



How Cairns locals are
banding together to
protect the world's
largest living structure

Words by Liz Bond
Photos by Mark Lehn



Read any news piece about the Great Barrier Reef and chances are it'll be focused on the natural wonder's parlous state, with everyone from the *New York Times* to the

Atlantic reporting that large sections of the reef are dead or dying. If you've not been to Cairns and seen the reef for yourself, it's easy to conjure up visions of lifeless, bleached coral, with rampaging crown-of-thorns starfish and coral-eating snails leaving a trail of destruction. Contrary to popular belief, however, the situation is not that bleak. With no coral bleaching recorded this past summer, local scientists who live, breathe and care for the reef every day are confident that it is actually just unwell and that their combined efforts will help it recover and thrive in the future.

There is no doubt, though, that the reef is under stress, especially by warming waters – a consequence of global climate change. Some areas have indeed suffered serious bleaching, but according to Singapore-born marine biologist Azri Saparwan, this is simply a defence mechanism against rising water temperatures and increased agricultural pollution that reduces the levels of oxygen in the water.



FROM LEFT
TOURISTS ENJOY
THE SANDY
BEACHES AND
CLEAR WATERS OF
FITZROY ISLAND;
MARINE BIOLOGIST
AZRI SAPARWAN IS
OPTIMISTIC ABOUT
THE REEF'S LONG-
TERM FUTURE



CLOCKWISE
FROM LEFT
CUTTINGS FROM
HEALTHY CORAL
SAMPLES ARE
TRANSPLANTED TO
DAMAGED
SECTIONS OF THE
REEF; LEISURE
DIVERS CAN
VOLUNTEER TO
CLEAN CORAL
SAMPLES; SETTING
UP A CORAL
NURSERY

The 30-year-old Azri is a chatty ball of energy with a wide smile and laughing eyes. As he talks about the reef, his enthusiasm is palpable. “It is so gigantic, there are still parts unexplored,” he says excitedly. “The size and diversity of the reef make it such a wonder.” However, his mood changes when asked if the reef is on its last legs. “No!” he answers, emphatically. “It’s not dead. It’s simply a little sick.”

Ocean conservation has always been Azri’s passion. While studying at South Australia’s Flinders University, he founded the Sukamade Turtle Refuge in East Java, to educate volunteers on compiling data and handling sea turtles. Currently employed as resident marine biologist on Fitzroy Island, part of Azri’s job is to train volunteer divers to clean small samples of heat-resilient coral in the tropical waters surrounding the island for the Reef Restoration Foundation (RRF). The RRF is a not-for-profit social enterprise focusing on regenerating high-value coral reefs. Cuttings from these healthy coral samples are transplanted from coral nurseries to damaged sections of the reef nearby, aiding the rebuilding process.

Covering approximately the same area as Italy, the Great Barrier Reef stretches over 2,300km in Queensland’s tropical north. Home to around 1,500





FROM LEFT
DIVING AND
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POPULAR WAYS OF
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AT THE GREAT
BARRIER REEF

fish species and six of the world's seven marine turtle species, it is one of the planet's most diverse ecosystems. It's no wonder the people who live and work here are so committed to protecting the reef. One shining example of this community action is Fitzroy Island Resort, an idyllic retreat surrounded by its own fringing reef and palm-lined beach.

Besides being a haven for divers and snorkellers, Fitzroy Island Resort has also rolled out various initiatives to protect and preserve the world's largest living structure. The resort supports the Cairns Turtle Rehabilitation Centre (CTRC), where tourists can visit recovering sea turtles. In December last year, it supported the work of the RRF with the establishment of the reef's first offshore coral nursery.

The RRF is currently headed by the quietly spoken Stewart Christie, who also used to lead Advance Cairns, the regional advocacy and economic development organisation for Tropical North Queensland. On a trip back to Cairns aboard the Fitzroy Island Fast Cat, the Scottish-born Christie shares how he now spends his time knocking on the doors of philanthropists, big business and government agencies, trying to enlist their support.

A pragmatist, Christie explains, "It's about making partnerships. We need to recognise that some things will work and some won't. But, we can't just keep monitoring [the situation] – we need to intervene."



