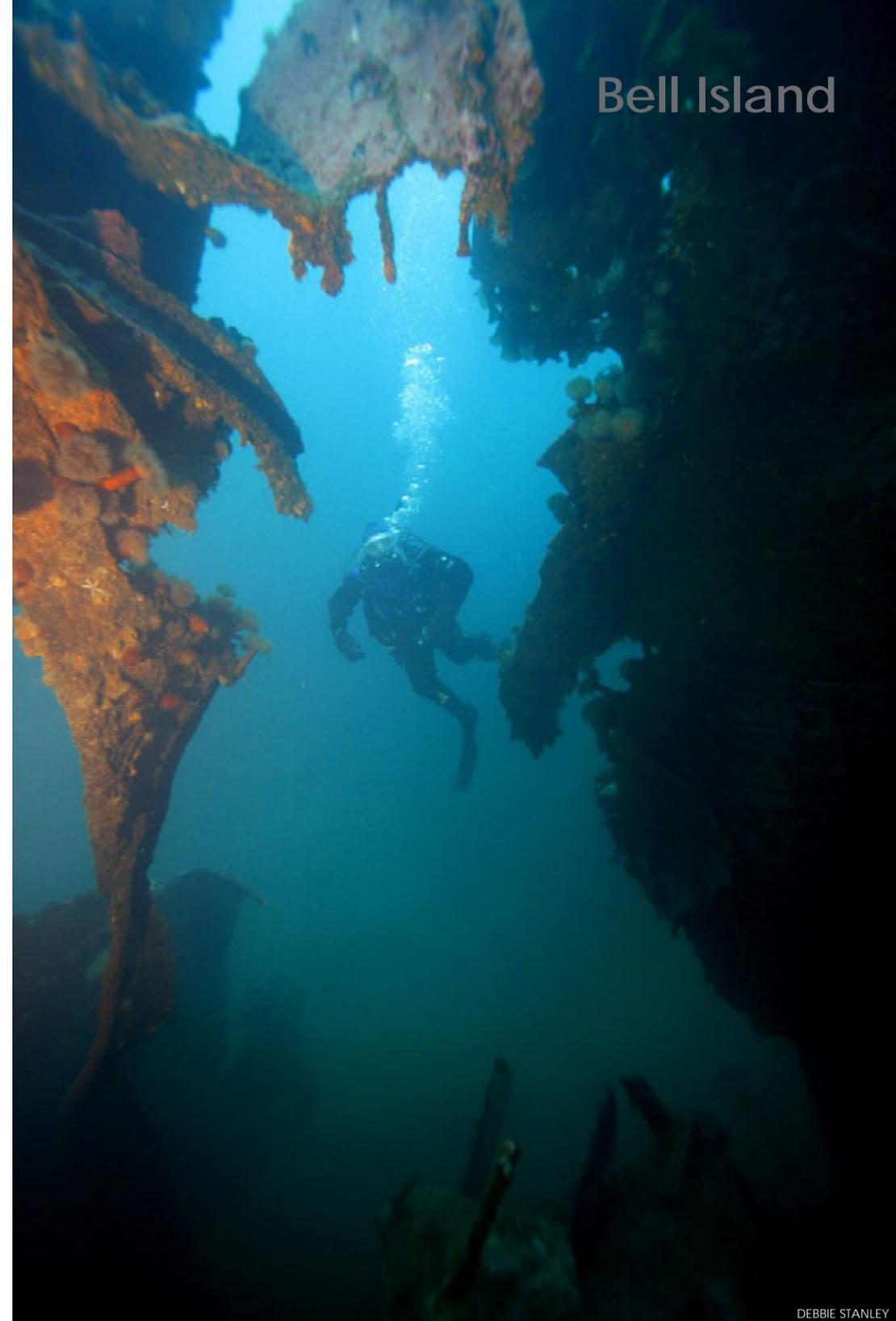
forced to the bottom, *U-513* recovered quickly. Without hesitation, she fired two torpedoes from her stern tubes. The *SS Lord Strathcona* was hit twice and also

Twenty-nine men died as a result of the attack—all from the *Saganaga*.

Diving

Today, the consequences of those attacks lie underwater like broken and discarded toys waiting to be reclaimed. And I was about to dive down and explore them.

My guide was Debbie Stanley, one of the co-owners of Ocean Quest—a dive lodge on Conception Bay that specializes in diving the wrecks. She and her husband, Rick, have taken on



DEBBIE STANLEY

the role of unofficial custodians of the site. Though the wrecks are not designated as protected by Canada's federal government, every diver on board has been warned politely, but firmly to "take nothing but pictures and

leave nothing but bubbles". These wrecks are, after all, graves for dozens of sailors killed in action.

Rick and Debbie are fighting to have the wrecks declared National Historic Monuments in order to stop the occasional



PUBLIC DOMAIN

After arriving in the bay, Captain Rolf Rueggeberg of *U-513* decided to wait until the following day to attack. In the morning, Rueggeberg surfaced, selected a target—the *SS Lord Strathcona*—and fired. But the two torpedoes misfired. *U-513's* crew hadn't armed their detonation switches. The torpedoes merely ran out of fuel and sank to the bottom. The sub was spotted ironically by the





DEBBIE STANLEY

The *SS Lord Strathcona* (left); Sunset at Conception Bay (far left)

Bell Island

way, I was shown a machine gun that sat on the deck, but I was not too keen to linger, my body was starting to get really cold. Nevertheless, after an hour surface interval, I was chomping at the bit to go down again.

The next dive was on the *Lord Strathcona* but not as deep and not as cold. This time, we headed straight for the bow. I got my picture taken doing my best “I’m the king of the world” imitation, poked my head into the room where an old Marconi radio was still attached to the wall and spent a few minutes playing with a flat fish.

As we neared the ascent line, we encountered a large jellyfish called a Lion’s Mane. With their venomous sting, they’re usually given a wide berth. But this one has drifted into the wreck and



transformed into a beauty—vibrant colors, pinks and greens lit up on the lumpfish. Something about ugly ducklings and fairy tales coming true sprang to mind. Debbie signaled me again, and we headed towards the stern.

By the way, did I mention that the water was brisk? Perhaps brisk isn’t the right adjective, possibly bone numbing is more accurate. The average temperature on this day was around 39°F.

Later, I would find out that it could get even colder. For example, when I was

suits are a must, serious undergarments recommended. The bottom line is that the temperature is the price you have to pay for these sensational dives.

