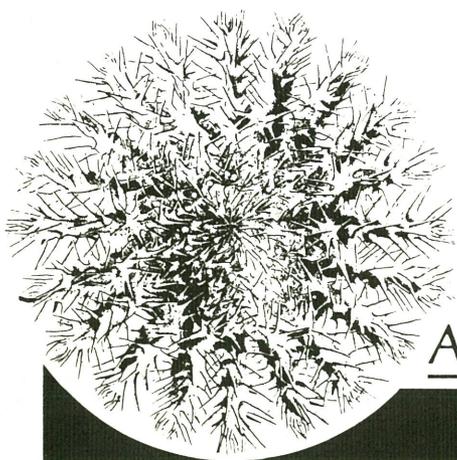


Recommendations of Assessment Panel (CISRA):
COTSAC Funded Ecological Research

Edited by P. Moran, Study Leader & C. Maguire, Administrator



GREAT BARRIER REEF
MARINE PARK AUTHORITY

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Australian Institute of Marine Science
The Crown-of-thorns Study

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ISBN 0 642 12249 0

Australian Institute of Marine Science, 1987

Copies available from Librarian

PMB No 3, Townsville MC., Queensland, 4810

COTSAC INTEGRATED SCIENTIFIC RESEARCH ALLOCATIONS 1986

Recommendations of Assessment Panel

The Assessment Panel recommended that funds be given to support the research efforts of 2 programs and 5 projects. The criteria used to select these programs and projects are given in Appendix 1.. These funds were for research on the mainly ecological aspect of the Acanthaster phenomenon as identified by COTSAC and as outlined in the Record of Understanding between the Great Barrier Reef Marine Park Authority and the Australian Institute of Marine Science. The way in which funds have been allocated is detailed in Table 1. The Conditions of Award governing these funds were sent to the Chief Investigators of each project (see Appendix 2). It should be noted that funds were given on a calendar year basis (i.e. the tenure of each grant runs until the 31st December 1986) which meant that the amount of funds allocated to some projects was increased from that requested in the original research proposals. This adjustment was not adopted for the AIMS proposal.

Seven research areas were designated for funding in the Record of Understanding between the Authority and the Institute. They represented the mainly ecological tasks identified by COTSAC. The amount of funds to be allocated in each area was suggested in the Record of Understanding. The actual amount allocated to each area by the Assessment Panel is given in Table 2. It can be seen in general that the amount allocated differs (in some instances quite widely) from that recommended. These differences occurred for the following reasons:

1. Due to delays in the availability of funds from the Federal Government the total amount of funds received was less than that recommended.
2. In general, funds were allocated on a calendar year, rather than fiscal year, basis.
3. Only a small number of research proposals were received for some areas.
4. Some research areas are being funded by other means. For example, research in the area of Geological Climate is being undertaken as separate program within the Institute.

As the research effort on the Acanthaster phenomenon builds it is anticipated that a more even balance between the various research areas will be achieved.

List of research proposals

Institution	Chief Investigator(s)	Funds requested		
		1985/86 \$	1986/87 \$	1987/88 \$
AIMS	(see proposal)+	417368	630331	610331
James Cook University	1. Pichon	44341 *	48138	48183
	2. Hopley	610	11494	-
	3. Heron	37000 *	-	-
	4. James, Bode & Stark	-	32697	28893
	4. Lucas	15593	16000	17000
	6. Hartwick & Milward	40490 *	-	-
Consultants	Harriott & Fisk	4000	19800	29700
VIMS	(see proposal)+	22600 *	23700 *	12700*
University of WA	Johnson	20730	-	-
Sydney University	Larkum	28249	47698	-
Macquarie University	McNeil et al.	14300	-	-
Deakin University	1. Hanna & Peden	21360 *	21031 *	-
	2. Hanna, Lee & Richardson	16078 *	17686 *	-
Melbourne University	Ramm	21150	59510	58910
Queensland University	1. Endean & Cameron	34000 *	29500	31000
	2. Endean & Cameron	28000 *	23000	22000
	3. Endean & Cameron	22000 *	20500	21500
Griffith University	Doherty	49797 *	47427	51045
Mapping & Hydrographic Surveys	McCarthy	?	?	?

* funds for 12 months

+ integrated program of research

- not given

List of expressions of interest

Institution	Name	Funds*
University of Queensland	McCallum	2200
CSIRO Marine Laboratories	Smith	-
La Trobe University	Smith	-
La Trobe University	Duncan	-
O.R. Systems Pty Ltd	Fay	-
Earthwatch	Darling	-
Kathleen Lumley College	Bayliss	-
W.A. Dept. Conservation and Environment	Ottaway	45000
Siromath Pty Ltd	Landman	-

* where applicable
 - not given

List of research proposals which are to receive funding for 1986.

