

REPORTS OF COTSAC-FUNDED PROJECTS MANAGEMENT-RELATED RESEARCH

The following reports to GBRMPA and published papers were based on research supported, in whole or part, by COTSAC funds. GBRMPA procedures for funding research projects include the preparation of "Consultancy Agreements" or "Research Grants" which, among other conditions, stipulate reporting dates and report formats. For most projects, researchers are requested to submit brief "Progress Reports" during the course of their projects and a "Draft Final Report" at the completion of their research. This "Draft Final Report" is sent for external peer review and returned to the researcher for amendment in the light of reviewers' comments. The final, edited version is called the "Final Report" and its acceptance by the delegate of the GBRMPA signifies the completion of the project.

Baxter, I. (1987)

Green Island: review of current knowledge. Draft report to GBRMPA, September 1987. 51pp.

Baxter, I. (1988)

Green Island reef: multidisciplinary study. Draft report to GBRMPA, December 1988. 12pp.

Bell, R. (1987)

A preliminary investigation of juvenile crown of thorns starfish *Acanthaster planci* (L.) on reefs in the central section of the GBR. Draft report to GBRMPA, May 1987 (Pilot study). 61pp.

Bell, R. (1987)

Assessment of the status of crown of thorns starfish *Acanthaster planci* (L.) at Credlin Reef (GBR Central Section). Report to GBRMPA, May 1987. 6pp.

Bell, R. (1987)

Assessment of the status of crown of thorns starfish *Acanthaster planci* (L.) at Hook Reef (GBR Central Section). Report to GBRMPA, May 1987. 4pp.

Bell, R., Kettle, B. and R. Stump (1987)

An evaluation of the effectiveness of artificial barriers for meso-scale crown of thorns management. Report to GBRMPA, June 1987. 73pp.

Bell, R., Kettle, B. and R. Stump (1988)

Artificial barriers on coral reefs: A frontline strategy for crown-of-thorns management. Inter. Coral Reefs Symp. 6 Abstract.

Birdsey, R. (1988)

Distribution and feeding patterns of carnivorous reef fishes of the families Serranidae, Labridae, Lutjanidae and Lethrinidae. Report to GBRMPA. 32pp.

Birdsey, R. (1988)

Large reef fishes as potential predators of *Acanthaster planci*. A pilot study by alimentary tract analysis of predatory fishes from reefs subject to *Acanthaster* feeding. Report to GBRMPA. 36pp.

Campbell, R.S.F., Glazebrook, J.S. and S. Hall (1987)

Studies on the diseases of the crown of thorns starfish *Acanthaster planci*. Report to GBRMPA. 5pp.

Choat, H. and M.I. McCormick (1988)

The indirect effects of *Acanthaster* and human disturbance on fish abundance patterns at Green Island: A preliminary examination. Interim report to GBRMPA. 19pp.

