Thdonesia Sulawesi Otth Sulawesi Text by Don Silcock Photos by Eric Hanauer and Don Silcock The island of Sulawesi lies like a large broken star in the middle of the vast archipelago that forms the country of Indonesia. It's remote location, roughly a third of the way between the huge islands of Borneo to the west, and New Guinea to the east, places Sulawesi right in amongst what is generally considered to be the richest marine environment in the world — the Coral Triangle.







CLOCKWISE FROM ABOVE: Zebra crab on fire urchin; Nudibranch; Pipefish. PREVIOUS PAGE: Shrimp on sea cucumber

Defined by the Nature Conservancy as the global epicenter of marine biodiversity, the Coral Triangle is characterized by more than 600 species of coral and 3,000 species of reef fish.

To put those numbers into perspective, the Red Sea has around 200 coral species and 1,000 fish species, and the Caribbean, 50 and 900 respectively.

Geographically, the Coral Triangle covers six countries—from the Philippines in the north to the Malaysian state of Sabah on the tip of the island of Borneo in the west and the Solomon Islands to the east. In between lies Indonesia, East Timor and Papua New Guinea.

The scientific reasons for this tremendous biodiversity are complex and relate to a combination of factors including such technical issues as water salinity, temperature and speciation rates. However, there is little doubt that the phenomenal flow

of water that marine scientists refer to as the Indonesian Throughflow plays a significant role (see sidebar on next page).

Diving North Sulawesi

Divers are basically spoilt for choice when it comes to exploring this part of Indonesia. The area has its own international airport at Manado, serviced by direct flights from Singapore with Silk Air four times a week. Plus it's easily accessed from

both Jakarta and Bali, although that usually involves a short stop at Makassar (Udjung Pandang) in South Sulawesi.

At the tip of North Sulawesi are the Bangka and Gangga Islands, which receive the full force of the Indonesian Throughflow as it first touches land, and offer some exceptional diving if you are an experienced diver and know how to handle strong currents.

On the east coast, there is the critter mecca in the sheltered Lembeh



Straits and some of the most unusual things you will ever see underwater, while on the west coast there is the magnificent Bunaken Marine Park with it's steep walls and blue water diving.

The whole area of North Sulawesi is very well served by an assortment of dive resorts plus a number of resident and visiting liveaboards and is without a doubt a world class destination that justifies an extended stay to make the most of the tremendous divina available.

Bunaken National Marine Park

One of the first parks to be established in Indonesia, the Bunaken Marine Park was created in 1991. It covers an



area of almost 90 hectares and 97 percent of it is water with the five islands in the park—Bunaken, Manado Tua, Mantehage, Siladen and Nain—occupying the other three percent.

Each of the five islands has its own flavor but the dormant volcano, Manado Tua, with its classic cone shape and sheer size, simply dominates the park. While Siladen Island, with its white sandy beaches and densely wooded interior, has a real desert island look about it. Bunaken Island, in the shadow of Manado Tua, is the most populated island and supports a population of around 4,000 people as well as the majority of the dive resorts that operate in the Marine Park.

The area is renowned for its blue waters, wall diving and pelagic encounters. It's easy to see why, when you look at



CLOCKWISE FROM TOP LEFT: Wolf lionfish; Lembeh Strait with the volcanic mountain looming on the horizon; Angelfish and trupetfish; Nudibranch



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the sea charts and have a basic understanding of the Indonesian Throughflow. The deep basins to the northand west of Bunaken and to the south in Manado Bay are the source of the blue water. As

the nutrient rich Throughflow surges past the five islands of Bunaken Park, it creates numerous counter currents around them.

The underwater topography and lunar cycles are just some of



White mantis shrimp; Transparent shrimp; Nudibranch; Leaf fish

the variables at work, but the end results are biodiversity hot spots that produce some wonderful dive sites. The sites around the crescent shaped Bunaken Island best illustrate these mechanisms, because the island—lying as it does in the middle of the park—faces into the predominant northeast current.

