



# beyond the

: TEXT PAUL WALDEN, IMAGES JUSTIN GILLIGAN

+ IN QUEENSLAND'S FAR NORTH THERE'S A PLACE WHERE THE WATERS REMAIN LARGELY UNCHARTED, AND DIVING STILL VERY MUCH MEANS EXPLORATION. POLITICALLY, THE REEFS HERE ARE PART OF THE GREAT BARRIER REEF, BUT THE NAME IS MISLEADING. SITUATED OUTSIDE THE CONTINENTAL SHELF, WITH DROPOFFS STRETCHING INTO OCEANIC ABYSSES, THESE REEFS ARE REALLY SOMETHING ELSE.



Green sea turtle



PAUL WALDEN

Deceptively beautiful



Coral cod

LEGENDARY RAINE ISLAND AND THE GREAT DETACHED REEFS

# barrier

The instruments rattle and our spirits soar as the small twin-prop bound for Lockhart River banks hard before setting course. My photographer Justin and I have done many dives on the reefs off Cairns, Northern Ribbons and Osprey, but have long dreamt of the tigers and turtles of Raine Island. This destination is only visited by a handful of trips each year, and, finally, we're on one of them: Nimrod Explorer's far northern expedition.

The landscape progressively gets drier, and after Cooktown there's little but wilderness below. It's the outback Cape York, and it's rough. A country of historic exploits and abandoned goldmines, where crocodiles reign. I know because I recently took a four-wheel-drive trip right to The Tip. Below I can see Bathurst Bay and the tidal mudflat where my bogged Landy was saved by rangers well after dark. Not a building or vehicle in sight.

Apparently, the waters around Raine Island are similarly wild. One of Nimrod's crewmembers is on the same flight and tells how, one evening the previous week, a Spanish mackerel leapt clean out of the

ocean to land on top of a canopy some 3.5 metres above the surface. You've got to wonder what was chasing it.

In Lockhart River, we're met by dry heat and a 4WD bus that takes us to the small coastal community of Portland Roads, where MV Nimrod Explorer is moored. Formalities over and dive gear assembled, we steam toward the Great Detached Reefs, a reef complex just south of Raine Island. Though officially part of the Great Barrier Reef, this reef system hosts not only the rather coastal fauna of GBR, but also pelagic species usually associated with Coral Sea atolls. The Great Detached Reefs are on the slope of the continental shelf, where very deep waters meet the relative shallows of GBR, and scientists speculate whether strong tidal currents and shelf upwelling of nutrient-rich deep-sea water contribute to the special ecology here.

As we work our way up to Raine Island, we enjoy one great dive after another. The common denominators for most of the sites are excellent vis, sheer walls covered by soft and hard corals, gorgonian fans and sponges, and a huge diversity of reef fish

great and small. In many locations, plentiful nudibranchs add extra colour to the mix, while schooling barracuda, trevally and humphead parrotfish cast shadows on the reef.

A surprisingly large number of baby whitetip reef sharks, grey whalers and silvertip sharks join us on many dives, and occasional chunky adults check us out before going back to patrolling the reef edge. The frequent shark sightings here are a reminder that the Coral Sea, sadly, is one of the world's last shark strongholds; something WWF is highlighting in their current campaign Save the Coral Sea (see fact box). Our party will have encountered eight different shark species before the week is over.

Slowly finning along the dropoffs, we make it a habit to cast an eye out into the blue every now and then – many of the dive sites are right next to abysmal depths of 600 metres or more, and you never know what may rise from there. At South Mantis Reef a huge dogtooth tuna suddenly raced past. Together with the sharks, barracudas and Spanish mackerels,



A school of sweetlips



Gorgonian fans at depth



Whitetip reef shark  
(*Triaenodon obesus*)



Diver with sea whip

these silvery tanks keep all the little reef fish on the alert. It's a highly active ecosystem. A battle zone.

