

Rock Lobster Enhancement & Aquaculture Subprogram

Papers Published as at May 2005

Contact	Publication / Reference
<p>Caleb Gardner University of Tasmania PO Box 252-01 Hobart, Tas 7000 Phone: 03 6227 7233 Projects: 2000/185, 1999/314</p>	<p>Mills, D. and B. Crear (in press). "Developing a cost-effective puerulus collector for the southern rock lobster (<i>Jasus edwardsii</i>) aquaculture industry." <u>Aquacultural engineering</u>.</p> <p>Gardner, C. (2003). Southern rock lobster aquaculture. <u>Hatchery International</u>: 12-13.</p> <p>Gardner, C. (2003). Southern rock lobster culture makes progress. <u>Austasia Aquaculture</u>. 17: 49-52.</p> <p>Gardner, C. Mills, D. Ibbott, S. Wilcox, S. Crear, B. (2000). Preliminary investigation towards on-growing puerulus to enhance rock lobster stocks while providing animals for commercial culture. <u>Tasmanian Aquaculture and Fisheries Institute Report 13</u>.</p> <p>Gardner, C. Mills, D. MacDiarmid, A. Oliver, M. Stewart, R. (2001). Opportunities for the rock lobster industry through re-seeding. <u>2nd National Lobster Congress</u>, Geelong Victoria.</p> <p>Mills, D. 1998. Rock Lobster puerulus for aquaculture? <u>Fishing Today</u>. 11: 9-11.</p> <p>Mills, D. 2001. Lobster puerulus collection information. <u>Fishing Today</u> 14(3): 21.</p> <p>Mills, D. 2002. Gem of an idea for rock lobsters. <u>The Mercury</u>. Hobart: 3.</p> <p>Mills, D. Gardner, C. Ibbott, S. Willcox, S. (1999). Acoustic tracking of small-scale movement in juvenile southern rock lobster (<i>Jasus edwardsii</i>). <u>Fish Movement and Migration, Bendigo, Victoria, Australian Society for Fish Biology</u>.</p> <p>Mills, D. Gardner, C. Ibbott, S., (in press). Behaviour of ongrown juvenile <i>Jasus edwardsii</i> after re-seeding to coastal reef. <u>Stock Enhancement and Sea Ranching: Developments, Pitfalls and Opportunities</u>. K. M. Leber, J. Kitada, H. L. Blackenship and T. Svåsand. London, Blackwell Scientific: 576.</p> <p>Mills, D. Gardner, C. Oliver, M. (2002). Lobster survival assessment turns to high-tech surveillance. <u>Fishing Today</u>. 15: 22-23.</p> <p>Oliver, M. Gardner, C. Mills, D. MacDiarmid, A. (2003). The high-tech world of lobster surveillance. <u>Water and Atmosphere</u>. 11: 5.</p> <p>Oliver, M. Stewart, R. MacDiarmid, A. Gardner, C. Mills, D. (2001). Lobsters in captivity: house angel or street devil? <u>Seafood New Zealand</u>. 9: 24-26.</p> <p>Oliver, M. Stewart, R. MacDiarmid, A. Gardner, C. Mills, D. (2002). Lobsters in captivity: house angel or street devil? <u>Fishing Today</u>. 15: 34-35.</p> <p>Oliver, M. Stewart, R. MacDiarmid, A. Gardner, C. Mills, D. (2002). Behaviour of <i>Jasus edwardsii</i> reared in captivity. <u>The Lobster Newsletter</u> 15(1): 9-11.</p>
<p>Clive Jones Department of Primary Industries Northern Fisheries Centre PO Box 5396 Cairns Q 4870 Ph 07 40350182 Project: 1998/305</p>	<p>Jones, C.M., Linton, L., Horton, D. & Bowman, W. (2001) Effect of density on growth and survival of ornate rock lobster, <i>Panulirus ornatus</i> (Fabricius, 1798), in a flow-through raceway system. <u>Marine and Freshwater Research</u>, 52, 1425-1429.</p>
<p>Dr Arthur Ritar Tasmanian Aquaculture and Fisheries Institute University of Tasmania Marine Research Laboratories Nubeen Crescent Taroona, Tas 7053 Phone: 03 6227 7295 Projects: 2003/211, 2001/094, 2000/214, 1998/303</p>	<p>Bermudes, M. and Ritar, A.J. (2004). The ontogeny of physiological response to temperature in early stage spiny lobster (<i>Jasus edwardsii</i>) larvae. <u>Comparative Biochemistry and Physiology Part A</u> 138, 161-168.</p> <p>Bermudes, M. and Ritar, A.J. (In press) The development and metabolic rate of spiny lobster (<i>Jasus edwardsii</i>) larvae under constant and fluctuating salinities. <u>New Zealand Journal of Marine and Freshwater Research</u></p> <p>Cox, S.L. and Johnston, D.J. (2003). Feeding biology of spiny lobster larvae and implications for culture. <u>Reviews in Fisheries Science</u>, 11, 89-106.