

1949/86  
Copy.1

COMMONWEALTH OF AUSTRALIA

---

DEPARTMENT OF NATIONAL DEVELOPMENT  
BUREAU OF MINERAL RESOURCES  
GEOLOGY AND GEOPHYSICS

---

RECORDS:

---

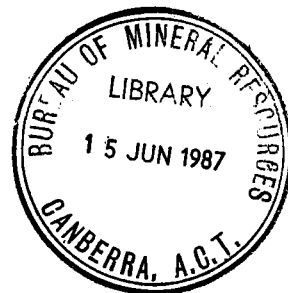
1949/86

BMR PUBLICATIONS COMPACTUS  
(NON-LENDING-SECTION)

PALAEONTOLOGICAL REPORT ON COLLECTION SENT FROM FITZROY  
FITZROY CROSSING ON JUNE 6TH, BY D.J. GUPPY.

by

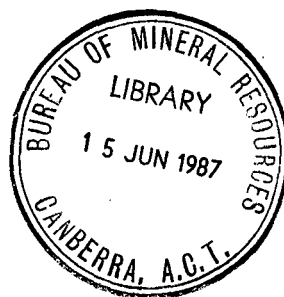
A.A. OPIK.



The information contained in this report has been obtained by the Department of National Development, as part of the policy of the Commonwealth Government, to assist in the exploration and development of mineral resources. It may not be published in any form or used in a company prospectus without the permission in writing of the Director, Bureau of Mineral Resources, Geology and Geophysics.

1949/86  
Copy.1

PALAEONTOLOGICAL REPORT ON COLLECTION  
SENT FROM FITZROY CROSSING ON JUNE 6th,  
BY D.J. GUPPY.



by

A.A. OPIK.

LOWER CRETACEOUS (Tentatively)

BMR PUBLICATIONS COMPACTUS  
(NON-LENDING-SECTION)

Sample labelled : SR 1

"Stony ridge 68 miles East of Broome on main road".

White sandstone (quartzitic) with poorly preserved large Lamellibranchiates. The forms can be determined as cf. *Cyprina Clarkei* (Moore) Etheridge 1902 and cf. *Panope* sp. Miss Crespin showed me a similar rock with perhaps the same forms from the loc. CL35, from the Frazer River N. of Nickabalee (Nilli-Cubaca) Well in the same area. The fossils are determined by kind help of Miss I. Crespin.

JURASSIC.

Samples labelled LC 1

"Langey crossing over Fitzroy River"

Glauconitic sandy leached siliceous or kaolinitic rock with Belemnopsis, Lamellibranchiates, fossilized wood, but without foraminifera.

The belemnites, several phragmocones and guards, suggest the forms described by C. Teichert as both *Belemnopsis* cf. *alfurica* and *Belemnopsis* cf. *incisa*. Among the poorly preserved lamellibranchiates *Buchia* sp. seem to be represented.

The glauconite is an unusual component in Jurassic sediments of N.W. Australia suggesting perhaps a high level in the Oxfordian.

UPPER MIDDLE DEVONIAN AND UPPER DEVONIAN BIOHERMS AND BISTROME FACIES.

Samples labelled : MRS 3C - MRS 6A, RS 8A, RS 8B.

"Group of low outcrops South of Margarete River area about 2 miles N.W. of Minnie Pool to Minnie Pool."

MRS 3C - Crinoid stems, Bryozoa indet.  
Pinkish limestone with Calcite and a black mineral

MRS 3D - Red Limestone, well bedded.  
Gastropods (*Straparollus*?)  
*Spirifer* sp.  
*Stromatopora* sp.  
A fish bone (?)

MRS 5A - Grey limestone, fine-grained  
Gastropods  
Stromatoporoids (*Actinostroma*)  
*Amphipora* (?) sp.  
Bryozoa (gen. indet.)

MRS 5B - Grey limestone, with bits of mica, chlorite  
Fragments of Trilobites (*Proctidae*)  
*Productella* sp. *Conocardium*  
*Leptostrophia* sp. *Fenestellid* Bryozoans  
*Spirifer* sp.  
*Atrypa* sp.  
*Schuchertella* ? sp.

MRS 6A - Limestone (perhaps dolomitic)  
Unfossiliferous, with quartz grains, feldspar, chlorite.

RS 8A- Pink Limestone  
Atrypa  
Brachiop. indet.  
Crinoid fragments

RS 8B - Pink limestone  
Spirifer sp.                      Gastropoda indet.  
Productella sp.                Serpulotheca sp.  
Bits of stromato-  
poroids or Calc. algae

Samples labelled : RS 9A - RS 9E

"Massive outcrop immediately South of Minnie Pool"

RS 9A - Grey to Yellowish limestone  
Bryozoa indet.  
Atrypa  
Gastropoda indet.  
Amphipora sp.

RS 9B - Crinoidal Limestone  
Thamnopora sp. -  
Stromatoporoids (Clathrodictyon)

RS 9C - Limestone (grey) with Gastropods (Straparollus and  
gen. indet.)  
Cystiphyllum (?) sp. -  
Alveolites cf. tumida  
Ostracoda (gen. indet.)

