

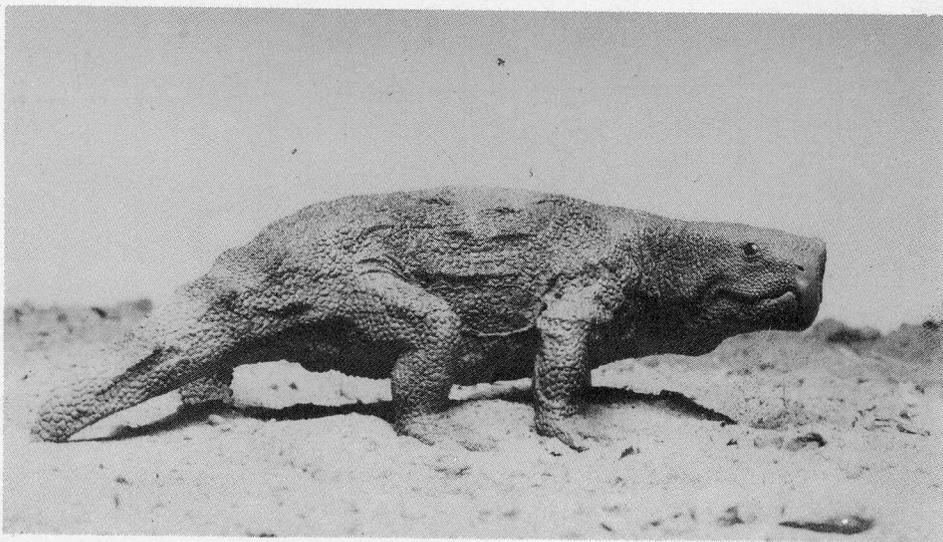
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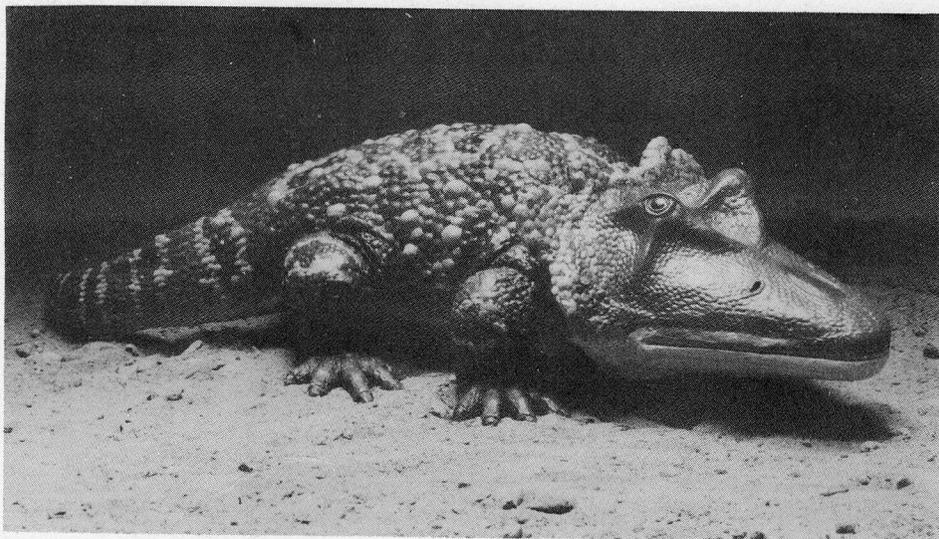
**THE
GEOLOGICAL
CURATOR**

VOLUME 3 No 8

ISSUE 2 FOR 1983



Rhynchosaurus sp.
Resin model



Dasyceps bucklandi
Resin model

THE GEOLOGICAL CURATOR

SUBMISSION OF MSS

Three issues are published each year. The last dates for submission of copy for publication are:

November 1st.	for first issue of following year
March 1st.	for second issue
August 1st.	for third issue.

Articles should be sent to the editor typed and, if possible, camera ready to the A4 format we use as this may help expedite publication. Enquiries and contributions to Tim Pettigrew, Sunderland Museum, Borough Road, Sunderland, Tyne and Wear SR1 1PP. Tel. No. 0783-41235 Ext. 13.

COLLECTIONS AND INFORMATION LOST AND FOUND.

All items relating to this section in the Geological Curator should be sent to:

Dr. Hugh S. Torrens, Geology Dept., University of Keele, Keele, Staffs. ST5 5BG. Tel. 0782-621111 Ext. 493.

INFORMATION SERIES ON GEOLOGICAL COLLECTION LABELS

All enquiries and items should be sent to:

Ron. Cleevely, British Museum (Natural History), Cromwell Road, London SW7 5BD. Tel. No. 01-589-6323 Ext. 418.

NOTES AND NEWS

All items relating to this section should be sent to Tony Cross, Curtis Museum, High Street, Alton, Hants GU34 1BA.

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Full A4 page	£25 per issue
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Further details from Diana Smith, Castle Museum, Norwich, Norfolk NR1 3JU. Tel. No. 0603-611277 Ext. 287.

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Members subscription	£5 per year
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BACKNUMBERS of the Geological Curator (and its predecessor; the Newsletter of the Geological Curators Group) are available at £1.75 each (except vol. 2. Nos. 9/10, and Vol. 3. Nos. 2 & 3 which are £3.50). Prices include the cost of postage. Payment should accompany all orders, which should be sent to Tom Sharpe, National Museum of Wales, Cathays Park, Cardiff CF1 3NP. Tel. No. 0222 397951.

Typed by Sylvia Robson, Tyne and Wear County Council Museums.

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EDITORIAL

COVER PHOTOGRAPHS

Resin models of fossil reptiles in the collections of the Warwickshire Museum. The top photograph shows a 1/3 scale model of Rhynchosaurus sp. length 290mm.

The bottom photograph shows a full-scale model of Dasyceps bucklandi (Lloyd) length 760mm. See the article on the construction of these models by Tristram Besterman on p. 507

S.O.S. URGENT! Save Our Series.