Fifteen minutes into the dive and Debbie had taken me to the stern. An old 4.7-inch deck gun sat covered with multi-colored sea life. I could still make out the unmistakable shape of a weapon, but the shawl of plumose anemones removed any threatening qualities. We circled the gun a couple of times and headed back to the ascent line. On the

pillaging. “Every time I swim past a box of bullets on the deck, there’s a few more bullets missing,” Rick explained. “And the brass plaque on the lifeboat was pried off last year.”

SS Lord Strathcona

Deb and I geared up and dropped over the side and down the mooring line towards the *SS Lord Strathcona*—a Canadian ship of 7,335 tons some 406 feet long. She sat between 90 and 125 feet, and as we approached, my first thought was that it looked as though I was swimming towards a coral reef. Of course, I knew that was absurd. But on this sunny day the light penetrated down, dappling the ship with bands of light and creating an explosion of gold, pinks, oranges and purples—all different-colored sea anemones. They encased large parts of the super structure creating the appearance of a wreck covered with coral.

The visibility was surreal. As I hovered just above what would have been the super structure, I was able to see half way to the stern of the ship. Remember, this was a 400-foot-long cargo ship. I’m

guessing the visibility was at least 100 plus feet.

Deb signaled to me, and we descended a few more feet where she introduced me to one of the resident lumpfish.

Now, there may be uglier fish in the ocean, but if there are, I’ve yet to see them. Think the Hunchback of Notre Dame—this fish looks as if it’s survived a seriously disfiguring accident some time in its life. Then Debbie panned her light across the creature, and the beast

deep in the *SS Rose Castle*, I experienced temperatures as low as 36°F. Some of the tech divers report 28°F deep in the holds where the water doesn’t move. Dry



Ammunition on deck area (right); Diver and lumpfish (far right)



DEBBIE STANLEY





GEORGE SHARRARD

become entangled. We swam in for a closer look. Moments later, I was also introduced to another local denizen—the Ocean Pout. I was immediately struck by its uncanny resemblance to the rock star, Mick Jagger, or perhaps Steve Tyler?

As we headed back into port (stuffing our faces with homemade moose meat stew to warm up), past the sheer cliffs of Bell Island, weaving among a couple of tankers anchored in the bay, the sun beating down, I was beginning to sense that this was going to be a very special week of diving.

SS Saganaga & PLM-27

The following morning, the skies were blue once again, and the seas were calm. We headed out to explore a couple of different wrecks. In the morning, we would dive the shallowest of the wrecks, *PLM-27* (Paris, Lyon, Marseilles)—a Free French ship I was told was caught in the second round of U-boat attacks; and in the afternoon, we would dive the *SS Saganaga*. Once again, on the way out Bill gave me the history.

It was 2 November 1942, only two months after the first attack. If people thought the first attack had been an anomaly, they were sadly

CLOCKWISE FROM LEFT: Ocean pout; Radio room on the *Rose Castle*; Divers check out a lion's mane jellyfish tangled in the wreckage

mistaken. This time, *U-518* slipped quietly into the bay. To avoid detection, she hugged the cliffs of the mainland so closely that her bridge crew reported seeing cars driving along the roads of the mainland. This time, the captain—Captain Friedrich Wissmann—decided on a night attack. But his first shot was no truer than that of his earlier counterpart. *U-518* fired at a coal boat moored near the Scotia Pier. The torpedo missed and instead hit the pier causing substantial damage. Wissmann's second two shots would not go astray. *U-518* swung around and lined up a shot on the *SS Rose Castle*. Two torpedoes were fired in quick succession. Both found their marks—one in the stern and one in the bow. The *Rose Castle* went down in minutes. The attack was unexpected and, of the 43 crew,

28 men lost their lives.

U-518 continued its attack. The Free French ship, *PLM-27*, was moored near the *Rose Castle*. She had fired flares to help survivors from the torpedoed ship. *U-518* used the light to line up a perfect shot. *PLM-27* took a torpedo dead amid ship. She was split almost perfectly in two and sank in seconds. Twelve men



GEORGE SHARRARD



DEBBIE STANLEY

died.

This time, it was snowing and cold when the attacks took place. There were no rescue boats in the area. Eighty-six-year-old, Gordon Hardy, survived the attack on the *Rose Castle*. He painted a picture of a Dantesque Hell. He remembers being in his bunk amidships

when the first torpedo struck. He jumped into the frigid water in his underwear just as the second torpedo hit. He spent hours clinging to a raft listening to the screams of other men around him in the dark. The cold was almost unbearable. He told of seeing some men die even as they were being pulled from the water. Once again, in the confusion, *U-518*, slipped out of the bay and back into the Atlantic.

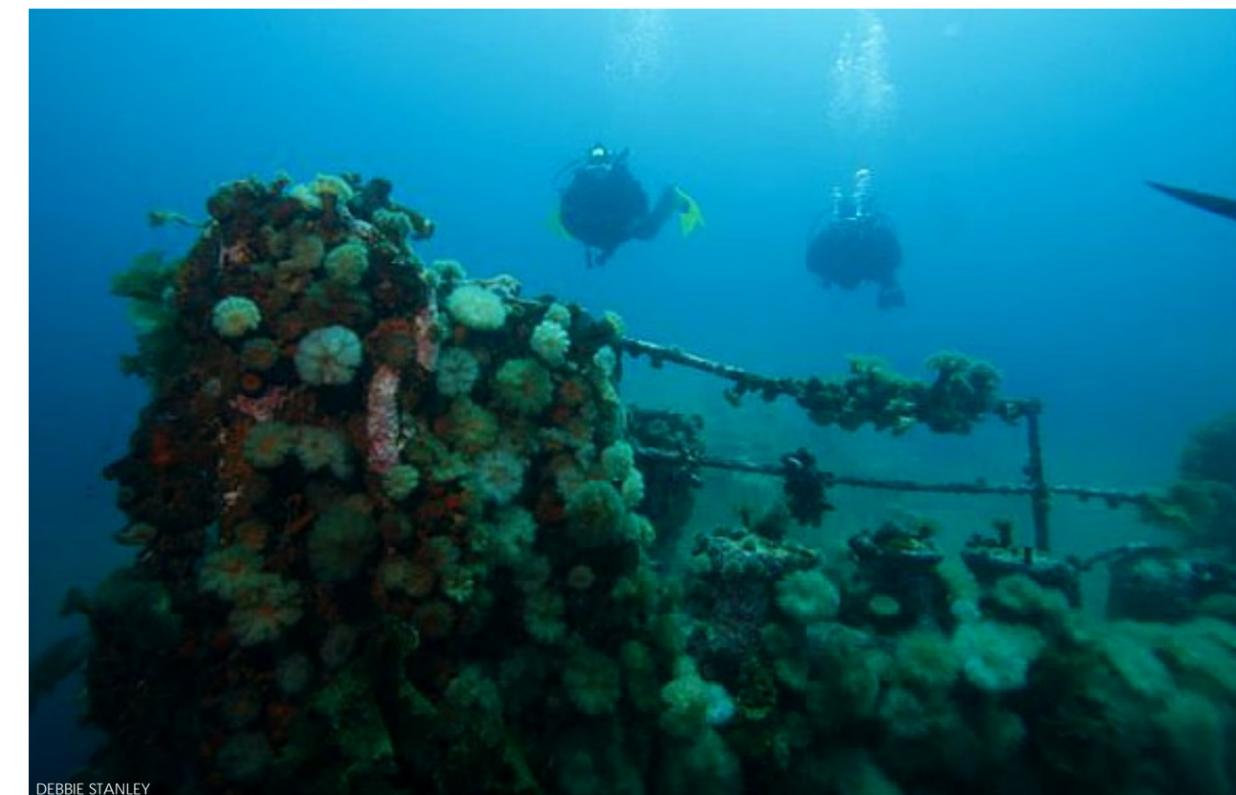
It's a horrifying story, but hard to imagine on a warm sunny spring morning. However, that was about to change. Deb and I suited up and quickly descended to the wreck of the *PLM-27*. As with the other wrecks, *PLM-27* sat upright on the bottom. She was relatively shallow, sitting in only 60 to 80 feet of water. After a quick look at the propeller, we worked our way forward from the stern towards amidships. Debbie swam through a



