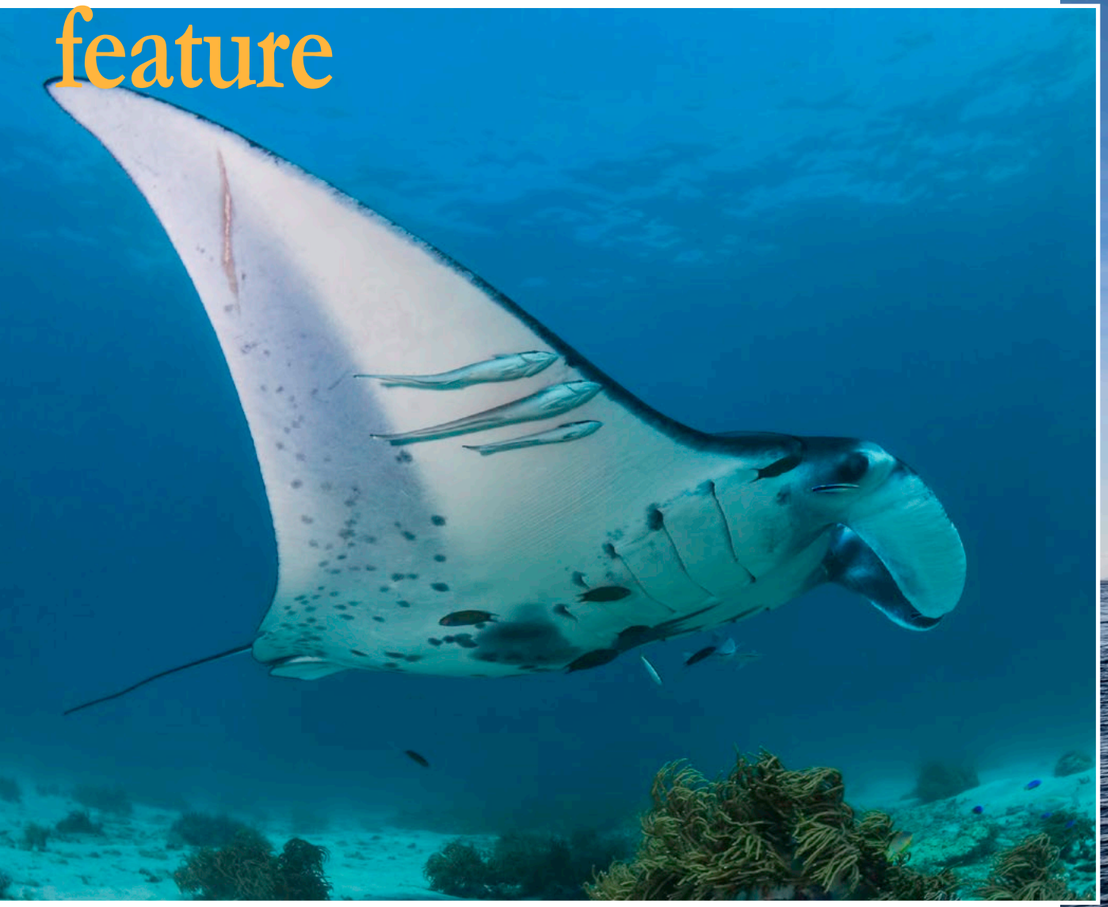
Papua New Guinea's

Manta Rays *of Milne Bay*

Text and photos by Don Silcock



Reef manta ray, or *Manta alfredi*, (above) at cleaning station off Gonu Bara Bara Island (right) in Milne Bay Province, Papua New Guinea

From a distance, there is little to distinguish the small island of Gonu Bara Bara from the myriad of others in this part of southern Milne Bay Province; and few would guess that just off its northern beach is the best place in the whole of Papua New Guinea to see the magnificent reef manta ray—*Manta alfredi*.

Reef mantas had been known to patrol that beach for many years, but all attempts to try and interact with them were random at best—maybe you would see one or more, maybe you wouldn't. Then, back in 2002, almost by accident, Craig de Wit discovered why the mantas were there.

Craig is the skipper of the *Golden Dawn* liveaboard, which had been chartered to search for mantas. He had gone to all the best-known Milne Bay locations but did not find a single one. Finally, in an act of inspired desperation, he responded to the pleas of James, the boat's engineer, to check out his home island where there were "lots of mantas just off the beach".

Here is how Craig described finding them:

"I discovered the cleaning station when we went to Gonu Bara Bara, James my engineer kept insisting that there were lots of mantas at his island, so we went in search of them. On arriving, we saw them around the place on the surface, so most of the group went for a snorkel in hopes of getting close to them. I decided to go for a dive along the beach, hoping to get close; and while drifting along in the current, I came across the cleaning station and I guess the rest is now history."

