



HELPING *turtles in trouble*

Graham Readfearn becomes a “voluntourist” for a day and joins a research project to help find out what’s killing the marine turtles off Straddie

Six tiny slivers of pale red fibreglass and a few centimetres of knotted fishing line were all that it took. Found inside the fist-sized body of a juvenile Loggerhead turtle, these seemingly innocuous bits of debris were enough to block its digestive system and cause a slow death.

“The scary thing is that when it comes to marine debris, size really doesn’t matter,” says marine ecologist Dr Kathy Townsend, leaning over to inspect the offending items. “The tiniest little thing can cause an impact.” Dr Townsend has carried out more than 200 post-mortem examinations on marine turtles in the last six years from her base at the University of Queensland’s Moreton Bay Research Station at Dunwich, on North Stradbroke Island.

I had joined Dr Townsend and a small group of volunteers who were being given a detailed personal insight into the precarious existence of marine turtles. In the early morning, there was a briefing on turtles and the Moreton Bay area. Then the group watched a post-mortem examination of three turtles. In the afternoon, they sweep a Stradbroke beach to clear the area of litter but also to record what’s there, down to size and colour.

The activities are part of an organised one-day “voluntourism” project run by the not-for-profit conservation group Earthwatch. Over the last two years, more than 200 people have taken part in the Turtles in Trouble project.

“Turtles are in trouble because of their life history,” says Townsend. “They are long lived – as much as 100 years or more – but they have to be 30 or 40 years old before they have their first chance to reproduce. They spend vast amounts of time in the open ocean before they come

back to a coastal area. They can go across multiple international boundaries which makes conservation efforts very difficult.”

About 200 turtles are stranded every year in the waters around North Stradbroke, the vast majority of them are found dead. Those still alive are handed over to carers but, says Townsend, few survive. “In the last five years I’ve been here, we’ve re-released only four out of the hundreds which I have seen. When they’re that sick that they allow humans to pick them up, they are unfortunately pretty far gone.”

The three most common turtle species found in Moreton Bay are Green, Loggerhead and Hawksbill. On a world scale, Loggerhead and Green turtles are considered endangered and Hawksbill turtles are “critically” endangered – one step away from being declared extinct in the wild. In Australia, Loggerheads are regarded most at risk while Green and Hawksbill turtles are classed as vulnerable.

The aim of Townsend’s research, supported by the work of PhD student Qamar Schuyler, is to get a better understanding of why turtles are dying. Being hit by boats is one threat, but “go slow” zones in the bay have helped to cut the boat strikes. Changes to fishing gear used by prawn trawlers has also helped, with numbers of turtles perishing after getting caught in trawl nets dropping to “almost nothing”, according to Townsend.

But the research at North Stradbroke has found that the impact of marine debris on turtles is far greater than previously had been thought. Originally the estimate was that about two per cent of turtles were stranded because they had eaten debris. Townsend’s research now



puts this figure at closer to 30 per cent for the Moreton Bay region.

Among the array of items discovered inside the turtles are balloons, stickers from apples, plastic bags, wrappers from cigarette packets, fishing lines, bottle tops, cling film and lolly wrappers.

In some cases, the turtles mistake the debris for food but, says Dr Townsend, they could also be eating it by mistake as rubbish gets mixed up with their diet of jellyfish, seaweed, clams, sponges and seagrass.

Allana Allman, 23, of Bellbowrie, was one of a group of eight people from construction company Leighton Contractors which regularly sends groups on Earthwatch projects. She was, to say the least, squeamish about witnessing the post-mortem but within 10 minutes she was capturing evidence with close-up camera shots.

"I was hesitant," she says. "I've not done or seen anything like that before. But when you see what a miserable death [the turtle] must have endured – well, I was upset and maybe a bit angry. I felt some urgency to adjust my lifestyle. I'll be taking a few more seconds just to make sure I'm picking up that litter and using the recycling bins."

But the work of volunteer researchers like Allana is not just a feel-good exercise. The work they do feeds directly into the research. Dr Townsend and Qamar Schuyler took their findings to the 5th International Marine Debris Conference in Hawaii last month, organised by the United Nations Environment Program and a US government agency.

"I think people are looking for an

experience that's beyond just spending time on a beach," says Dr Townsend. "When you're sat in an office it's hard to make any direct connection between what you do as an individual and what the outcome of your actions might be. It's hard to see how throwing that fishing line into the water or dropping that bottle cap in the city could impact a sea turtle. This project shows people just why there's a need for recycling and for reducing our impact on the environment because ultimately, in Brisbane, everything that's not cleaned up ends up in the bay."

Be a "voluntourist"

The one-day Turtles in Trouble experience runs on selected dates through the year. Cost, \$149, includes food, refreshments and the return boat trip from Cleveland.

To find out more, email Earthwatch at earth@earthwatch.org.au, see the website www.earthwatch.org.au or telephone (03) 9682 6828.