- Copeman, D.B., Glazebrook, J.S. and K.A. Licastro (1988)**
Studies on the diseases of the crown of thorns starfish *Acanthaster planci*. Report to GBRMPA. 11pp.
- Coumbis, E.E. (1988)**
Remote sensing component of the relationship between *Acanthaster* outbreaks and water mass characteristics in the Great Barrier Reef Marine Park. Interim report to GBRMPA, August 1988. 6pp.
- Coumbis, E.E. (1989)**
The relationship between *Acanthaster* outbreaks and water mass characteristics in the Great Barrier Reef Region: Remote sensing component. Final report to GBRMPA, October 1989.
- DeVantier, L.M. (1989)**
Impact of the crown of thorns starfish *Acanthaster planci* (L.) on the community structure, demography and morphology of massive corals. Progress report for the period 24th August to 17th November 1989. 5pp.
- Dight, I.J., James, M.K. and L. Bode (1988)**
Models of larval dispersal within the central Great Barrier Reef: Patterns of connectivity and their implications for species distributions. Inter. Coral Reef Symposium 6 (3): 217-224.
- Dight, I.J., Bode, L. and M.K. James (1990)**
Modelling the larval dispersal of *Acanthaster planci*: I. Large scale hydrodynamics, Cairns Section, Great Barrier Reef Marine Park. Coral Reefs 9: 115-123.
- Dight, I.J., Bode, L. and M.K. James (1990)**
Modelling the larval dispersal of *Acanthaster planci*: II. Patterns of reef connectivity. Coral Reefs 9: 125-134.
- Doherty, P.J. and J. Davidson (1988)**
Monitoring the distribution and abundance of juvenile *Acanthaster planci* in the central Great Barrier Reef. Inter. Coral Reef Symposium 6 (2): 131-136.
- Endean, R., McCallum, H.I. and A.M. Cameron (1987)**
Study of crown of thorns starfish predators on or in the vicinity of reefs of the Great Barrier Reef. Draft final report to GBRMPA. 28pp
- Fernandes, L. (1988)**
Investigation of sampling biases in manta tow surveys with particular application to crown-of-thorns starfish (*Acanthaster planci*). Progress report to GBRMPA. 7pp.
- Fernandes, L. (1989)**
Biases associated with the use of the manta tow, a rapid reef surveillance technique, with particular application to the crown-of-thorns starfish (*Acanthaster planci*). Final report to GBRMPA. 104pp.
- Fernandes, L., Marsh, H., Moran, P.J. and D. Sinclair (1990)**
Bias in manta tow surveys of *Acanthaster planci*. Coral Reefs 9: 155-160.
- Fisk, D.A. (1989)**
Report to GBRMPA on the results of coral settlement studies at Green Island for the summer of 1988-89. Draft final report to GBRMPA. 7pp.

- Fisk, D.A., Harriott, V.J. and R.G. Pearson (1988)**
The history and status of crown-of-thorns starfish and corals at Green Island Reef, Great Barrier Reef. Inter. Coral Reef Symposium 6, (2): 149-155,
- Flood, P.G. and E. Frankel (1988)**
Search for evidence within surface and subsurface sediments for the occurrence of previous aggregations of crown-of-thorns starfish on the southern Great Barrier Reef; Capricorn Studies. Progress report (1) to GBRMPA, October 1988. 7pp.
- Flood, P.G. and E. Frankel (1988)**
Search for evidence within surface and subsurface sediments for the occurrence of previous aggregations of crown-of-thorns starfish on the southern Great Barrier Reef; Capricorn Studies. Progress report (2) to GBRMPA, December 1988. 8pp.
- Flood, P.G. and E. Frankel (1989)**
Search for evidence within subsurface sediments of the occurrence of previous aggregations of crown-of-thorns starfish on Heron Island Reef, southern Great Barrier Reef. Draft final report to GBRMPA, May 1989. 8pp.
- Flood, P.G. and E. Frankel (1989)**
Search for evidence within surface and subsurface sediments of the occurrence of previous aggregations of crown-of-thorns starfish. Part A: Capricorn Reefs. Draft final report to GBRMPA, May 1989. 12pp.
- Flood, P.G. and E. Frankel (1989)**
Search for evidence within surface and subsurface sediments for the occurrence of previous crown-of-thorns starfish skeletal material, Great Barrier Reef, Australia. Program, 366: Heron Island; Program 368A: Capricorn-Bunker Section; Program 368B: Innisfail, Townsville, Cape Upstart, Whitsunday and Pompey Complex Sectors. Final report to GBRMPA, 31 August 1989. 23pp + 13 figs.
- Ganter, R. (1987)**
Oral history of human use and experience of crown of thorns starfish on the Great Barrier Reef. Report to GBRMPA. 31pp.
- Ganter, R. (1988)**
The Japanese experience of north Queensland's mother of pearl industry. Draft report to GBRMPA. 70pp.
- Glazebrook, J.S., Zann, L.P., Brodie, J.E., Sutton, D.C. and L. Trott (in press)**
First recorded mass mortality in the crown-of-thorns starfish *Acanthaster planci* (L.). In press in Diseases of Aquatic Organisms.
- Glazebrook, J.S., de Beer, S.W. and R.M. Larsen (1989)**
An atlas of the digestive tract of the crown-of-thorns starfish. Draft final report to GBRMPA, May 1990.
- Henderson, R. (1985)**
The role of *Acanthaster planci* in reef degradational processes: Historical perspective and current influence. Progress report to GBRMPA, December 1985. 3pp.
- Henderson, R. (1986)**
The role of *Acanthaster planci* in reef degradational processes: Historical perspective and current influence. Progress report to GBRMPA, May 1986. 15pp.

