

Recovery of Coral Reefs on the Great Barrier Reef Following Attack by *Acanthaster*¹

R. G. PEARSON²

Abstract

Investigations have centered on reefs off the Queensland coast near Innisfail. Large populations of *Acanthaster* attacked these reefs in the mid 1960's. Transect surveys of the seaward slopes of 18 reefs made during July–November 1971 showed that the coverage of live corals, larger than about 10 cm diameter, ranged from less than 1 per cent on the worst affected reef to 58.5 per cent on an undamaged reef. Corals near the reef crest subject to heavy wave action and large colonies of *Diploastrea* and massive and branching *Porites* were least affected. Long term quantitative studies of two 10 m² plots on damaged reefs have recently commenced. Preliminary results show that about 70 to 75 per cent of all colonies are less than 5 cm diameter. Although turnover of small corals is high there is a net gain of colonies. Mortality of large colonies is low. Factors which could influence the recovery of corals on damaged reefs are discussed.

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² Fisheries Laboratory, Mourilyan Harbour, Queensland, 4858, Australia.