



Halmahera

—A Diver's Haven in the Maluku Islands

Text and photos by Don Silcock



Halmahera

Diver and giant clam at Mios Kon near Raja Ampat (left); Fishing along the coast near Raja Ampat (above)
PREVIOUS PAGE: Superb soft corals and sponges at Pantai Sago reef on the southern side of Tifore

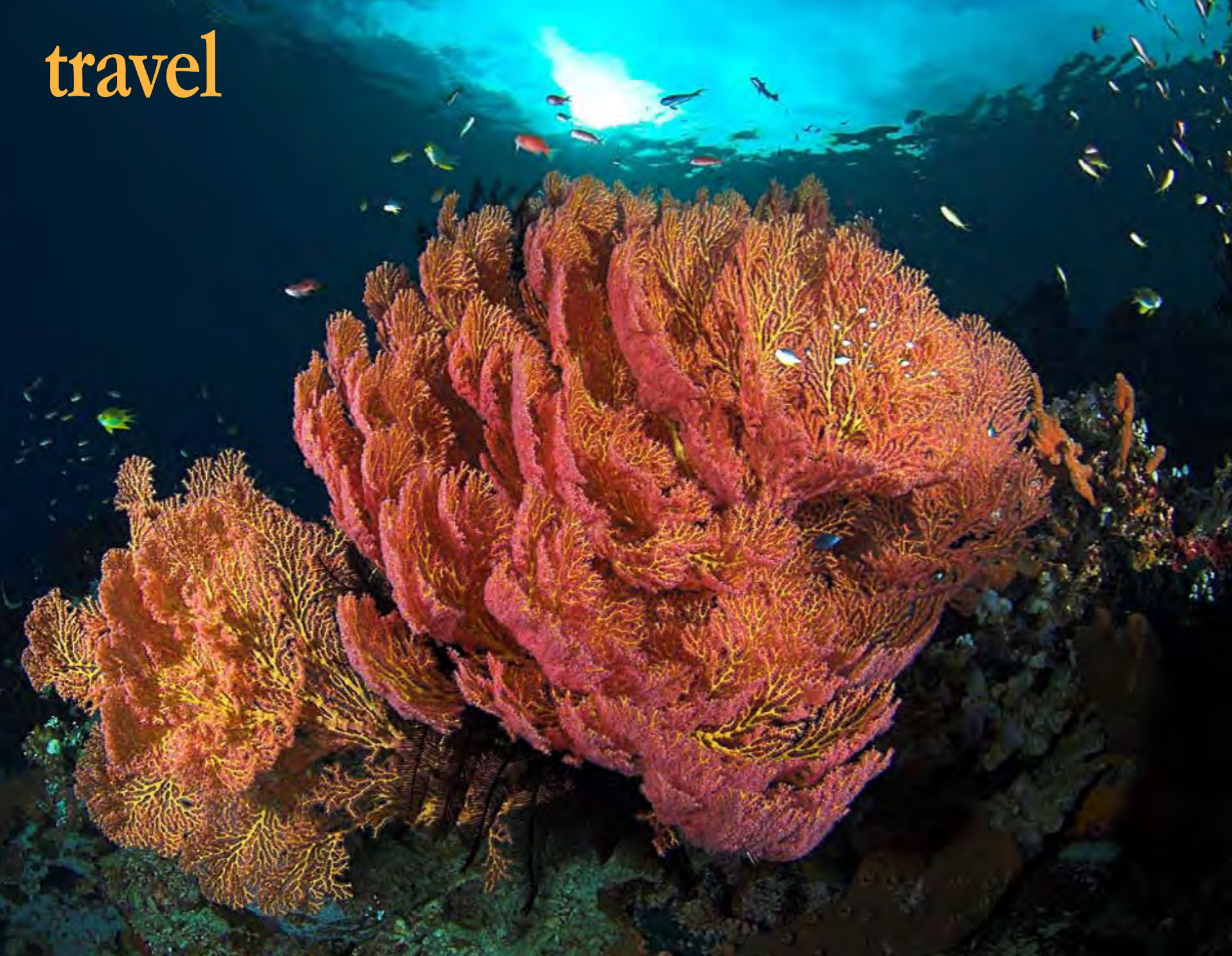
The sands of time have long since washed over the remote East Indonesian province called the Moluccas. Home to less than two million of the archipelago's 227 million in population, and spread out over nearly 1,000 islands, the area is little known within the country and few foreigners could even point to it on a map with any degree of certainty. Hard to believe then, that just over 500 years ago, the Moluccas were the trigger for the so-called "age of exploration"—a two hundred year period when the major powers of Europe sent fleets of sailing ships to find and then control the fabled Spice Islands of the far east.

