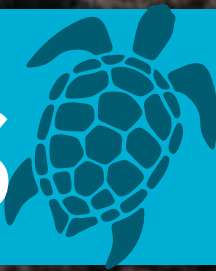




Turtles



YOUR FIELD REPORT

ISSUE 5



Duncan Williams from WWF-Pacific travelled up Papua New Guinea's Esis river deep into the rainforest that covers the south coast of New Britain

GREAT SEA REEF, FIJI



Hello!

Welcome to your latest turtle update



Karalaini Rereavosa, assistant turtle project officer, WWF-Pacific

Pacific communities hold the key to marine turtle survival. Thanks to your support, we recently spoke to people from 14 villages across Vanua Levu, Fiji's second-largest island, to understand how they feel about

these majestic ocean wanderers. While we've made incredible progress in changing attitudes towards turtles on several of Fiji's smaller islands, both egg harvesting and turtle poaching continue in the areas we visited, highlighting the vital work ahead of us. Over the page, my colleague Duncan recounts his recent trip to Papua New Guinea, where he's been sharing the conservation success stories you've helped us achieve in Fiji. **Sota tale!**

(This means 'see you soon' in Fijian!)



Papua
New Guinea

AUSTRALIA

MAKING WAVES

Thanks to you, Fiji's turtle guardians are inspiring communities in Papua New Guinea

Stepping off the boat in the Pomio district of New Britain island we were soaked. It had been a bumpy ride, enough to test even the most seasoned sailor. But the sights were worth it. Pomio's landscape is simply breathtaking: misty mountains rise dramatically from the coast, and they're covered in the most pristine, diverse rainforests I've ever seen. But we weren't here for the scenery. We came to share our experience of the marine turtle conservation work you support in Fiji, where we're helping change

attitudes among communities who've historically hunted turtles and harvested their eggs. We've helped former turtle hunters become community monitors – known as *Dau ni Vonu* – who study and protect nesting females on local beaches. Now we hope to work with the people of Papua New Guinea to do the same.

Across Pomio, we talked to villagers about the importance of marine turtles, the threats they face and the ways they could help protect them. We shared stories of Fiji's *Dau ni Vonu*, showing how their Pacific neighbours are drawing on

Community member Patrick Kontore teaches Duncan about eggs



Turtle eggs: hatched (right) and unhatched

Leatherback nest!

their traditional knowledge to help marine turtles, and also taking the lead in actively protecting them. Working together is a two-way process

and, encouragingly, they were enthusiastic about starting to monitor their own visiting turtles and learning more about the different species and their nests.

Leatherback discovery

During our visit, we surveyed some beaches where turtles are known to nest and made some exciting discoveries. Near Galowe village, where long, sandy beaches hug crystal-clear waters, we found four leatherback turtle nests – and the eggs they held were extraordinary. In Fiji, where mainly hawksbill and green turtles nest, we're used to handling eggs around the size of a ping-pong ball. These were as big as snooker balls. Imagine the size of the females that laid them!

Our trip marked a huge milestone for marine turtle conservation in Papua New Guinea. When communities lead protection efforts, the change that follows will endure. I'm so excited to see what the future holds for turtles here.

Duncan

Duncan Williams
Sustainable fisheries and food programme manager, WWF-Pacific



RIVER REVIVAL

The Dreketi river is Fiji's deepest waterway, winding through the nation's second-biggest island, Vanua Levu. Just over two years ago it was declared a protected area, creating a sanctuary for the rare species of sharks and rays that give birth to their young here.

Local fishers are already noticing a difference. "We're seeing greater numbers of sharks and a wider range of species, including critically endangered scalloped and great hammerhead sharks," explains 65-year-old Peni Vuakanisakea. "The sharks are also swimming further upriver, and other marine animals, including turtles, are following." It's great to hear this encouraging news.

Coral reefs support a huge variety of marine life



Picture perfect

The dense rainforest shrouding this volcano in Papua New Guinea's Pomio District is one of the most biodiverse on Earth

RECORD-BREAKER

Of all the marine turtle species, the leatherback is exceptional – in every sense of the word...