</p> <p>Crear, B., Thomas, C., Hart, P. and Carter, C. (2000). Growth of juvenile southern rock lobsters, <i>Jasus edwardsii</i>, influenced by diet and temperature, whilst survival is influenced by diet and tank environment. <u>Aquaculture</u> 190, 169-182.</p> <p>Crear, B.J. and Forteach, G.N.R. (2001). Flow rate requirements of captive western rock lobsters (<i>Panulirus cygnus</i>): effects of body weight, temperature, activity, emersion, daily rhythm, feeding and oxygen tension on oxygen consumption. <u>Marine and Freshwater Research</u> 52, 763-771.</p> <p>Crear, B.J. and Forteach, G.N.R. (2001). Recovery of the western rock lobster, <i>Panulirus cygnus</i>, from stress: the effect of dissolved oxygen level. <u>Journal of Shellfish Research</u> 20, 921-929.</p> <p>Crear, B., Hart, P., Thomas, C. and Barclay, M. (2002). Evaluation of commercial shrimp growout pellets as diets for juvenile southern rock lobsters, <i>Jasus edwardsii</i>: Influence on growth, survival, colour and biochemical composition. <u>Journal of Applied Aquaculture</u> 12, 43-57</p> <p>Crear, B.J. and Forteach, G.N.R. (2002). Feeding has the largest effect on the ammonia excretion rate of the southern rock lobster <i>Jasus edwardsii</i> and the western rock lobster <i>Panulirus</i></p>

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<p>Grant Liddy Department of Fisheries, W.A. Western Australian Marine Research Laboratories PO Box 20 North Beach, WA 6920 Ph: 61 8 92468460</p>	<p>Liddy, G. C., Phillips, B.F., and Maguire, G.B. The effect of starvation and feeding regimes on survival and growth of instar 1 phyllosoma of the western rock lobster, <i>Panulirus cygnus</i>. <u>Aquaculture International</u>. Submitted.</p> <p>Liddy, G.C. and Phillips, B.F. 2001. The effect of starvation and feeding on survival and growth of instar 1 phyllosoma larvae of the western rock lobster, <i>Panulirus cygnus</i>. Pages 309-312 in C.I. Hendry, G. Van Stappen, M. Willie, and P. Sorgeloos, editors. <u>Larvi'01 - Fish and Shellfish Larviculture Symposium. European Aquaculture Society, Special Publication No. 30, Oostende, Belgium.</u></p> <p>Phillips, B.F. and Liddy, G.C. Recent developments in spiny lobster aquaculture. <u>Proceedings of the 3rd World Fisheries Congress, American Fisheries Society</u>. In press.</p>
<p>K Williams CSIRO Marine Research PO Box 120, Cleveland Q 4163 Ph 07 3826 7284 Projects: 1998/303, 2000/212</p>	<p>Glencross, B., Smith, M., Curnow, J., Smith, D., Williams, K.C., 2001. The dietary protein and lipid requirements of post-juvenile western rock lobster <i>Panulirus cygnus</i>. <u>Aquac. Nutr.</u> 9, 119-129.</p> <p>Smith, D.M., Williams, K.C., Irvin, S., Barclay, M., Tabrett, S., 2003. Development of a pelleted feed for juvenile tropical spiny lobster (<i>Panulirus ornatus</i>): response to dietary protein and lipid. <u>Aquac. Nutr.</u> 9, 231-237.</p> <p>Ward, L.R., Carter, C.G., Crear, B.J., Smith, D.M., 2003. Optimal dietary protein level for juvenile southern rock lobsters, <i>Jasus edwardsii</i>, at two lipid levels. <u>Aquaculture</u> 217, 483-500.</p> <p>Barclay, M.C., Irvin, S., Williams, K., Smith, D., 2004. Dietary astaxanthin requirements of juvenile tropical spiny lobster <i>Panulirus ornatus</i>. <u>Proceedings 7th International Conference on Lobster Biology and Management</u>, Hobart, February 2004. p. 112. (Abstr.).</p> <p>Irvin, S., Barclay, M., Williams, K.C., 2004. Are mussels a suitable reference feed for the tropical spiny lobster <i>Panulirus ornatus</i>? <u>Proceedings 7th International Conference on Lobster Biology and Management</u>, Hobart, February 2004. p. 112. (Abstr.)