The current is at it's strongest on the eastern and western sides of the islands and the sites there, such as Timur One and Two are rich in hard and soft corals, sponges and schooling fish,

nourished by the nutrients from the deep water basins to the north. But the underwater topography between the islands, and the 1,500m deep Manado Bay to the south, creates the swirling counter currents that feed the multiple dive sites on the southern side of Bunaken—such as Lekuan One. Two and Three on the southwest side and the really excellent Fukui on the southwest side.

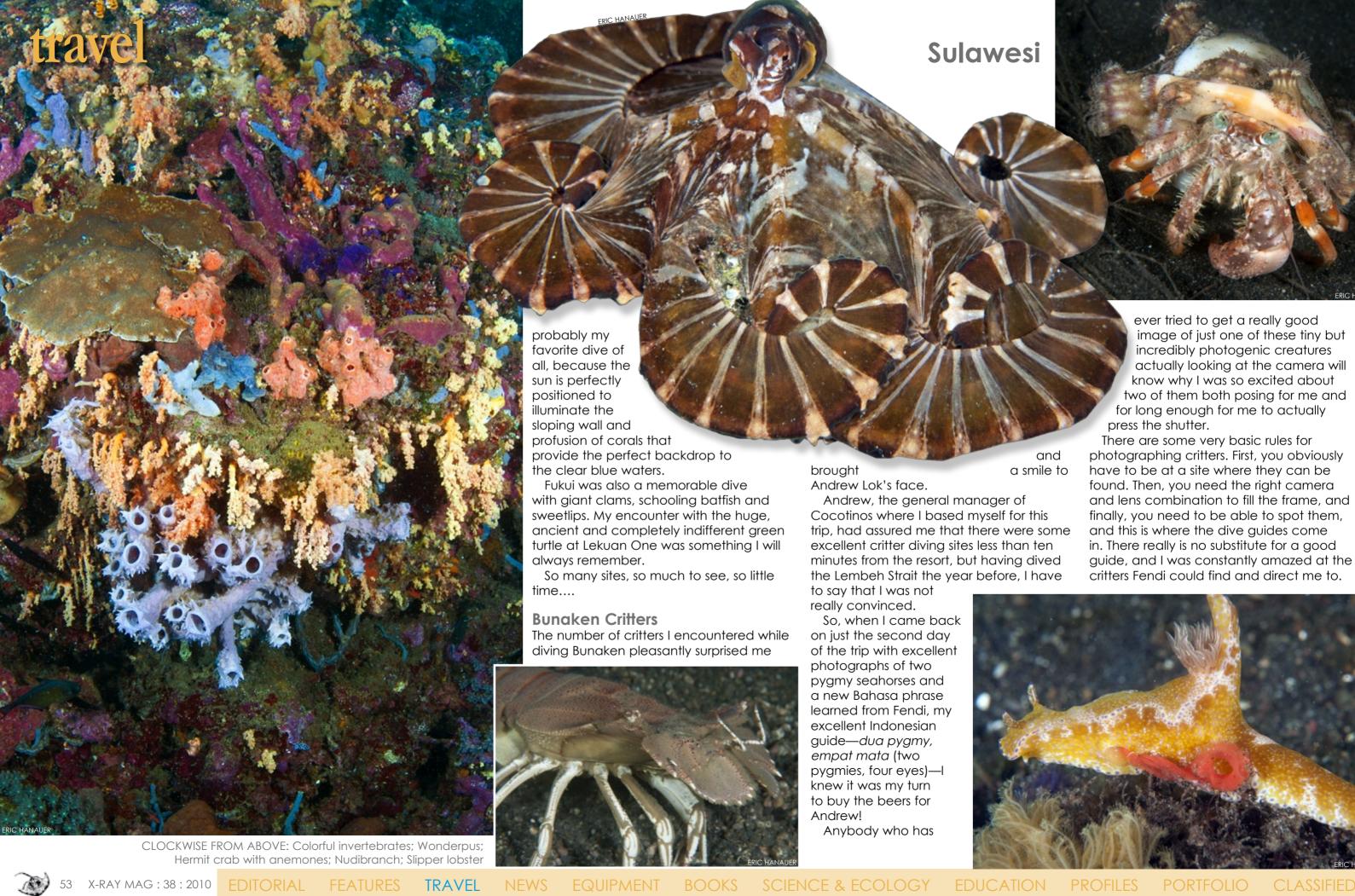
Diving these sites is a heady experience—particularly on the vertical walls, which drop down into the abyss and create a feeling akin to vertigo on a clear day if you look down!