There's one particular feature that gives the leatherback turtle its name. It shares its reptilian head, broad flippers and wide, teardrop-shaped body with other marine turtles. But where are the bony, overlapping scales that define most turtles? With its deep, head-to-tail ridges, this animal's shell is very different from the rest.

In fact, these differences mark out the leatherback as the last survivor of the *Dermochelyidae*, a family distinct from other marine turtles. Unlike them, its backbone isn't fused to the lower shell, and instead of a shell it has tough, leathery black skin that's studded with hundreds of bony platelets.

Encountering a leatherback is like meeting a dinghy – it's huge! Leatherbacks can grow up to 1.8 metres long and weigh 500kg. Remarkably, the biggest example ever recorded came ashore in Wales in 1988, clocking in at 2.5 metres long and weighing a staggering 900kg.

These giants are formidable travellers. It's possible they have the greatest geographical range of any reptile, roaming the Atlantic and Pacific oceans. They can also cover huge distances when migrating. One female was recorded

averaging 30km a day for 647 days on a journey from her breeding grounds in the Coral Triangle of Indonesia to the west coast of the US, covering more than 20,000km in total.

Cool trick

All reptiles depend on the outside environment to regulate their temperature, but leatherbacks are peculiarly adapted to swimming in cold seas close to the poles. Their big muscles and high metabolism enable them to generate extra heat, and they can hold in warmth thanks to layers of fat and oil. They also use a heat-exchange system whereby blood cooled by flowing close to chilly skin is heated by warmer blood vessels coming out from the core. This helps maintain a steady temperature.

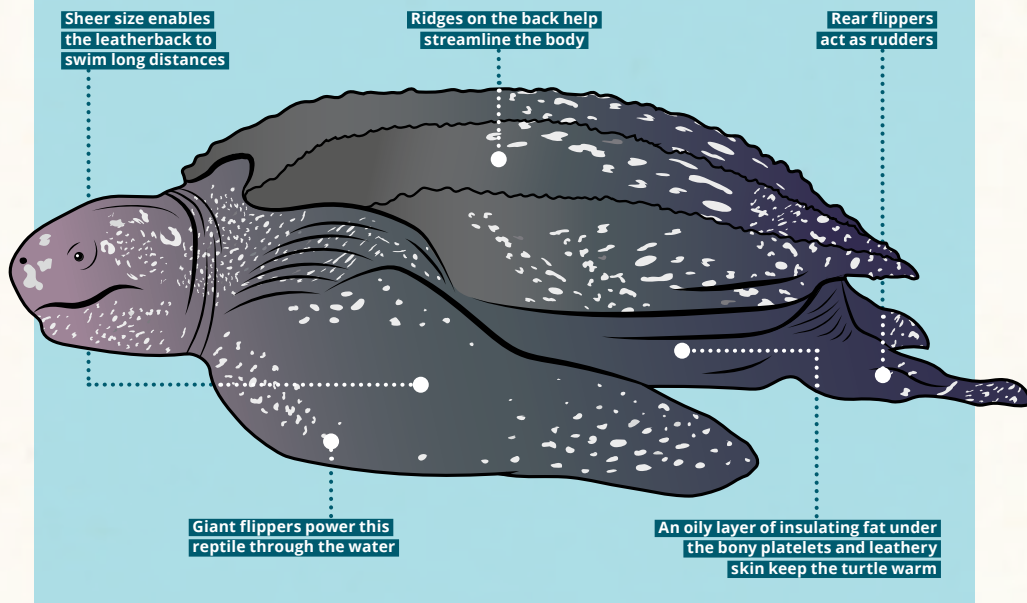
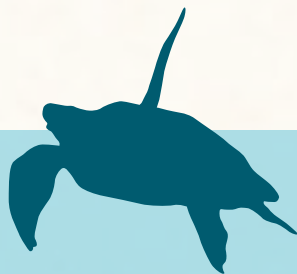
Carnivorous leatherbacks survive largely on a diet of jellyfish, which mostly consist of seawater. As a result, leatherbacks swallow far more saltwater than other marine turtles. They rid themselves of excess salt by weeping it from glands close to their eyes. The glands are so big they're twice the size of the turtle's brain.