Craig christened the cleaning station "Giants@Home", and I was fortunate to experience it first-hand just two weeks after that discovery.

Cleaning stations

Cleaning stations are a kind of underwater demilitarized zone where the normal Darwinian survival of the fittest rules of the reef are put on hold while matters of personal hygiene are attended to. Mantas, like most medium and large underwater creatures, suffer infestation

Location of manta ray cleaning station at newly named dive site, Giants@Home

THIS PAGE: Manta rays patrol the Giants@Home cleaning station, just off the beach at Gonu Bara Bara Island

Manta Rays

Scene at typical cleaning station, with cleaner shrimp in mouth of moray eel. Note identification stripe on cleaning shrimp

from tiny parasitic crustaceans and have no real way of removing them without some help. That help comes in the shape of small creatures like shrimps, gobies and wrasses who cohabit in specific locations known to both sides as places of mutual benefit—the larger creatures get rid of their unwanted guests and the small ones are allowed access to areas of their guest they would normally never venture, to feed on the rich pickings found there. Interestingly, most of the cleaning creatures have developed stripes, which are believed to identify them as "cleaners" to their potential customers!

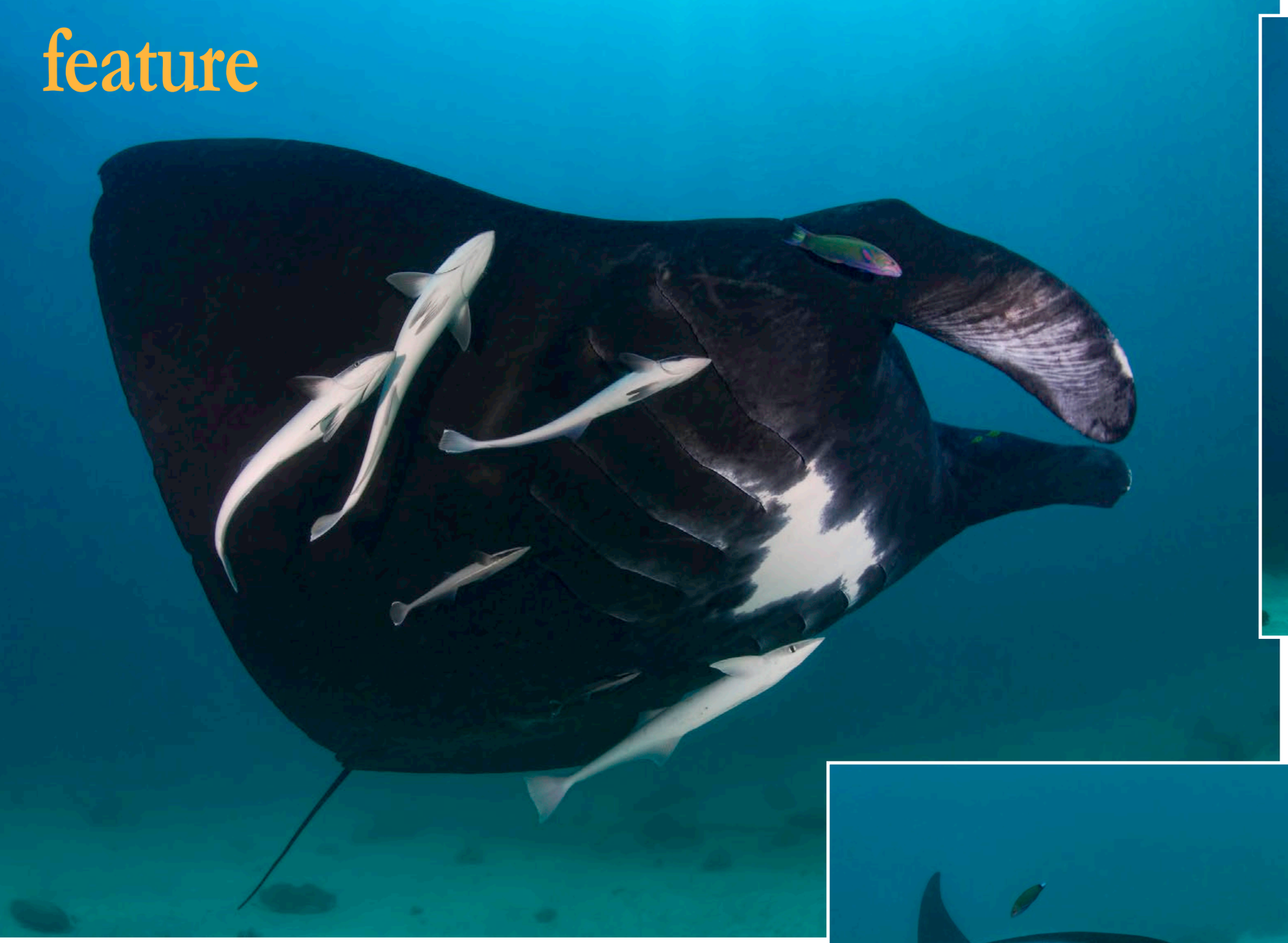
Cleaning stations in general are easy to recognize. They tend to be quite common and are great places to watch the interaction between the cleaners and their customers. Typically, when a large fish enters a station, it signals its needs by assuming a trance-like posture, often with its mouth wide open and gills extended outwards so that the cleaners can get access to the most difficult areas. It is quite normal to see the cleaners foraging in the deepest recesses of the fish's mouth. The usual signal that the truce is over is a shudder from the fish, prompting the cleaners to quickly exit stage left!