Readers may have noticed that there have been no entries for the label register issued with the last two editions of the Geological Curator. This is simply because Ron Cleevely has not received any contributions. The success of the register is entirely dependent on the membership of the Group. If you do not support this venture then we cannot continue to run it. So please send examples of the labels of the collectors represented in your institution (fossils, rocks or minerals) to Ron as soon as possible. Even example(s) representing one collector per institution would help tremendously.

BACK BY POPULAR REQUEST

Remember the series entitled Collectors and Collections of note which appeared in previous volumes of The Geological Curator? Well commencing with this issue it has been decided to re-introduce the series under the slightly modified title of Collectors, Collections and Museums of note. The numerical sequence has been continued from the previous series (to avoid confusion). Contributions for this section are invited from G.C.G. members (and anyone else who the editor can coerce into contributing!)

FORTHCOMING MEETINGS

Friday 9th December, 1983

A.G.M. at Warwick Museum.

Programme.

10.30 - 11.00	Coffee (Council chamber, Shire Hall)
11.00 - 11.20	General history of Warwick Museum by the Curator, Dr. W.C. Allan.
11.20 - 12.00	The geological collections in Warwick Museum by T.P. Besterman.
12.00 - 13.00	Tour of displays and stores at Market Hall and stores in The Butts.
13.00 - 14.00	Lunch (in local pubs within a few minutes walk of the Museum)
14.00 - 14.30	History of Geology in the Midlands by Prof. F.W. Shotton, F.R.S.
14.30 - 15.00	Triassic Reptiles from Warwick and their significance by Dr. M. Benton.
15.00 - 15.30	A short paper by Dr. Gerald R. Fitzgerald (Nat. Mus. Canada).
15.30 - 15.45	Tea.
15.45	10th Annual General Meeting.

AGENDA

1. Apologies
2. Minutes
3. Matters arising
4. Chairman's Report
5. Secretary's Report
6. Treasurer's Report
7. Editors Report
8. Recorders Report
9. Election of Officers and Committee for 1984
10. Any Other Business.

NOMINATIONS FOR COMMITTEE AND OFFICERS

Committee There are two vacancies for Committee members. Members are reminded that nominations must be sent to the Secretary no later than 18th November.

Officers Howard Brunton completes his term of office as Chairman and Philip Doughty (Ulster Museum) will be proposed as the new chairman. The other officers are willing to continue in office but any alternative nominations must also be received by 18th November.

(Group Secretary)
Merseyside County Museum.
Liverpool L3 8EN.

Wednesday 15th February, 1984. Leicestershire Museum.

A meeting to celebrate 10 years of G.C.G.

Friday-Saturday 8th-9th June, 1984. Ludlow Museum.

Including a field trip (9th June) to Downton Gorge and the Ludlow Anticline.

Friday 7th September, 1984. Castle Museum, Norwich.

Topics to include Quaternary research, Specimen storage and conservation.

Friday 7th December, 1984. A.G.M. at the National Museum of Wales, Cardiff.

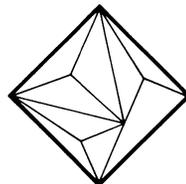
April 1985. Meeting at Winchester (Hampshire Museum Service)

July 1985 Meeting to coincide with the Museums Association

Conference at Birmingham.

September, 1985 Meeting at Bolton Museum.

December, 1985 A.G.M. at Brighton Museum.



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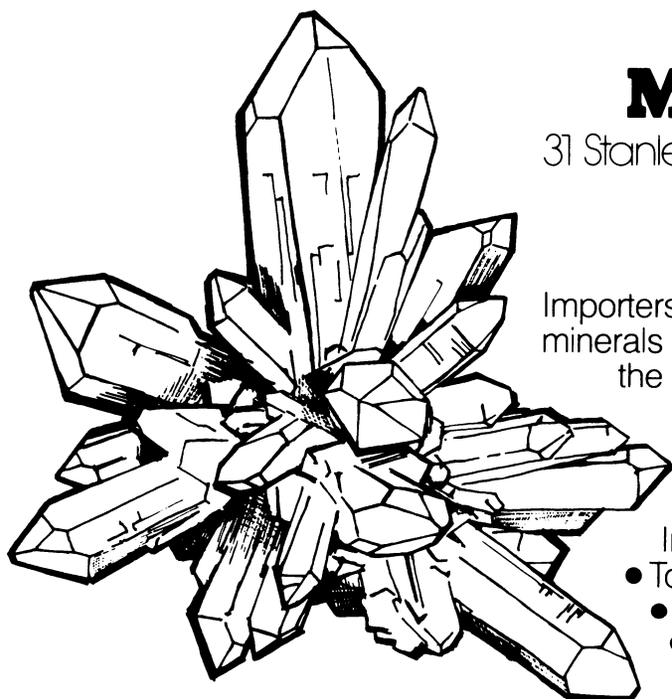
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Palaeontological Association

REVIEW SEMINARS

CEPHALOPOD PALAEOBIOLOGY

Date: 16 NOVEMBER 1983

Venue: Department of Geology,
University,
Keele, Staffs.
ST5 5BG

Local Organiser: H.S. Torrens
(Address as above)
Telephone 0782 - 621111, ext. 493

Programme

Lectures

1. Dr John Callomon (London)
"Sexual dimorphism and taxonomy in ammonites"
2. Professor Desmond Donovan (London)
"Palaeobiology of Fossil Coleoids"
3. Professor Michael House (Hull)
"Juvenile Stages and ammonoid evolution"
4. Dr Nicol Morton (London)
"Ammonite anatomy and jaw function"

with film of living Nautilus (courtesy of Dr Anna Bidder - Cambridge)

It is hoped to organise a small display with specimens and relevant literature. Contributions to this would be welcome.

REVIEW SEMINARS are informal, one-day events in which specialists summarise recent developments in a palaeontological topic for a general audience. They are particularly designed for those requiring background in the subject under review, including lecturers and teachers. Students are especially welcome.

There is no booking and no registration fee, entry is open to all. SIMPLY TURN UP ON THE DAY!

Meetings commence with coffee at 10.30 a.m. and end with tea at 4.00 p.m. Lunch will be available.

