

# RBM NEWSLETTER



The Official Newsletter of RBM Aquaculture, Mid West Yabby & Fish Traders and Robert McCormack

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## Welcome to RBM Aqua Newsletter

Hi all, this is the last newsletter for the year. Its been a hectic few months with travelling here there and everywhere catching crayfish. I am extremely lucky to be living in NSW and close to Queensland as I am having no difficulty in catching crayfish easily. It is quite amazing how easy most species are to capture if you are in the right area. For most species so far in NSW just a couple of hours at a good location will get you a load of crayfish. So far I have only found 4 species that have proved hard to find. *Euastacus suttoni* is easy to get little ones but a big male has not been captured as yet, *Euastacus australasiensis* proved hard to find initially but once I found a population I was neck deep in them within 30 minutes. *Euastacus maccii* proved hard to find and is the hardest yet but as a terrestrial crayfish I have been unprepared so next trip with land crayfish traps should have better luck, and *Cherax rotundus* had been proving difficult till this recent rain. I am having a great time chasing crayfish and learning heaps about them. The trouble is that the more you learn the more you realise how little you know. My thanks to all those people across Australia that are helping me with my crayfish collection and identification.

## RBM Aqua Website

Finally updated the RBM Aqua website to include the Australian Crayfish Project. It is something that I have been meaning to do for some time and though I had started it was just one of those jobs that just never got finished. Finally got the inspiration late November during a couple of weeks of wet weather. Too miserable to go yabbing in the bush so stayed home and did all the odd computer jobs like update website. Check it out [www.rbmaqua.com.au](http://www.rbmaqua.com.au)

## The Myall Swamp Yabby *Gramastacus myall* (*Tenuibranchiurus*?)

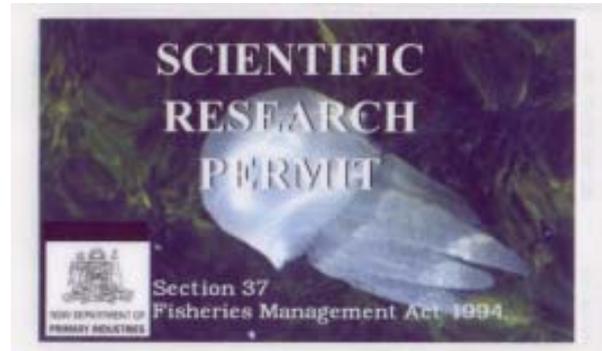
Last newsletter I spoke to you on a new species of crayfish found in NSW that I am calling *Gramastacus myall*. I have sent samples to Pierre Horwitz at Edith Cowan University in Western Australia for him to identify, Pierre is a crayfish guru on the other side of Australia from me and he is currently describing a *Gramastacus wyong* species. No results as yet he is still working on them but may be a *Tenuibranchiurus* species so will have to keep you updated on that one. Also in the last newsletter advised that I would include a photo of the *Gramastacus wyong*. Went to get some but it was dry and everything down their holes so I was unable to dig any up. Spent a day in 33°C heat without any success so you may have to wait till next newsletter. Will get one eventually and put the *wyong* and *myall* side by side and you can see what you think, are they the same or different.

*Gramastacus myall*? (*Tenuibranchiurus*)



## Scientific Collection Permit

N.S.W DPI has issued me with a Scientific Collection Permit for the whole of NSW. Bit of a drama getting it requiring a mass of paperwork and environmental effects statements. My trouble is that as a rule scientific collection permits are usually issued for a specific area or region, etc. My permit on the other hand was for everywhere in NSW. It is for every river, every creek, stream, swamp or puddle and for every piece of land in-between. No problems for NSW DPI they were very helpful and efficient and we worked through all the issues and the permit was issued. This is just the start I am working on the applications for Queensland and Victoria now.