DEBBIE STANLEY



DEBBIE STANLEY



DEBBIE STANLEY

gap in the side of the ship, stopped and gestured for me to look around. At first I was puzzled. Look at what? I was floating in the middle of a large hole in the side of the ship.

Then, it dawns on me. This was a wound from a torpedo. The two-inch steel hull was jagged and peeled back like so much aluminum foil. I was awestruck by the scale of the destruction. To be in the vicinity of an explosion capable of ripping a ship open like a cardboard box must have been a terrifying experience. How anyone lived through this explosion is beyond my comprehension. I felt a deep sadness for the sailors who were caught

in this attack. Particularly when I remembered that many floated and died in the freezing water after surviving the explosion. It's little wonder Deb and Rick are fighting so hard to get this area declared protected. I understood it as a debt owed the men who died on these ships.

A sober feeling followed me for the rest of the day. I enjoyed exploring the wreck of the *SS Saganaga*, but I couldn't get the image of that torpedo hole out of my mind. In fact, that haunted sensation was only reinforced when I was shown the anchor of the *Saganaga*. A massive piece of iron, it must have weighed a couple of tons.



DEBBIE STANLEY

CLOCKWISE FROM ABOVE: Divers at the bow, interior, deck gun and anchor of the *SS Saganaga*





DEBBIE STANLEY

Bell Island

COUNTER-CLOCKWISE FROM TOP LEFT: A diver explores the *PLM-27*; The *Rose Castle*; Diver inside the *PLM-27*; Writer Robert Osborne

Robert Osborne is a Canadian writer and based in Toronto, with 25 years as a journalist in television news and seven years as a dive writer. Visit: www.canadiandiver.ca



DEBBIE STANLEY



EXPERIENCE
your adventure
Newfoundland and Labrador

- Close Encounter Tours: Whales, Icebergs, Sea Birds, Caves and Shipwrecks....Yes Shipwrecks!
- Want to be filled with culture, history and fun?
- Looking for a home away from home or group getaway? Book your accommodations with us. Year of the shipwreck discounts.
- How about those historical places, wide open spaces, and people with smiles on their faces?





Tel: 1 (709) 834-7234
 Cell: 1 (709) 685-4565
 Toll Free: 1 (866) 623-2664
info@oceanquestadventures.com
www.oceanquestadventures.com






PUBLIC DOMAIN

And yet it lay discarded half way along the ship, blown from the bow some 275 feet away as casually as a letter tossed across a table.

SS Rose Castle

Day three and we were exploring the deepest of the wrecks—the *SS Rose Castle*. She was also the most intact. In fact, it was a little eerie to swim among

the upright masts and cranes that looked almost ready to use. She was also the coldest dive and bottom time (at well over 110 feet to the deck) was fairly limited for recreational divers. But we did have just enough time to reach the massive stern gun.

By the end of the week, I had managed to put in four days of diving on the wrecks. I was struck by three

thoughts. First of all, that anything I thought I knew about diving in Newfoundland and Labrador was wrong. I had imagined Newfoundland and Labrador's waters to be dark and cold, with low visibility and not much to see anyway. I was right about the cold, but dead wrong about what was there to explore and how clearly it could be seen. I've dived tropical waters that would be put to shame by the stunning viz and rich life of Conception Bay.

My second thought was that not only had I dived some of the best wrecks of my life, but I had been touched by a sense of profound history that had given added meaning to the experience. My final thought was for the men who endured those two nights back in 1942. I was left with a deep respect for anyone who lived and died in the battles around Bell Island. ■



DEBBIE STANLEY



Hooded Nudibranchs

Weird creatures from inner space

Text by Peter Symes
Photos by David Hall

This strange-looking creature, *Melibe leonine*, is one of the most characteristic members of the Opisthobranchia. Its most notable feature is the large expandable muscular oral hood, fringed with sensory tentacles, which it opens and throws forward in order to catch food in a manner similar to a fisherman with a catch net. It is also known as the Lion Nudibranch because of the hoods' likeness to that of a lion's mane.

This species feeds on just about anything that is unfortunate enough to swim in front of its gaping head, and its diet includes copepods, amphipods and ostracods, as well as small post-larval molluscs. This species hunts mainly attached but is a good swimmer when harassed or dislodged. The animal stands attached to the substrate (often a blade of eelgrass or kelp) and expands the oral hood ahead of itself to trap prey. It then sweeps the hood left and right or downward. When the ventral surface

of the hood contacts a small animal, the hood rapidly closes, and the fringing tentacles overlap, holding the prey in. The whole animal is then forced into the nudibranch's mouth.