RS 9D - Limestone with Corals  
Amphipora sp.  
Disphyllum ? sp.  
Prismatophyllum brevilamellatum Hill

RS 9E - Yellowish dense limestone, highly fossiliferous  
Atrypa sp.                      Amphipora sp.  
Spirifer sp.  
Emanuella sp.  
Rhynchonellids

RS 9F - White, dense limestone  
with Atrypa and bits of Stromatoporoids

Samples labelled : RS 11 - RS 16A

"Outcrops between RS 9 and North side of J 7 Range"

RS 11 - Corallimestone  
Amphipora  
Corals indet.

RS 12 - A specimen of a bioherm limestone

RS 14A- Prismatophyllum brevilineatum Hill

RS 14B- Brachiopod limestone  
Atrypa sp.  
Gypidula (?) sp.

RS 14C- Red limestone  
Gastropods, indet.  
Stems of crinoids  
A piece of manganese oxide in box-structure  
Atrypa sp.

- RS 16, RS 16A - Red limestone  
A Goniatite (indet.)  
Limestone with stromatoporoids.

Samples labelled : RS 19A - 19F

"South End of Hull Range on South side of Margarete River"

- RS 19a - Calciferous sandstone, a specimen.
- RS 19a - (second bag).  
Limestone  
Stromatoporoids  
Amphipora
- RS 19E - Limestone with Gastropods, Brachiopods, very sandy, with bits of chlorite, quartz, etc.  
Prismatophyllum sp.  
Stromatoporoids
- RS 19F - Yellowish limestone with ostracods and Brachiopods.  
Ostracoda : several species of Primitidae  
Beyrichidae, Bairdiidae  
Brachiopods : Torynifer sp.

Samples labelled : RS 26A - RS 26C;  
RS 29B - 29E;  
RS 31B, 31C;  
RS 33A - 33D, RS39.

"Scattered bold limestone outcrops in gap East between J7 and J8 masses. Outcrops located on east side of the gap a few miles West of Louisa River".

- RS 26A and B - Red limestone, bioherm  
Atrypa sp Receptaculites sp  
Schizophoria sp Stromatoporoidea  
Gastropoda indet. Phillipsastraea sp.
- RS 26C - Red limestone, bioherm  
Brachiopoda, ostracoda, - indet.
- RS 29B - Limestone (yellow)  
with Amphipora
- RS 29E - Bioherm limestone  
with Stromatopora (Clathrodictyon?)
- RS 31B - Red Limestone  
Crinoidal stem joints, roots
- RS 31C - Calcareous sandstone  
with mica, chlorite, pebbles of quartz, slate.
- RS 33A - Red limestone, bioherm  
Gypidula sp  
Atrypa sp Scubellum sp. (n.sp. Teichert)  
Leptostrophia? sp. Proetids  
Productella sp.  
Hypothyridina sp.  
Spirifer sp.  
Schizophoria sp.  
Pugnoides sp. No.1 (non plicate)  
Pugnoides sp. No.2 (biplicate)  
Emanuella sp. No.1  
Emanuella sp. No.2
- RS 33B - Red limestone, bioherm  
Phillipsastraea cf. delicatula Hill  
Receptaculites sp.  
Gastropoda indet.  
Spirifer sp.  
Pugnoides sp. No.1 (non plicate)

RS 33D - Red limestone, bioherm  
Atrypa sp.  
Productella sp.  
Strophomenoids  
Brachiopoda indet.

RS 39 - Limestone,  
Crossbedded (Lime-sandstone)  
seemingly detritus (contemporaneous) from or inside  
a Devonian bioherm.

Sample labelled RS 42

"Limestone outcrop at foot of, and on North side of J8 Trig.Hill"

RS 42 - Pink limestone bioherm  
Corals  
Stromaloporoids  
Indet.brachiopods  
Atrypa, Rhynchonelloids, Spirifer  
Emanuella sp. No.1

#### CONCLUSION.

This collection represents the bioherm facies of Devonian rocks around Minnie Pool, - Pinbilly Well, South of Margaret River. Doubtless Upper Middle Devonian and Upper Devonian both are represented in the collection. In this facies it is not possible to determine the boundary between these formations exactly. Where *Amphipora* is present, especially when in form of biostromes, Middle Devonian can be assumed. But the absence of *Amphipora* in a section or in a locality does not necessarily mean the absence of Middle Devonian rocks. A full and proper study of the complete fauna is the only way to determine this still important boundary.

The number of species recognised in this collection is small in comparison with the number given in the fossil lists by Dr. C. Teichert. Many forms in the present collection are represented only by few incomplete specimens and could not be determined exactly. This can be done easily by comparison with the better preserved fossils in the collection of Dr. C. Teichert.

New for the Devonian of N.W. Australia are the abundant ostracods in the sample RS 19F, which deserve a special attention and, if possible, more material.

The brachiopods determined here as *Emanuella*, *Pugnoides* and *Torynifer* are not mentioned by Dr. Teichert.

*Pugnoides* is represented mainly by immature specimens, without costae. *Emanuella* and *Torynifer* are spiriferoid genera with a non-plicate, non costate shell. About ten genera with the same structure are known from the Devonian and an exact determination can be done on behalf of the internal features, which needs more time. In regard to this the forms referred to *Emanuella* need a revision. *Torynifer* is a carboniferous (Mississippian) genus, not yet recorded from the Devonian. It is represented in the sample RS 19F only (the ostracode limestone). But among all known smooth spiriferoids *Torynifer* only has a dorsal hinge plate connected with the median septum, which is present in the brachiopode from RS 19F also.

Canberra.

(A.A. Opik)  
Palaeontologist.