



Scientist on a mission to make us see climate challenges

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CLIMATE - THE WEATHER WATCHERS - AN AGE SERIES

In an Age series on experts working in the climate-change sphere, Liz Minchin meets CSIRO's Donna Green.

ISLAND-HOPPING in far north Australia sounds like most people's idea of a holiday. But wading along a jetty swamped by seawater on Horn Island early last year, after a week talking to people whose beachside homes had been hit by unprecedented flooding, CSIRO scientist Donna Green was struck by how many other Australians could soon face similar problems. "That trip to the Torres Strait Islands reminded me of walking along Aspendale beach near the CSIRO's atmospheric research office (in Melbourne's south-east) and looking at all the new multimillion-dollar houses being built just behind the dunes. I was always amazed that our planning codes still allowed people to build so close to the shore and on such low-lying land," says Dr Green. "But it wasn't until I was talking to people on the islands, who'd been up to their knees in seawater in their front rooms, that it really hit home. That's when I thought, 'hang on, if this was . . . my house being flooded, how would I feel?' "

Dr Green is one of a handful of CSIRO scientists looking at how climate change's impacts - such as rising seas, bigger storm surges and more heat - are affecting people in Australia already. While many climate experts spend much of their time in laboratories or offices, the London-born scientist has spent the past decade working in half-a-dozen countries, going from designing and installing solar panels for schools in northern Thailand to lecturing at the University of California. But two years ago, she moved back to Australia, after realising how few scientists were doing the work she felt was needed most urgently: talking to ordinary people about how global warming might change their lives and working on strategies to reduce impacts. "I've always been interested in getting to the root causes of environmental problems, which usually include people and politics . . . If you want to tackle climate change, you've got to work with people."

The Torres Strait is one of many parts of Australia identified as being highly vulnerable to climate change. Others include the Great Barrier Reef, Kakadu and the Murray-Darling Basin. But Dr Green says big-city residents also will increasingly feel global warming's effects. For instance, today, mosquitoes carrying potentially fatal dengue fever are limited largely to far north Queensland. Last year, the Torres Strait's Thursday Island was again declared at extreme risk of an outbreak of dengue, also called "break-bone fever" because of its excruciating pain. But research has found that, as Australia heats up, the area in which disease-carrying mosquitoes can live increases, allowing outbreaks to spread gradually further south.

Although she understands some scientists' reluctance to be seen as too outspoken about climate change, Dr Green argues it is more important than ever to be talking about what the science says, what we can do to avoid the worst-case scenarios, and how we might adapt to a warmer world. "I think there's a lot of fear and confusion in the community about climate change, which is taking a real emotional toll on people, particularly for some indigenous Australians and farmers . . . It's tempting to stay removed from all that. "But once you've talked to people whose living rooms have been flooded, and when you know that it's likely to hap-pen more often because of climate change, you realise you have an obligation to make sure those people know what's going on."