This spectacular nudibranch can seasonally be found in large numbers on kelp—particularly in kelp beds south of the Puget Sound—and sometimes 'swimming' in coastal waters. When swimming, it is usually upside-down, and thrashes or undulates back and forth. It is often seen swimming near the water's surface in the summer, or after fall and winter storms disturb the eelgrass.

The wide flattened cerata (fringes) of this species are easily detached when disturbed by fish or predators, as a defensive mechanism, inviting the predator to follow the detached body part drifting in the current, rather than stay around and hassle the animal itself. Animals are often found with some or all the cerata missing or in a state of regrowth. Predators may include fish, kelp dwelling crabs and sea stars.



This species occurs on the west coast of North America, from Alaska to Baja California. Eggs can be found in the Washington state area at any season. The eggs are attached to kelp and eelgrass in long, wide yellow or cream-colored ribbons, which form tight coils or wavy folds.

Melibe leonina has a sweet fruity aroma, which you can smell throughout the room when a number of them are in a tank. It tends to 'get to you' like a bad perfume. They are gregarious animals and probably use it to keep together. ■



Timor Leste

Land of the Sleeping Crocodile

Text and photos
by Don Silcock

The juvenile salt-water crocodile was near to death when the small boy found it stranded in a swamp far from the sea. Although greatly afraid, the boy decided to try and save the crocodile and eventually managed to get it back to the sea where it quickly recovered. The two became best friends and went on to travel the world together, with the boy riding on the back of the crocodile as it swam across the seas. But as the crocodile grew older, and the time came for it to die, it told the young man it would transform itself into a beautiful island where he and his children could live until the sun sank into the sea...

A family of
anemone fish
at Bob's Rock
east of Dili





CLOCKWISE FROM FAR LEFT:
The view from the top of
Cape Fatucama towards
Dili; Arte Moris art commune
in Dili; Painted crocodile
model at Arte Moris

Timor Leste

Declaring itself independent on the 28 November 1975 as the Democratic Republic of East Timor, the country was invaded and annexed just nine days later by its large western neighbor

Indonesia, and another 24 years of often brutal colonial rule was to follow. The end of the Suharto era in Indonesia ultimately lead to self-determination and the newly independent Republic of Timor Leste finally joined the global community on the 20 May 2002. Lead by the charismatic former guerilla leader Xanana Gusmao, and the urbane and articulate Nobel Peace Prize winner, Dr Ramos Horta, the country more commonly known by its anglicised name of East Timor remains one of the world's poorest nations, but its large reserves of natural gas and oil promise a much brighter future.



The tale of the boy and his cold-blooded friend is told often in Timor to explain the island's crocodile-like shape and why the Timorese have a special affinity with the large reptile that is said to inhabit the creeks and pools along much of the south coast of the country.



Food vendors at Avenue de Portugal prepare for the evening

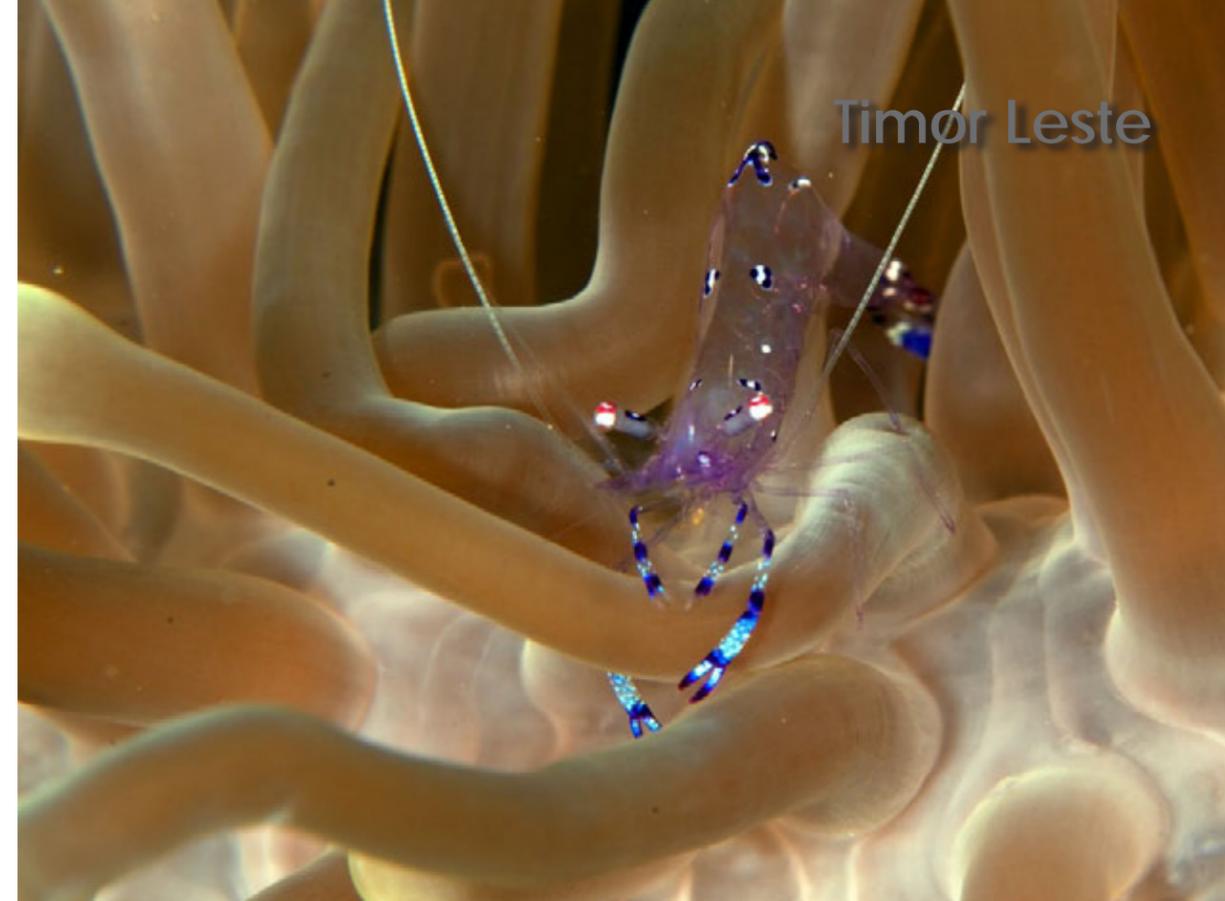
A new country—twice
The island of Timor has a long history of colonial rule dating back to the early 16th century when the Portuguese and Dutch sailing ships first arrived in search of the source of the incredibly lucrative Spice Trade.

