THE CONVERSATION

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Death on the Great Barrier Reef: how dead coral went from economic resource to conservation symbol

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Don't write it off just yet. american_rugbier/Flickr, CC BY-SA

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A recently published obituary for the Great Barrier Reef has drawn ire from reef scientists. While obituaries, even satirical ones, are undoubtedly premature, they are part of a long and complicated history of death on the reef.

The obituary comes after this year's record bleaching event in the northern section of the reef, where more than 50% of coral has died on some reefs.

Since settlement, dead reefs along the Great Barrier Reef have been celebrated as an economic resource, criticised as a scientific misnomer, and now seemingly embraced by conservationists as a shock tactic.

A coral reef flat near Port Denison. William Saville-Kent, The Great Barrier Reef of Australia: Its Products and Potentialities (London: W.H. Allen, 1893).

A dead reef is a good reef

In the 19th and 20th centuries, settler Australians did not grieve the abundance of dead coral they found; they celebrated it. Live coral was praised for its aesthetic beauty and natural charms but dead coral could be crushed, burned down, and turned into building materials or fertiliser. Dead coral had a use and potential for economic development.

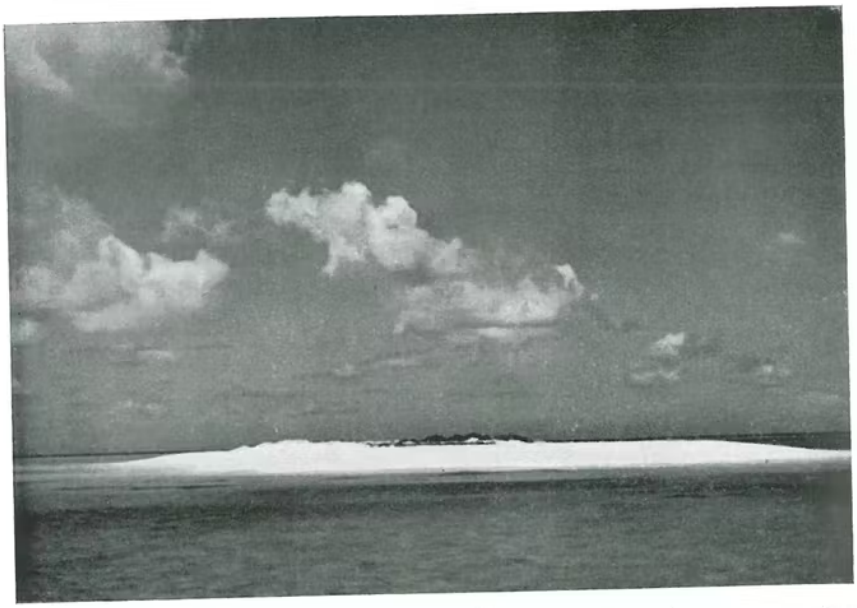
When the colonial government was considering a site for settlement in Cape York, one of the appeals of Somerset was the abundance of coral lime on nearby Albany Island.

In 1872, the sub-collector of customs and police magistrate at Cardwell, Charles Eden, wrote that Cardwell's bay was "one mass of dead coral", lying loose and easily collected in minutes. The use of coral lime as building materials or fertiliser continued into the 20th century.

Historical geographer Ben Daley claims that between 1900 and 1940 licensed coral mining took place at at least 12 different locations, largely between Townsville and Cairns.

Despite the odd protest the reef's endless supply of dead coral continued to be viewed as an economic asset. In 1951, marine zoologist Frank McNeill wrote that the reef was a "wealth in coral gravel".

He compared the reef's coral with "a dead reef" in Moreton Bay, Brisbane. There a company had been milling the dead coral for cement manufacturing but the coral was "not nearly the quality of that from the Great Barrier Reef deposits". He wondered when the reef's limitless supply would be "turned to account".



Upolu Bank, near Green Island, off Cairns, Queensland. A typical small mound (cay) resting atop a large coral bank. Except for the sparse vegetation, the composition is carbonate of lime—gravels and fine sand.

Photo.—H. Chargois, F.R.P.S.

Wealth in Coral Gravels

By FRANK McNEILL.

Frank McNeill's article on the Reef's coral debris drew attention to a latent economic resource awaiting mass development.

Dead, or just rocky?

In the postwar era, as the impacts of western economic development on the environment became more clear, the idea of exploiting an environment such the Great Barrier Reef for minerals became less socially acceptable.

The issue came to a head in 1967 when a Cairns cane grower, Donald Forbes, lodged an application to mine Ellison Reef (35km northeast of Dunk Island) for limestone. Forbes believed the area he wanted to mine was "dead".

He told reporter Patricia Clare, author of the 1971 book The Struggle for the Great Barrier Reef, that "the lime he wanted to take was not living coral but coral … that was lying all over the place out there, just waiting to be gathered up".

Forbes' application prompted one of longest environmental campaigns in Australian history, which ended with the establishment of the Great Barrier Reef Marine Park.

The conservationists' main objection to Forbes' application was the idea that Ellison Reef was dead. To prove that it was alive, members of the Queensland Littoral Society (the original name for the Australian Marine Conservation Society) completed surveys of the reef.

Their survey constructed an image of Ellison Reef which contrasted sharply with its supposed demise. While to outward appearances it seemed dead, it was in fact a complex living community.

The Innisfail mining warden, who recommended that the lease be rejected, announced that "the term 'dead reef' is a misnomer … the reef is in fact not 'dead' but very much alive".

Wanted: alive

In the 1960s the idea of the reef being dead was anathema to conservationists and scientists alike. Conservationists foresaw a future in which dead reefs would be plundered for their remaining useful qualities. Scientists saw a misunderstanding that needed to be rectified.

Today, claims of a dead reef are still criticised by scientists. In contrast, conservationists are more willing to embrace the notion both to draw attention to their cause and to shock the public into

activism.

The Great Barrier Reef's future is clearly uncertain, but we can learn many things from its past. I wonder if conservationists should stay on the message established in 1967: that the Great Barrier Reef is very much alive. That in itself might be enough to shock folks into action.

A living reef offers hope and opportunity for change. As tourist operators lamented earlier this year, dead reefs could deter visitors who have no interest in visiting a coral graveyard. It is unlikely that concerned citizens would organise to save a dead Great Barrier Reef.

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