Non-members of the Association are welcome

BRING YOUR SPECIMENS for IDENTIFICATION

CATALOGUE OF TYPE, FIGURED & CITED FOSSILS IN KINGSTON UPON HULL CITY MUSEUMS

by M. J. Boyd

"The publishing of a list of type and figured specimens in the collections must be the aim of every museum holding such specimens and efforts should be made to keep this up to date." (Owen, 1964).

The imperative in the above quotation provides the present author's justification for publishing the following catalogue without the detailed historical account of Kingston upon Hull City Museums' past and existing geological collections with which it was originally intended to be prefaced. It is hoped to publish the latter at a future date.

Like many similar institutions, Kingston upon Hull City Museums had their origin in the collections formed by the local Literary and Philosophical Society during the nineteenth century. The museum of the Hull Literary and Philosophical Society was opened on 15th July, 1823, the year after the founding of the Society itself, and occupied two rooms at the Exchange (in what is now Exchange Court), which were rented at £15 per annum. The first Curator was a Mr W.H. Dykes. The collections included important palaeontological material from their very beginning; as Boylan (1981, p.254) has pointed out, a series of Pleistocene mammal specimens from the Kirkdale Cave were among the first items presented to the museum. Moreover, William Smith and his nephew John Phillips are known to have presented a collection of fossils, from the Yorkshire coast, to the museum, after their series of lectures to the Literary and Philosophical Society in 1824 (Sheppard, 1920, p.85). By 1831 the size of the collections necessitated their removal to the Public Rooms (now Hull's New Theatre) on Jarrat Street, where the museum occupied an upstairs room. The collections remained there until June, 1855, when they were transferred to the, newly-completed, Royal Institution building on Albion Street. A Guide to the museum published five years later (Anon., 1860) reveals the existence of fairly extensive geological exhibits, including fossils presented by Dr John Lee F.R.S. (1783-1866) of Hartwell Park, near Aylesbury, and John Edward Lee (1808-1887) of Hull. Interestingly, the exhibits also included material of Megalosaurus and Iguanodon, the first two dinosaurs to be described. Eventually the collections, whose maintenance and exhibition were proving beyond the means of the Literary and Philosophical Society, were presented to Hull Corporation, who, in 1900, appointed the energetic Thomas Sheppard F.G.S. as Curator. During the forty years or so of Sheppard's curatorship the geological collections were greatly enlarged and, by the time of his retirement, included much important palaeontological material. Tragically, however, the Central Museum in the Royal Institution was totally destroyed in an air-raid on 24th June, 1943. The only significant palaeontological survivals were the J.R. Mortimer collection of fossils, mostly from the Yorkshire Chalk, and a portion of the old Malton Museum collection (acquired by Hull in 1932), consisting largely of Oxfordian and Kimeridgian fossils from the Vale of Pickering. A copy of a draft catalogue of the numerous type, figured and cited fossils lost in 1943 (prepared by P.J. Boylan (Leicestershire Museums)) is held in Kingston upon Hull City Museums; it is hoped that a revised version of this will be published in the near future. With the exceptions of the J.R. Mortimer and Malton Museum collections, almost all the existing palaeontological collections in Kingston upon Hull City Museums have been acquired since 1943.

CHARACTERISTICS OF THE CATALOGUE

The zoological classification employed for the invertebrate taxa in the catalogue is that of the 'Treatise on Invertebrate Paleontology' (ed. R.C. Moore); that used for the vertebrates is taken from Romer (1966).

The palaeontology collections of Kingston upon Hull City Museums currently include no primary, secondary or tertiary type specimens (sensu Blackwelder, 1967). Specimens representing other categories of type (e.g. topotype, chorotype) are only included in the present catalogue if also figured or cited. For each specimen in the catalogue the stratigraphic horizon is given first, followed by locality data and status (the last section including full references to the appropriate publications).

SYSTEMATIC CATALOGUE

Phylum BRACHIOPODA
Class Articulata
Order Rhynchonellida

Family Rhynchonellidae : Subfamily Cyclothyridinae

Lamellaerhynchia rostriformis (Roemer)

- KINCM 61.64.9. Cretaceous, Hauterivian, Speeton Clay (zone C₇).
Speeton, North Yorkshire.
FIGURED Owen & Thurrell (1968, plate 2, figure 9a-c).

Cyclothyris mirabilis (Walker)

- KINCM 77.67.1. Cretaceous, Albian (Lower), Melton Carstone.
Melton Clay Pit, Melton, North Humberside.
CITED Owen, Rawson & Whitham (1968, page 518).

Burrirhynchia leightonensis (Walker)

- KINCM 77.67.2-13. Cretaceous, Albian (Lower), Melton Carstone.
Melton Clay Pit, Melton, North Humberside.
CITED Owen, Rawson & Whitham (1968, page 517).
9 complete specimens and 3 pedicle valves.

Phylum MOLLUSCA
Class Cephalopoda
Order Ammonoidea

Family Perisphinctidae : Subfamily Pictoniinae

Pictonia aff. baylei Salfeld

- KINCM 1.38.1. Jurassic, Kimeridgian (Lower), Kimeridge Clay, baylei zone.
? Hildenley Brickyard, Hildenley, near Malton, North Yorkshire.
CITED Arkell (1945, page 352).
This, and specimens KINCM 1.38.3 and KINCM 1.38.4, were noted by Arkell (1945) as being, "from the state of preservation probably from Hildenley brickyard."

Pictonia costigera Buckman

- KINCM 1.38.3. Jurassic, Kimeridgian (Lower), Kimeridge Clay, baylei zone.
? Hildenley Brickyard, Hildenley, near Malton, North Yorkshire.
CITED Arkell (1945, page 352).
- KINCM 1.38.7. Jurassic, Kimeridgian (Lower), Kimeridge Clay, baylei zone.
North Eastern Railway Bridge, Malton, North Yorkshire.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- Pictonia gracilis Tornquist
- KINCM 1.38.4. Jurassic, Kimeridgian (Lower), Kimeridge Clay, baylei zone.
? Hildenley Brickyard, Hildenley, near Malton, North Yorkshire.
CITED Arkell (1945, page 352).
- KINCM 1.38.6. Jurassic, Kimeridgian (Lower), Kimeridge Clay, baylei zone.
North Eastern Railway Bridge, Malton, North Yorkshire.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- Pictonia densicostata Salfeld
- KINCM 1.38.8. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- KINCM 1.38.12. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- Pictonia cf. fortis Tornquist
- KINCM 1.38.11. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- Pictonia cf. latecostata Tornquist
- KINCM 1.38.10. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- Pictonia sp.
- KINCM 1.38.27. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).
- Subfamily Aulacostephaninae
- Rasenia uralensis (d'Orbigny)
- KINCM 1.38.2. Jurassic, Kimeridgian (Lower), Kimeridge Clay, cymodoce zone.
? Hildenley Brickyard, Hildenley, near Malton, North Yorkshire.
CITED Arkell (1945, page 352).