HOW TOURISM HELPS THE GREAT BARRIER REEF

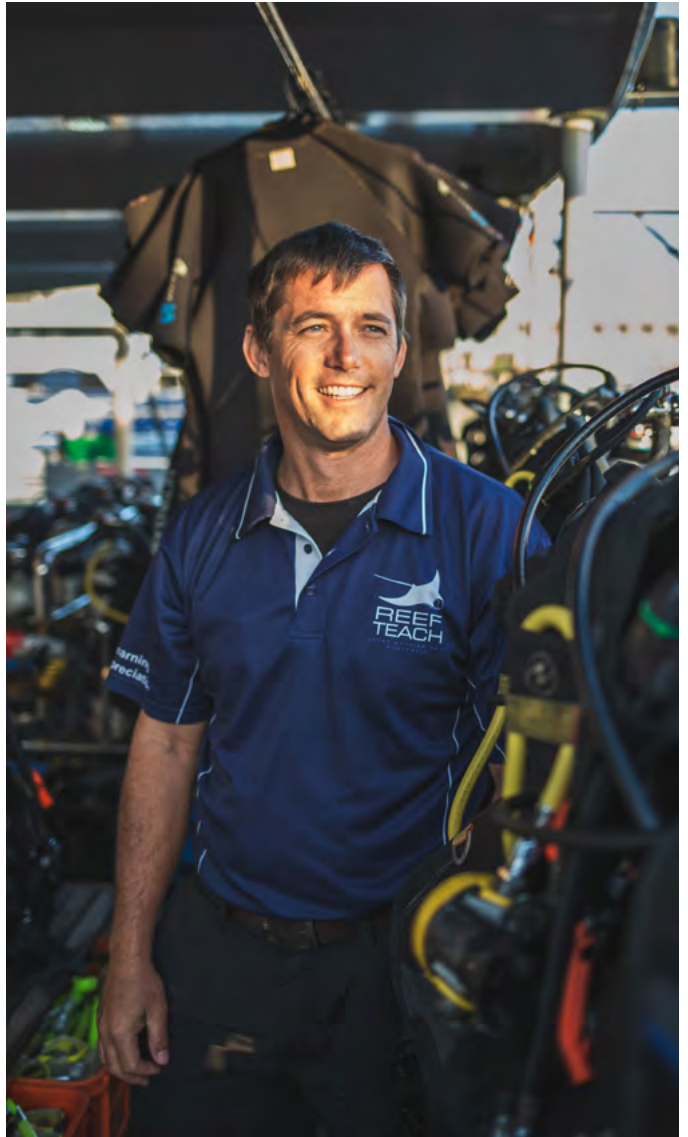
- Tourists can volunteer to monitor marine life on cruises like those offered by Sunlover Reef Cruises (sunlover.com.au) or clean up a beach with Tangaroa Blue (tangaroablue.org), an organisation involved in removing marine debris.
- Plastic is killing turtles and massively increasing disease risk in corals. More than 50 tour boats and over 400 hotels and bars have taken up the challenge to go plastic-straw-free. Find out more about the Last Straw on the Great Barrier Reef campaign at thelaststrawonthebr.org.
- Holidaying in and around Cairns also supports the reef. A small levy from each boat and tourism operation within the Great Barrier Reef Marine Park goes towards managing the park.

RIGHT
GARETH PHILLIPS,
WHO SKIPPERS
PASSIONS OF
PARADISE. ALSO
CO-FOUNDED
THE REEF
TEACH CENTRE

Evidence of this partner-led approach is apparent in the ongoing coral nursery scheme, which adopted a highly successful method developed in the Florida Keys to establish an initial six growing frames in late 2017. The project was seed-funded by Fitzroy Island Resort, Cairns Dive Centre, the Association of Marine Park Tourism Operators, Gem Pearl and the Australian Government's National Environmental Science Programme. The National Australia Bank awarded a substantial grant earlier this year while Japan's largest travel agency JTB further boosted the effort with funds this April.