For it was only in the Moluccas, with its equatorial climate and rich volcanic soils, that the aromatic spices of cloves, nutmeg and mace could be found. Perceived to offer protection against the horrendous great plagues that ravaged 16th

century Europe and providing the only way at that time to preserve and flavor meat, these exotic spices were so valuable that they were literally worth their weight in gold. In the great race to find and then control their source, Christopher



Mike's Point



Columbus discovered the New World of the Americas, Ferdinand Magellan's expedition circumnavigated the world for the first time, and Vasco Da Gama rounded the Cape of Good Hope at the tip of Africa and established the sea route to the Indian sub-continent.

Today, those spices are a common supermarket commodity and the Spice Islands, a group of five volcanic islands located off of the west coast of the island of Halmahera and the Banda Islands—some 500km to the southeast—are quiet outposts in the huge Indonesian

archipelago.

These days, a new breed of adventurer is exploring the Halmahera area of the Moluccas. Instead of spices, explorers are looking for exciting places to dive. Ironically, many of the liveaboard vessels in this area are local Pinisi boats modeled after the European sailing ships that came looking for the spices in the 16th century.

The Indonesian Throughflow
— *A Phenominal Force of Nature*
Northern Indonesia first established

itself on the international dive map with Bunaken Marine Park on the west coast of North Sulawesi near Manado, and then, the critter Mecca of the Lembeh Straits on the east coast, followed by the Raja Ampat area on the northeastern tip of Irian Jaya—the Indonesian eastern half of the island of New Guinea—which has established an almost legendary reputation in recent years as a must-dive location.

The diving in these areas is particularly special because of what is known as the “Indonesian Throughflow”—the

Halmahera

phenomenal flow of water from the Pacific Ocean to the northwest of Indonesia into the Indian Ocean to the south of the archipelago. (See sidebar next page.)

Off the beaten track

The sheer size of Indonesia means that any journey to its more remote regions involves a fairly significant amount of travel, and to experience the Halmahera region means being prepared to go the distance—and roll with the punches.

My personal journey involved an overnight flight from Sydney to Singapore followed by the morning flight with Silk Air to Manado and an overnight stay—well sort of... we had to check out of the hotel at 2:00am to get to the airport in time for the 4:30am departure with



CLOCKWISE: Superb fan corals in the Proco Channel of the Patintie Straits; The *SMY Ondina* under full sail; Airborei pier



THE INDONESIAN THROUGHFLOW

The Indonesian Throughflow is the result of monsoonal weather patterns and oceanic currents that combine to create higher water levels and temperatures in the Pacific Ocean, which together with its lower salinity, result in a flow of water so large that traditional measurements are not big enough to measure it!

The *Sverdrup*, named after the Norwegian scientist Harald Sverdrup who invented it, is used and one Sverdrup is one million cubic meters of water per second. A popular analogy used to visualize this flow of water is if you imagine a river 100m wide, 10m deep and flowing at four knots. Then imagine 500 similar rivers—that's one Sverdrup.

It is estimated that the total amount of seawater that passes through the Indonesia archipelago because of the Throughflow is 20-22 Sverdrups, or 10,000 of those fast-flowing rivers.

A basic understanding of the Throughflow mechanism, together with a look at the map quickly puts into perspective why parts of northeastern Indonesia offer such fantastic diving.