## Lists of Australian Freshwater Crayfish Species

I have been working off a list of Australian Species, a copy is below. Don't know how correct it is but this is what I have compiled from all the bits and pieces of information I have collected over the years. It is as up to date as I can get it so if you think it needs correction please let me know. If any of the species listed have been recategorized or I have not added another newly discovered species then please let me know.

### **FRESHWATER CRAYFISH OF AUSTRALIA**

#### **Species List 1. Confirmed 2005**

(Disclaimer; This list has been compiled from the available data, it is the list that I am working from and will change as each species is captured, identified and DNA tested)

No.	GENUS	SPECIES	LOCATION	PIC
<b>ASTACOPSIS</b>				
1	Astacopsis	<i>franklinii</i>	New Town Rivulet, Northern Hobart, Tasmania	
2	Astacopsis	<i>gouldi</i>	Big River Tasmania	
3	Astacopsis	<i>tricornis</i>	Huon River, Tasmania	
<b>CHERAX</b>				
1	Cherax	<i>albidus</i>	Western Victoria & Eastern South Australia	Yes
2	Cherax	<i>barretti</i>	Japanese Creek, Wessell Is., NT.	
3	Cherax	<i>cainii</i>	Scott River Western Australia	Yes
4	Cherax	<i>cairnesensis</i>	Proserpine Queensland	
5	Cherax	<i>cartalacoolah</i>	Cape Flattery, northeast Queensland	
6	Cherax	<i>crassimanus</i>	WA	
7	Cherax	<i>cuspidatus</i>	Urunga, NSW	Yes
8	Cherax	<i>depressus</i>	West Brisbane Queensland	
9	Cherax	<i>destructor</i>	NSW, QLD, Vic, SA, NT	Yes
10	Cherax	<i>dispar</i>	Qld Frazer Island	
11	Cherax	<i>glaber</i>	Blackwood River Western Australia	
12	Cherax	<i>nucifraga</i>	Palm Springs, Northern Territory	

13	Cherax	<i>parvus</i>	O'Leary creek North Eastern Qld	
14	Cherax	<i>preissii</i> ,	Kalang River Western Australia	
15	Cherax	<i>quadricarinatus</i>	Flinders River Queensland, Howard River NT.	Yes
16	Cherax	<i>quinquecarinatus</i>	Canning River Western Australia	
17	Cherax	<i>rhynchotus</i>	Jardine River Queensland, Cape York peninsula.	
18	Cherax	<i>robustus</i>	Bribie Island Queensland	
19	Cherax	<i>rotundus</i>	Barmah Forest Vic, South Central NSW within 50 km border	Yes
20	Cherax	<i>setosus</i>	Port Stephens NSW	Yes
21	Cherax	<i>tenuimanus</i>	Western Australia	Yes
22	Cherax	<i>urospinosus</i>	Indooroopilly, Brisbane, QLD.	
23	Cherax	<i>wasselli</i>	Northern Tip Queensland	
<b>ENGAEUS</b>				
1	Engaeus	<i>affinis</i>	Warburton, VIC	
2	Engaeus	<i>australis</i>	Lilly Pilly Gully, Wilson's Promontory, VIC	
3	Engaeus	<i>cisternarius</i>	Tributary of the Dip River, NW TAS.	
4	Engaeus	<i>cunicularius</i>	Tasmania	
5	Engaeus	<i>curvisuturus</i>	Yarra River plains, near bridge over Yarra River at Warburton	
6	Engaeus	<i>cymus</i>	Buffalo River, Dondangadale, Victoria	
7	Engaeus	<i>disjuncticus</i>	Rubicon River, due E of Elizabeth Town on Weetah Rd, N TAS.	
8	Engaeus	<i>fossor</i>	Dip Falls Tasmania	
9	Engaeus	<i>fultoni</i>	Cape Otway forest, VIC, Ferntree Gully, VIC.	
10	Engaeus	<i>granulatus</i>	Browns Creek, upstream from road, at mouth of creek, E of Port Sorell, TAS.	
11	Engaeus	<i>hemicirratulus</i>	Gippsland, VIC	
12	Engaeus	<i>karnanga</i>	Lilly Pilly Gully, Wilsons Promontory, Victoria	
13	Engaeus	<i>laevis</i>	Victoria and Tasmania	
14	Engaeus	<i>lengana</i>	Rocky Cape, in National Park, west coast of Tasmania	
15	Engaeus	<i>leptorhynchus</i>	North-east Tasmania between Upper Blessington, St. Helens and Mt. William.	
16	Engaeus	<i>lyelli</i>	Vic Great Dividing Range from the Grampian Ranges in the west to near Myrtleford in the east	
17	Engaeus	<i>mairener</i>	Lefroy, northeast Tasmania.	
18	Engaeus	<i>mallacoota</i>	Croajingolong National Park, on Genoa-Mallacoota Road, east Victoria.	
19	Engaeus	<i>martigener</i>	Strzelecki Peaks, Flinders Island.	
20	Engaeus	<i>merosetosus</i>	Geelong-Ballarat region Victoria	
21	Engaeus	<i>nulloporius</i>	North Tasmania	
22	Engaeus	<i>orientalis</i>	Cann River, Victoria	
23	Engaeus	<i>orramakunna</i>	Lilydale, northeast Tasmania.	
24	Engaeus	<i>phyllocercus</i>	Narracan River, near Narracan, Gippsland	
25	Engaeus	<i>quadrimanus</i>	Melbourne to Mallacoota, near the Victorian-New South Wales border	
26	Engaeus	<i>rostogaleatus</i>	Morwell, Eastern Strzelecki Ranges, Victoria.	
27	Engaeus	<i>sericatus</i>	South Western Victoria	