Divided into eastern and western halves by the Europeans, Dutch West Timor eventually became part of the new Republic of

Indonesia in 1949 when the Dutch formerly withdrew from their East Indies colonies. However, East Timor remained under Portuguese rule until 1975 when political turmoil and a military mounted coup d'état in Lisbon resulted in the Portuguese abruptly leaving and effectively abandoning the territory after 455 years of colonial rule.



Cape Fatucama



Timor Leste



TOP LEFT TO RIGHT: Scorpionfish, hawkfish and mantis shrimp at the Pertamina Jetty and anemone shrimp at Dili Rock; Commensal Shrimp at the Pertamina Jetty (above); Hairy Crab at Dili Rock (left)

the north-east coast of Bali flourish from their exposure to those nutrient rich waters, so does the north coast of Timor hold considerable promise.

To the north of Timor Leste are the remote islands of Alor and Wetar—the most easterly of the chain of islands called the

Lesser Sundas, which form the southern boundary of the huge Indonesian archipelago.

Further north above Alor and Wetar are the deep basins of the Banda Sea,

and as the rich waters of the Throughflow surge their way south and approach the Lesser Sunda shelf, upwellings are created that suck up the phosphorus and nitrogen-laden detritus of the sea so rich in nutrients.

The Ombai Strait between Alor, Wetar and Timor Leste is one of the three main passages for the Indonesian Throughflow through the Lesser Sunda islands, which means two things: big currents and the chance of some great diving!

Add to this mix the fact that recreational scuba diving simply did not exist in Timor Leste ten years ago, and the known dives sites are simply a fraction of what are still to be discovered.

Main diving locations

Currently the main diving locations in Timor Leste can be broken down into four areas: those in and around the capital of Dili; the coastal locations up to two hours' drive to the east and west of Dili; the large island of Atauro to the north of Dili; and

Diving Timor Leste

A quick look at the map and a basic understanding of the Indonesian Throughflow is enough to tell you that just as North Sulawesi, Raja Ampat and



Timor Leste



CLOCKWISE FROM TOP LEFT: Paddleflap rhinopias, thorny seahorse, tozeuma shrimp, tiger shrimp and porcelain crab at Tasi Tolu



the smaller uninhabited island of Jaco at the far eastern tip of the country.

a somewhat legendary status both as Timor Leste's version of the Lembeh Strait, which is rather overstating the situation

Dili

There are three main sites that are dived regularly in Dili—the Pertamina Jetty near the center of the city, Tasi Tolu on the western outskirts and nearby Dili Rock. All are shore dives. Pertamina Jetty and Tasi Tolu are muck diving and critter sites, while Dili Rock is a mixture of critters and coral gardens.

Tasi Tolu enjoys

as it is just one site—albeit a very good one—compared to the multiple sites in Lembeh. It owes its actual existence as a dive site to the direct intervention of the country's president.

Tasi Tolu takes its name from the three fresh water lakes just below the nearby foothills, which fill to capacity during the rainy season and then overflow, flooding the roads and villages in the general area. To prevent this, the government commissioned a project to install a drainage channel so that the overflow could run off into the sea—the subsequent design for which took the most logical path and would have dumped the outflow right on to the Tasi Tolu site.

The local diving community waged a campaign to get the drainage channel relocated and ultimately got the issue on the radar screen of Dr Ramos Horta, the President of Timor Leste. Horta sees tourism as part of the potential solution to one of Timor Leste's most pressing problems—





LEFT TO RIGHT: Beautiful bommie at Marble Rock east of Dili; Stunning soft corals and sponges at Maubara west of Dili; Yet another beautiful Bommie, this time at One Tree east of Dili



lack of employment opportunities—and accepted that destroying one of the best critter dive sites in Dili was not a great idea and was eventually able to stop the project.

I did several dives at Tasi Tol and eventually got to know it like the back of my hand, but I have to say that I would have missed the site completely if I had not been shown it by the dive guides from Dive Timor Lorosae, the dive center with which I dived in Timor Leste.

Not that the site is particularly hard to find. Rather, it looks nothing like a photogenic one, as it's just a flat patch of marine growth. But in amongst it, you will find a

wide variety of photogenic critters.

East of Dili

There are numerous dives sites heading east from Dili, all of which are shore dives reached by short paths from the main road and involve getting kitted up under whatever shade is available and walking down the beach. All the sites have sheltered entries, so actually getting in to the water is easy and exposure to the strong currents of the Ombai Strait is gradual and manageable. My personal favorites to the east of Dili were Secret Garden, Marble Rock and One Tree—with Secret Garden standing out because its

small, but superb, sponge garden filled with resident colonies of photogenic purple anthias and silvery glass fish.

West of Dili

There are two main dive site areas to the west of Dili—Bubble Beach and the picturesque town of Maubara.

Bubble Beach is reputed to be one of the best dives in Timor Leste. Unfortunately, access from the shore is not possible anymore, as the area had been fenced off as the “bubbles” are believed to be natural gas leaking up from the deep water gas reserves that hold the key to Timor Leste’s future





CLOCKWISE FROM TOP LEFT: Stunning bommie at Dirt Track east of Dili; Is this the best bommie in Timor Leste? Maubara west of Dili; Another incredible bommie at Maubara; Shy Goby on a sea whip at Bob's Rock east of Dili

ing, but as you go deeper at around 15m, they come to life and positively abound with marine life that is nourished by the strong currents that sweep the site.

My favorite bommie was about 200m to the north-west of the main entry point straight down from the car parking area near the church. It is at around 19m in depth and was simply teeming with life.

Ata'uro

The large and visibly stunning island of Ata'uro is located 30km due north of Dili. For me, it was a case of, "so near, but oh so far". The island is right in the path of the Indonesian Throughflow, as it rushes south into the Ombai Strait. Tales of schools of pelagics and pods of whales and dolphins abound. Alas, not for me, as that basic logistic detail—a boat—required for such diving was not available. So, all I could do was note the many stories from people I met who have dived there and resolve to get back in the future.

Ata'uro suffers from a lack of rainfall, which

means that life is hard for the permanent residents of the island, and development is significantly slower than on the mainland. But the lack of run-off from the island means that the visibility around At'auro is exceptional.