Northeast Sulawesi, together with Raja Ampat in Irian Jaya and the largely unexplored area of Halmahera in the Moluccas is where the flow of water from the Pacific Ocean first touch major landfall.

There is a very simple principal that applies with the world's oceans and seas, and the marine biota that inhabits them, which is when something dies, it usually sinks to the bottom. This detritus of the sea, rich in phosphorus and nitrogen from the decayed organisms, would remain on the bottom were it not for the effect of the Throughflow.

The tremendous flow of water resulting from the Throughflow produces cold water upwellings from the deep trenches and basins to the north of Indonesia, which bring the rich nutrients that are a significant part of the reason why those areas of Indonesia, which are exposed to it, are so rich and biodiverse. ■

Luscious soft corals at Sardine Reef



Striped sweetlips at Mike's Point (above); Manta Ray at 3m near Raja Ampat (top right); Schooling Fusiliers at Mike's Point (right)

Merpati Airlines to Sorong in Raja Ampat. I did not complain though, as several of my new best friends on this trip were from the United States and had already been traveling for over 48 hours at that point in time.

Arrival in Sorong at 7:00 in the morning meant that, first of all, we were finally there and able to board our waiting liveaboard, the *MV Ondina*. Secondly, we still had a full day ahead of us and a chance to sample some of the superb diving in the area before starting our journey towards the strangely-shaped island of Halmahera and onwards to our final destination of the Lembah Strait in North Sulawesi.

Raja Ampat

Much has been written about Raja

Ampat in the last seven to eight years, and the area has achieved almost cult-like status in the diving community. There is absolutely no doubt that Raja Ampat truly is one of the last frontiers in global diving, and I have personally enjoyed some of my most memorable dives in the area.

On this trip, I was lucky enough to revisit two of my personal favorite locations—Sardine Reef and Mike's Point.

Sardine Reef is a large circular seamount located to the east of Kri Island on the northern side of the Dampier Strait, which means that it sits right in the path of the Indonesian Throughflow, as it surges through the Strait. Its eastern tip is where the current hits the seamount, and diving

the site is a kind of like the Goldilocks and porridge situation—not too hot, as it's incredibly difficult to do much more than hold on to your mask, and not too cold, otherwise the phenomenal fish life goes off the boil.

Sardine is a very "fishy" dive, and when it is at its peak, it is hard to take in the sheer volume of pelagics schooling in the rich current—so many in fact that you will often hear the so-called "fish thunder" phenomena produced by cavitation in the water column when a large volume of fish moves rapidly.

Mike's Point is also near Cape Kri on the northern side of the Dampier Strait, but rather than being a submerged seamount like Sardine, it makes its presence felt by breaking



LEFT TO RIGHT: Diver poses with soft coral at Pantai Sago reef on the southern side of Tifore; Beautiful fans and sponges at Rennie's Rock in the Goweba Channel in the Goraici group of islands; Goraici Islanders rowing home at sunset



the surface with a small rock roughly 30m in diameter. So strong is the current that can flow past it, that U.S. forces surveying the area in WWII thought it was the wake of a camouflaged Japanese ship and bombed the island!

There are two things that I think make Mike's Point really special in an area that has some pretty incredible diving—the massive aggregation of sweetlips on the southern wall and the sublime coral garden in about 10m of water, occupying what appears to be a large crater from the WWII bombing.

Exploring the wall and the sweetlip aggregation make for an exhilarating first part of the dive. Then, taking an extended deco stop in the coral gardens—with the sun streaming down creating a cathedral light effect—is to die for.