Prorasenia stephanoides (Oppel)

- KINCM 1.38.13a-d. Jurassic, Kimeridgian (Lower), Kimeridge Clay, cymodoce zone.
North Eastern Railway Bridge, Malton, North Yorkshire.
CITED Arkell (1945, page 351).
4 "well-preserved nuclei" (Arkell, 1945).

Prorasenia sp.

- KINCM 1.38.19a-c. Jurassic, Kimeridgian (Lower), Kimeridge Clay, baylei zone.
Locality as above.
CITED Arkell (1945, page 351).
3 "well-preserved nuclei" (Arkell, 1945).

- KINCM 80.62.219. Jurassic, Kimeridgian (Lower), Elsham Sandstone, mutabilis zone.
Melton Gallows Pit, Elsham, South Humberside.
CITED Cambridge & Parks (1955, pages 253-4).

Rasenioides spp.

- KINCM 1.38.22a-c. Jurassic, Kimeridgian (Lower), Kimeridge Clay, ? cymodoce zone.
North Eastern Railway Bridge, Malton, North Yorkshire.
CITED Arkell (1945, page 351) as "Prorasenioides spp."
3 "well-preserved nuclei" (Arkell, 1945).
Ex Malton Museum (Chadwick collection).

Pararasenia sp.

- KINCM 80.62.223. Jurassic, Kimeridgian (Lower), Kimeridge Clay.
Wrawby Cutting, Wrawby, South Humberside.
CITED Cambridge & Parks (1955, pages 253-4).

Aulacostephanus sp.

- KINCM 80.62.210. Jurassic (Upper)/Cretaceous (Lower), ? Spilsby Sandstone.
Wrawby Gravel Pits, Wrawby, South Humberside.
CITED Cambridge & Parks (1955, pages 253-4).

- KINCM 80.62.211. Jurassic, Kimeridgian (Lower), Elsham Sandstone, mutabilis zone.
Melton Gallows Pit, Elsham, South Humberside.
CITED Cambridge & Parks (1955, pages 253-4).

Subfamily Perisphinctinae

Perisphinctes ingens (Young & Bird)

- KINCM 2.38.43. Jurassic, Oxfordian (Middle), Malton Oolite, plicatilis zone.
Pye Pits, Malton, North Yorkshire.
CITED Arkell (1935-1948, pages 119 & 126).
Ex Malton Museum.

Perisphinctes antecedens Salfeld

KINCM 2.38.105. Jurassic, Oxfordian (Middle), Malton Oolite, plicatilis zone.
Browse Pit, Malton, North Yorkshire.
CITED Arkell (1935-1948, page 89).
Ex Malton Museum.

Perisphinctes (Arisphinctes) maximus (Young & Bird)

KINCM 2.38.307. Jurassic, Oxfordian (Middle), plicatilis zone.
Unlocalised. ? Malton, North Yorkshire.
CHOROTYPE. CITED Arkell (1935-1948, pages 113 & 115; also text figure 35).
Ex Malton Museum.

Family Cardioceratidae : Subfamily Cardioceratinae

Amoeboceras pingue Salfeld

KINCM 1.38.17. Jurassic, Kimeridgian (Lower), Kimeridge Clay, cymodoce zone.
North Eastern Railway Bridge, Malton, North Yorkshire.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).

Amoeboceras cf. lineatum (Quenstedt)

KINCM 1.38.16. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).

Amoeboceras cricki Salfeld, A. crenulatum (Buckman) & A. ? kitchini Salfeld

KINCM 1.38.25a-o. Horizon and locality as above.
CITED Arkell (1945, page 351).
15 "well-preserved nuclei" (Arkell, 1945).
Ex Malton Museum (Chadwick collection).

Quenstedtoceras sp.

KINCM 80.62.1074. Jurassic, Oxfordian, Oxford Clay.
Kettleby Lane, near Wrawby, South Humberside.
CITED Kent (1938, page 222).

Family Kosmocerotidae

Kosmoceras pollux (Reinecke)

KINCM 80.62.1073. Jurassic, Oxfordian, Oxford Clay.
Kettleby Lane, near Wrawby, South Humberside.
CITED Kent (1938, page 222).

Family OPELLIIDAE : Subfamily Taramelliceratinae

Creniceras sp.

KINCM 80.62.1072 Jurassic, Oxfordian, Oxford Clay.

Kettleby Lane, near Wrawby, South Humberside.
CITED Kent (1938, page 222).

Family Aspidoceratidae : Subfamily Aspidoceratinae

Aspidoceras cf. longispinum (Sowerby)

- KINCM 1.38.14a-b. Jurassic, Kimeridgian (Lower), Kimeridge Clay, cymodoce zone.
North Eastern Railway Bridge, Malton, North Yorkshire.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).

Aspidoceras cf. sesquinodosum Fontannes

- KINCM 1.38.15a-c. Horizon and locality as above.
CITED Arkell (1945, page 351).
Ex Malton Museum (Chadwick collection).

Aspidoceras cf. circumspinosum (Quenstedt)

- KINCM 1.38.18a-b. Horizon and locality as above.
CITED Arkell (1945, page 351).
"Two nuclei" (Arkell, 1945).
Ex Malton Museum (Chadwick collection).

Family Dactylioceratidae

Dactylioceras commune (J. Sowerby)

- KINCM 693.1980. Jurassic, Toarcian, Lias (Upper), Hildoceras bifrons zone.
Unlocalised. ? North Yorkshire coast.
FIGURED Boyd (1980, figure 1).
Specimen bears carved 'head'.