Jaco Island

At the very eastern tip of Timor is the area of Los Palo and the National Park of Jaco Island. Boasting brilliant white sand beaches, turquoise seas and apparently pristine reefs, the diving around the island is reputed to be exceptional, as the area is effectively completely unspoiled because the island is uninhabited and rarely visited by commercial fishing boats. But the only real option to dive Jaco Island is from a liveaboard, which simply was not available when I was there. But all that will change in 2012 when the highly regarded Worldwide Dive and Sail will conduct several back-to-back trips in Timor Leste with its liveaboard the *SY Oriental Siren*.

prosperity. A fenced-off area is the site of a proposed gas processing facility.

There are two sites at Maubara—the Church and the Fort, with the former offering some superb diving around the numerous bommies on the sloping coral slope. First impressions should be ignored, because the shallower parts of the slope are not particularly appeal-



Schooling Anthias at Dirt Track east of Dili



Commensal Shrimp at the Pertamina Jetty

Timor Leste

second. The best way to visualize a sverdrup is to think of a river 100m wide, 10m deep and flowing at four knots. Then imagine 500 of those rivers all combined together, and that is one sverdrup.

with an estimated 200,000 losing their lives during the 24 years the country was the 27th province of Indonesia. Comprised of 16 ethnic groups, each with its own language, but dominated by the Tetuns from the western part of the country, Timor Leste is one of only two staunchly Roman Catholic countries in Asia—the Philippines being the other.

While the country's oil and gas reserves holds the promise of a brighter future, Timor Leste remains amongst the poorest countries in Asia. After ten years of independence, the grinding poverty is clearly making patience wear rather thin.

A very interesting facet of Timor Leste culture is *tara bandu*, a form of *adat*, or traditional customary practice, found among specific ethnic groups in Malaysia, Indonesia and the southern Philippines. In the absence of a formal law and order system, *adats* are used by these ethnic groups to regulate and control overall village life and its social order. During the occupation,

It is estimated that the total amount of seawater that passes through the ITF is 20-22 sverdrups, or 10,000 of those rivers.

The people

Timor Leste's people are fiercely independent. They have paid a very heavy price to achieve independence,

The Indonesian Throughflow

A basic understanding of the Indonesian Throughflow (ITF) and *sverdrups* is essential if you want to know why the scuba diving can be so good in certain parts of the vast Indonesian Archipelago and less-so in other areas.

The *Readers Digest* explanation of what causes the ITF is a disparity in sea levels. The Pacific Ocean to the northwest of the Indonesian archipelago has a sea level of 150mm (6 inches) above average, whilst the Indian Ocean to the south has a sea level 150mm below average. This disparity is caused by the trade winds and associated oceanic currents that act in opposite directions in the northern and southern hemispheres. The overall consequence of this disparity is the largest movement of water on the planet, which flows through the Indonesian archipelago from the Pacific Ocean to the northeast to the Indian Ocean in the southwest.

So huge is the volume of water associated with the ITF that traditional measurements such as cubic meters and gallons are inadequate to describe it in an easily understandable way. So, the Norwegian scientist, Harald Sverdrup, invented the sverdrup—one million cubic meters of water per



Sea Star at Dirt Track east of Dili

LEFT TO RIGHT: Statue of Christ at Cape Fatucama; Catholic monument in Dili; Fast food shop, Timor Leste style



the Indonesian legal system was applied and all Adat customs were prohibited. However, since the new country emerged in 2002, tara bandu has enjoyed a revival under the sponsorship of several non-governmental organizations (NGO's) active in Timor Leste.

Tara bandu means "hanging

prohibition". Contrary to the literal interpretation a westerner might take, the hanging part refers to the fact that whatever is prohibited is hung (displayed) in a prominent position as a warning to potential thieves and poachers.

A fairly elaborate ceremony is conducted to initiate the specific

prohibition, which can cover anything from protecting an area of the local environment—such as cutting trees or fouling a water source—to stealing vegetables from other people's gardens. Valuable animals are sacrificed during the ceremony. People

caught breaking the prohibitions are required to provide the same number of animals to restore the balance of the tara bandu. But perhaps the most effective, and certainly the most controversial, element of the prohibition are the magic spells

that are cast that call upon the souls of the village ancestors to assist with the protection. NGO's saw the tara bandu as an excellent way to help restore some of the environmental damage caused by excessive deforestation during the occupation and a way to introduce localized law and order, given the scant availability of police and legal resources in the new country.

Fast food

There are two really nice side



Local kids watch the divers gear up at Bob's Rock east of Dili



creating a beautiful backdrop to the crystal waters of the Ombai Strait.

The other side benefit is the Timor Leste version of fast food, which is readily available at the side of the road. Villagers of Timor Leste supplement their income by selling freshly caught grilled fish and packages

benefits to diving the coastal sites to the east and west of Dili. The first is the drive itself, which is quite spectacular and vaguely reminiscent of the Big Sur area in California, as the coast road hugs the shoreline and winds around the many bays and headlands along the way. The mountainous hinterland of Timor Leste starts at the coast and rise dramatically,

of very tasty yellow rice wrapped in leaves.

Dive operators

There are currently three options available if you are looking to sample what Timor Leste has to offer—two land-based and one liveaboard.

The two land-based operators are Dive Timor Lorosae and



Timor Leste



Timor Leste

their new one had not arrived from Australia, so all my dives were all shore dives either in the Dili area or to the east and west, and I was unable to dive

Excursions

I used to do it on every trip—dive up to the very last possible minute and then spend the remaining time packing my gear and

reviewing my underwater images, completely ignoring the above water scenery. Writing for *X-RAY MAG* has changed all that, and now I dare not return from an assignment without spending at least one full day exploring as much of the locale as possible.

Dili and the immediate countryside have much to offer, and you can either be adventurous

by hiring a motorbike and drive yourself or mitigate the traffic accident risks by going for a car and a driver. I went for the low-cost adventurous option and really enjoyed the freedom of finding my own way around. Here is my list of must-see places in the order that I did them in.

Avenue de Portugal. An early morning walk down the main thoroughfare of Dili is a pleasant way to start the day and you will

see the local fishermen bringing in their catch on the beach and laying it out for sale on the roadside wall. The avenue follows the coast most of the way through Dili, and you will find much to see, ranging from the new high-tech and closely guarded Chinese Embassy to hotels and cafés serving breakfast.

Cape Fatucama. Mid-morning is a good time to check out the huge statue of Christ on the headland at the eastern end of Dili and the fantastic view its location offers. Reminiscent of the one in Rio de Janeiro, the statue was built by the Indonesians during their occupation of the country in an attempt to get the strongly Roman Catholic Timorese on side. It's quite a hike up the hill to the base of the statue, but the view once there is well worth it, and there are a couple of cafés near the beach on the way back into Dili where you can get a local coffee and restore your metabolism.