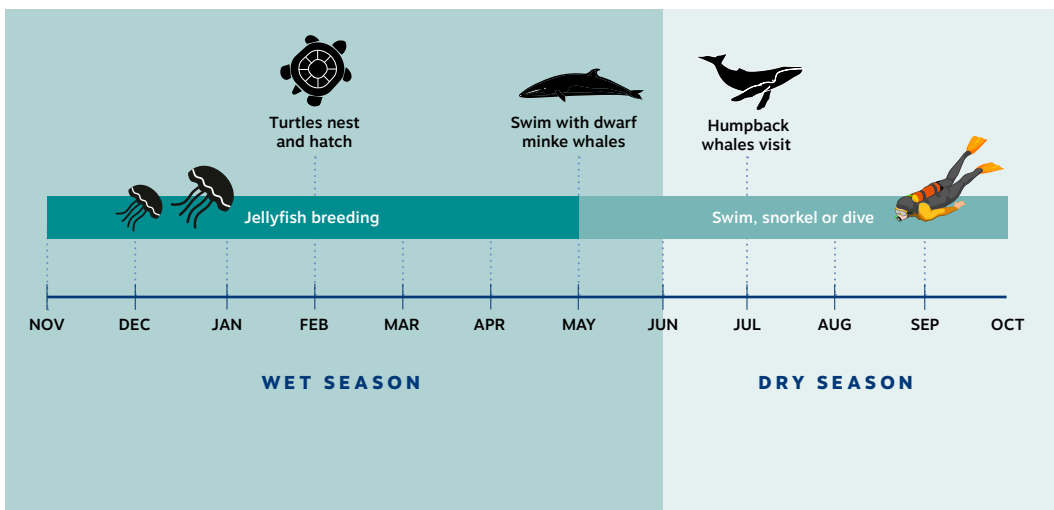
While big corporations are starting to throw their weight behind reef conservation, individuals are also looking to do their bit. By day, South African Gareth Phillips skips the Passions of Paradise, which offers day trips to the outer reef. At night, along with fellow marine biologist Abby Seymour, he works as a lecturer offering information and tips on how best to experience and enjoy the wonders of this diverse ecosystem through a unique educational programme called Reef Teach.

During the two-hour presentation, while passing around coral specimens, the lively Seymour explains, "Many people see



+ WHEN TO VISIT THE REEF

The best times to visit North Queensland are during Australia's winter and spring (July to November), when humidity is lowest. Stinger suits are mandatory during the wet season as it coincides with jellyfish season (from November through May).





TOP
THALA BEACH
NATURE RESERVE
RESORT, LOCATED
BETWEEN CAIRNS
AND PORT
DOUGLAS, IS ONE
OF THE MANY
BUSINESSES
ELIMINATING
THE USE OF
PLASTIC STRAWS



*SilkAir flies
between
Singapore
and Cairns five
times a week*

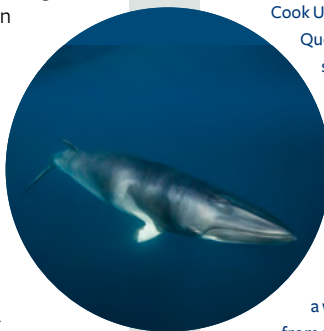
the bleached coral and think it's dead. However, some of these sections are a thousand years old – you can imagine how many bleaching events they've been through and yet, they're still here."

Bobbing on a perfectly turquoise lagoon at Hastings Reef on board Passions of Paradise, the solidly built Phillips doesn't mince words when he discusses how some American media outlets misreported that 93% of the reef was dead in 2016. "No," he says firmly, with a steady hand on Passion's wheel, "93% of the reefs surveyed were bleached but not dead. Bleaching is a natural physical response, like a fever to an infection".

"Last year, I shut down a site we go to called Spit Bommie. Between the crown-of-thorns starfish ravaging it and some bleaching, it wasn't fair to take tourists there. A few weeks ago, I had a good look and the recovery is outstanding – in just a year! It shows that recovery is "very possible".

So what can you do for the reef? For a start, according to Phillips, just visit it. "Come see the Great Barrier Reef – there is no other place like it on earth." ■

Words by CATHERINE BEST; Photos by MIKE BALL



MEET THE WHALE WHISPERER

Don't try to book an appointment with Dr Alastair Birtles in June or July. For two months of the year, the Australian research professor is largely incommunicado, hopping between dive boats in a quest to find out more about the Great Barrier Reef's most mysterious inhabitants: dwarf minke whales.

Birtles is the head of the Minke Whale Project, based at Townsville's James Cook University in North Queensland, and has spent 25 years and over 2,000 hours in the water studying these creatures. Visit the southern hemisphere in winter, and you'll find him in a wetsuit dangling

from a rope line, photographing and sketching whales and collecting fragments of their shed skin.

For Birtles, this commitment is borne from passion. "I know I'm biased, but they are exquisitely beautiful," he says of the whales. "They shine – that black, white and grey contrasting pattern; it's lovely being in the water with a large and attractive animal."

For this two-month window, Birtles and his research team piggyback on scuba diving vessels licensed by the Great Barrier Reef Marine Park Authority to operate minke whale swims. Permits are capped at eight operators, giving just 2,000 people a season the chance to interact with the minkes.

Birtles, a zoologist and marine biologist, says the partnership between researchers and dive boats is an example of responsible tourism at its best. "It's expensive doing research out here and it would be impossible if we had to [deploy] a research vessel. But these boats enable us to be out here."

It seems that ecotourism might hold the key to unlocking the minke's secrets. minkewhaleproject.org