Family Ancyloceratidae : Subfamily Crioceratitinae

Aegocrioceras raricostatum (Phillips)

- KINCM 22.64.12. Cretaceous, Hauterivian, Speeton Clay.
Speeton, North Yorkshire.
FIGURED Rawson (1975, plate 4, figure 8).

Aegocrioceras ?koeneni Spath

- KINCM 22.64.13. Horizon and locality as above.
CITED Rawson (1975, page 149).

Family Nostoceratidae

Neocrioceras cf. pseudoarmatum (Schlüter)

- KINCM 2.38.36. Cretaceous, Senonian, Upper Chalk, Inoceramus lingua zone.
Chalk Pit by North hill Plantations, one mile north-east
of Wetwang, North Humberside.
CITED Wright & Wright (1942, page 121) and Wright & Wright
(1950, page 15).
"A remarkable quadrituberculate toxicone" (Wright & Wright,
1942). J.R. Mortimer collection.

Class Bivalvia
 Order Pterioida
 Family Ostreidae : Subfamily Ostreinae

Ostrea (Liostrea) bononiae

- KINCM 80.62.224. Jurassic, Kimeridgian (Lower), Kimeridge Clay.
 Wrawby Cutting, Wrawby, South Humberside.
 CITED Cambridge & Parks (1955, pages 253-4).

Phylum ECHINODERMATA
 Class Stelleroidea
 Order Forcipulatida
 Family Asteroidea : Subfamily Asteroidea

Asterias arenicola Goldfuss

- KINCM 2.38.324. Jurassic, Oxfordian (Middle), Lower Calcareous Grit Fmn.
 Unlocalised. ? Vale of Pickering, North Yorkshire.
 CITED Sheppard (1933, page 108) as "a well-preserved
 starfish from the Oolites." However, mode of preservation
 and matrix lithology suggest it may be of Callovian age,
 from the Kellaways Rock.
 (C.R. Edwards, pers. comm.). Ex Whitby Museum.

Phylum CHORDATA
 Class Chondrichthyes
 Order Selachii
 Family Hybodontidae

Hybodus obtusus Agassiz

- KINCM 2.38.500. Jurassic, Oxfordian (Middle or Upper), Coralline Oolite
 Fmn.
 Whitewall Corner quarry, 1 mile south of Malton, North
 Yorkshire.
 FIGURED Platnauer (1888, plate 1, figure 1).
 Isolated tooth. Ex Malton Museum.
- KINCM 2.38.501. Jurassic, Oxfordian (Middle), Lower Calcareous Grit Fmn.
 Unlocalised. ? Malton, North Yorkshire.
 FIGURED Platnauer (1888, plate 1, figure 3).
 Isolated tooth. Ex Malton Museum.
- KINCM 2.38.502. Jurassic, Oxfordian (Middle or Upper), Coralline Oolite
 Fmn.
 Unlocalised. ? Malton, North Yorkshire.
 FIGURED Platnauer (1888, plate 1, figure 5).
 Isolated tooth. Ex Malton Museum.
- KINCM 2.38.503. Horizon and locality data as above.
 FIGURED Platnauer (1888, plate 1, figure 11).
 Isolated tooth. Ex Malton Museum.

Class Osteichthyes
 Order Acipenseriformes
 Family Chondrosteidae

Gyrosteus mirabilis Agassiz

- KINCM 2.38.504. Jurassic, Toarcian, Lias (Upper).
Whitby, North Yorkshire.
CITED Woodward (1889, page 362) and Woodward (1890, page 107). One of "two small examples..... in Mr Chadwick's collection at Malton" (Woodward, 1890). Ex Malton Museum.

Class Mammalia

Penny (1963, pp.6, 8) cited a series of 42 Pleistocene mammal specimens in the collections of Kingston upon Hull City Museums. As all are from the same horizon, and from closely adjacent localities, they are listed below in a more compact format than is used elsewhere in the present catalogue. All the specimens are from the Kelsey Hill Gravels at Burstwick and Kelsey Hill in North Humberside. The Kelsey Hill Gravels are demonstrated by Penny (1963) to have been deposited by melt-water during the later stages of the Weichselian (Devensian), when the ice front had withdrawn halfway across Holderness. The contained fossils are a derived assemblage, making up a "curious mixture of 'warm' and 'cold' forms, terrestrial and aquatic, marine and non-marine" (Penny, 1963, p. 5). The composition of the vertebrate assemblage indicates that the deposits from which the mammal specimens were derived were not all of the same age; however, none could have been earlier than the Saale Glaciation (Wolstonian) or later than the Last Interglacial (Ipswichian).

The specimens are listed below in the three groups in which they were cited by Penny (1963), who did not give museum registration numbers for any of them.

GROUP I. Burstwick Pit, Burstwick, North Humberside.

Elephas primigenius Blumenbach: KINCM 23.55.74 (molar fragment).

Elephas antiquus Falconer & Cautley: KINCM 23.55.75 (molar fragment).

Elephas sp: KINCM 23.55.76 (molar fragment); KINCM 23.55.73 (limb bone fragment).

Rhinoceros sp: KINCM 23.55.66 (ulna).

Rangifer tarandus (Linnaeus): KINCM 23.55.148; KINCM 23.55.150; KINCM 23.55.152; KINCM 23.55.155 (antler bases); KINCM 23.55.143; KINCM 23.55.151; KINCM 23.55.153 (beam fragments).

Bison sp: KINCM 23.55.124 (metacarpal); KINCM 23.55.131; KINCM 23.55.132 (metapodials); KINCM 23.55.78; KINCM 23.55.80; KINCM 23.55.85; KINCM 23.55.88; KINCM 23.55.90; KINCM 23.55.91; KINCM 23.55.92; KINCM 23.55.93 (horn core fragments).

Odobenus cf. rosmarus (Linnaeus): KINCM 23.55.76a (tusk fragment).

Seal (sp. indet.): KINCM 23.55.59; KINCM 23.55.60 (thoracic vertebrae).

Bear (sp. indet.): KINCM 23.55.138 (shaft of humerus).

GROUP II. Kelsey Hill (Pit B), near Burstwick, North Humberside.

Elephas primigenius Blumenbach: KINCM 50.59.46 (molar fragment).