Manta cleaning stations

Manta rays are filter-feeding planktivores that use their mouths and modified gill plates to strain plankton and small fishes from the water. They have teeth, which are tiny, peg-like and about the size of a pinhead, but they are not used for feeding. Instead, they are utilized during breeding so that the mating mantas can hold on to each other. Basically, manta rays are harmless to both man and to the cleaners, but they are nevertheless big animals, with the average wingspan of reef mantas reaching around 5.5m, while the larger oceanic mantas (*Manta birostris*) getting to at least 7m. They are truly intriguing creatures that are both intelligent and curious, having brains that are significantly larger in proportion to their body size than other fish. Being in their presence is, in my opinion, an absolute joy and cleaning stations are a great way to maximize that interaction time.

Open water encounters with reef mantas are typically fleeting in nature. They will check you out, but that's usually it, and they move on. Whereas, at a cleaning station, there are more mantas and they stay longer as they take turns being serviced.

Usually, the cleaning station will be close to an area with a strong current that brings the rich plankton which mantas feed on, which explains the early reports of mantas near Gona Bara Bara as close by as the China Strait that connects the Coral Sea to the south with Milne Bay and the Solomon Sea to the north. Giants@Home is a particularly good station as it is shallow at about 9m, so bottom time



THIS PAGE: Manta rays patrol the Giants@Home cleaning station, just off the beach at Gonu Bara Bara Island

is not an issue. It is literally just off the beach, which makes it very safe, and water clarity is usually (but not always) pretty good.

But the exceptional thing about its location at Gonu Bara Bara means it can only really be dived from a liveaboard and therefore the total number of divers in the area is the number on the boat and shifts can be organized to minimize the number of divers in the water at any point in time. At other locations, this is rarely the case, and your interaction can often be spoiled by the sheer number of other divers.

Timing at Giants@Home does not seem to really matter, and I have seen mantas on the bommie throughout the day. They are not always there, but very rarely will you dive there and not see at least one (but often many more)!

Manta ray protocol

We have all seen those old images of "intrepid divers" riding on the backs of manta rays by holding on to a couple of resident remoras—so 1970s—but at least the offenders could claim ignorance. Today, we know much more about these wonderful creatures, and they truly are an incredible mix of grace and symmetry, combined with intelligence and curiosity.

Both oceanic and reef mantas are also listed on the IUCN Red List as "Vulnerable", which means they are likely to become "Endangered" unless the circumstances threatening their survival and reproduction improve. There are many reasons for that status, which are far beyond the scope of this article; but as divers, we are privileged to experience such creatures, and therefore, it is our responsibility to behave properly when we do.

We should *never*, ever, try to ride a manta like those guys from the 1970s, and we should *never* chase or harass them in any way! What we should do, and in my personal experience this is by far the best way to get the best interactions, is to position ourselves around the cleaning station so that the mantas have

THIS PAGE: Manta rays at the Giants@Home cleaning station, Gonu Bara Bara Island

a clear entry and exit. Don't get too close as you will be in the way, and the mantas will not come in as they appear to feel vulnerable when hovering to be cleaned and are easily spooked.

Once they have made a few passes and gotten used to you, they will often come close to really check you out, which is the best type of encounter, as it is on the manta's terms and they are in control. Basically, behave and you will be amply rewarded!

So, where is Gonu Bara Bara?