</p> <p>Johnston, D.J., Calvert, K.A., Crear, B.J., Carter, C.G., 2003. Dietary carbohydrate:lipid ratios and nutritional condition in juvenile southern rock lobster, <i>Jasus edwardsii</i>. <u>Aquaculture</u> 220, 667-682.</p> <p>Smith, D.M., Williams, K.C., Irvin, S.J., 2004. Optimising dietary protein content for the tropical rock lobster <i>Panulirus ornatus</i>. <u>Proceedings 7th International Conference on Lobster Biology and Management</u>, Hobart, February 2004. p. 108. (Abstr.)</p> <p>Smith, D.M., Williams, K.C., Irvin, S.J., 2005. Response of the tropical spiny lobster <i>Panulirus ornatus</i> to protein content of pelleted feed and to a diet of mussel flesh. <i>Aquac. Nutr.</i> (in press)</p> <p>Irvin, S.J. Tabrett, S.J., 2005. A novel method of collecting fecal samples from spiny lobsters. <u>Aquaculture</u> 243, 269-272.</p> <p>Submitted</p> <p>Barclay, M.C, Irvin, S.J., Williams, K.C., Smith, D.M. Dietary astaxanthin requirements of juvenile tropical spiny lobster <i>Panulirus ornatus</i>. <u>Aquac. Nutr.</u></p> <p>Irvin, S.J., Williams, K.C., 2004. CSIRO studies dry feeds for juvenile spiny lobsters. <i>Global Aquaculture Advocate</i> 7, 74-75.</p> <p>Submitted or at internal referee stage</p> <p>Ward, L.R., Carter, C.G, Crear, B.J. Apparent digestibility of potential ingredients as protein sources in formulated feeds for the southern rock lobster <i>Jasus edwardsii</i>. <u>Aquaculture</u>.</p> <p>Williams, K.C., Smith, D.M., Barclay, M., Irvin, S., Tabrett, S. 2005. Water immersion time reduces the preference of juvenile tropical spiny lobster <i>Panulirus ornatus</i> for pelleted dry feeds and fresh mussel. <u>Aquac. Nutr.</u>, Accepted subject to revision</p> <p>Tolomei, A., Crear, B, Johnston, D. 2003. Diet immersion time: effects on growth, survival and feeding behaviour of juvenile southern rock lobster, <i>Jasus edwardsii</i>. <u>Aquaculture</u> 219, 303-316.</p> <p>Williams, K.C., Smith, D.M., Barclay, M.C., Irvin, S.J., 2004. Pelleted dry feeds for juvenile tropical rock lobster <i>Panulirus ornatus</i> that out perform mussels. <u>Proceedings 2004 World Aquaculture Society Conference, Hawaii, March 2004</u>. pp. 551 (Abstr.)</p>

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R van Barneveld Barneveld Nutrition 19-27 Coonan Rd South Maclean QLD 4280 Ph 07 5547 8611	van Barneveld. R.J., Development of Spiny Lobster Enhancement and Aquaculture Systems in Australia and New Zealand, 2004, <u>Book of Abstracts, Aquaculture 2004</u> , World Aquaculture Society
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Rock Lobster Heath Workshop, June 1998	<p>Evan. L., Review of Lobster Health & Disease Processes</p> <p>Patterson. B., Physiological Stress Responses in Post Harvest Lobsters</p> <p>Jussila, J Hemocytes and Disturbances</p> <p>Evans L., Jussila. J., Tsvetnenka. E., and Fotedar. S., Crustacean Host Defence Mechanisms with Emphasis on Clawed and Spiny Lobsters</p> <p>Paterson. B.D. and Spanoghe. P.T., Stress indicators in marine decapod crustaceans, with particular reference to the grading of western rock lobsters (<i>Panulirus Cygnus</i>) during commercial handling</p> <p>Jussila. J., Jago. J., Tsvetnenko. E., Dunstan. B. and Evans, L. Total and differential haemocyte counts in western rock lobsters (<i>Panulirus Cygnus</i> George) under post harvest stress</p> <p>Evans. L.H., and Brock. J.A. Diseases of Spiny Lobsters</p>	<p>Dr Robert van Barneveld Subprogram Leader Rock Lobster Enhancement & Aquaculture Subprogram 19-27 Coonan Rd, South Maclean QLD 4280 PH: 07 5547 8611</p>