28	Engaeus	<i>spinicaudatus</i>	Scottsdale on Old Waterhouse Road, NE. Tasmania.	
29	Engaeus	<i>sternalis</i>	Warragul.	
30	Engaeus	<i>strictifrons</i>	Port Macdonnell in South Australia to Warrnambool in Victoria	
31	Engaeus	<i>tayatea</i>	Mt. Horror, northeast Tasmania.	
32	Engaeus	<i>tuberculatus</i>	Sherbrooke Falls.	
33	Engaeus	<i>urostrictus</i>	East of Melbourne, Victoria.	
34	Engaeus	<i>victoriensis</i>	Dandenong Ranges Victoria	
35	Engaeus	<i>yabbimunna</i>	Burnie area	
<b>ENGAEWA</b>				
1	Engaewa	<i>similis</i>	South West Western Australia	
2	Engaewa	<i>subcoerulea</i>	South West Western Australia	
<b>EUASTACUS</b>				
1	Euastacus	<i>armatus</i>	NSW, Vic, SA	Yes
2	Euastacus	<i>australasiensis</i>	Sydney NSW	Yes
3	Euastacus	<i>balanensis</i>	Atherton Tableland, Queensland	
4	Euastacus	<i>bidawalis</i>	Dingo Creek South Eastern NSW Victoria	
5	Euastacus	<i>bindal</i>	Upper North Creek, Mt Elliot, NE QLD.	
6	Euastacus	<i>bispinosus</i>	Burrong Falls South West Victoria	
7	Euastacus	<i>brachythorax</i>	Brown Mountain, NSW	
8	Euastacus	<i>clarkae</i>	Forbes River, West Port Macquarie, NSW	Yes
9	Euastacus	<i>claytoni</i>	Nimmitabel, NSW	
10	Euastacus	<i>crassus</i>	Victorian Alps, southern NSW	
11	Euastacus	<i>dalagarbe</i>	Border Ranges, NSW	
12	Euastacus	<i>dangadi</i>	Cedar Park Kempsey, NSW	Yes
13	Euastacus	<i>dharawalus</i>	Fitzroy Falls, NSW	
14	Euastacus	<i>diversus</i>	Orbost, Victoria	
15	Euastacus	<i>dundungra</i>	Barrington Ranges NSW	Yes
16	Euastacus	<i>eungella</i>	Eungella National Park, Queensland	
17	Euastacus	<i>fleckeri</i>	Mount Molloy, Queensland.	
18	Euastacus	<i>gamlaroi</i>	Hanging Rock, NSW	
19	Euastacus	<i>girummulayn</i>	Nightcap Ranges, NSW	
20	Euastacus	<i>gumar</i>	Richmond Range, NSW	
21	Euastacus	<i>guruhgi</i>	Mt Warning National Park, NSW	
22	Euastacus	<i>guwinus</i>	Shoalhaven River, NSW	
23	Euastacus	<i>hirsutus</i>	Belmore Falls, NSW	
24	Euastacus	<i>hystricosus</i>	Kilcoy Creek South Eastern Queensland	
25	Euastacus	<i>jagara</i>	Mistakes Mountain, Queensland	
26	Euastacus	<i>jarabar</i>	Border Ranges, NSW	
27	Euastacus	<i>kershawi</i>	Victoria	Yes
28	Euastacus	<i>macci</i>	New England, NSW.	Yes
29	Euastacus	<i>maidae</i>	Currumbin Creek, Queensland	
30	Euastacus	<i>mirangudjin</i>	Richmond Range, NSW	Yes
31	Euastacus	<i>monteithorum</i>	Kroombit Creek, Kroombit Tops, central QLD.	
32	Euastacus	<i>neodiversus</i>	Wilson's Promontory, Victoria	
33	Euastacus	<i>neohirsutus</i>	Dorrigo, NSW	
34	Euastacus	<i>polysetosus</i>	Barrington Tops, NSW	