	Name/ type	Project	Amount requested \$	Amount given \$
Australian Institute of of Marine Science	(Program)	-	417,368	395,076
James Cook University	(Program)			
	Hopley	T/E	610	2,000 *
	Lucas	B/E	15,593	19,352 *
	Hartwick, Milward	B/E	40,490	5,000
	James, Bode, Stark	M	32,697	32,697
Deakin University	Hanna, Lee, Richardson	B/E	16,078	16,078
Griffith University	Doherty	E	49,797	49,797
	Parslow, Galbric	M	4,000	4,000
Queensland University	Endean, Cameron	E	22,000	22,000
Consultants	Harriott, Fisk	E	4,000	12,000 *
TOTAL	-	-	-	\$558,000

* adjusted to calendar year funding

T/E: Technology - Ecology

B/E: Biology - Ecology

E: Ecology

M: Modelling

Table 2. Breakdown of the amount of funds allocated to the various research areas outlined in the Record of Understanding between the Great Barrier Reef Marine Park Authority and the Australian Institute of Marine Science.

Research Areas	Funds recommended* \$	Funds allocated* \$	Projects
1. Macro-scale dynamics	127,500	133,986	AIMS; Doherty; Hopley
2. Meso-scale dynamics	157,000	97,840	AIMS; Lucas; Endean/Cameron; Harriott/Fisk
3. Bionomic strategies	100,000	40,935	AIMS
4. Trophodynamics	100,000	30,789	AIMS
5. Analysis/modelling	65,000	117,933	AIMS; James/Bode/Stark; Parslow/Galbric
6. Geological climate	85,000	***13,398	AIMS
7. Larval ecology	40,000	123,119	AIMS; Hartwick/Milward; Hanna/Lee/Richardson
TOTAL	692,500	558,000	

* for 1985/86 (full fiscal year)

** for 1986

*** the G.B.R.M.P.A. had already allocated a grant of \$49,500 to Associate Professor R. Henderson of J.C.U. on this Research topic.

EVALUATION OF RESEARCH PROPOSALS AND EXPRESSIONS OF INTEREST TO UNDERTAKE ECOLOGICAL RESEARCH ON THE CROWN-OF-THORNS STARFISH USING FUNDS GIVEN TO THE AUSTRALIAN INSTITUTE OF MARINE SCIENCE

Guidelines for the selection of proposals

For proposals to be accepted it is **ESSENTIAL** that:

1. They are consistent with the relevant recommendations arising from the COTSAC report.
2. The funds being requested are within the guidelines laid out in the Record of Understanding formulated between the Institute and the Authority.
3. They encompass research which is mainly ecological in nature as defined in the Record of Understanding developed between GBRMPA and AIMS. Under this agreement the mainly ecological research tasks were divided into 7 areas:
 - (a) Macro-scale dynamics of the coral/crown-of-thorns interaction.
 - (b) Meso-scale dynamics of the coral/crown-of-thorns interaction.
 - (c) Bionomic strategies of predator and prey.
 - (d) Trophodynamics of the coral/crown-of-thorns interaction.
 - (e) Data analysis and modelling.
 - (f) Geological climate.
 - (g) Ecology of starfish larvae in the plankton.

This classification reflected the ecological research recommended by the Crown of Thorns Starfish Advisory Committee (i.e. Recommendations 8,9 & 11).

4.
 - (a) The research described is likely to produce results and is feasible in both a scientific and logistic sense.
 - (b) The proposed research integrates with and builds on present research on the crown-of-thorns starfish.
5. The results and progress of all research be reported annually to the Study Leader.
6. The results produced from such research will be published in the open scientific literature.
7. The Institute is capable of providing any scientific and/or logistic support which may be required for the successful completion of the research objectives.
8. The funds be managed by the Chief Investigator(s) or the Institution to which he/she belongs and that details of expenditure be supplied at the end of the grant.

Also, it is **DESIRABLE** that resources are available (in the proposal or elsewhere) to allow the chief investigator to attend an annual workshop (towards the end of each year) at the Institute where the results and progress of all research will be reported and discussed.

COTSAC INTEGRATED SCIENTIFIC RESEARCH ALLOCATIONS 1986

These grants are recommended by the Assessment Panel for the Allocation of COTSAC Funds and approved by the Crown-of-Thorns Starfish Advisory Review Committee (COTSARC).