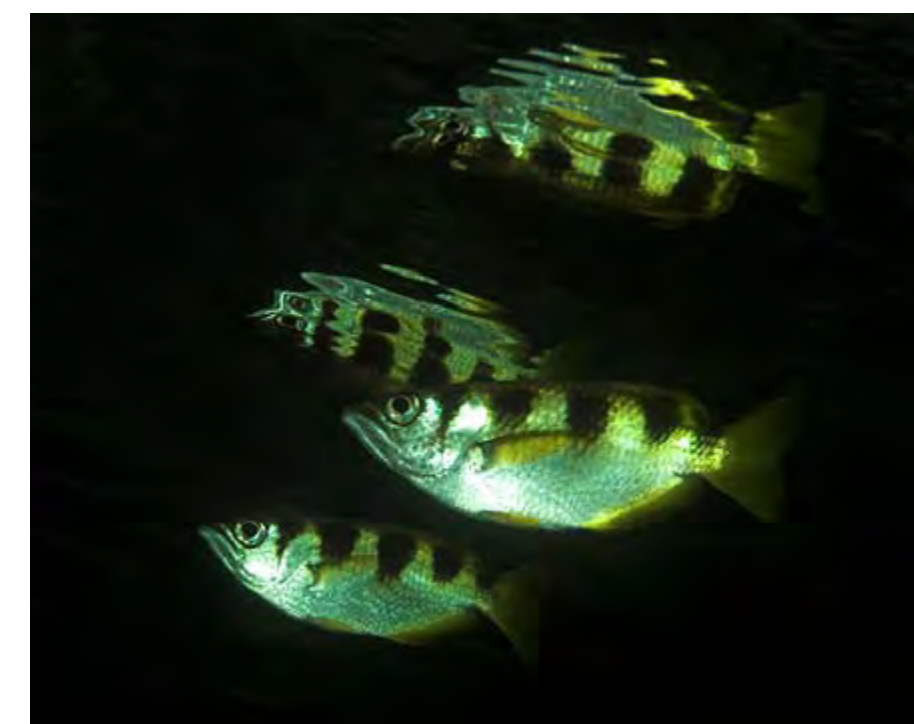
Misool

From Raja Ampat and the excitement of diving the Dampier Strait, our journey to Halmahera took us southwest on an overnight 12-hour cruise to the western tip of the large island of Misool and the

group of six small islands called the Blue Water Mangroves.

As the name suggests, these low-lying islands are densely covered in mangroves, but unlike many other such habitats, their position in the Halmahera Sea and their close proximity to each other creates a situation whereby they are flushed with clear blue water on every rising tide—creating a pretty unique dive location.

Mangroves are normally associated with the word *swamp* because of the high concentration of sediment and



Archer fish in the gin clear water (top left) of the Blue Water Mangroves of Misool; A pair of archer fish and their reflections (bottom left); Soft corals at Airborei pier (above)

other organic detritus, which means that diving in them is not a particularly rewarding experience. But the Blue Water version at Misool is quite extraordinary, and diving them provides a unique insight into these special ecosystems, because you can actually see what is there.

Of particular interest are the coral growths on the mangrove, which are quite spectacular when backlit by an overhead sun streaming through the dense canopy. Also, in the inlets that reach deep into the mangroves, numerous archerfish are to be found practicing their special method

of catching insects with a deadly accurate jet of water spat at high speed from their mouths.

Penetrating these inlets on a rising tide is quite surreal, as the water is so clear and so still that it's difficult to tell where the underwater world ends—the archerfish seem to float

through the leafy mangroves above the water.

It's also a rather tense experience, as the mangroves are also the perfect habitat for the salt-water crocodile, and a diver was actually attacked by one in April 2009. He lived to tell the tale, but the moral





CLOCKWISE FROM FAR LEFT:
Translucent anemone shrimp;
Anemone fish; Amazing sponge
garden in the Proco Channel
of the Patintie Straits; Beautiful
barrel sponge in the Proco
Channel of the Patintie Straits



of the story is always let the dive masters know where you are going and be very vigilant.

Out there

In the middle of the Halmahera Sea roughly equidistant between Misool and Halmahera Island, and a six-hour sail northwest from the Blue Water Mangroves, is the large banana-shaped island called Pisang and the nearby two smaller islands called Batuanyer Kecil.