The island is located in southern Milne Bay Province, about 8km to the south-east of the former provincial capital of Samarai Island at the bottom of the

Gonu Bara Bara Island on map of Papua New Guinea (left)

View of China Strait (above); Manta ray at cleaning station (top left)

China Strait. Roughly 2km wide and 7km long, the China Strait is the passage between the southeastern tip of the Papua New Guinea mainland and the China Strait group of islands. It connects the Coral Sea to the south with Milne Bay and the Solomon Sea to the north and was named by Captain John Moresby, who surveyed the region and claimed the south-eastern part of New Guinea for Britain in 1873.

Moresby wrote in his journal that he believed he had found "a new highway between Australia and China". This was a very big deal at the time as it seemed to provide a way to eliminate the long and dangerous detour sailing ships of the day had to make around the Louisade Archipelago as they made their way north from the eastern coast of Australia to China.

Samarai Island is sadly run-down these days and a shadow of its former glory under the Australian colonial administration, when it was the second largest town in Papua New Guinea after Port Moresby. But its jetty is a treasure trove of critters that make a great alternative to Giants@Home!

How to dive Gonu Bara Bara

The only way to dive at Gonu Bara Bara is from a liveaboard, and there are two that service the area. Top of the list is the MV *Chertan*, which is owned and operated by Rob van der Loos. *Chertan* is based in Alotau, the capital of Milne Bay Province and operates year-round in Milne Bay, with regular visits to the China Strait, Samarai Island and, of course, Gonu Bara Bara. Van der Loos has been running dive trips in Milne Bay since 1986 and, simply put, knows the area better than anybody else. MV *Golden Dawn* also dives Gonu Bara Bara but it is based from Madang and operates throughout Papua New Guinea depending on the seasons.

MV *Chertan* liveaboard docked in Milne Bay Province

March, June and October are when the boat visits Milne Bay and, as its skipper Craig de Wit discovered Giants@Home, he clearly owns the bragging rights about the site! ■

Asia correspondent Don Silcock is based from Bali in Indonesia. He has dived extensively in Papua New Guinea, Indonesia and many other countries in the Indo-Pacific region and his website ***www.indopacificimages.com*** *is full of information on those locations.*