35	Euastacus	<i>reductus</i>	Eastern NSW	Yes
36	Euastacus	<i>rieki</i>	Kosciosko, Paddy's River South Eastern NSW	
37	Euastacus	<i>robertsi</i>	North East Queensland	
38	Euastacus	<i>setosus</i>	Mount Glorious, Queensland	
39	Euastacus	<i>simplex</i>	Ebor, NSW	Yes
40	Euastacus	<i>spinichelatus</i>	Doyles State Forest, NSW	Yes
41	Euastacus	<i>spinifer</i>	Eastern NSW	Yes
42	Euastacus	<i>sulcatus</i>	North Eastern NSW and South Eastern Qld.	Yes
43	Euastacus	<i>suttoni</i>	Billyrimba Creek NSW. Qld	Yes
44	Euastacus	<i>urospinosus</i>	Maleny, Queensland	
45	Euastacus	<i>valentulus</i>	Northern NSW Southern Qld	Yes
46	Euastacus	<i>woiwuru</i>	Dandenong Mountains, Victoria	
47	Euastacus	<i>yanga</i>	West Uralla, NSW	
48	Euastacus	<i>yarraensis</i>	Gellibrand River South West Victoria	Yes
49	Euastacus	<i>yigara</i>	O'Leary Ck, Tully R. Queensland.	
<b>GEOCHARAX</b>				
1	Geocharax	<i>falcata</i>	Glenelg River South Western Qld	
2	Geocharax	<i>gracilis</i>	South West Victoria	Yes
<b>GRAMASTACUS</b>				
1	Gramastacus	<i>gracilis</i>	Western Vic & south Eastern SA	
2	Gramastacus	<i>insolitus</i>	Western Vic & south Eastern SA Moyston.	
3	Gramastacus	<i>myall</i>	Myall Lakes NSW	Yes
4	Gramastacus	<i>wyong</i>	Wyong NSW	Yes
<b>PARASTACOIDES</b>				
1	Parastacoides	<i>insignis</i>	Scott's Peak Tasmania	
2	Parastacoides	<i>pulcher</i>	Tasmania	
<b>TENUIBRANCHIURUS</b>				
1	Tenuibranchiurus	<i>glypticus</i>	Bells Creek Caloundra, Queensland	

### OTHER DESCRIBED SPECIES

These are described species but not confirmed as yet. They may yet be added to the list above otherwise the corrected name is listed.

