



THE MARINE BIOLOGIST

MAKING WAVES

ON THE
GREAT BARRIER REEF

Meet marine biologist Jacinta Shackleton, a descendant of the legendary explorer Sir Ernest Henry Shackleton, who educates the younger generation to preserve Australia's Great Barrier Reef

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From the impressive “Humpback Highway” in the East Coast waters to the largest loggerhead turtle nesting population in the South Pacific at Mon Repos Conservation Park, Australia is known for its abundant marine wildlife. But perhaps the most well-known natural wonder of the world located in Australia, the Great Barrier Reef, has come under the watchful eye of climate change activists in recent moments. According to a 2022 study by Australian Geographic, 91 per cent of reefs have been affected by coral bleaching. One marine biologist, Jacinta Shackleton, hopes to change this fate through education.

I take a tiny seaplane from Bundaberg, Queensland to the most remote island in the Great Barrier Reef, Lady Elliott Island, to see Jacinta’s work in action. After a 30-minute journey, the carbon emissions from which are 100 per cent offset via a Greenfleet partnership, I catch my first glimpse of the pristine coral cay and the deep blue water surrounding it.

It’s here on the Great Barrier Reef, among the impressive marine wildlife, that the Adelaide native realised her aspirations as a young girl. It was during a family trip to the Queensland coral cay of Green Island, some 1,000 miles from her hometown, and years later, she would complete her Bachelor of Science in Marine Biology, and land her first major conservation role on Lady Elliott Island.

Since 2019, the island has been powered by 100 per cent renewable energy and was the first island on the Great Barrier Reef to cease selling single-use plastic bottles in 2012. The abundant coral is a reflection of the sustainable practices that they preach.

The lagoons and vibrant reefs house thousands of different species of marine life, including dolphins, eagle rays, tiger sharks and a plethora of colourful fish. I even encountered a loggerhead turtle just a few metres away during my snorkelling tour. But the experiences Jacinta leads offer more than just recreation to the island’s ecotourism visitors; they are helping to inspire a new generation to respect and care for the reef.

“Taking a child snorkelling for the first time is special. You don’t forget that,” says Jacinta. “The other side of that is taking older people snorkelling who haven’t been in the water for 40-50 years, and that’s really special. Sometimes people will come up and cry, and they’re just glad they did it.”



⬅️ **Clockwise from top left:** Lady Elliott Island is located off the coast of Queensland, Australia; the Great Barrier Reef is home to over 1,500 species of fish; manta rays in the deep; Jacinta spends at least three hours in the water each day; the coveted Blanket octopus





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Lady Elliott Island currently employs four Master Reef Guides, like Jacinta, which travellers on the island may encounter on their snorkelling or diving tours. The island offers 20 dive sites and two snorkelling trails, which are exclusive to day or overnight visitors to the island and are far away from the reefs visited by commercial Great Barrier Reef tour operators.

During Jacinta's time on the island, she spends at least three hours a day in the water among the brightly coloured corals and wildlife. Her passion for conservation has even led to an increased frequency of water surveys to assess macroalgae cover (a collective term for seaweeds and other marine algae), percentage cover of corals, and any damage to the reef to determine the ecosystem's overall health.

"There is a range of different surveys that we conduct out there, and we've got a team specifically assigned to doing that at the moment, which is really good," says Jacinta.

It's her love of the reef (and her fear of missing out) that led her to an extremely rare discovery there: the Blanket Octopus. Sightings of the rainbow-like mollusc are so scarce that the species is reported to have only been spotted three prior times in waters off Lady Elliott Island.



Above: Lady Elliott Island is home to 20 dive sites and two snorkelling trails

It was during one of her days off in 2022 that Jacinta came face-to-face with the cephalopod.

"It was pretty choppy, but I have always had this thing where if I don't go out snorkelling, [I think] I'm going to miss something amazing. I'll just do it, and if it's really bad, I'll get out." Jacinta and a visiting friend persevered and soon spotted the magnificent creature. "We were cruising along and just saw its colour," she recalls. "It took us a minute to figure out exactly what it was. It was so cool. That will be the only one I ever get to see in my whole life."

To experience the true magic of the Great Barrier Reef, one must see it to believe it. A sentiment that Jacinta also shares in her latest venture as an environmental science teacher.

"Young people should definitely get out there and see the reef, given that we have it here in Australia," she says. "I just like to teach kids about all the marine life and the beautiful coral and see if I can get some of them interested in pursuing a career in science, or research, or tourism. I'm just trying to get them enthusiastic about it."