Ecology isn't the sole drama, though. On our way north, we plough the waters of Wreck Bay, named after the numerous ships that have foundered in this area. At least 21 vessels sank here during the 18th and 19th centuries, and only three of the wrecks have been located. One of them is HMS Pandora, which lies north of Raine Island; she had been sent out from England to capture the mutineers from Captain Bligh's HMS Bounty. With a few prisoners still in a holding pen, she went down in 1791.

At The Pinnacle, a bommie inside the Great Detached Reef, I get a taste of what the shipwrecked sailors experienced. There's little to see here but vast empty expanses of ocean and the turquoise speck of the bommie. Not a single other vessel had been sighted during our days at sea. We're alone. There aren't even any birds in the sky.

It's a curious situation: above the surface the ocean is a desert; below, it's an Eden. This contrast is particularly obvious at The Pinnacle. It towers from the bottom at over 40 metres like the column of some ancient Greek temple, its sheer walls covered in soft corals, sponges and gorgonian fans, with the occasional cavern opening up like a window, wide-eyed and colourful inhabitants peering out from the darkness inside. There's very little parking space left for any more life forms. We're in what scientists call a hotspot: an area of

extraordinarily high biodiversity. The Great Detached Reefs are on the fringes of the renowned Coral Triangle – the area with the greatest number of reef fish species in the world.

For all the marvellous diving we experience on the way north, Raine Island remains in the back of our minds. This uninhabited sand cay hosts the planet's largest known rookery for the green sea turtle: between 14,000 and 22,000 turtles have been recorded on a single night during the breeding season, which lasts from November through January. It's also the most important seabird rookery in the Great Barrier Reef Marine Park, with 84 species recorded, including 16 breeding. And tropical Australia's oldest European building tops it all off; the Raine Island beacon, built by convicts in 1844, can be seen from miles away.

At the crack of dawn on our fourth day, binoculars reveal the beacon surrounded by a cloud of seabirds, and the heavy breakers off the island shining like gold in the rising sun. A pod of bottlenose dolphins is escorting us. Frigate birds and boobies level out by the wheelhouse and watch us with ancient eyes. It's a grand reception.

We wipe the sleep from our eyes and stand in the salty spray at the bow. Suddenly I spot a long dark-grey shape appearing to sit idly just below the surface. The turtle-breeding colony at Raine Island has a loyal following of tiger sharks. Mapping of the movements of tiger sharks fitted with GPS tags suggests that the sharks basically are

in orbit around the island. They are unlikely to miss out on the easy pickings provided by turtles worn out by digging and egg-laying.

Tens of thousands of tonnes of guano were mined here in the early 1890s. Kitting up in our dive gear downwind from the island, we can tell that the stocks have been replenished since the mining ceased.

Today, Raine Island has full protection as a nature reserve and only a select few scientists and filmmakers are granted permits to go ashore. Diving around the island is also regulated, so we have to stay outside a certain exclusion zone. Nevertheless, we're excited when we get into the tender.

The first group of divers do a rolling entry pretty much on top of a tiger shark, and whilst Justin and I aren't quite as lucky, we see schooling barracudas and humphead parrotfishes as well as several large turtles and numerous whitetip reef sharks, grey whalers and silvertip sharks. A bull ray spreads out like a rug on the seafloor far below us, and in the shallows, we find very healthy and colourful hard coral, shy fire dart gobies and more anemonefish than I've ever seen in any one spot. The topography varies from plateaus that form steps into the deep to sheer drop-offs plunging to 40-50 metres.

After four dives at Raine, Justin and I remain tigerless. But the turtles and the anticipation of seeing a striped bulk emerge from the depths have made every dive extra enjoyable. We're not grumpy

when it's time for a farewell BBQ. Anchored a distance from the island, we can just make out a lone turtle making her way up the beach in the fading light. She struggles over a berm and disappears. The next instant, sand starts flying as she digs out a hole for her eggs.