Old Identification Name		Current Identification	
Cherax	<i>aruanus</i>	Cherax	
Cherax	<i>bicarinatus</i>	Cherax	<i>quadricarinatus</i>
Cherax	<i>boschmai</i>	Cherax	
Cherax	<i>buitendijkae</i>	Cherax	
Cherax	<i>communis</i>	Cherax	
Cherax	<i>davisi</i>	Cherax	<i>destructor</i>
Cherax	<i>divergens</i>	Cherax	
Cherax	<i>esculus</i>	Cherax	<i>destructor</i>
Cherax	<i>glabrimanus</i>	Cherax	<i>quinquecarinatus</i>
Cherax	<i>gladstonensis</i>	Cherax	<i>cairsensis</i>
Cherax	<i>longipes</i>	Cherax	

Cherax	<i>lorentzi</i>	Cherax	
Cherax	<i>misolicus</i>	Cherax	
Cherax	<i>monticola</i>	Cherax	
Cherax	<i>murido</i>	Cherax	
Cherax	<i>neocarinatus</i>	Cherax	<i>quinquecarinatus</i>
Cherax	<i>neopunctatus</i>	Cherax	<i>cuspidatus</i>
Cherax	<i>pallidus</i>	Cherax	
Cherax	<i>paniaicus</i>	Cherax	
Cherax	<i>papuanus</i>	Cherax	
Cherax	<i>plebejus</i>	Cherax	<i>preissii</i>
Cherax	<i>punctatus</i>	Cherax	<i>cuspidatus</i>
Cherax	<i>rotundus setosus</i>	Cherax	<i>setosus</i>
Cherax	<i>solus</i>	Cherax	
Euastacus	<i>alienus</i>	Euastacus	<i>Spinifer/reductus</i>
Euastacus	<i>aquilus</i>	Euastacus	<i>neohirsutus</i>
Euastacus	<i>clydensis</i>		<i>Spinifer/yanga</i>
Euastacus	<i>keirensis</i>		
Euastacus	<i>nobilis</i>	Euastacus	<i>spinifer</i>
Euastacus	<i>spinosus</i>	Euastacus	<i>spinifer</i>
Euastacus	<i>serratus</i>	Euastacus	<i>Spinifer//australienensis</i>
Paranephops	<i>planifrons</i>		
Parastocoides	<i>inermis</i>		
Parastocoides	<i>leptomerus</i>		
Parastocoides	<i>sternalis</i>		
Parastocoides	<i>tasmanicus</i>		

## Current Projects

Back in 1997 through my consultancy service I designed a trout farm up in the Mount Royal Ranges at the back of Hanging Rock NSW. This is high country around the 1100 to 1300 mtr high. When I was surveying the site and designing the facilities, etc. I did a quick survey of the species in the surrounding creeks and streams as part of the Statement Of Environmental Effects for the development application. Well, I was expecting to find *E. spinifer*, *E. reductus* and *E. gamilaroi* in the streams but I found 2 unidentified species that I did not have a clue what they were back then. This is my current xmas project to check out the creeks and streams in the Mount Royal Ranges and see if these 2 species are something new or not. One of the crayfish species is another swamp type crayfish that lives in a burrow in swampy ground. They are only found in the swampy areas and not in open water so normal crayfish traps don't work. Unlike *E. maccii* it does not cap its burrow but leaves it open, these type crayfish are the ones that I have the most trouble catching. Over the Christmas break I will be making some traps to catch these crayfish, if anybody has a good design please let me know. Made some flap traps out of corrugated plastic pipe with a one way flap on each end. The idea is to replace a section of burrow with my trap and just wait for them to crawl in, never tried it before, but never know it may work. Will give you an update next newsletter.