? Rhinoceros sp: KINCM 50.59.20; KINCM 50.59.24; KINCM 50.59.57; KINCM 50.59.64; KINCM 50.59.91 (rib fragments); KINCM 50.59.107 (fragment of frontal).

? Rangifer tarandus (Linnaeus): KINCM 50.59.30 (antler fragment).

Bison sp: KINCM 50.59.1; KINCM 50.59.6; KINCM 50.59.87 (metacarpals); KINCM 50.59.65 (horn core with frontal).

Odobenus rosmarus (Linnaeus): KINCM 50.59.89 (fragment of pubis).

GROUP III. Kelsey Hill (Pit B), near Burstwick, North Humberside.
Halichoerus grypus (Fabricius): KINCM 58.60.3 (right humerus).
 ? Phoca vitulina Linnaeus: KINCM 58.60.2 (5th metacarpal).
 Teleost fish: KINCM 58.60.1a-k (11 vertebral centra).

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SUPPLEMENT TO CATALOGUE

Phylum CHORDATA
 Class Mammalia
 Order Perissodactyla
 Family Equidae

Equus cf. caballus Linnaeus

- KINCM 2.38.394. Pleistocene, Weichselian (Devensian).
 Hessle, near Hull, North Humberside.
 CITED Boylan (1967, page 120).
 Proximal phalanx. J.R. Mortimer collection.

Family Rhinocerotidae

Didemocerus hemitoechus (Falconer)

- KINCM 53.65.1. Pleistocene, Eemian (Ipswichian).
 Sewerby, near Bridlington, North Humberside.
 CITED Boylan (1967, page 118).
 Cheek tooth.

Order Artiodactyla
 Family Bovidae

Bison cf. priscus (Bojanus)

- KINCM 53.65.2-6 Pleistocene, Eemian (Ipswichian).
 Sewerby, near Bridlington, North Humberside.
 CITED Boylan (1967, p. 119).

REFERENCE

- BOYLAN, P.J. 1967. The Pleistocene Mammalia of the Sewerby-Hessle buried cliff, East Yorkshire. Proc. Yorks. geol. Soc. 36, 115-125.

Michael J. Boyd
 Department of Natural History
 Kingston upon Hull City Museums
 Town Docks Museum
 Queen Victoria Square
 Kingston upon Hull
 North Humberside

LOST AND FOUND

compiled by Hugh S. Torrens

In the welcome clarificatory notes to the last but one Lost and Found it was reported that the compiler would do his best to pass on returns to the original enquirers as well as publishing such returns in The Geological Curator. In these hard times apologies are due to some enquirers who may have only learnt about any such returns from the subsequent publication of them. Keele University is now obliged to encourage me to pay the greater part of all my postage costs and some problems have arisen as a result.

H.S.Torrens.

In what follows the references to Cleevely 1983 refer to that work no geological curator can do without:-

R.J. Cleevely 1983 World Palaeontological Collections, published London.

1. Items & information SOUGHT

136. LAPWORTH, Charles

First professor of Geology at Mason College, later the University of Birmingham - born Farringdon 1842, educated at Culham College, Oxfordshire 1862-4. Taught Galashiels and St. Andrews. Professor at Birmingham 1881-1913. Died 1920.

Was external examiner for University of Wales (Bangor, Aberystwyth & Cardiff), Victoria University - Manchester and Liverpool, and London University College. Information requested as to the existence and location of documents, letters, notebooks, specimens, maps, exam papers, examiners' reports, etc., to Dr. Beryl Hamilton, Dept. of Geography, Christ's & Notre Dame College, Liverpool Institute of Higher Education, L16 8ND.

137. Carved amber

I should be interested to hear from anyone who has or knows of any European carved works of amber, (figures, reliefs, caskets, shrines etc.). I am compiling a catalogue of European ambers in the Victoria and Albert Museum.

Marjorie Trusted,
Department of Sculpture,
Victoria and Albert Museum,
South Kensington,
London, SW7 2RL.

138. Rightful home for two Pagiophyllum specimens from Lyme Regis

Amongst the collections of Prof. T.M. Harris who died in May are two specimens of Pagiophyllum peregrinum (L. & H.), almost certainly from the Lias of Lyme Regis. Both have numbers written in indian ink on white paper discs measuring 6mm. in diameter, nos. 61 and 62. The only other labels are determinations as P. peregrinum. For no. 61 this is in Harris' hand, for 62 in that of M.W. Kendall.

These specimens appear to have been on loan to Prof. Harris, presumably in the 1940's when Miss Mabel W. Kendall was working with him on these Jurassic conifers. There is no evidence that they were loaned either from the BM or from Oxford. As they thus appear to have come from another museum, I would be glad to hear from anyone wishing to claim them. I know that during his lifetime Harris worked on material from at least the following U.K. museums: Nottingham, Leeds, Yorkshire, Manchester, Leicester.