CONDITIONS OF AWARD

1. These Conditions of Award and the offer of grant to which they relate form the contract governing the payment of the grant specified in the offer of grant and such contract shall upon acceptance, bind the institution, the grantee and the Australian Institute of Marine Science. Unless specifically advised there can be no forward commitment of funds beyond 1986.

PART I: DEFINITIONS

2. In these conditions unless the contrary intention appears:

- (1) **approved project** means the project specified in the offer of grant;
- (2) **grant** means the grant of financial support specified in the offer of grant and shall comprise the following heads of expenditure as specified in the offer of grant:
 - (a) a **personnel grant** is the sum of money, specified in the offer of grant, for the salary and related costs of either personnel of a specified designation and classification or of full-time, part-time or casual research support personnel for the approved project;
 - (b) an **equipment grant** is the sum of money, specified in the offer of grant, for specific items of equipment the capital cost of which exceeds 600 dollars, and for installation, freight and service charges;

- (c) a **travel grant** is the sum of money, specified in the offer of grant, for the purpose of travel between specified places and, where applicable, for subsistence and field expenses; and
 - (d) a **vessel grant** is the sum of money, specified in the offer of grant, for the hire or charter of ships, boats or other vessels, for ship-time, and for the purchase, modification and service charges for ships, boats or other vessels; and
 - (e) a **maintenance grant** is the sum of money, specified in the offer of grant, for expenditure other than that covered by other heads of expenditure and includes items of equipment, costing less than 600 dollars and charges for computing;
- (3) **the Institute** refers to the Australian Institute of Marine Science.
 - (4) **the Authority** refers to the Great Barrier Reef Marine Park Authority.
 - (5) **the panel** means the Assessment Panel established by the Council of the Institute to advise on the allocation of these grants;
 - (6) **COTSAC** refers to the Crown-of-Thorns Starfish Advisory Committee;
 - (7) **the Study** refers to the Institute's component of the Crown-of-Thorns Study Program funded by the Great Barrier Reef Marine Park Authority;
 - (8) **the Director** means the Director of the Institute;
 - (9) **the Study Leader** means the person nominated by the Director as being responsible for the coordination of the Study in the Institute;
 - (10) **grantee** means the grantee specified in the offer of grant;
 - (11) **institution** means the institution specified in the offer of grant;

- (12) **offer of grant** means the offer of grant contained in the Acceptance Form duly signed by the Director or his nominee;
- (13) the **responsible officer** of the institution means the Registrar or equivalent administrative head, or his nominee;
- (14) **term of the grant** means the period from the date of offer to 31 December 1986;
- (15) a reference to a clause refers to the relevant clause of these conditions and a reference to a sub-clause refers to the relevant sub-clause of the clause in which the reference appears; and
- (16) words importing the masculine gender include the feminine and words in the singular number include the plural and vice-versa.

PART II : GRANTS

- 3. All communications from the grantee to the Institute relating to grants shall be directed to the Director and shall be made through the responsible officer of the institution.
- 4. The award of a grant is subject to the formal acceptance of the offer of the grant and these Conditions of Award by:
 - (1) the grantee;
 - (2) the responsible officer of the institution.
- 5. The grant shall be used for the approved project in respect of which it is awarded and shall not be used for any other purpose.
- 6. The grant will be paid to the institution which shall administer the funds for and on behalf of the grantee in accordance with these Conditions of Award.

7. (1) The grant may be terminated by the Institute by notice in writing given by the Director to the institution:
- (a) at any time if in the opinion of the Director the approved project for which the grant is awarded is not being carried out with competence and diligence or in accordance with the offer of grant;
 - (b) on the death or incapacity of the grantee unless suitable alternative arrangements satisfactory to the Director are made for continuance of the approved project for which the grant was awarded; or
 - (c) in the case of the events specified in sub-clauses 9(1) and 9(2) if agreement on the transfer of the grant cannot be reached; or
 - (d) on agreement of all the parties.
- (2) Upon termination of the grant under sub-clause (1):
- (a) the grantee and the institution shall take all action necessary to terminate any further expenditure under the grant;
 - (b) moneys that have not been expended and are not committed shall, subject to sub-clause (3) be repaid to the Institute within six months.
- (3) Where agreement is reached in accordance with sub-clause 9(1) moneys that have not been expended and are not committed may be transferred directly to the new institution referred to in that sub-clause.