It's still early in the breeding season, so we know that she's only a forerunner of the hordes that are to follow: in one exceptional season, the total number of turtles visiting Raine Island and nearby Moulter Cay was estimated to be in excess of 103,000. That's a lot of turtles – and they may be relatively safe in Australian waters. But as they migrate far into the domains of Indonesia, Papua New Guinea and Solomon Islands, Australian legislation can't protect them. Keep in mind that the green sea turtle is named for the colour of the fat inside its shell; turtle meat is a highly sought after traditional food in many places. It's not a stretch to imagine that generations to come will find it overwhelming to see that single turtle nesting on the beach. We have very mixed feelings when the Raine Island beacon recedes in our wake the following morning.

Many more terrific dives are in store for us en route back to Portland Roads, but the one at Perisher Blue stands out from the rest. This site features snow-white sand punctuated by coral outcroppings and flanked by a wall with caves and swim-throughs. Within six minutes of entering the water, we've seen two mobula rays and a large cruising tawny nurse shark. They weren't hard to discover, because the visibility is around 50-60 metres. We glide

## legendary raine°



Diving at the Great Detached Reefs



Longnose hawkfish  
(*Oxycirrhites typus*)

### SAVE THE CORAL SEA!

The Coral Sea features extraordinarily rich biodiversity. It's a massive area of pristine marine habitat in a world where coral reefs are disappearing at a rate five times faster than the rainforests. But it's not a sanctuary. There's virtually no formal protection of the Coral Sea. It has remained what it is thanks to its sheer remoteness. And now it's under threat from increasing shark-finning and prospecting for gas and oil. WWF is calling on the Australian people to ask the government to declare the entire Coral Sea a Marine Protected Area. Sign their petition to save the Coral Sea at [www.wwf.org.au](http://www.wwf.org.au)



Barrier Reef anemone fish  
(*Amphiprion akindynos*)



Hawksbill turtle  
(*Eretmochelys imbricata*)

## legendary raine°

over fields of garden eels. Schools of blue triggerfish are outlined against the white background; the scene looks like a piece of modern design. A Maori wrasse flies by, eyes darting left and right. It's simply stunning. One of those moments that stay with you forever and you remember when you hear your favourite song.

Before we know it, the week is over and we're back by the mainland. Nimrod anchors in the little bay at Portland Roads in the evening, and, tired from some 26 dives, I retire to our cabin. It's not long before I'm roused by Justin. A group of Indo-Pacific humpback dolphins are hunting in the floodlight behind the dive deck. They rush in from the darkness and gracefully slide tackle their prey right next to us. After

a while they disappear; maybe the growing number of spectators put them off. Demi, the head instructor, fetches a didgeridoo and begins to play into the ocean. And the dolphins return. Enthralled, we don't care whether it's the music or the fish that brings them back. Dolphins are playing in the moonlit waves at our feet; stars are flickering in the night heavens. A parting gift from Cape York. This is what we want life to be like.

Looking back at the trip from the sterile confines of my study, it all seems unreal. As if the whole thing had only been one of those dreams of adventure. I know that I'll feel this way when the day is grey and the office hours long. But the dream is true. Out there, beyond the barrier, it's waiting.



The Raine Island beacon marks a wilderness outpost

## MORE GREAT SPEAKERS FOR OZTEK'09

**JILL HEINERTH** A pioneering technical diver and award winning filmmaker whose many diving accomplishments are highlighted by an Antarctic cave diving expedition inside the largest iceberg known to man, (*National Geographic, Ice Island*), Jill joins the international celebrity presenters at OZTeK'09. Combining a mastery of underwater technology with a formal Fine Arts education, Jill Heinerth wrote, produced, and appeared in *Water's Journey*, the PBS documentary series. Holding various scuba, cave diving, and closed circuit rebreather instructor credentials, Jill has also made significant contributions to the United States Deep Caving Team's Wakulla 2 project using paradigm-changing technology to map an underwater cave system in three dimensions. At Wakulla Jill also established a women's diving world record. Often called on by Hollywood directors to produce difficult underwater scenes, Jill is also sought out by international magazines and websites to document extreme environments with high technology. An Adobe Photoshop expert and teacher of underwater digital photography, some of Jill's professional diving, photographic and filmmaking awards include: *Sport Diving Magazine: Named A Living Legend; Women Diver's Hall of Fame: Inaugural Inductee; Explorer's Club Film Festival: Best Documentary; Canadian Technical Diver of the Year; Cine Golden Eagle (2); Gold Aurora Award; Fellow: National Speleological Society, and International HD Film Fest: Best Documentary.* Canadian-born, now living with her husband Robert in North Florida, there's more on Jill