The mountains. If you've dived the coastal sites, you've driven the coast road. So, why not

Free Flow Diving, both of which are located right across from the beach on Avenida de Portugal, the main street of Dili.

My trip was organized with Dive Timor Lorosae, or DTL as it is usually referred to, which is started back in 2002 by Darwin based Australian Mark Mialzygrosz, who first went to Timor Leste in 2000 to assist with the rebuilding of the country's infrastructure after the bloody transition to independence.

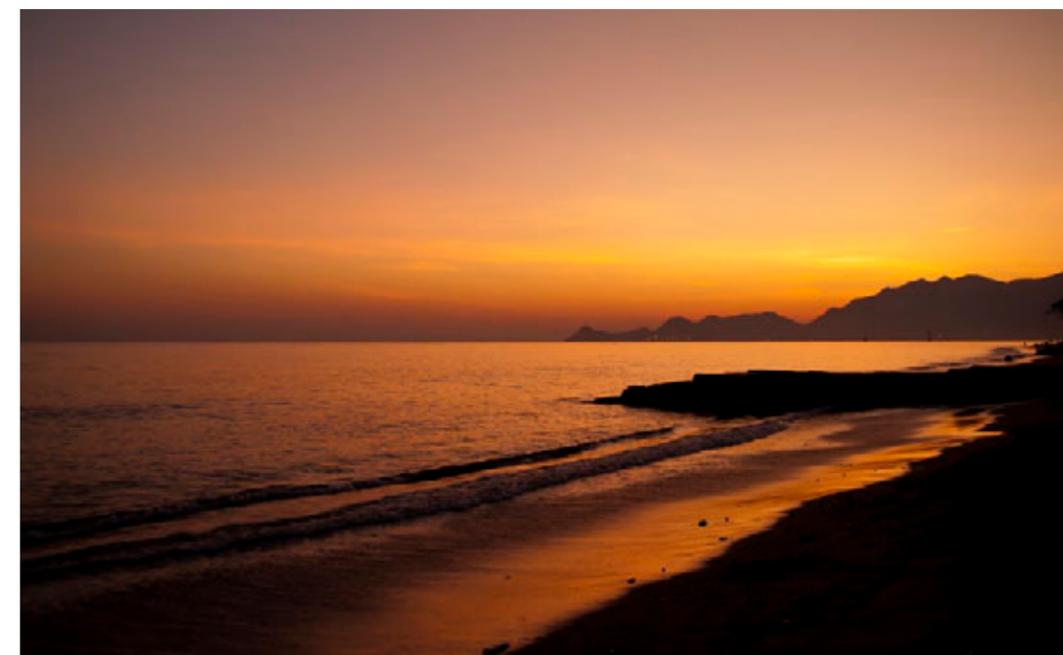
Mark is an interesting guy to talk to and is very passionate about Timor Leste and its people, plus he has some great tales about the exploratory dives in the early days after independence diving places that simply had never been seen before.

When I dived Timor Leste DTL were in between boats and



Atauro. But all that has changed now that the boat has arrived and DTL dives Atauro regularly, so I am planning my next trip as I write this article.

The third option is Worldwide Dive and Sail liveaboard the *SY Oriental Siren*, which will conduct several back-to-back trips in Timor Leste from August 2012 and will dive the best of the Dili and coastal sites (including Bubble Beach) and both Ata'uro and Jaco Islands.



CLOCKWISE FROM TOP LEFT: Dive Timor Lorosae; Ata'uro Island; Mountains south of Dili; Dili sunrise; Secret Garden dive site; Coral Grouper



CLOCKWISE FROM FAR LEFT: Schooling anthias at Secret Garden, east of Dili; Duban hinge-beak shrimp at Pertamina Jetty; Superb shallow water bommie at Secret Garden, east of Dili; Goby at Dili Rock; Moray eel at Pertamina Jetty

spectacular mountain scenery.

Santa Cruz Cemetery.

Not what you would normally consider to be top of one's list of tourist attractions, but 30 minutes wandering around the site of the 1991 massacre of more than

100 people by the Indonesian Army will endear you to the sheer determination of the Timorese people. Caught on film by two western journalists and smuggled into Australia at great personal risk, the film alerted the world to the suffering and injustice that the Timorese were experiencing.

Xanana Reading Room.

Dedicated to Xanana Gusmao—the former guerrilla leader and now prime minister of Timor Leste—this part library, part museum and part cultural centre is an essential stop for visitors to Dili in search of information and advice about Timor Leste.

Arte Moris. In many ways, this kind of artistic commune set in the remains of an Indonesian

era museum personifies all that is weird and wonderful about Dili. Art students live here while they are trained in a variety of mediums, and their works are on display throughout the buildings and grounds.

Avenue de Portugal. As the sun starts to set, it's time to go back to where you started the day and join the many locals who dine and drink at the beachside stalls, which spring up late in the afternoon. Freshly grilled fish and ice cold beer rarely tasted so good.

Afterthoughts

As divers, we are constantly looking for new and exciting places to try. Timor Leste offers an interesting mix of things

to see above and below the water. Very much in the mode of a developing country, Timor Leste's rough edges add to its charm. The sheer determination of its people to overcome the country's colonial past and the brutal years of the Indonesian occupation is simply admirable. The known diving locations justify a trip in themselves, but the thought of what waits to be discovered is tantalizing. If you do decide to go, do yourself a favour and allow some extra time to do some land-based exploring and enjoy the country as it is now because it won't stay this way forever. ■

For more information please visit Don Silcock's website at: Indopacificimages.com



head inland and check out the mountainous interior? Eat before you do, as facilities are few and far between.

