

To: Mike Scanlon@WOOD.SID@CALM
From: "Russ Shiel" <shielr@watson.canberra.edu.au>
Cc:
Subject: details
Attachment:
Date: 02/04/2001 12:35

Mike

You'll note that I have been cautious with names...not all WA critters are who they seem to be at first glance...so I tend to err on the side of caution until the detailed morphological work can be done.

In terms of known distributions:

Chydoridae

Alona cf. *longinqua* (Smirnov, 1971) - widespread, pancontinental, maybe except Tas?

Alona cf. *rigidicaudis* (Smirnov, 1971) s.l. - pancontinental, incl. Tas.
but as the s.l. indicates, there are several things in W.A. at present lumped under this nomen

Kurzia cf. *longirostris* (Daday, 1898) - WA, NT, QLD, NSW - not common

Leydigia sp. - can't say much until species determined

Rak sp. - probably one of the new sp. Frey found in W.A. Remains unnamed
- probably more widespread in W.A. than sparse records indicate

Daphnidae

Ceriodaphnia cornuta s.l. - Pancontinental - but as the s.l. implies, there's more than one pointy-faced small *Ceriodaphnia* in northern Australia. One is *C. cornuta* s.str. The other isn't, but hasn't been separated or described yet. Dorothy Berner from Temple University in Philadelphia is planning a stint in my lab. later in the year to work on this species complex, among others in *Ceriodaphnia*

Ceriodaphnia sp. - depends on which species

Ilyocryptidae

Ilyocryptus sp. - depends on which species

Macrothricidae

Macrothrix sp. a - as above

Macrothrix sp. b - as above

Sididae

Diaphanosoma/Latonopsis? sp. - as above

At the present level of uncertainty for most W.A. cladocerans, it isn't possible to say much. If some of the above identified only to genus turn out to be undescribed, that would be notable. Putting a species name on W.A. cladocerans requires detailed knowledge of morphological attributes of other Australian taxa, which unfortunately (mostly) doesn't exist....

Chrs

Russ

To: Mike Scanlon@WOOD.SID@CALM
From: Adrian Pinder@WOOD.SID@CALM
Cc:
Subject:
Attachment:
Date: 01/03/2001 08:54

Mike, the (boring) oligos are as follows:

Black Spring	Allonais paraguayensis 4
	Dero furcata 1
	Pristina proboscidea 1
Lollywell Spring	Allonais paraguayensis 2
	Pristina proboscidea 1
Moon Spring	Allonais paraguayensis 2
Enigma Spring	Aulodrilus pigueti 1
	Allonais paraguayensis 1
Drysdale River	?Nais communis (head end regenerating so cannot be sure of id) 1

All are Naididae except for the Aulodrilus which is a Tubificidae

These are mostly typical northern Australian species but none are endemic to Australia. Nais communis would be the first record of this species from northern Australia (except for a few east-coast Qld records) but its a tentative id and not unexpected in the north. P. proboscidea has not been recorded from northern WA before but it is most commonly found in northern Australia (with a single wheatbelt record).

Adrian Pinder
Department of Conservation and Land Management
PO Box 51 Wanneroo 6946
Ph (08) 9405 5153, fax (08) 9306 1641
email: adrianp@calm.gov.au (work)
email: maxcat@indigo.net.au (home)

Halse, Stuart

From: Maria Katalin Holynska [mariahol@robal.miiz.waw.pl]
Sent: Tuesday, 1 May 2001 17:01
To: Halse, Stuart
Subject: Mesocyclops from Western Australia

Dear Stuart,

I have finished the examination of the material you kindly sent to me some weeks ago. I learnt much again: some problems have been resolved, and meanwhile new questions arose...

SLIDES:

Mesocyclops brooksi: In some characters the four females (Lake Cronin, Fortescue marsh, Hotham River, and Dalkin[??]) differ from the original description. These features are: hyaline membrane of the last antennal segment with usually more than one, relatively small notch; ventral spinules present on antennal segments 1, 4-5, 7-13, of apical spines of P4 and P3 medial spine usually conspicuously shorter than lateral one; second endopodal segment of antenna (third segment) sometimes bearing seven setae (but taking into consideration the specimens you sent me in alcohol, the eight setae-state seems to be more common)

Another character, the state which was not mentioned in the description of Pesce et al., that there are few rows of short hairs (unfortunately it is rather easy to overlook) on the latero-dorsal surface of the genital double-somite, in the anterior half.

If these animals are really *M. brooksi*, I have to modify the World key to *Mesocyclops* (it should be submitted at the Backhuys Publishers in July). Therefore I decided to ask for the type material of *M. brooksi*, deposited in Perth, and I hope that such a comparison helps us to settle the question of the identity of your *Mesocyclops* at last.