G. Hill, Palaeontology Department, British Museum (Natural History), Cromwell Road, London SW7 5BD.

139. Footprints from the Lower Cretaceous of southern England

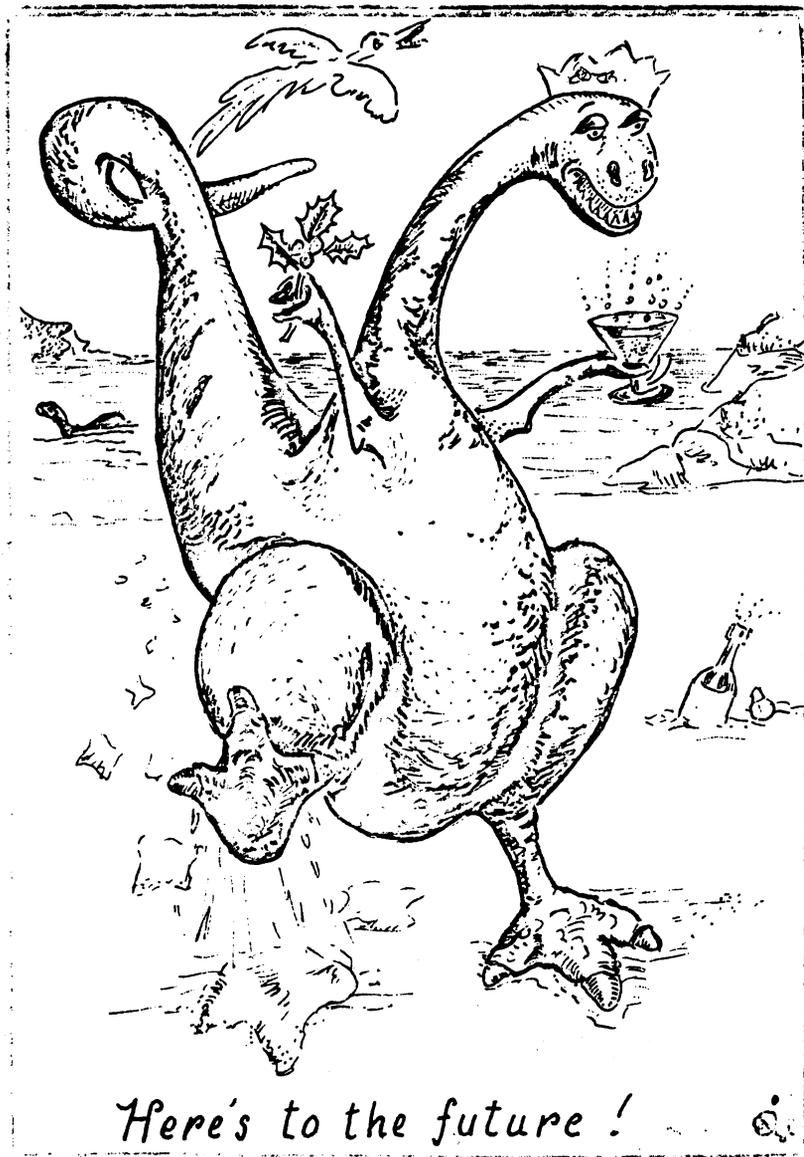
Work being carried out, with the aid of the Sylvester-Bradley Award for 1982, on Ichnites spp. from the Lower Cretaceous of Southern England has already demonstrated that footprints, sets or individual natural casts/moulds, exist in museums, university departments and in private collections but are not recorded in the literature.

I would be grateful if anyone who knows of the whereabouts of any such material from the Wealden or Purbeck strata of southern England could communicate this information to me. Catalogue/Accession numbers and any other details of where, when and by whom it was collected would be much appreciated.

Photographic records of sites or material would also be of considerable interest.

Please address correspondence to:

P.C. Ensom,
35 Camden Way,
Dorchester,
Dorset.
DT1 2RA.



140. SILVESTER, Norman L. M.Sc. F.R. Met. Soc.

"I was contacted by the daughter of the late Norman L. Silvester about a surviving collection of rocks, minerals and fossils made almost entirely by him. A brief visit was made and as a result the following information can be given.

Silvester had studied Geology at University. The following papers (geological) were written by him.

The Igneous Complex of Y. Foel (sic) Fras, Caernarvonshire. Geol. Mag. LIX, pp. 134-9, 1922.

Note on a specimen of Micraster showing unusual features. Geol. Mag. LXII, pp. 274-7, pl. 1925.

Glacial Features in a New Exposure at Finchley. Proc. Geol. Assoc. 37, pp. 102-106. 1926.

He was the (or a) curator of Doncaster Museum before becoming Curator of the Russell-Cotes Art Gallery and Museum, Bournemouth, in 1932. He remained there until 1958. He was the author of the Russell-Cotes' Museum Catalogue of the Geological Terrace. N.D. 6Op. His collection (estimated to be not more than 2000 specimens) has fallen into some disorder in the last year or so. Most of the specimens are numbered and in some cases it was found that sheets of paper, presumably from the original storage drawers, had small labels stuck on them with corresponding numbers and limited information. (identification, formation, and locality). The collection is stratigraphically and geographically wide, though only material from the British Isles was noted.

The material is of very variable quality.

The Micraster specimen described by Silvester in 1925 is now known to be in the collections of the BM(NH) (Cleevely 1983, p. 265), Acc.No.E.17669. (D.N.Lewis, pers.comm.) which concurs with the expressed intention of Silvester, in this paper, to deposit it there.

If anyone knows of reasons why the collection may be more important scientifically than immediately appears to be the case could they please let me know. Similarly if any institution has any interest in the collection please contact me."

P.C. Ensom,
Dorset Natural History and Archaeological Society,
Dorset County Museum,
Dorchester,
DT1 1XA.

LOST & FOUND

2. Items & information FOUND

49. FFARINGTON, Miss Mary Hannah

(c. 1815-1888)

I only recently read the discussion regarding the Ffarington collection of Pleistocene molluscs in the G.C.G. Newsletter (2(2), 82 & 2(3), 127-128), after coming across the listing in Hancock & Pettitt's (1979) "Collections and collectors in NW England".

In the early 'seventies, when I still lived in Preston (before I went to university and during some of the vacations thereafter), I spent some time trying to resurrect the neglected geological collection in the Harris Museum. Unfortunately, although I could make some attempt to clean and sort the material and re-identify and label those specimens I could, time did not allow me to get as far as I would have liked with the task.

However, I was greatly pleased by my rediscovery of the mammal bones from the Preston Dock excavations in the 1880's which had been lying forgotten in the "attic", and about which I had been pestering Miss Tressider after collecting similar material from Clifton.

After reading the discussions concerning the Ffarington mollusc collection, however, it appears that "the problem of the fate of the commoner species at Preston" (to quote Hancock & Pettitt) is still unresolved. I also collected molluscs from the gravels between Worden and Whittle-le-Woods in 1972-1974 and had read the literature regarding the Ffarington, and other, collections. In my work at the Harris Museum I was thus able to recognise, and appreciate the significance of, a large boxfull of mollusc shells and associated MS notes which I discovered tucked away in a dusty part of one of the galleries - obviously part of the Ffarington collection. (see Clevely 1983, p. 116).

From your note concerning the Ffarington material owned by Mr. Forrester, I would say that the collection in the Harris Museum was in a very much better condition.