Midday is the best time to do this trip, as it is much cooler as you climb out of Dili towards the old hill towns of Aileu and

Maubisse, which are the centre of the main coffee growing area of Timor Leste. If you make it all the way to Maubisse, you will find that the former government rest house has been converted into a hotel called the Pousada and boasts 360 degree views of the



fact file

Timor Leste



SOURCES: US CIA WORLD FACT BOOK, STARFISH.CH

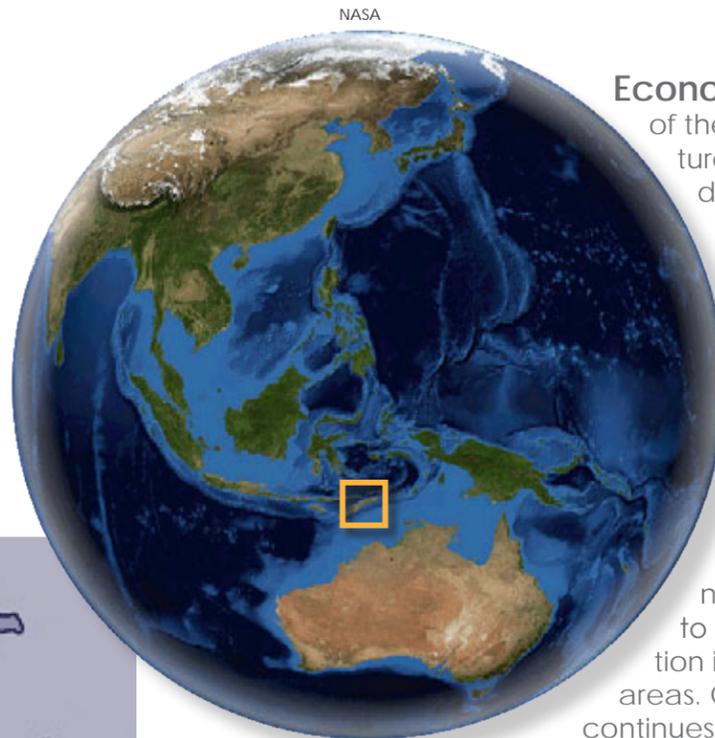
History In the early 16th century, the Portuguese began to trade with the island of Timor and colonized it by the mid-century. After clashes with the Dutch in the area, Portugal ceded the western portion of the island to them in a treaty in 1859. From 1942 to 1945, imperial Japan occupied Portuguese Timor, but after the Japanese defeat in World War II, Portugal resumed colonial authority. On 28 November 1975, East Timor declared itself independent from Portugal. Nine days later, it was invaded and occupied by Indonesian forces. In July 1976, Indonesia incorporated it and designated the region a province of Timor Timur (East Timor). Over the next 20 years, an unsuccessful campaign of pacification followed. An estimated 100,000 to 250,000 individuals lost their lives during this period. On 30 August 1999, an overwhelming majority of the people of Timor Leste voted for independence from Indonesia in a popular referendum supervised by the United Nations. In retribution, Indonesian militias supported by the country's military began a large-scale scorched earth campaign as the Timorese awaited the arrival of a multinational peacekeeping force in late September 1999. Around 1,400 Timorese were killed by the militias and 300,000 people were forcibly pushed into western Timor as

refugees. Destruction was rampant and affected most of the country's infrastructure, including nearly all of the country's electrical grid as well as homes, irrigation systems, water supply systems, and schools. The violence was brought to an end on 20 September 1999, when an Australian-led force of peacekeeping troops—called the International Force for East Timor (INTERFET)—were deployed to the country. Timor Leste was internationally recognized as an independent state on 20 May 2002. However, internal tensions threatened the new nation's security again in 2006, when a military strike sparked violence leading to a breakdown of law and order. Once again an Australian-led peace-keeping force—this time called the International Stabilization Force (ISF)—was deployed to Timor Leste at the request of Dili. In addition, an authorized police presence of

over 1,600 personnel was organized and deployed in Timor Leste by the U.N. Security Council in what was called the U.N. Integrated Mission in Timor-Leste (UNMIT). Stability was restored in the region by the ISF and UNMIT, thereby allowing peaceful presidential and parliamentary elections to be held in 2007. Since then, the country has experienced stability except for one incidence in 2008 when a rebel group tried and failed to stage a coup. Government: republic. Capital: Dili

Geography Timor Leste is located in Southeastern Asia, north-

RIGHT: Global map with location of Timor Leste
BELOW: Detail map of Timor Leste



west of Australia. It lies at the eastern end of the Indonesian archipelago in the Lesser Sunda Islands. The country includes the eastern half of the island of Timor, the Oecussi (Ambeno) region on the northwest portion of the island of Timor, as well as the islands of Pulau Jaco and Pulau Atauro. Terrain: mountainous. Lowest point: Timor Sea, Savu Sea, and Banda Sea 0m. Highest point: Foho Tatamailau 2,963m. Coastline: 706km

Climate Timor Leste's climate is tropical, humid and hot, with dry and rainy seasons. Natural hazards include earthquakes, tsunamis and tropical cyclones; floods and landslides are common.

Environment Deforestation and soil erosion have developed as a result of widespread use of slash and burn agriculture. Timor Leste is party to the following international agreements: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification

Economy About 70 percent of the economic infrastructure of the country was devastated by Indonesian troops and anti-independence militias by late 1999. Refugees numbering 300,000 fled westward. A massive international program of 5,000 peacekeepers (up to 8,000) and 1,300 police officers helped to stabilize the country over the next three years. This led to significant reconstruction in both rural and urban areas. Challenges the country continues to face includes generating jobs for young people entering the work force, rebuilding its infrastructure and strengthening the civil administration. Oil and gas resource development in offshore waters has helped to increase government revenues, but not jobs, since there are no production facilities in the country. The economy continues to improve despite the outbreak of violence and civil unrest in 2006. By 2009, most of an estimated 100,000 internally displaced persons came back home. Government increased spending signifi-

cantly in 2009-2010, for the most part on basic infrastructure, roads and electricity leading to first time national debt in late 2011.

Population 1,177,834
Ethnic groups: Austronesian (Malayo-Polynesian), Papuan, small Chinese minority. Religions: Roman Catholic 98%, Muslim 1%, Protestant 1% (2005). Internet users: 2,100 (2009)

Currency U.S. Dollar

Language The official languages are Tetum and Portuguese. Indonesian, English and about 16 indigenous languages are spoken. Tetum, Galole, Mambae and Kemak are spoken by a large part of the population.

Health There is a very high degree of risk for food or waterborne diseases such as bacterial and protozoal diarrhea, hepatitis A, and typhoid fever as well as vectorborne diseases such as chikungunya, dengue fever and malaria (2009)

Decompression Chambers
BALI: Sanglah General Hospital Hyperbaric Medical Department. Tel: 62-361-227911



MAKASSAR (SULAWESI): Rumah Sakit Umum Wahidin Sudirohusodo. Tel: 62 - 0411 (584677) or 584675

Web sites
Discover Dili
www.discover-dili.com ■

Anemone shrimp at Dili Rock