PART III : APPROVED PROJECTS

8. An approved project shall be commenced as soon as practicable.

9. (1) Where the grantee transfers to another institution (in this clause referred to as the "new institution"), the Director may approve the transfer of the grant to the new institution provided that:
 - (a) all parties agree to the termination of the contract constituted by the offer of grant and these Conditions of Award, and agree on the transfer of equipment, and funds not committed, to the new institution; and
 - (b) the grantee, the new institution and the Institute enter into a new contract which shall be constituted by a new offer of grant and new Conditions of Award.
 - (2) Where the grantee is no longer able to continue the approved project at the institution, the Director may approve the transfer of the grant to another person at the institution provided that:
 - (a) all parties agree to the termination of the contract constituted by the offer of grant and these Conditions of Award; and
 - (b) the person to whom it is proposed that the approved project should be transferred, the institution and the Institute enter into a new contract which shall be constituted by a new offer of grant and new conditions of award.
 - (3) In considering a request for a transfer the Director will have regard to the circumstances of each case and may attach conditions to his approval of the transfer of the approved project and of the transfer of items of equipment purchased under the grant.
10. (1) Where there is an invention or process improvement arising from a project the grantee or institution must ensure that the industrial property in that invention or process improvement is protected.
 - (2) The grantee or institution may at its own expense make application for a grant of Letters Patent in Australia and other countries in respect of an invention and, in the event of making such application, shall notify the

Commonwealth through the Institute and provide particulars of the invention to which the application relates.

- (3) If the grantee or institution does not wish to apply for a grant of Letters Patent in respect of an invention, the grantee and institution shall, at the request of the Institute, assign to the Institute the right to apply for Letters Patent in respect of the invention and no amount will be payable by the Institute by way of consideration of compensation for any such assignment.
- (4) The grantee or institution shall not abandon a patent for an invention without first having offered to assign the patent to the Institute.
- (5) The grantee or institution shall exploit inventions on normal commercial terms and in a manner that will be for the benefit of the Australian economy.

11. The grantee shall make arrangements acceptable to the Director, for the lodgement with an appropriate museum or archive of marine taxonomic data or other specimens or samples resulting from the project as specified in the document prepared by the Marine Research Allocations Advisory Committee (MRAAC) for 1986 and entitled "Advice and Instructions to Applicants for Marine Sciences and Technologies (MST) Grants".

12. (1) When conducting research pursuant to the approved project on or involving humans or animals the grantee shall ensure that the codes adopted for this purpose by the National Health and Medical Research Council shall be observed.
- (2) When conducting research pursuant to the approved project which involves or is concerned with the use of recombinant DNA techniques the grantees shall ensure that the principles and guidelines established and approved by the Australian Government's Recombinant DNA Monitoring Committee are observed.

PART IV : REPORTS

13. (1) The grantee shall provide the Study Leader or his nominee with details of the brand, serial number and warranty details of any equipment purchased with funds provided within the offer of grant. These details shall be furnished by 1 July 1986.
- (2) The grantee also shall furnish a report on the progress of the project also by 1 July 1986. The format for such reports will be specified in the document prepared by MRAAC for 1986 and entitled "Advice and Instructions to Applicants to Marine Sciences and Technologies (MST) Grants".
- (3) Unless otherwise approved by the Panel, within six months of the termination of the grant under clause 8, transfer of the grant under clause 9, or expiry of the term of the grant, the grantee shall furnish in such form as is approved by the Panel, a final report on the work on the approved project to the Study Leader.
- (4) The final report specified in sub-clause (2) above shall contain a summary of:
 - (i) the aims of the project;
 - (ii) results and benefits;
 - (iii) difficulties encountered;
 - (iv) details of publications resulting from the project;
 - (v) a report giving the location and method of storage of data and such other information as would enable future use to be made of taxonomic and geological specimens and numerical data collected as part of the project;

(vi) details of the equipment purchased from the grant and the uses proposed for it in the future.

(5) Information contained in a progress or final report, including results of research, may be used for whatever purpose the Institute and the Authority, after consultation with the grantee, think fit.

14. When at any time during or after completion of an approved project the grantee publishes a book, article, newsletter or other literary or artistic work which relates to the approved project the grantee shall acknowledge in the publication the support of the Federal Government and where appropriate the support of the Institute.

PART V : FINANCIAL PROVISIONS

15. (1) The liability of the Institute to support the project is limited to the amount approved in the offer of a grant.

(2) Subject to sub-clause (3) moneys allocated to meet the needs of the approved project shall be spent during the term of the grant.

(3) Moneys which are not spent during the term of the grant may be carried over after that term only:

(a) as specified in sub-clauses 16(3) and (4); or

(b) where the Director approves the carrying forward of the unspent moneys.

16. (1) Subject to this clause and to any direction by the Director moneys forming part of a grant shall not be transferred between heads of expenditure or used in any way other than as specified in the offer of grant.