Heinerth on [www.intotheplanet.com](http://www.intotheplanet.com)  
**RICHE KOHLER** His passion for technical diving and maritime

history has led him to explore some of the most challenging and dangerous shipwrecks in the world, including the *Andrea Doria* and *HMHS Britannic*. He's located and helped name numerous lost vessels, including the mine-laying sub *U-215* on the Georges Banks off Nova Scotia, a WWII destroyer *USS Murphy* crushed and forgotten in the New York approaches, and the 1800 steamship *SS Peconic*, a hurricane victim off the Georgia coast. But identification of an unknown WWII German U-Boat, the *U-869*, catapulted him into television and documentary film making. Detailed in the NY Times best seller, *Shadow Divers* by Robert Kurson, this exciting story is slated to be a major motion picture by 20th Century Fox. Kohler and long time dive buddy John Chatterton co-hosted the long-running History Channel series *Deep Sea Detectives*, and worked on projects for Paramount Pictures, CBS, PBS, and the Discovery Channel. In 2005 Kohler and Chatterton headed an expedition to the world's most famous ship wreck, *RMS Titanic*. Using the Russian *Mir* submersibles they made a series of dives. They located and documented new evidence that changed perceptions about *Titanic's* final moments, the tragic sinking and loss of 1500 people. These important discoveries led the pair to executive produce three award-winning History Channel documentaries *Titanic's Final Moments: Missing Pieces, Titanics Achilles Heel, and Titanics Lost Sister: Britannic*. A new book *Titanics last Secrets* by Brad Matsen, detailing these expeditions and findings will be available in 2008. With his wife Carrie, Kohler is currently conducting technical dive training, rebreather instruction, and leading shipwreck expeditions worldwide. More on Richie Kohler, visit [www.RichieKohler.com](http://www.RichieKohler.com).

**For more information on the OZTeK'09 Dive Conference & Exhibition plus the speaker list, go to [www.diveoztek.com.au](http://www.diveoztek.com.au) or email [admin@diveoztek.com.au](mailto:admin@diveoztek.com.au)**

**OZTEK'09**  
 21-22 MARCH 2009 SYDNEY

## snapshot adex 2008°



Happy participants in the Malaysian SSI Kids Scuba program which is now recognised as Asia's largest SSI children's scuba training scheme. There's a high learner/trainer ratio and family camps are conducted during school holidays. If you'd like to share the fun, here's how:  
 Email - [kidsscuba@yahoo.com](mailto:kidsscuba@yahoo.com)  
 Telephone: 6019-3176705 (Syed), 6019-3826705 (Nadia), Fax: 603-51928005  
 Or visit [www.kidsscuba.com](http://www.kidsscuba.com)

Mathew Partridge of Thailand's Pro-Tech Diving College chats with Adex visitors. Matt has been contributing technical diving material to *Sportdiving Magazine* and will be reporting on his participation in a cave diving expedition in Mexico. Check in with Mathew - [info@tech-ccr.com](mailto:info@tech-ccr.com) [www.protechdivers.com](http://www.protechdivers.com)



Above: Sportdiving Magazine's hard working team Leanne Wylie (left) and Gail Tippet (right) were delighted with the numbers of visitors stopping by their booth.  
 Left: Subscriber sign-ups for Sportdiving Magazine reached near-record numbers this year. More ADEX pix are on [www.divetheblue.net](http://www.divetheblue.net)