'*M. nr. kieferi*' (Big Spring, 7/9/99): It is *Mesocyclops woutersi* Van de Velde, 1987. I have identified this species from Queensland (Townsville) as well. Besides Australia, *M. woutersi* was recorded from New Guinea, Laos, Vietnam, South China as far as the Ryukyus.

'*M. australiensis*' (SPG 0027, 1/10/97; Ellen Brook, 7/11/91): In my opinion, they are actually conspecific with the *Mesocyclops* identified by you as *M. brooksi*. I have seen *M. australiensis* from Victoria and New South Wales (the terra typica), and all those specimens differ from the western Australian ones in: having only seven setae on the second endopodal segment of the antenna; hairs present on dorsal surface of pediger 5; dorsum of genital double-somite densely pilose; epistoma (area between labrum and rostrum) usually pilose; body length smaller (0.8-1.1 mm); hyaline membrane of last antennal segment with one large notch usually.

'*M. darwini*': The female from Fortescue marsh certainly is *M. darwini*. The other female from Mt. Elisabeth, however, displays few differences (longitudinal row of spinules near lateral margin of antennary basipodite **not** reaching level of implantation of exopodite seta [like in *M. rarus* for instance - see Fig. 9B in my paper on Australasian *Mesocyclops*]; and spinules on frontal surface of P1 basipodite **tiny**) from *M. darwini*. In one of your vials (Mt. Elisabeth!!) contained an adult and CV copepodid female of this *darwini*-like *Mesocyclops*. That adult female showed the same differences from the "typical" *M. darwini* as the specimen on the slide. At this moment it is difficult for me to interpret this divergence: it was just an accident or, those differences are widespread in that population/region? We should examine more animals.

'*M. notius*': Lake Gregory - OK!

'*M. nr. pehpeiensis*' (Mt. Elisabeth; Long Spring Rainforest): It is *Mesocyclops papuensis* Van de Velde, 1987. I identified it from Townsville. This species is known from New Guinea, Borneo, and

11/05/2001

Java also

VIALS:

Mount Elizabeth: *Mesocyclops cf. darwini* - see above

Poorginup Lake (2/10/98), Pindicup Lake (21/10/98), Girrawees swamp(26/8/98): *Mesocyclops brooksi*(?) - see comments above

Big Spring: *Mesocyclops woutersi* Van de Velde, 1987

Fortescue Marsh (3/6/00): *Mesocyclops notius* Kiefer, 1981

I must confess that I had problems with finding these localities on our (quite good) Russian map. Are all these sites in Pilbara region?? Where is Mt. Elizabeth for instance? Is it far from Fortescue Marsh?

With best regards,

Maria

Dr. Maria Hołyńska
Museum and Institute of Zoology
Polish Academy of Sciences
Wilcza 64
00-679 Warsaw, POLAND

11/05/2001

SALLY BLACKS MOUND SPRING COPEPODS COLL. 2000

SITE NAME	ORDER	FAMILY	SPECIES	NO. SPECIMENS	COMMENTS
Drysdale River	Copepoda	Cyclopoida	<i>Microcyclops varicans</i>	1 female, 1 juvenile	common
Black Spring	Copepoda	Cyclopoida	<i>Ectocyclops rubescens</i>	1 gravid female, 2 juveniles	common - govt. specimen file
Moonsping	Copepoda	Cyclopoida	<i>Eucyclops australiensis</i>	22 females, 1 male, 2 juveniles	common
Big Spring	Copepoda	Cyclopoida	<i>Ectocyclops rubescens</i>	1 female	Sent to Maria Katalin Hooyńska for verification
	Copepoda	Cyclopoida	<i>Mesocyclops nr kiefferi?</i>	3 females	
Mt Elizabeth	Copepoda	Cyclopoida	<i>Mesocyclops nr pelhpeiensis?</i>	1 female	Sent to Maria Katalin Hooyńska for verification
	Copepoda	Cyclopoida	<i>Mesocyclops darwini</i>	3 females	

postscript
sent

10.08.01

Dear Mike,

This is the list of my final Identifications of your material:

Id MS	Id GT	Locality
<i>A. mjobergi</i> ✓	<i>Austrogomphus pusillus</i> (2)	Dunham R. and Penticost R.
<i>N. risi</i>	<i>Nannophlebia mudginberri</i> (1) ✓	Ord R., Button's Crossing
<i>Coenagrion</i> sp. 3 ✓	<i>Ceriagrion aeruginosum</i> (10)+ <i>Agriocnemis</i> spec.(1) ✓	Big Spring
<i>Nososticta</i> spec.	<i>Pseudagrion lucifer</i> (2) ✓	Ord R., Button's Crossing
<i>A. neophytus</i> ✓	<i>Antipodogomphus neophytus</i> (6)	House Roof Mill
✓ <i>H. australiae</i> ✓	<i>Hemicordulia australiae</i> (1)	Enigma Spring
✓ <i>R. lieftincki</i> ✓	<i>Rhodothemis lieftincki</i> (2)	Enigma Spring
<i>C. nigrifrons</i> ✓	<i>Crocothemis nigrifrons</i> (2)	Parry Lagoon
✓ <i>I. australis</i> ✓	<i>Ictinogomphus australis</i> (1)	Enigma Spring
✓ <i>O. spec.</i> ✓	<i>Orthetrum caledonicum</i> (1)	Black Spring
<i>R. graphiptera</i> ✓	<i>Rhyothemis graphiptera</i> (1)	Parry Lagoon
<i>Argiocnemis</i> + <i>Ichnura aurora</i> ✓ <i>rubescens</i>	<i>Argiocnemis</i> (1)+ <i>Coenagrionidae</i> spec.(1)	Lollywell Spring
<i>Argiocnemis</i> + <i>Pseudagrion</i> spec. ✓	<i>Argiocnemis rubescens</i> ✓ (4)+ <i>Pseudagrion</i> spec. (3)	Enigma Spring
-	? <i>Pseudagrion</i> spec.(1)	Moon Spring


The above is written from memory as I unfortunately packed the material a bit too early. It should, however come pretty close, and you will get out of any confusion when you receive the material next week. All vials are individually labelled. If any questions remain, please ask (e-mail).

What we first thought to be *I. aurora* is a coenagrionid unknown to me. It is, however not a final instar, not in perfect condition and a single individual so that I hesitate to make any id attempt at this stage. I hope you do not mind that I kept this specimen here where there is possibly the biggest chance to find out more. If and when I do, I shall let you know.

I also have included a Tax Invoice for Id and Confirmation of Id of approximately 40 specimen from north-western Australia.

I shall be quite happy to look at more larvae of Australian Odonata if and whenever desired.

Best wishes,



(Gunther Theischinger)

IDENTIFICATIONS FROM STUART HALSE

20/03/07

SALT BLACK'S OSTRACODS

<u>Engina Spring</u>		
<u>Cyprinotus kimberleyensis</u>	#649 ♀	animals 2 (uncommon)
<u>Big Spring</u>		
<u>Cyprretta baylyi</u>	juvenile (small, round) of baylyi	1 animal (rare)
<u>Cyprretta sp654</u>	#654 ♀	1 animal (rare)
<u>Stenocypris malcolmsi</u>	#650 ♀	2 animals (uncommon)
<u>Herpetocypris sp 652</u>	#652 ♀	6 animals (most common)
<u>Standeria sp653</u>	#653 ♀	3 animals (uncommon)
<u>Ilyodromus viridulus</u>	#651 ♀	1 animal 1 (rare)
<u>Black Spring</u>		
<u>Cyprretta baylyi</u>	cf baylyi small round, #655 ♀	most common
<u>Ilyodromus viridulus</u>	same sp as #651	rare (1 animal)
<u>Ampullocypris oblongata</u>	#656 ♀	mod common
<u>Herpetocypris sp 652</u>		rare (1)
<u>Mt Elizabeth GT4</u>		
<u>Ilyodromus viridulus</u>	hairier than #651; more elongated in front but same species	mod common
<u>well holly Spring</u>		
<u>Cyprinotus kimberleyensis</u>		common
<u>Drysdale River</u>		
<u>Ilyodromus viridulus</u>		uncommon (3-4)
<u>Candoropsis tenuis</u>	#657 ♀	rare (1)

WESTERN AUSTRALIAN
museum
SCIENCE & CULTURE

1 October, 2001

Mr J. Cocking,
WA Dept of Conservation & Land Management,
PO Box 51,
Wanneroo,
WA, 6946.

Dear Jim,

Sorry to have been so long about attending to the samples which Sally Black, Peter Liston and Andrew Storey collected in the Kimberley area.

In general, "someone" has done a very good job at identifying these freshwater snails to generic level. I have listed my identifications below but, as you will see, have not ventured beyond the generic level myself – I don't think that anyone could, with any certainty. The families represented here have not been revised to the specific level, or not to include WA forms. Others, which have been or are being revised, are proving to be a lot more complex than is reflected in the current literature.

There is some very interesting material among these specimens.