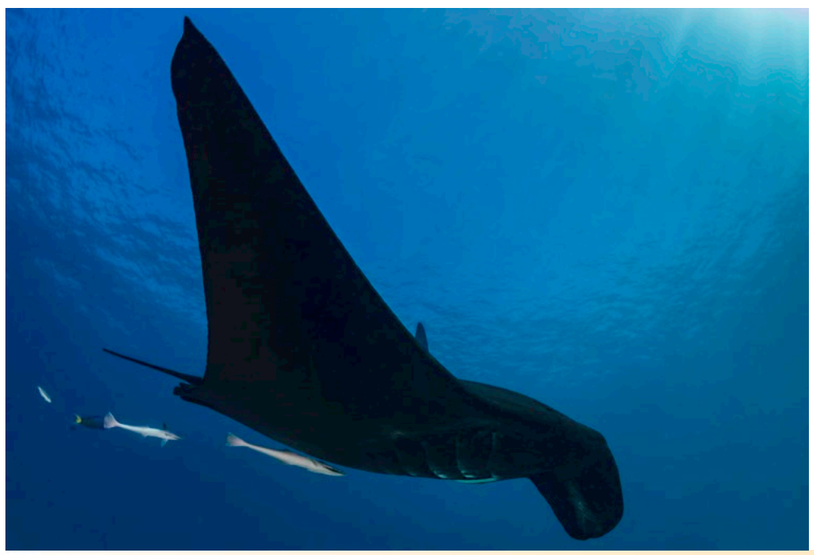
fact file

Papua New Guinea

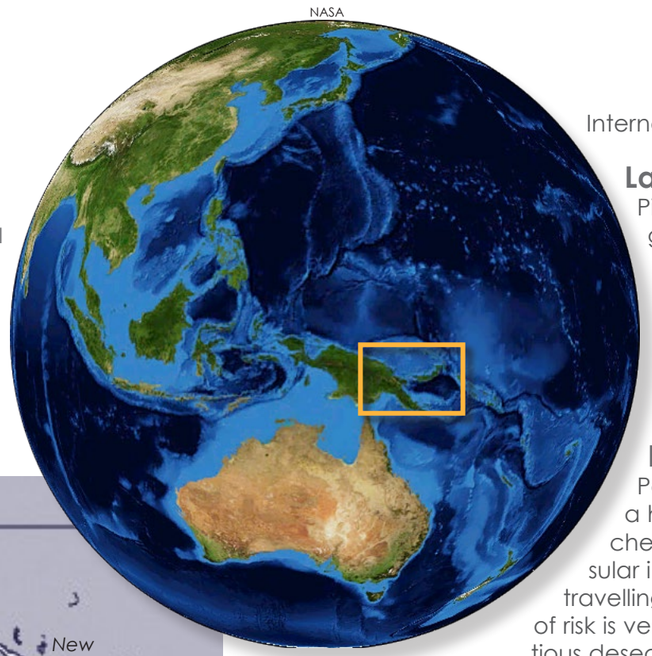
SOURCES: US CIA WORLD FACTBOOK, XE.COM, PAPUANEWGUINEA.TRAVEL/DIVING

History Papua New Guinea is a developing country in the Southwest Pacific, located on the eastern half of New Guinea, which is the second largest island in the world. In 1885, it was divided between the United Kingdom (south) and Germany (north). In 1902, the United Kingdom transferred its half to Australia, which occupied the northern portion during World War I and continued to administer the combined areas until independence in 1975. After claiming some 20,000 lives, a nine-year secessionist revolt on the island of Bougainville ended in 1997. Today, Papua New Guinea relies on the assistance of Australia to keep out illegal cross-border activities from Indonesia primarily, including illegal narcotics trafficking, goods smuggling, squatters and secessionists. Government: constitutional monarchy with parliamentary democracy. Capital: Port Moresby

Geography Oceania, Papua New Guinea is a group of islands east of Indonesia including the eastern half of the island of New Guinea between the Coral Sea and the South Pacific Ocean; Along its southwestern coasts, it has one of the world's largest swamps. Coastline: 5,152km. Terrain: mostly mountainous with rolling foothills and coastal lowlands. Lowest point: Pacific Ocean 0m; Highest point: Mount Wilhelm 4,509m.



Climate Tropical climate with slight seasonal temperature variation; the northwest monsoon occurs December through March; the southeast monsoon occurs May through October. Natural hazards: active volcanism, as PNG is situated along the Pacific "Ring of Fire". The country experiences frequent and at times severe earthquakes, mudslides and tsunamis.



RIGHT: Global map with location of Papua New Guinea
BELOW: Location of Milne Bay on map of Papua New Guinea
BOTTOM LEFT: Manta ray at cleaning station off Gonu Bara Bara Island

Economy Natural resources abound in PNG. However, getting to them has been difficult due to the rugged terrain, issues with land tenure as well as expensive infrastructure development. Around 85% of the population live on subsistence farming. Two-thirds of export income comes from mineral deposits such as copper, gold and oil. Estimates of natural gas reserves come to about 227 billion cubic meters. Construction of a liquefied natural gas (LNG) production facility planned by a consortium led by a major American oil company could develop export of the resource in 2014. It is the largest project of its kind in the history of the country and could help the nation double its GDP. Transparency will be a challenge for the government for this and other investment projects planned. Other areas of development by the government include more affordable telecommunications and air transport. Prime Minister Peter O'Neill and his administration face challenges that involve physical security for foreign investors, building investor confidence, increasing the integrity of state institutions, bettering economic efficiency through privatization of state institutions operating under par, and continuing good relations with Australia, which ruled PNG when it was a colony.

Environment Growing commercial demand for tropical timber is causing deforestation of the PNG rainforest. It also suffers pollution from mining projects and severe drought;

Population 6,552,730 (July 2014 est.) Ethinic groups: Melanesian, Papuan, Negrito, Micronesian, Polynesian. Religions: Roman Catholic 27%, Protestant 69.4%, Baha'i 0.3%, indigenous beliefs and other religions 3.3% (2000 census).

Internet users: 125,000 (2009)

Language Melanesian Pidgin serves as the lingua franca, English is spoken by 1%-2%, Motu is spoken in the Papua region; there are 715 indigenous languages—many unrelated.

Health & Safety Papua New Guinea has a high crime rate. Please check state advisory consular information before travelling to PNG. The degree of risk is very high for major infectious deseases; food or waterborne diseases include bacterial and protozoal diarrhea, hepatitis A and typhoid fever; vectorborne diseases including dengue fever and malaria are high risks in some locations (2004)

Currency Kina (PGK). Exchange rates: 1USD=3.03PGK; 1EUR=3.32PGK; 1GBP= 4.37PGK; 1AUD=2.15PGK; 1SGD=2.13PGK

Decompression Chambers
Melanesian Hyperbaric Services
Jacksons Airport, Port Moresby,
Papua New Guinea
Tel: +675 693 0305
or +675 693 1202
Port Moresby Medical Service
Tel: +675 325 6633
or +675 693 4444

EVACUATION INSURANCE is compulsory for some PNG dive operators, liveaboards and resorts. See DAN for information and travellers insurance: www.diversalertnetwork.org

Websites
Papua New Guinea Tourism
www.pngtourism.org.pg