Developments in Rock Lobster Enhancement and Aquaculture I, March 1999	<p>Crear. B., Lobster culture in Tasmania</p> <p>Ward. G., Live-holding of southern rock lobsters in sea cages</p> <p>Jones. C., Aquaculture and enhancement of tropical rock lobster, <i>Panulirus ornatis</i></p> <p>Crear. B., Report on a study tour to New Zealand and the United States</p> <p>Hart. P., Rock lobster aquaculture in Japan</p> <p>Phillips. B and Melville-Smith. R., RLEAS Project Outcomes: Puerulus collection and biological neutrality</p> <p>Williams. K., Smith. D., Crear. B., Glencross. B. and Evans. L., RLEAS Project Outcomes: Feed development for rock lobster aquaculture</p> <p>Evans. L., RLEAS Project Outcomes: Pilot study of disease conditions in all potential rock lobster aquaculture species at different growth stages</p> <p>Geddes M., Jones. C. and Crear. B., RLEAS Project Outcomes: Optimum environmental and system requirements for adult rock lobster holding and grow-out</p> <p>Paterson. B., Rock lobster post-harvest research and implications for aquaculture</p> <p>Hart. P., Towards propagation research</p>	<p>Dr Robert van Barneveld Subprogram Leader Rock Lobster Enhancement & Aquaculture Subprogram 19-27 Coonan Rd, South Maclean QLD 4280 PH: 07 5547 8611</p>
Technical potential for rock lobster propagation in aquaculture systems, September 1999	<p>MacDiarmid. A., Outline of previous and future research on aspects of <i>Jasus edwardsii</i> biology and behaviour pertinent to management of broodstock</p> <p>Tong. L.J. and Moss. G.A., Summary of the work done in New Zealand at NIWA Mahanga Bay, on rock lobster (<i>Jasus edwardsii</i> and <i>J. verreauxi</i>) propagation</p> <p>Frusher. S., A note on sex ratios and pigmentation of eggs</p> <p>Hirokazu Matsuda, Phyllosoma rearing of the Japanese spiny lobster, <i>Panulirus japonicus</i>, using small rearing vessels</p> <p>Takeshi Murai and Taku Yoshimura, Biological Barriers to Aquaculture of Rock Lobster</p> <p>Taku Yoshimura, Developmental status of aqua-culture lobster fisheries in Japan</p> <p>Jiro Kittaka, Importance of three major factors for successful phyllosoma culture</p> <p>Ritar. A.J., Propagation of southern rock lobster (<i>Jasus edwardsii</i>) in Tasmania</p> <p>Bermudes. M., Effect of photoperiod on survival, growth, feeding and cannibalism in early developmental stages of <i>Jasus edwardsii</i> phyllosoma larvae</p> <p>Hall. M., Closed cycle breeding of crustacea with special reference to rock lobsters</p> <p>Satoshi Mikami, Investigation of the gut system; Application for lobster aquaculture</p> <p>Johnston. D., Summary of Research – Rock Lobster Digestive Systems/Physiology</p> <p>Phillips. B., Present and future directions in Western Australian rock lobster propagation</p> <p>Benzie. J., Rock lobster research at the Australian Institute of Marine Science</p> <p>Benzie. J. & Taku Yoshimura, The 1999 Japan/Australia rock lobster Workshop in Perth funded by DISR</p> <p>Tong. L.J., The biological feasibility of rock lobster propagation from egg to puerulus</p> <p>Jungalwalla. P., Rock Lobster Propagation research – an aquaculture perspective</p> <p>Montague. P., The Cooperative Research Centre (CRC) for Aquaculture</p> <p>van Barneveld. R.J., Summary and overview of the day's discussion</p> <p>van Barneveld. R.J., Discussion of economic and biological feasibility</p> <p>van Barneveld. R.J., Development of a research plan</p>	<p>Dr Robert van Barneveld Subprogram Leader Rock Lobster Enhancement & Aquaculture Subprogram 19-27 Coonan Rd, South Maclean QLD 4280 PH: 07 5547 8611</p>
Developments in Rock Lobster Enhancement	<p>Jeffs. A. and Bruce. M., Rock lobster aquaculture developments in New Zealand</p> <p>Shelley. P., Future prospects for rock lobster aquaculture in Tasmania</p> <p>Jones. C., Rock lobster aquaculture in Far North</p>	<p>Dr Robert van Barneveld Subprogram Leader Rock Lobster Enhancement &</p>

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