A mid-morning dive at Timur One and Two on the east coast of Bunaken is simply superb, and

Sulawesi













Cocotinos Resort is located right in the fishing village of Kima Bajo in Wori Bay, north of Manado, and there are some great critter sites to the north of the bay at Aba Point and Odyssea Point and to the south at Gabet and Posi Posi.

Aba Point is a classic critter site, located in a small bay that provides protection from rough weather with a small river providing a constant source of organic nutrients and nearby deepwater for the essential cold water upwellings critters seem to thrive on. It was there that I was able to capture the two pygmies on a small gorgonian fan at 30m, but spent so long with them my beeping computer limited further exploration to an extended 5m deco stop.

The pygmy seahorse is in my opinion the single most

dangerous creature in the sea for underwater photographers!

Posi Posi to the south of Wori Bay is the place to be as the sun goes down because of its resident colony of mandarin fish and their nightly mating ritual—but make sure you get there early and get a good spot, as it can get crowded with boats from other resorts.

Being so close to the world's critter mecca of the Lembeh Strait is obviously challenging, and you won't find the really exotic critters, such as hairy froafish and Ambon scorpion fish in Bunaken, but there is no doubt that there is a lot of small stuff to see on the western side of North Sulawesi.

Lembeh

There really is no other place quite like the Lembeh Strait it's simply unique!

Located as it is between the eastern side of the tip of North Sulawesi and the island of Lembeh, the strait benefits from the rich flow of deep sea nutrients of the Indonesian Throughflow, and its cold waters plus sheltered bays on both the mainland and Lembeh side provide the protected areas for the critters to thrive.

And thrive they certainly do-attracting divers and underwater photographers from all over the world to witness the incredible selection of the weird, wonderful and downright strange creatures the sea can offer.

For underwater photographers, it's a "must do", and many divers will enjoy it, too. But it has to be said that it's not everybody's cup of tea. The water can be

Sulawesi

CLOCKWISE FROM FAR LEFT: Local transport through the jungle; A busy day at the pier; Crinoids on sea

quite cool, and the visibility, challenging at times. Plus, if you are not taking photographs, critters that can disguise themselves to look just like a rock or

a crinoid look like rocks and crinoids and may not hold your attention like a stunning coral reef can.

I chose to stay at Cocotinos because its location at Kima Bajo meant that I could get to all the main dive sites around Bunaken, Plus, it's a relatively easy 90-minute drive over to Lembeh, which means that you can have the best of both worlds—diving the walls and reefs of Bunaken plus some of the famous sites in Lembeh like Hairball and Nudi Falls.

Havina spent a week at Lembeh last year dedicated to critter diving, this balance of a couple of days there in between the rest at Bunaken proved to be a perfect way to spend ten days in North Sulawesi.

For more information, visit: www.indopacificimages.com



SOURCES: CIA.GOV WORLD FACTBOOK.

History In the early 17th century, the Dutch began to colonize Indonesia, From 1942 to 1945, Japan occupied the islands. After Japan's surrender in WWII, Indonesia declared its independence, however, it took four years of negotiations, recurring hostilities and mediation by the United Nations for the Netherlands to finally agree to transfer sovereignty in 1949. 1999 marked the year of Indonesia's first free parliamentary election after decades of repressive rule. The world's thirdlargest democracy, Indonesia is the world's largest archipelagic state. It is also home to the world's from Indian Ocean to largest Muslim population. Current challanges include: improveing education, alleviating poverty, curbing terrorism, initiating economic and financial reforms, controling corruption, holding the military and police accountable for human rights violations in the past, addressing global warming, and controlling bird flu. An historic peace agreement with armed separatists in Aceh was reached in 2005, which led to democratic elections in Aceh in 2006. However, the government still faces sporadic armed resistance by the separatist Free Papua Movement. Government: republic. Capital: Jakarta