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The role of *Acanthaster planci* in reef degradational processes: Historical perspective and current influence. Progress report to GBRMPA, November 1986. 17pp.
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Preliminary comments on the pilot dating program at INS and ANU investigating the history of *Acanthaster* on the Great Barrier Reef. Report to GBRMPA, February 1987. 5pp.
- Henderson, R.A. (1990)**
Crown-of-thorns skeletal elements in surface sediment, Central and Southern Sectors of the Great Barrier Reef. Draft final report to GBRMPA, May 1990.
- Henderson, R.A. and P.D. Walbran (1989)**
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- Hopley, D. and P.C. Catt (1987)**
Use of near infra-red aerial photography for monitoring effects of *Acanthaster planci* outbreaks. Report to GBRMPA July 1987. 8pp.
- Hopley, D. and P.C. Catt (1988)**
Use of infra-red aerial photography for monitoring effects of *Acanthaster planci* outbreaks. Report to GBRMPA, August 1988. 10pp + 4 papers.
- Hopley, D. and P.C. Catt (1988)**
Use of infra-red aerial photography for monitoring ecological changes to coral reef flats on the Great Barrier Reef. Inter. Coral Reef Symposium 6 (3): 503-508.
- Hundloe, T., Neumann, R. and M. Halliburton (1988)**
Great Barrier Reef Tourism. Griffith University publication.
- Hundloe, T. and J. Parslow (1988)**
Crown-of-thorns risk analysis. Draft final report to GBRMPA. 271pp.
- Hundloe, T., Vanclay, F.M. and M. Carter (1987)**
Economic and socio-economic impacts of the crown-of-thorns starfish on the Great Barrier Reef. Draft report to GBRMPA, June 1987. 132pp.
- James, M.K., Bode, L., Stark, K.P. and I. Dight (1988)**
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- Johns, R.B. (1988)**
Terrigenous and anthropogenic inputs to a Cairns - Great Barrier Reef sediment transect. Report to GBRMPA, November 1988. 36pp.
- Johnson, D.B., Moran, P.J. and S. Driml (1990)**
Evaluation of a crown-of-thorns starfish (*Acanthaster planci*) control program at Grub Reef (central Great Barrier Reef). Coral Reefs 9: 167-171.
- Keesing, J. (1989)**
Report on visit to University of the Ryukyus, Okinawa, Japan. 8-23 August 1989. Report to GBRMPA, November 1989. 19pp.

Kettle, B. (1987)

Presurvey of John Brewer Reef: An exercise to determine crown of thorns starfish distribution prior to a joint GBRMPA/RAN eradication program. Report to GBRMPA, January 1987. 8pp.

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Postsurvey of John Brewer Reef: An exercise to determine crown of thorns starfish distribution after a joint GBRMPA/RAN eradication program. Report to GBRMPA, January 1987. 4pp.

Kuchler, D.A., Bina, R.T. and D. van R. Claasen (1988)

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Matthew, P. (1989)

Oral history of reef fishing on the Great Barrier Reef with special emphasis on the effects of crown of thorns starfish on fish yields. Progress report to GBRMPA, January 1989. 3pp.

Matthew, P. (1989)

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Sublethal damage to *Acanthaster planci* as an index of predator pressure. Mar. Ecol. Prog. Ser. 56: 29-36.

McCormick, M.I. and J.H. Choat (1989)

A monitoring study of reef fishes at Green Island with respect to the effects of *Acanthaster* and human disturbance. Final report to GBRMPA, June 1989. 25pp.

