CROSS the world, coral reefs are turning into marine deserts. It’s almost unthinkable that Australia’s Great Barrier Reef (GBR)—the world’s biggest coral edifice, 2000 kilometres long, home to 400 coral and 1500 fish species—could be headed the same way.

Thus began the ABC Four Corners programme, ‘Beautiful One Day’, broadcast on 22 April 2002. The World Wide Fund for Nature (WWF) could not have been happier. The ABC was essentially implementing the WWF communication strategy formulated over two years ago and launched in June 2001 with the publication of a Great Barrier Reef Pollution Report Card. The environment group’s determination to establish in the public mind that a raft of theoretical threats to the GBR is real, and that the causes are known, was a considerable victory. The ABC, the nation’s public broadcaster, had run the WWF campaign almost to a tee.

The issue of scientific disagreement as to ‘whether’ the reef was under threat was raised, but never proceeded with. Instead, the programme ‘investigated’ a list of potential threats to the GBR—oil exploration, coral bleaching, intensive fishing, and water pollution sourced from the grazing and sugarcane industries—with an accompanying accusation. The accusation was that industry was the cause of the alleged degradation and that industry was ‘digging in and not giving an inch’. No evidence, just a speculation, boosted in the programme by Imogen Zethoven, GBR Campaign Manager for WWF. ‘It’s unfortunate that cane-growers [alongside cattle-grazing, the object of Green fury] have decided to take a position of denial.’

Each threat in the documentary was presented in one of three ways. It was given the ‘preferred’ scientist treatment as to the existence and/or the cause of a threat, there was a simple assertion of a threat with no scientific evaluation as to cause, or there was a simple assertion devoid of any evidence of a threat. The viewer was left with the impression that there was a problem and that WWF was the saviour. Certain industries, and government, were assigned the role of insensitive destroyer.

Given that Four Corners prides itself as being at the forefront of investigative journalism, it is surprising that several of these documented threats were essentially ignored. The activities that were left alone were tourism and recreational (including indigenous) fishing. These were obviously friends of the WWF campaign, not to be touched by the ABC, despite evidence from the Authority of their impact on the Reef.

As Dr Piers Larcombe, marine biologist of James Cook University, observed in the online discussion following the programme, ‘didn’t you notice that [the programme] didn’t point to any examples of GBR degradation linked to anything except warm water? Read the established, published refereed science, and insist the managers use that information to spend your money on the reef and other environmental issues’.

The oil threat was clearly bogus, and presumably used for dramatic effect. Its treatment required simple facts, but these were not supplied in...
the programme. Instead, the Minister was confronted with the allegation in a way that any denial left a suspicion of guilt. For example, in response to the speculation that a government department would have provided information to oil companies with the thought that oil drilling on the Reef might be permitted, Environment Minister David Kemp stated, ‘Oil drilling on the Reef is absolutely banned, it has been since 1975, and that isn’t going to be changed’.

The viewer is left to rely on the word of a politician. The implication, of course, is that this is insufficient. After all, two journalists had found documents to suggest connivance between government departments and oil companies. The facts are easily ascertained. Professor Bob Carter of James Cook University recently published an article which shows that growth rate and calcification rate in a major reef-building coral, collected from sites along and across the GBR, increased slightly over the 20th century, probably because of a 0.5 °C increase in the temperature of GBR waters.

Moreover, the health of corals can be reliably measured through coral cores that have compared calcification rates dating back to the fifteenth century. These studies have shown that during the last century (the 20th century) calcification rates (in other words, coral growth rates) increased by an average of four per cent across the inner, middle and outer reef systems. They certainly did not decrease, as suggested in the Four Corners programme.

Professor Bob Carter of James Cook University recently published an article which shows that growth rate and calcification rate in a major reef-building coral, collected from sites along and across the GBR, increased slightly over the 20th century, probably because of a 0.5 °C increase in the temperature of GBR waters.

The ABC blamed coral bleaching on Greenhouse gas emissions. The programme produced no evidence to back the assertion, apart from the WWF mantra that Greenhouse causes bleaching, which is the mainstay of the WWF campaign to ‘save the Reef’ from all sources of threat.