Geography Indonesia is an archipelago of islands located in Southeastern Asia, between

the Indian Ocean and the Pacific Ocean. Coastline: 54,716 km. The terrain is mostly coastal lowlands with interior mountains on the larger islands. Lowest point: Indian Ocean 0m. Highest point: Puncak Jaya 5,030m. Note: Indonisea is made up of 17,508 islands of which 6,000 are inhabited. It straddles the equator in a strategic location adjacent to major sea lanes

Pacific Ocean. Piracy and armed robbery has been known to occur against ships in the territorial and offshore waters in the Strait of Malacca and South China Sea.

Climate Indonesia has a tropical, hot, humid climate with more moderate temperatures in the highlands. Natural hazards include severe droughts, occasional floods, earthquakes, tsunamis, volcanic activity and forest

Environment Deforestation: water pollution from industrial wastes, sewage; air pollution in urban areas; smoke and haze from forest fires. Indonesia is party to agreements including: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Ozone Laver Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands. The country has signed. but not ratified Marine Life Conservation.

Economy As a vast polyglot nation, Indonesia has been able to weather the global financial crisis relatively smoothly due to its heavy reliance on domestic consumption as the impetus for economic growth. To counter the effects of the crisis, the government used fiscal stimulus measures and monetary policy and offered cash transfers to poor families. Consumption was partially buoyed by campaign spending in advance of legislative and presidential elections in 2010. Economic advances and significant reforms in the financial sector, including tax and customs reforms, the use of Treasury bills, and capital market development and supervision, were made under President Yudhoyono. Increasingly robust GDP growth and sound fiscal stewardship has steadily reduced Indonesia's debt-to-GDP ratio in recent years. Pursistent challenges include poverty and unemployment, inadequate infrastructure, corruption, a complex regulatory environment, and unequal resource distribution among regions. Natural resources: petroleum, tin, natural gas, nickel, timber, bauxite, copper, fertile soils, coal, gold, silver. Agriculture: rice, cassava, peanuts, rubber, cocoa, coffee, palm

oil, copra; poultry, beef, pork, eggs. Industries: petroleum and natural gas, textiles, apparel, footwear, mining, cement, chemical fertilizers, plywood, rubber, food, tourism.

RIGHT: Location of Sulawesi Island on global map. BELOW: Location of Sulawesi Island on map of Indonesia

Currency Indonesian Rupiah (IDR). Exchange rates: 1EUR = 11,715.31 IDR; 1USD = 8,980.00 IDR; 1GBP = 14.032.15 IDR

Population 240,271,522 (July 2010 est.) Ethnic groups: Javanese 40.6%, Sundanese 15%, Madurese 3.3%, Minangkabau 2.7%, Betawi 2.4%, Buais 2.4%, Banten 2%, Banjar 1.7%, other groups 29.9%. Religions: Muslim 86.1%, Protestant 5.7%, Roman Catholic 3%, Hindu 1.8%, other religions 3.4% (2000) census). Living with AIDS/HIV: 270,000 (2007 est.) Below poverty

Language Bahasa Indonesia (which is the official, modified form of Malay), English, Dutch, local dialects (Javanese is the the most widely spoken)

line:

17.8%

(2006).

Internet

users: 30 mil-

lion (2008)

Health There is a high degree of risk for food or waterborne diseases such as bacterial diarrhea, hepatitis A and E, and typhoid fever, as well as vectorborne diseases such as chikungunya, denaue fever and malaria. Note: There have been cases in Indonesia of the highly pathogenic H5N1 avian influenza. However, it poses a negligible risk to visitors.

Hyperbaric Chambers

Manado (Sulawesi): Malalayana Hospital, tel: 0812-4302970; and Professor Dr Kan-dou Hospital, tel: (+62) 8134-0000840

Makassar (Sulawesi): Rumah Sakit Umum Wahidin Sudirohusodo Tel: (+62) 0411-584677

Websites

Tourism Indonesia

www.indonesia.travel North Sulawesi Promotion Board www.north-sulawesi.org