## **Cherax Rotundus**

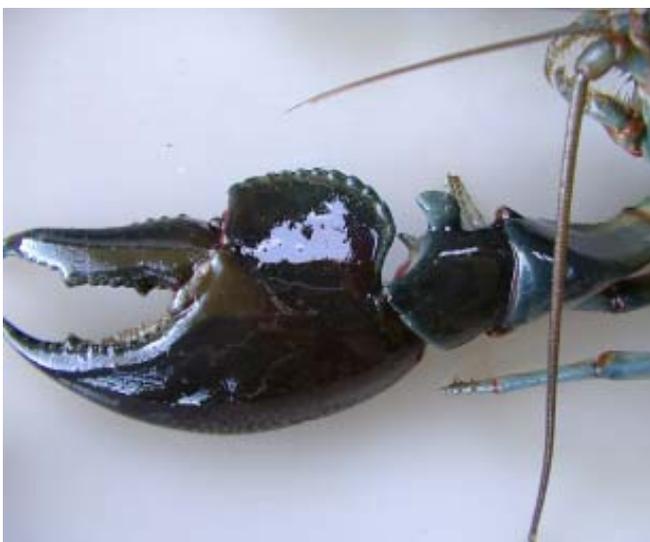
**(Barmah Forest Yabby, Barmah Swamp Yabby, Spanner Claw Yabby)**

Some time ago Professor Chris Austin determined that *Cherax setosus* and *Cherax Rotundus* were separate species. Well *Cherax setosus* are relatively common in my area and I actually grow them in the drains around my front yard. *Cherax rotundus* on the other hand are only supposedly from Barmah Forest in Victoria and is very hard to come across as its been a drought for the last 7 years so not much water around. I have been interested in *rotundus* and had a chat to Dave Royal from Crayfish World who's a very knowledgeable crayfish expert from Victoria but he was having difficulty getting any. Had a chat with Steve Chara from Otway Yabbies Victoria but he was having trouble getting any so not looking good. Both people know the species well and both had been chasing it but both are having difficulty, so not looking good for me as I rely on these type experts to steer me in the right direction.

It was not a big concern as yet because they are a Victorian species and I was not going to be doing them till next year. Currently I am just finishing off collection of all NSW species and starting on Queensland species for my Australian Crayfish Project.



Well surprise, surprise, it seems that *rotundus* are not just in Victoria they are in NSW as well. Late November after heavy rain along the NSW Victorian border *rotundus* made an appearance. Steve Chara came to the rescue and got some specimens of *rotundus* for me but he got them from NSW. Seems that *rotundus* are not just restricted to Barmah Forest in Victoria they also occur in NSW within 50 kilometres of the border. Good news for me I can add them to the NSW Species and have some great specimens for photography. Love the spanner claw and paddles, they are unusual and tough making a good aquarium pet, added these ones to my home tanks as they are so easy going.



## What The???

This is a real enigma. This is a crayfish that lives like an *Engaeus* species but looks like a *Euastacus* species. It's found in the New England region of NSW and is an undescribed species. It lives in only 3 widely separated locations that are relatively small areas only 200 acres in size maximum each. It is a species that survives surrounded by *Cherax destructor* which is one of Australia's most prolific and fast growing species. It survives by not living in open water. It is a terrestrial crayfish that avoids any open water and lives in extensive burrow systems below ground in cattle paddocks. It's a really interesting crayfish this one, a real unknown, as it grows to over 100 grams in size and is hairy, especially the males. Calling it *Euastacus maccii* for now but that will probably change. I will send samples to Professor Chris Austin at Charles Darwin University and see if he can let me know what sort of crayfish it is. Chris has moved from Deakin Uni and is heading up to Darwin so will be February before he is up and ready for more samples. Will give you an update next newsletter, I expect you will hear lots more on this one as it's a real enigma.