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Effects of nutrients carried by mainland runoff on reefs of the Cairns area: A research plan and preliminary results. Report to GBRMPA, February 1988. 26pp.

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The use of strontium as an indicator of anthropogenically altered environmental parameters. Inter. Coral Reef Symp. 6 (2): 325-330.

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An analysis of fishing activities on possible predators of the crown of thorns starfish (*Acanthaster planci*) on the Great Barrier Reef. Draft final report to GBRMPA. 131pp.

Stockwell, R.M. and J.S. Glazebrook (in press)

Preparation of cell cultures from crown-of-thorns larvae. *In press* in *In Vitro*.

Stump, R. (1987)

A survey of Credlin Reef, Central Section, for crown of thorns starfish. Report to GBRMPA, December 1987. 21pp.

- Sutton, D.C. (1988)**
Identification of bacterial populations associated with crown-of-thorns starfish and assessment of their role in the ecology of the starfish and A preliminary investigation into factors affecting the mortality of *A. planci* larvae raised under field and laboratory conditions. Final report to GBRMPA, August 1988. 8pp.
- Sutton, D.C., Lucas, J.S. and L.A. Trott (1985)**
Pathology of Fijian crown of thorns starfish (*A. planci*). Report to GBRMPA, December 1985. 3pp.
- Sutton, D.C., Trott, L., Reichelt, J.L. and J.S. Lucas (1988)**
Assessment of bacterial pathogenesis in crown-of-thorns starfish, *Acanthaster planci* (L.). Inter. Coral Reef Symposium 6 (2): 171-176.
- Valentine, P.S. (1988)**
A land use study to investigate potential agricultural chemical inputs to marine environments in the northern Great Barrier Reef Region. Report to GBRMPA. 31pp.
- van Woosik, R., Steven, A. and L. de Vantier (1988)**
Surveys of the distribution, abundance and impact of the crown of thorns starfish (*Acanthaster planci* L.) on the fringing reefs of the northern Whitsundays, December 1988. Draft report to GBRMPA.
- van Woosik, R., Steven, A. and L. de Vantier (1988)**
Surveys of the distribution, abundance and impact of the crown of thorns starfish (*Acanthaster planci* L.) on the fringing and adjacent midshelf reefs of the Whitsunday region, January 1989. Draft report to GBRMPA. 51pp.
- Walbran, P.D. (1987)**
An atlas of the skeletal components of the crown of thorns starfish. GBRMPA Tech. Mem. No. 11. 42pp.
- Walbran, P.D. and R.A. Henderson (1988)**
The status of the crown of thorns starfish (*Acanthaster planci*) in the Great Barrier Reef, Australia, assessed from the sediment record of John Brewer, Green Island and Heron Island Reefs. Draft report to GBRMPA, May 1988. 38pp.
- Walbran, P.D., Henderson, R.A., Hull, A.J.T. and M.J. Head (1988)**
Evidence from sediments of long-term *Acanthaster planci* predation on corals of the Great Barrier Reef. Science 245: 847-850.
- Walbran, P.D., Henderson, R.A., Faithful, J.W., Polach, H.A., Sparks, R.J., Wallace, G. and D.C. Lowe (1989)**
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- Weaver, K. (1987)**
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- Weaver, K. (1987)**
Precontrol survey for crown of thorns starfish (*Acanthaster planci*): Holbourne Island. Report to GBRMPA, April 1987. 12pp.
- Weaver, K. and M. Ritchie (1987)**
Report on a crown of thorns survey conducted on reefs off Mackay, 14-22 November 1987. Report to GBRMPA, November 1987. 12pp.

Worland, L. (1987)

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Zann, L.P., Done, T.J. and A.M. Ayling (1989)

The status of crown of thorns starfish *Acanthaster planci* (L.) in Vanuatu, March/April 1988. pp 133-142 in: The Marine Resources Survey of Vanuatu. T.J. Done and K.F. Navin (eds.), Aust. Inst. Mar. Sci. Tech. Rept., Townsville.