(2) An institution may, upon the request of a grantee:

- (a) transfer grant moneys the sum total of which does not exceed 1000 dollars between heads of expenditure listed in the offer of the grant to meet in whole or in part increases in the costs of items specified in the offer of grant or to assist in achieving the aims of the approved project;
 - (b) transfer grant moneys, in addition to those specified in sub-clause (2)(a), to the travel head of expenditure to meet appointment expenses of Research Fellow or Research Associate level staff, subject to the institution's normal conditions for recruitment for appointments of the same duration, of Lecturer and Senior Tutor level staff respectively; and
 - (c) transfer an allocation of grant moneys from a particular item of equipment specified in the offer of grant to an alternative item of equipment which is equivalent in terms of the requirements of the approved project.
- (3) The institution may upon the request of the grantee and during the term of the grant, commit moneys for equipment, travel, maintenance, and vessel time always providing that such commitment may not be made where the resultant expenditure is likely to occur more than one year after the term of the grant.
- (4) The institution may upon the request of the grantee carry forward funds for a maximum of 3 months beyond the end of the term of the grant.
17. (1) The institution shall supply to the Director within six months after the expiry of the term of grant, or upon termination of the grant under clause 7, or upon transfer of the grant under clause 9, a return showing for each head of expenditure and each item under the head of expenditure:
- (a) all moneys expended;
 - (b) all moneys committed but not yet expended;

- (c) all moneys not expended or committed;
 - (d) all variations approved under sub-clause 16(2); and
 - (e) all variations approved by the Director.
- (2) Moneys committed, but not yet expended ((b) above), or carried forward to the following grant year as approved variations under sub-clauses 16(3) and 16(4) are to be included in a return at the end of the following grant year.
- (3) The returns referred to in sub-clauses (1) and (2) shall be accompanied by a declaration as to the correctness of the return by the responsible officer of the institution.
- (4) As soon as practicable after the final return under sub-clause 17(1) or 17(2) is submitted it shall be supported by:
- (a) a certificate of a registered companies auditor or a qualified public accountant not being an employee of the institution, who has examined the accounts and records of the institution; or
 - (b) where the financial statements of an institution are audited by the Auditor-General of a State, Northern Territory or the Commonwealth, a certificate by the senior internal auditor of the institution or such other person of equivalent status.
- (5) The declaration and certificate referred to in sub-clauses (3) and (4) shall state in each case that all moneys paid under grants have been expended solely upon the relevant approved project and in accordance with these conditions and the offer of grant.
- (6) Moneys shown as unspent in the returns referred to in sub-clauses (1) and (2) shall be returned to the Institute as and when required by the Director.

18. The grantee and persons engaged by the grantee or by the institution shall not, unless appointed at the Institute, by virtue of the grant or of the contract referred to in clause 1, become in the service or employment of the Institute, and the grantee or

institution, as appropriate, shall be responsible for effecting all insurances required under the Workers' Compensation legislation and for taking all other action requisite as employer of persons so engaged.

19. A commitment to employ persons under a grant shall not be given by the grantee or by the institution unless approval has been given by the Director and is noted on the offer of grant.

20. (1) In respect of persons employed or to be employed under a grant, unless the Director otherwise determines:

(a) salaries shall, to the limit of funds provided for that purpose including any funds available by virtue of Clause 15, accord with the salaries paid by the institution for similar positions;

(b) recreation leave, sick leave and other conditions of employment shall, subject to sub-clause (2), be in accordance with those of the institution; and

(c) the recruitment procedures of the institution shall be followed except as modified by sub-clause (3)

(2) Recreation leave in respect of the period of the grant shall be taken during the term of grant.

(3) Appointments shall not be made to Research Fellow or Research Associate positions without the prior written approval of the Director.

21. Without the permission of the Director a person who is receiving a salary for full-time work under a grant shall not accept additional remuneration:

(1) in excess of 2000 dollars per annum in respect of other employment or activities; nor

(2) from any other source in respect of work performed on the approved project.

PART VII : EQUIPMENT

22. (1) The procedures and arrangements for purchasing, installing, recording, maintaining and insuring an item of equipment under a grant shall be those of the institution.
- (2) Upon termination of the grant under clause 7 or upon expiry of the term of the grant all equipment purchased using funds from an equipment grant must be returned to the Authority unless the institution elects to purchase the equipment at prices to be agreed.
- (3) Where the Director approves the transfer of the grant under sub-clause 9(1), he may also determine that the institution shall make any equipment purchased under the grant available for transfer to the institution to which it is proposed that the grant be transferred.
- (4) The grantee or any other person engaged in carrying out the approved project shall have first priority in the use and operation of the equipment and the institution shall so far as practicable permit persons authorised by the Director to have reasonable access to equipment in priority to other persons.