Leatherbacks can dive three times as deep as other marine turtles, reaching depths of 1,000 metres or more. Their ▶

With their teardrop-shaped bodies and powerful front flippers, leatherback turtles swoop effortlessly through the water, grazing on jellyfish

LONG-HAUL TRAVELLER

The leatherback's body is specially adapted for life navigating from ocean to ocean. This marine turtle can manage huge distances on journeys that last months at a time.



blood contains twice as much oxygen as other marine turtles', and they can withstand the increased pressure by collapsing their lungs. It's possible they deep-dive like this to scope out their dinner, as jellyfish sink into deeper water during the day, rising at night to feed in the shallows.

Distances and diet bring twin threats for leatherbacks. They risk being trapped or killed as 'bycatch' in fishing gear such as longline, gillnets and trawl fisheries. Then there are the ever-present plastic bags floating in the ocean, which many

turtles mistake for edible jellyfish. Once swallowed, the bags can cause suffocation or obstruction of the gut.

Nests full of promise

For all the feats of their adult lives, leatherbacks are in most danger during the first days after hatching. Females return to the tropical beach where they hatched and create a flask-shaped hole in the sand. They'll lay between 60 and 120 white, spherical eggs, each the size of a snooker ball. The shape is critical, as it appears to maximise the use of space

in the nest while also reducing dehydration. And the female's job isn't over – she'll come back five or six times a season, leaving gaps of nine to 10 days between laying.

The hatchlings that climb to the surface and crawl to the ocean have a one in a thousand chance of survival. Predators pick off plenty, but human threats such as hunting or disturbances make life difficult too. Eggs are taken for everyday food, or nests are destroyed accidentally.

DID YOU KNOW?

About a third of leatherback eggs are undersized and contain no yolk – but no one knows the reason why all those infertile eggs are laid.

Your supported turtles on Fiji have better odds than most, as we're funding community teams to watch over their nests. We're also training fishers in how to avoid catching them accidentally. Leatherbacks need our support, too. They're classed as vulnerable, and some populations in the Pacific and south-west Atlantic are critically endangered. With your support, we can give them a helping hand. ■



Female leatherback turtles nest on tropical and subtropical beaches at night, digging large pits in the sand to lay their eggs

A WORLD OF GOOD

Try a daily dose of nature to boost your mental and physical wellbeing

In fast-paced Hong Kong, many of us are living under constant pressure. Work, studies, family responsibilities and digital overload can take a real toll on both our emotional and physical wellbeing – particularly for young people growing up in an increasingly urban and screen-dominated environment.

Yet one of the most effective remedies lies closer than we think, often just beyond our doorsteps: nature.

How nature helps us feel better

An overwhelming body of evidence shows that connecting with nature is one of the best things we can do for our mental wellbeing. It helps us relax, lowers stress levels, boosts confidence, self-esteem and creativity, and helps us to find focus and emotional balance.

However, despite Hong Kong's rich biodiversity, stunning landscapes and easy access to country parks and beaches, recent studies show that Hong Kong people scored the lowest among 18 studied regions globally for the level of nature connectedness and well-being index.

While many people recognise that nature makes them feel better, busy urban lifestyles often leave little room to do so.

Let's reconnect with nature

At WWF, we believe that strengthening our connection with nature is essential – not only for our own wellbeing, but also for fostering greater care and action in protecting the natural world.

You don't need a long hike or a remote destination to make a difference. Spending just 20 minutes a day engaging with nature can make a massive difference to our mental wellbeing.

While spending time in the great outdoors is rewarding, you can also connect with nature when you're at home too – from growing herbs,

listening to birdsong, to enjoying images of nature to bring a sense of calm to your day.

The great news is that many of the powerful mood boosters are totally free – as long as we look after our world. Let's restore nature, and let nature restore us– as long as we look after our world. Let's restore nature, and let nature restore us.

GET YOUR DAILY DOSE OF NATURE

Take a moment each day to reconnect with the natural world around you – for your own wellbeing, and for the planet we all share.





Working to sustain the natural world for people and wildlife
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As well as helping to safeguard turtles, you support our other vital work to help protect our beautiful planet and its wildlife. Thank you.