All three islands rise steeply from the deep waters of the Halmahera Sea and are richly coated in dense vegetation. Underwater, the two Batuanyer Islands and connected by a reef, which is extremely vibrant and covered in hard and soft corals in a kind of mirror image of the dense vegetation above water.

The three islands sit right in the path of the Indonesian Throughflow and, as it passes around them, their shapes and underwater topography produce the



perilous downdrafts that are a constant potential danger when diving the best sites in Indonesia.

Diving such locations requires what Ricard Buxo, the Spanish cruise director of

MV Ondina, calls a rapid negative entry whereby everybody in the dive tender is geared up and ready to go. The tender then positions itself up-current of the site, and on the signal, the engine is killed and

CLOCKWISE FROM LEFT:
Gorgeous sponges;
Crocodile fish;
Gorgonian fan



everybody rolls backwards at the same time, grab cameras and get down quickly before the currents take you away.

The trick is to get to the front of the site where the current hits it, central enough and deep enough to avoid being pulled to the side or taken over the top by the flow of water. This is where the effect of the current is reduced and the best action is to found, plus further down is often where the “big dogs” can be found.

Halmahera Island

From Pisang Island, it was another six-hour overnight sail to Djorong Island, at the

southern tip of Halmahera, where over the next few days we dived the reefs of Karang Dorobi, Ganone and Nenas, and then several sites in the Patintie Strait between the eastern side of Halmahera and the large island of Bacan.

Most of the sites in the Patintie Strait and particularly the ones in the Proco Channel, between two small islands that sit out in the Strait, are classic big current dives requiring the rapid negative entry and a pair of vigilant dive tenders.

On several of these dives, I tagged on behind Ricard Buxo as he centralized himself where the current hit the reef and then

went down to around 40m looking for the “hot spot” where the current first touches the reef, bringing with it cold water from the deep rich with the detritus of the sea. Plankton feeders love this “sea soup” and gather where it hits the reef, which creates the foundation of a mini-ecosystem as the other layers of the marine food chain work the area.

Although quite deep, and pretty exciting because of the larger predators that gather there, the current is quite manageable, as it only really gathers intense velocity as the depth reduces. We saw numerous large gray reef sharks cruising the current



Delicate soft corals (left) can be found decorating the mangroves; Batfish at sunset underneath Airborei pier (above)

and down deep, way beyond the limits of recreational diving, were the unmistakable profiles of great hammerheads.

The Goraici Islands

From the Patintie Straits, another overnight sail took us further to the northwest into the Molucca Sea and the

Goraici group of islands.

The Goraici's are about 75km south of Ternate and Tidore—the original main Spice Islands off the west coast of Halmahera, and the only place in the world where cloves could be found.

The people of the Goraici's have an enviable reputation as pragmatic environmentalists who have succeeded

in keeping their reefs healthy and in good condition by preventing the twin scourges of dynamite and cyanide fishing that has done so much damage elsewhere in Indonesia.

The area is indeed rich in marine life and at Tagani Bay on the northwest tip of Kayoa Island is where the celebrated ichthyologist Jerry Allen had his highest

fish count of 303 species on one dive. Our dives in the area were notable for strong currents, clear blue water, healthy reefs with rich hard and soft corals and cruising sharks and pelagics.

We spent two days diving the Goraici Islands, but could easily have spent a week in the area. However, our journey was coming to an end, and yet, we

had one more treat in store—Tifore Island in the middle of the Molucca Sea halfway between Halmahera and North Sulawesi and just about as remote as it gets!

On the southern side of Tifore is a reef at Pantai Sago known for a school of barracudas said to number over a 1,000. We dived the southeast face of the reef where the current hits the reef. It is really a great dive, with superb hard and soft corals down deeper, and huge shoals of schooling fish.