- The diversity of planate planorbids (which I have placed in the genera *Gyraulus* and *Helicorbis*) is, I understand, in keeping with the ideas of Winston Ponder and Stephanie Clarke (Australian Museum), who are currently working on these and other freshwater taxa.
- I cannot find any specimens in our collections of those I have labelled as *Glyptophysa* sp. Both localities from which they were collected are in Dampierland. Winston and Stephanie might be interested to see some of these specimens – I regret that I haven't time to follow this up before I leave for India next week – perhaps you could contact them. The shells

WESTERN AUSTRALIAN MUSEUM - SCIENCE & CULTURE

Perth Cultural Centre, Francis Street, Perth, Western Australia 6000

Telephone: +61 8 9427 2700 • Facsimile: +61 8 9427 2882 • Web: www.museum.wa.gov.au

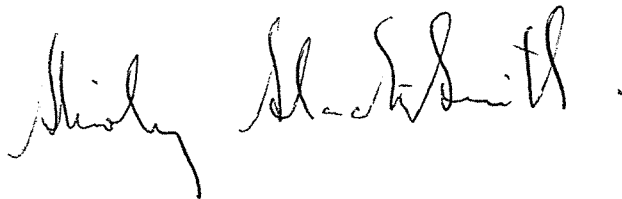
PERTH • MARITIME • FREMANTLE • GERALDTON • KALGOORLIE-BOULDER • ALBANY

look more like those of physids but the superficial soft parts seem typical of planorbids.

- The identity of the juvenile planorbids I have called *Leichhardtia* sp. is really vague, as the shell characters have not developed at this stage.

I am leaving your specimens on my desk in case you should want to collect them while I am away. It would be best to contact Corey Whisson before you come in. I have taken a specimen of each taxon for our collections, except in the case of the larger sample from Lollywell Spring, from which I have taken 6 specimens of the *Glyptophysa*.

Sincerely,



S.M. Slack-Smith,
Curator of Molluscs.

Class Gastropoda

Family Ancyliidae

Ferrissia (Pettancyllus) sp. - *F. (P.) ? petterdi* (Johnston, 1879)

Enigma Spring, Carlton Hill Station, Victoria Bonaparte area;

coll. S. Black;

Map Zone 52, Easting 465163, Northing 8354911;

Parry Lagoon, coll. A. Storey & P. Liston;

Easting 0420479, Northing 8280604;

Dunham River, Kimberley; coll. A. Storey & P. Liston;

Easting 0432513, Northing 8213838;

Family Planorbidae

Gyraulus sp. 1

Black Spring, Drysdale River Station, North Kimberley;
coll. S. Black;
Map zone 52, Easting 219995, Northing 8269770;

Gyraulus sp. 2

Enigma Spring, Carlton Hill Station, Victoria Bonaparte area;
coll. S. Black;
Map Zone 52, Easting 465163, Northing 8354911;

Parry Lagoon, coll. A. Storey & P. Liston;
Easting 0420479, Northing 8280604;

Big Spring, Meda Station, Dampierland area; coll. S. Black;

? *Helicorbis* sp.

Enigma Spring, Carlton Hill Station, Victoria Bonaparte area;
coll. S. Black;
Map Zone 52, Easting 465163, Northing 8354911;

Lollywell Spring, Beagle Bay township area, Dampierland;
coll. S. Black;
Map Zone 51, Easting 465618, Northing 8123092

Leichhardtia sp. - *L. ? sisurnius* (Hedley, 1918)

Enigma Spring, Carlton Hill Station, Victoria Bonaparte area;
coll. S. Black;
Map Zone 52, Easting 465163, Northing 8354911;

? *Glyptophysa* sp. - ? *G. ? egregia* (Preston, 1906)

Big Spring, Meda Station, Dampierland area; coll. S. Black;

Lollywell Spring, Beagle Bay township area, Dampierland;
coll. S. Black;
Map Zone 51, Easting 465618, Northing 8123092

Family Lymnaeidae,

Austropeplea ? lessoni (Deshayes, 1830) - juveniles

Enigma Spring, Carlton Hill Station, Victoria Bonaparte area;
coll. S. Black;
Map Zone 52, Easting 465163, Northing 8354911;

Lollywell Spring, Beagle Bay township area, Dampierland;
coll. S. Black;
Map Zone 51, Easting 465618, Northing 8123092

Class Bivalvia

Family Corbiculidae.

Corbicula (Corbiculina) sp. (2 lots) – *C.(C.) ?ovalina* Deshayes, 1855
Dunham River, Kimberley; coll. A. Storey & P. Liston;
Easting 0432513, Northing 8213838;