

# COMMONWEALTH OF AUSTRALIA

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## SPEECH

BY

**The Rt Hon. W. McMAHON, M.P.**

ON

# CROWN OF THORNS STARFISH

## Ministerial Statement

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*[From the 'Parliamentary Debates', 30 March 1971]*

**Mr McMAHON** (Lowe—Prime Minister)  
—by leave—On 7th April 1970 the Government announced to the House the membership of a joint committee established by the Commonwealth and Queensland to investigate the problem of the Crown of Thorns Starfish on the Great Barrier Reef. The committee comprised:

#### Commonwealth Nominees

Professor R. J. Walsh, O.B.E., Professor of Human Genetics at the University of New South Wales (Chairman).

Professor W. G. H. Maxwell, Associate Professor of Geology at the University of Sydney.

Mr D. J. Tranter, Senior Research Scientist, Division of Fisheries and Oceanography, Commonwealth Scientific and Industrial Research Organisation.

#### Queensland Nominees

Dr J. M. Harvey, Director-General of Primary Industries.

Professor J. M. Thomson, Professor of Zoology at the Queensland University.

Mr C. L. Harris, of the Department of Primary Industries.

The announcement of the committee's membership followed agreement reached on 29th January 1970 by both Governments that such a committee be established and that it should be financed on a dollar for dollar basis by each Government.

I am pleased to be able to tell the House that on last Thursday, 25th March, the Chairman of the Committee, Professor Walsh, reported to me on the results of the committee's work. In view of the importance of the report and of the widespread interest which has been taken in its progress I arranged for Cabinet to consider the report today and for the report to be tabled so that honourable members will be able to inform themselves fully of its conclusions, and of the reasons underlying these conclusions. Honourable members will be aware of the very deep concern which is felt by many about the possibility of destruction to the Great Barrier Reef by the crown of thorns starfish. This concern has been deepened for many by the belief that perhaps complete destruction of the Reef was inevitable unless early Government action was taken. Some have suggested that it may now be too late to save the Reef. It is therefore pertinent to draw to honourable members' attention a reference in the Committee's report to articles in the Press and in semi-technical journals on the starfish as being either repetitive presentations of eye-catching speculations or exaggerations of the limited facts available.

Some of the confusion appears to have occurred because the available methods of estimating population densities of the starfish are rather crude. Extrapolations from these results are not reliable and are of doubtful value. Also overlooked has been

the fact that the published figures of the proportion of dead coral on reefs attacked by the starfish have included an estimated 10 to 50 per cent of corals killed by other means—such deaths being a normal state of affairs. Analogies have been drawn between the action which had been taken on Guam and the situation in the Great Barrier Reef. On Guam, teams of divers were used to combat the starfish. Some felt that a similar operation should be mounted on the Great Barrier Reef. Such suggestions overlooked the fact that Guam has a comparatively simple reef surrounding it, around which the starfish were said to move, limited on one side by the island beach and on the other by the sea proper, whereas the Great Barrier Reef is of a size and a complexity which makes similar generalised action to that taken on Guam ineffective.

In the light of the wide differences of authoritative opinion as to the threat, if any, which the starfish posed to the Great Barrier Reef the Commonwealth considered it necessary to obtain more facts before any further action was taken to deal with the starfish beyond that already set in train by the Queensland Government and to which reference is made in the Committee's report. The Great Barrier Reef is perhaps the most complex eco-system known to man and many experts considered that it would have been irresponsible for generalised action to be taken before knowing the likely consequences of such action upon the chain of life which comprises the Reef as we know it. As to the results of the Committee's investigations the Committee has found that:

the crown of thorns starfish does not constitute a threat to the Great Barrier Reef as a whole;

there is no danger of substantial erosion of the physical structure of the reef; and there is no threat to the Queensland coastline or ports.

The entire living cover, or even a large proportion of the coral cover, of the Reef will not disappear as a result of the crown of thorns starfish. Whilst there has been extensive damage to coral because of the starfish, serious damage is limited. Recolonisation and regeneration of coral have occurred on all reefs examined by the Committee. The Committee has not been

able to determine whether the high density of starfish in some areas is a unique or a cyclical phenomenon but it appears more likely to be an episodic event which may have occurred previously.

The Committee refers to the fact that the feeding by the crown of thorns on living coral constitutes, in the long term, part of the reef building process, whereby dead material is consolidated in order to provide the platform necessary for the Reef's continued growth. Tourist activity has not declined as a result of the starfish damage. The Committee cannot give the reason for the population increase of crown of thorns starfish in some areas. It reports that the hypothesis that local collection of triton shells has reduced predator pressure on the starfish has not been substantiated nor has the hypothesis that pesticides and other organic chemicals may have been causal. The Committee believes that there is no need to attempt to reduce the population of the crown of thorns starfish throughout the whole of the Great Barrier Reef at the present time. It does not dispute that certain reefs or portions of reefs having social or commercial importance may be protected by manual destruction of accessible starfish.

The Committee finds that present knowledge of reef ecology is inadequate to assess fully present and future problems concerning the crown of thorns starfish and related matters. It therefore suggests a programme of research involving continued monitoring of starfish population; research into reef ecology, with particular attention to the biology of the starfish and corals; and experiments in local control of the starfish. To achieve this programme it recommends that a sum of money of the order of \$90,000 to \$120,000 be provided in the first year to allow such research and that the sum provided be increased progressively in each of the second and third years at which time there would be a review in the light of the operation of the Australian Institute of Marine Science. As I have already mentioned, Cabinet has considered the recommendations of the Committee. I am pleased to be able to say that the Government agrees with the recommendations of the Committee. I have been in touch with the Queensland Premier and we have agreed that \$45,000 be allocated on a matching basis by each Government for research

projects recommended in its first year by an advisory committee. The advisory committee would report to the Minister for Education and Science, who will act on behalf of both Governments. This amount will be increased by \$10,000 by each Government in each of the second and third years. Each Government is prepared to increase its grant on a matching basis to

the upper limits recommended by the report if the advisory committee finds in practice that it has sufficiently good research projects to warrant this. I shall announce the membership of the advisory committee as soon as possible.

I present the following paper:

Crown of Thorns Starfish—ministerial statement,  
30th March 1971.