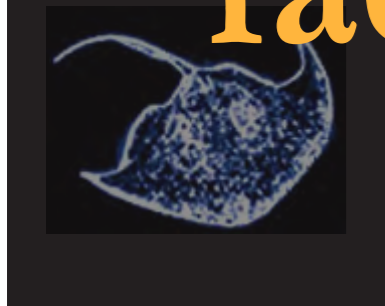
The day we spent diving Tifore before the final nights sailing to Lembeh was the perfect end to a fantastic trip through Halmahera—remote locations, big currents and fantastic diving.

Hard to beat...

Don Silcock is a dive writer and underwater photographer originally from the United Kingdom, but now based in Sydney, Australia. For more information on diving in Indonesia, Papua New Guinea and Australia visit: www.indopacificimages.com ■

fact file

Indonesia



SOURCES: CIA.GOV WORLD FACTBOOK, STARFISH.CH

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 third-largest democracy, Indonesia is the world's largest archipelagic state. It is also home to the world's largest Muslim population. Current challenges include: improving education, alleviating poverty, curbing terrorism, initiating economic and financial reforms, controlling 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: Indonesia 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 from Indian Ocean to 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 fires.

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 Layer 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 legisla-

tive 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. Persistent 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 natu-

rubber, food, tourism.

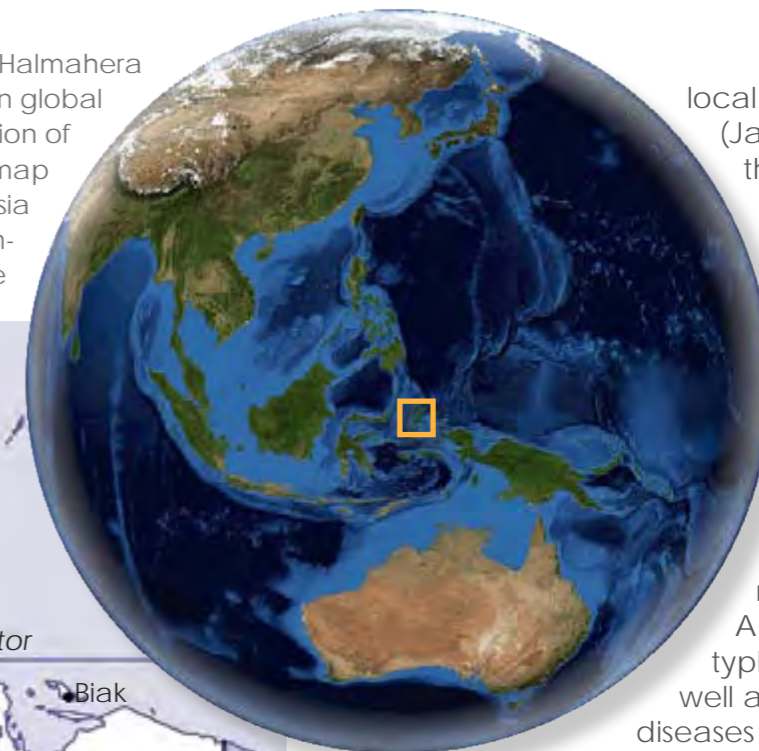
Currency Indonesian Rupiah (IDR). Exchange rates: 1EUR = 11,715.31 IDR; 1USD = 8,980.00 IDR; 1GBP = 14,032.15 IDR

Population 240,271,522 (July 2010 est.) Ethnic groups: Javanese 40.6%, Sundanese 15%, Madurese 3.3%, Minangkabau 2.7%, Betawi 2.4%, Bugis 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 line: 17.8% (2006). Internet users: 30 million (2008)

Language Bahasa Indonesia (which is the official, modified form of Malay), English, Dutch,



RIGHT: Location of Halmahera Island of Indonesia on global map. BELOW: Location of Halmahera Island on map of Indonesia. BOTTOM RIGHT: Clownfish in anemone



local dialects (Javanese is the most widely spoken)

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, dengue 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.

ral gas, textiles, apparel, footwear, mining, cement, chemical fertilizers, plywood,

Hyperbaric Chambers

Manado (Sulawesi): Malalayang 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
Halmahera Island Tourism
www.halmahera-utara.com ■