## The Wangat Crayfish *Euastacus dundungra*

Some time ago I stumbled across this species whilst doing a routine check of creeks and streams. I was expecting to find *Euastacus spinifer* and *Euastacus reductus* in this stream in the Barrington Ranges over 800 mtrs. These were in this creek below 700 metres so it was only to be expected that they would be a bit higher but no. Instead the creek was infested with these unidentified crayfish. They are much like any number of crayfish in both colour and shape but different enough that I could not readily identify them. After collecting and examining just about every species in NSW I am getting to the stage that I can look at crayfish and say this is that species or not but these ones I was unsure of so sent samples to Chris Austin at Deakin University for DNA identification and when we got the results back they were a bit weird. I expected this to be some sort of *reductus* or closely related to it or even related to *mirangudjin* but that was not the case. Instead the DNA results did not correspond to any known species on the data base but did show it was close to *Euastacus valentulus/sulcatus*, *E. gumar* and *E. dangadi*. Yet it looks nothing like these animals and is small under 35 gram in size max. I have named the species *Euastacus dundungra* and in partnership with Dr Shane Ahyong we have done the description and lodged it with samples at the Australian Museum. This was the first description I have done and a very interesting learning curve. Originally I just expected to have to describe just a couple of specimens but Shane recommended that I do a bunch so that there is a good comparison. It was quite a wise suggestion as I went back to the site and collected samples from the extremes of this crayfishes distribution and there was a large variation between specimens from different areas. Also on that trip I found another species in the same stream and that was unexpected as to date only the one species had been found in that stream. Don't know anything about this other species as yet will give you an update next newsletter.



## **RBM AQUACULTURE**

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### **NSW DPI Update November 2005**

Had a chat to Ian Lyall our NSW DPI Aquaculture Manager. Ian's always great to talk to he is always so enthusiastic and positive about the aquaculture industry and its future in NSW. Ian gave me an up date on what's happened with the department.

There is a lot happening with our NSW Department Primary Industries over the last few months and at the moment. This is whats happened:

The Deputy Director General Richard Sheldrake has left his position and a new replacement was announced 25/11/05 as Renata Brookes who comes from DPI Compliance Mine Safety and Biosecurity.

Nick Rayns the Director of Fisheries Management left in mid September and his position is still available. Anthony Hurst is acting Director of NSW Fisheries Management at the moment. The position of Director has been advertised.

Ian Lyall is still our Aquaculture Manager.

Geoff Allan is our Research Manager.

Damian Ogburn is our Biosecurity Manager.

Ian Powell is our Aquaculture Compliance Manager.

Phil Read is still our only extension officer and his position is secure for this financial year. The Minister the Hon Ian McDonald has made a commitment to support extension to the aquaculture industry, 10 out of 10 for the Ministers commitment. Phil is being paid out of core funding and lets hope it continues for many years to come. Phil is busy with the implementation of the Hatchery Quality Assurance Program, doing the disease manual as well as the normal extension duties.

### **Bird Flu**

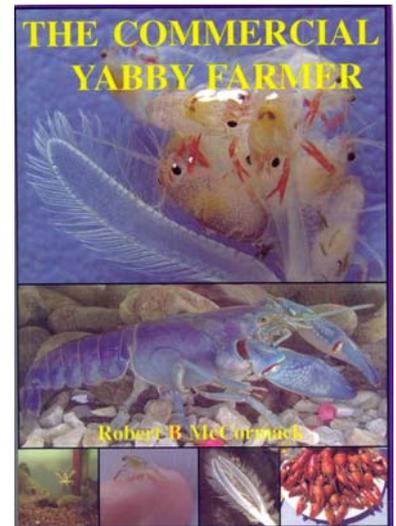
The NSW Food Authority and NSW DPI Biosecurity are closely monitoring the spread of Bird Flu internationally and its implications for Australian and NSW consumers. For the aquaculture industry bird flu overseas is seeing more people turn away from poultry and consuming more seafood. This is a trend that is likely to continue and very likely to start impacting on the Australian consumers. So be prepared as the hype about bird flu continues aquaculture should benefit tremendously. PS. Dont know if bird flu will effect cormorants but you can always hope as if you are a fish/crayfish farmer then cormorants are a major problem.

