



Michael Madigan



IN CANBERRA

IF JAMES Cook had been provided with modern marine science measuring instruments and invited to repeat his 1770 voyage up the east coast of Australia, he'd find the Great Barrier Reef in pretty much the same state as it was 250 years ago.

That bold claim, made by marine geologist Bob Carter, is the sort of proclamation guaranteed to incense sections of the scientific community which have accumulated a mountain of evidence they insist proves very much the contrary.

Land run-off, water turbidity, wonky holes, chemical pollution, crown of thorns starfish, tourist pressure, coral bleaching and overfishing are not believed to be merely threatening this ancient marvel which stretches across an area larger than Britain.

About 25 million years after it began life as the eroded sediments of the Great Dividing Range, the greatest structure on Earth created by living organisms is so crippled by its human saboteurs it may have as little as 20 years left, according to some experts.

The respected Professor Ove Hoegh-Guldberg, director of the Centre for Marine Studies at The University of Queensland, believes coral bleaching will continue to occur and coral will die regardless of what happens in the battle against global warming. Coral could simply disappear in as little as 20 years as sea temperatures rise faster than expected.

"It is shocking to wake up and realise we really are in a desperate time," he said recently.

This week's announcement the Federal Government will cut carbon emissions by between 5 per cent and 15 per cent by 2020 has again focused attention on the fate of Queensland's most loved, and perhaps most lucrative, natural resource.

After Monday's announcement the Australian Greens shot off an open letter to Prime Minister Kevin Rudd declaring he had failed to answer the challenge of "one of the greatest moral and economic challenges of our time".

"A target range of 5-15 per cent will spell the end of Australian icons like the Great Barrier Reef, Kakadu and will place even greater stress on our already struggling Murray-Darling Basin," the Greens said.

The World Wildlife Fund joins a host of respected organisations including the Great Barrier Reef Marine Park Authority, which says the reef is under unprecedented threat from coral bleaching.

The lethal phenomenon which science calls a "stress-induced expulsion of symbiotic unicellular algae" drains all colour from the breathtaking underwater landscape, leaving the reef looking like an abandoned cattle yard littered with bone-white coral skeletons.

The reef has experienced two mass coral bleachings — in 1998 and 2002 — while the volume of sediment flowing from land into the marine park from its catchment area has quadrupled during the past 150 years due largely to grazing and cropping expansion in the catchment, the WWF says.

Meanwhile wonky holes, springs on the seabed which pump out polluted water draining off land, also may be poisoning

inshore reefs while outbreaks of the crown of thorns starfish, a carnivorous predator which preys on reef coral polyps, are thought to be triggered by pollution.

Amid the impending horror it's interesting, and perhaps even a little subversive, to listen to the voice of a scientist who insists all is well on the reef, and all will remain well.

Bob Carter, adjunct research professor in the Marine Geophysical Laboratory at James Cook University, is emerging as one of the nation's more outspoken sceptics on a rage of issues associated with global warming.

His critics have insisted he has "little if any standing in the scientific community" but his very presence on the reef debate front line, and his association with a marine science tertiary faculty with international standing, makes him worth listening to.

"Were Captain Cook to sail up the Queensland coast today, out of sight of land, and was provided with modern measuring instruments, he would be unable to detect any difference from when he first sailed along the reef in 1770," Carter says.

"The various environmental threats invoked daily for the reef are either natural events and cycles, which have been occurring for thousands of years, or completely unproven speculations such as global warming affecting the reef."

Carter is the first to admit the reef has been, and continues to be, subject to environment threats, which he says fall into two sub-sets.

"The first is genuine, and demonstrably due to human influence. It is the local pollution that surrounds ports or resorts including sewage run-off, boat anchorages and development such as blasting a channel through a fringing reef to service



an island resort.”

Since the creation of The Great Barrier Reef Marine Park Authority, this type of damage has been regulated and is under strong control, he says.

“It’s no longer a problem, and never was much of a problem in the first place because there are more than 2000 individual reefs in the GBR, and only a handful are subject to heavy visitor pressure.”

The second type of threat is speculative and concerns regional damage to the reef by things like coral bleaching, sediment/nutrient pollution and crown of thorns infestation.

“All of these things are natural phenomena, often episodic and which naturally vary in rate or intensity,” he says. “These are the threats that the media ritually intone every day, responding to statements by lobby groups such as the Australian Conservation

Foundation or WWF, who are just as self-interested as the reef scientists.

“None of these threats has been shown to be operating today at a higher or more intense rate than within previous natural cycles.”

Carter suggests the claims the reef is dying need to be challenged with a simple request — name one reef which is officially deceased. “I am aware of none,” he says.

Carter also points out coral bleaching is most often generated during times of low wind, which cause local patches of surface water to increase in temperature. “There is no evidence of significant changes in regional sea surface temperatures along the GBR and sea level in northern Australia.

“Another factor that is generally ignored about bleaching is that corals have the adaptive capability to shed the algae they host in their tissues, changing them for

other forms that are better suited to a different water temperature.”

Quicksilver Cruises, which runs reef tours and has a heavily vested interest in the reef’s survival, also sees the reef as a far more robust organism than many in the scientific community.

Environment compliance manager Doug Baird says that’s partly because it is probably the best-managed marine park on the planet.

Baird says in 16 years of regular visits to the reef he’s never seen it looking so good. Cyclones can devastate it while water runoff containing fertiliser and other pollutants are chief concerns. “But it’s not dead, nothing could be further from the truth,” he says. “I think some people might underestimate the reef’s robust ability to bounce back.”

The greatest structure on Earth created by living organisms is so crippled by its human saboteurs it may have as little as 20 years left



BARRIER to change ... claims the popular tourist attraction is under serious environmental threat have been disputed