The ‘preferred’ scientist in the programme on the bleaching issue was Dr Terry Done of the Australian Institute of Marine Science. He observed that, in 1998, in places such as the Seychelles, 90 per cent of the corals were destroyed following an episode of ‘a very large pool of hot water floating around in the Indian Ocean’. There was no suggestion from Dr Done during the programme that the hot water was caused by global warming. Just the assertion by the reporter.

There are scientists, including Professor Ove Hoegh-Guldberg of the University of Queensland, who make a definite link between greenhouse gas emissions, global warming and coral bleaching. Nevertheless, Dr Dave Barnes of The Australian Institute of Marine Science recently published an article which shows that growth rate and calcification rate in a major reef-building coral, collected from sites along and across the GBR, increased slightly over the 20th century, probably because of a 0.5 °C increase in the temperature of GBR waters.

The iconic status of the GBR makes it a rallying point both for opportunistic scientists and environmental activists

The viewer is left to rely on the word of a politician. The implication, of course, is that this is insufficient. After all, two journalists had found documents to suggest connivance between government departments and oil companies. The facts are easily ascertained. Professor Bob Carter of James Cook University stated in the online discussion.

depiction of the scientific coring undertaken by the Ocean Drilling Program (ODP) as oil drilling is gross misrepresentation, and mischievous. ODP Leg 133, cored in the 1990s, provided us with invaluable information as to the history and evolution of the GBR, which was freely published by an international team of scientists for all of us to share … of course the results of ODP Leg 133 were of interest to the oil exploration industry … Oil occurs in sedimentary rocks. Therefore, any advance in our understanding of sedimentary rocks and how they were deposited is of general interest to the oil industry.

The ABC blamed coral bleaching on Greenhouse gas emissions. The programme produced no evidence to back the assertion, apart from the WWF mantra that Greenhouse causes bleaching, which is the mainstay of the WWF campaign to ‘save the Reef’ from all sources of threat.

Moreover, the health of corals can be reliably measured through coral cores that have compared calcification rates dating back to the fifteenth century. These studies have shown that during the last century (the 20th century) calcification rates (in other words, coral growth rates) increased by an average of four per cent across the inner, middle and outer reef systems. They certainly did not decrease, as suggested in the Four Corners programme.

Dr David Williams, Research Director, CRC (Reef), was the ‘preferred’ scientist on the issue of sediment and nutrient pollution from the sugarcane and grazing industries. He stated, ‘there are many examples in South-East Asia where the population pressure on the land, and particularly cutting down trees and so on, has led to sedimentation and run-off of nutrients that have had major impacts on the reefs’. At no stage, however, did he produce evidence or research to suggest any such threat to the GBR.

Interestingly, Four Corners was overtly sceptical of the position taken by the better-published scientist in this area, Dr Peter Ridd. Dr Ridd suggested that evidence on the Great Barrier Reef shelf of either increased sediment input or increased turbidity is absent. These ‘good news stories’ have been published in peer-reviewed scientific publications, but because they do not accord with the ‘Litany’, they are dismissed.

The programme illustrated the issue of fishing pressure by retelling the story of one fish-kill washed up at Mission Beach, far north Queensland, which resulted in a further expansion in the designated Marine Park. There was no attempt to evaluate the general accusation that fish life on the Reef is in danger from overfishing. It would be interesting to understand the relative potential contributions of impacts from recreational versus commercial fishing on fish stocks. What is the latest science regarding the potential relationship between overfishing and outbreaks of crown-of-thorn starfish?

The difference between fact and allegation regarding the GBR is part of a much wider problem. There is increasing competition for research funds amongst scientists and for donations and membership amongst established conservation organizations. One way to obtain funds is to make a lot of noise about a potential problem and at the same time become an expert and/or advocate for the issue. The iconic status of the GBR makes it a rallying point both for opportunistic scientists and environmental activists. It is disappointing that Four Corners could not see this.

Dr Gary Johns is a Senior Fellow with the Institute of Public Affairs Ltd.