## The Commercial Yabby Farmer

Robert B McCormack

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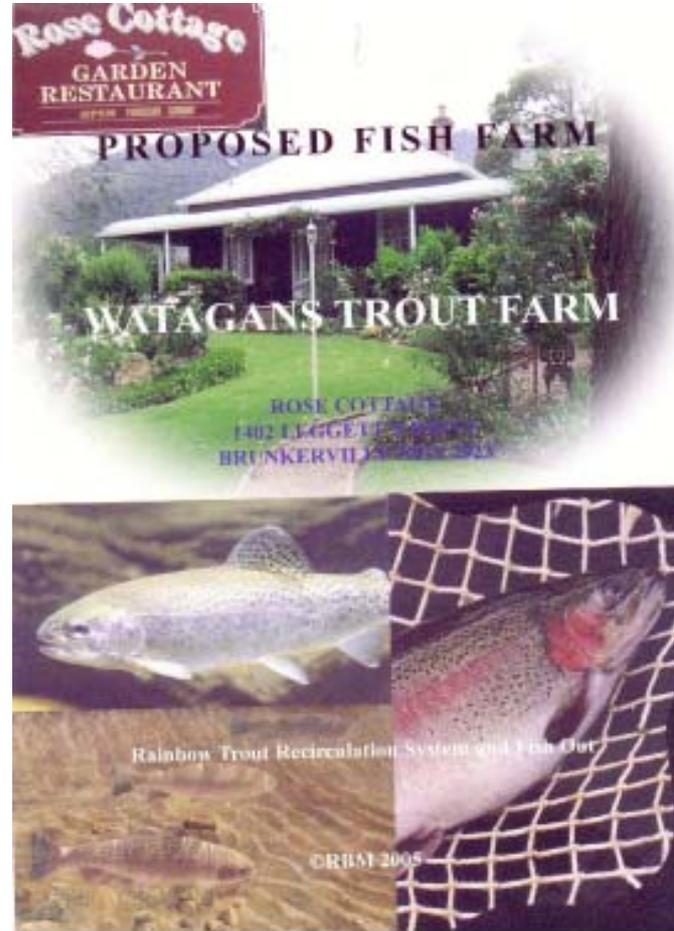
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### 4 New Species of Crayfish

Four new species of crayfish have been described by Jason Coughran. Jason's my hero, 10 out of 10 to him for this great work. The species are all from up North Eastern NSW and they are *E. girurmulayn*, *E. guruhgi*, *E. jagabar* and *E. dalagarbe*. What a mouthful, these are all relatively small species and it seems Jason has done a mass of work to find and describe them. I have never met Jason but hear all about him from many of you. I will try and catch up with him next trip north as he is doing phenomenally good work.

## Watagans Trout Farm

RBM aquaculture Consultants has finalised the Development Application for the Watagans Trout Farm. We lodged this development application with Cessnock City Council on the 19<sup>th</sup> December just before Christmas. Council will be short staffed for the next few weeks so we don't expect to hear much back till mid to the end January 2006. This will be the first Aquaculture Development Lodged with a Council in NSW since the Hunter and Central Coast Sustainable Aquaculture Strategy SEPP62 was gazetted. The development application has been designed within the parameters of SEPP62 so will be interesting to see if the approvals process will be streamlined as intended by SEPP62. Will give you an update next newsletter.



## *Euastacus gamilaroi* ?????

My current project area is the mountain ranges between Nowendoc and Nundle. It's a relatively remote and isolated area that is proving a challenge. I have started looking around my old haunts and then ranging out from these known areas into the unknown. Went looking for *E. gamilaroi* and *E. polysetosus* last week. Found *E. polysetosus* easy enough but what I thought was *E. gamilaroi* is not matching the description by Gary Morgan 1997. Gary's descriptions of the *Euastacus* crayfish of NSW is my bible I work from and a fantastic source of information. Don't know what these crayfish are whether *E. gamilaroi* or not, they are very similar, but different, will give you an update next newsletter.