I drew the discovery to Miss Tressider's attention and stressed the importance of the collection. Shortly thereafter I left for university which, along with my subsequent other research work, has prevented me taking more than a passing interest in the subject until now.

Presumably the material is still in its box in the Harris Museum, and awaiting a belated reunion with the rest of Miss Ffarington's collection. I should be interested to learn if this is so, and any news you may have of the collection will be greatly appreciated.

Stephen Jusypiw,
Geological Conservation Review Unit,
Nature Conservancy Council,
Pearl House,
Bartholomew Street,
Newbury,
Berkshire,
RG14 5LS.

69. PAYTON, Mr. of Dudley

I noted among the donations to the Museum of the Yorkshire Philosophical Society, York in their Annual Report for 1840 published 1841 the following (p. 23);

"Specimen of Calymene blumenbachii; cast of the largest specimen of Calymene blumenbachii yet found at Dudley."

Further news of this donation would be welcome in case it identifies Mr. Payton!

H.S. Torrens.

90. Lavin's Museum, Penzance

In our previous issue (Geological Curator 3, no. 5, p. 316, 1982) we reported a source which claimed the Museum was erected about 1839, in Chapel Street, Penzance. Peter Embrey of the British Museum (Nat. Hist.) points out that negative evidence suggests it is somewhat later. Courtney's Guide to Penzance 1845 refers to collections there and to Lavin as a dealer but makes no mention of the Lavin Temple or Museum while describing Chapel Street.

112. ABBOTT, W. J. Lewis (c. 1853-1933)

- see also Cleevly 1983 p. 38.

Part of his Collection acquired 1st October 1929 by the Wellcome Institute, London. This included:

I a geological collection

- a) semi precious and precious stones in different states of morphology.
- b) flints showing how structure affected manufacture into tools.

(This material is now in Merseyside County Museums, Dept. of Geology.)

II A collection of prehistoric anthropology (now largely in Dept. 3. of the Science Museum - otherwise BM(NH)).

III A collection of prehistoric and Roman finds largely from the Hastings area (photographed in albumen print stereoscopic cards); some also from London. (Most of the known Hastings material has been returned: ditto London; but not completely.)

He lived from about 1900 in the Hastings area; his business was as a "Gem Importer, Jeweller, gold and silversmith, watchmaker and optician, licensed appraiser" at 8 Grand Parade, St. Leonards, Sussex. Collection I(a) was catalogued in typescript which is marked "Part I". Abbott's correspondence

with Dr. Malcolm the Wellcome Conservator refers to a Part II which we do not have but which I think covered the collection I(b); the material seems to have been incorporated into our cataloguing of his flints by Armand Lacaille. No catalogue seems to have been prepared for the archaeological finds.

Georgina Russell,
Transfer Officer,
Wellcome Institute,
London,
NW1 2BP.

See also item 141 in Found Section

125. CALVERT, John

We have already discussed the possibility that there were two Victorian geological collectors of this name (Geological Curator 3, no. 4 p. 245-6 1982). It seems worth putting on record the fact that there were in all probability three! the third being in Leeds according to E.K. Clark. 1924. History of 100 Years of the Leeds Philosophical and Literary Society p.38. who writes that in the 1820's

" The office of Sub-curator was instituted, and Mr. Henry Denny appointed with a salary of £80. He took the place of the previous resident, his duty being to give his individual attention to the concerns of the Society, to arrange the Museum under the direction of the Curator, to accumulate, preserve and label subjects in Natural History in order to render the collections not a resort for the gratification of curiosity but a valuable school of instruction. The Council augurs well for the future in this respect by reason of the success of a Mr. Calvert in furnishing a Museum which had proved an object of distinguished local attraction and as to which they proffer their congratulation.*

*According to the Leeds Directory, 1830, p. 215, Mr. John Calvert, who had been collecting biological, geological, and ethnological objects for 35 years, opened in 1827 his Museum of 15,000 specimens to the public on payment of an admission fee of one shilling. The Museum appears in the Directory of 1845-1847, also in 1853, when Mr. Calvert is given as a Gun and Fishing Tackle Maker and a Gold and Silver Plate Dealer. In 1856 he is mentioned as a Dealer and not as having a Museum. "

129. COLENUTT, George William (c. 1862-1944)

Mike Crane has drawn attention to the entry in R.J. Cleevely, 1983, p.85, which states that the Tertiary fish from the Osborne Beds and Bembridge Marls described by E.T. Newton (1899) are now to be found in the Institute of Geological Sciences. The British Museum (Natural History) is also stated to have received donations of Tertiary fish and Crustacea in 1899 and 1903. A number of other Colenutt donations are also recorded here. To avoid any confusion in the future, it should be noted that entry 4852 in the Bristol Institution 'Rough Present Book', reproduced in The Geological Curator 3(6): 397, is correctly dated 1895. This volume contains entries from 1866 to 1898, not 1893 as the title page indicates.

133. GREG, Robert Hyde F.G.S. (1795-1875)

The Mineral Department of the BM(NH) has the Allan-Greg collection and manuscript catalogues, we purchased it in 1860. It is made up of the collection of Thomas Allan (1777-1833) of Edinburgh which was afterwards the property of Robert Hyde Greg (1795-1875) and added to by his son Robert Philips Greg (1826-1906). I suggest P.G. Embrey's foreward to the "new" edition of Greg & Lettsom's Mineralogy of Great Britain and Ireland, (See below) as a useful source of information.

Manual of the
MINERALOGY
 of
Great Britain & Ireland
 by
Greg & Lettsom
 1858

A facsimile reprint
 with
 Supplementary Lists of British Minerals
 by
 L. J. Spencer, F.R.S.
 and
 a Fourth Supplementary List
 (1977) together with a foreword
 by
 Peter G. Embrey

LAPIDARY PUBLICATIONS
 Broadstairs · Kent · England

J.P. Fuller,
 British Museum (Natural History),
 Cromwell Road,
 London.
 SW7 5BD.

133. In fairness to Geoff Hancock, who first raised this query, we should point out Geoff's main point was that Robert Hyde Greg was not previously known to have formed a geological collection. Peter Embrey's introduction (p.X) comments that R.H. Greg "did nothing to add to the (Allen-Greg) collection". It seems that the part of R.H. Greg in the Greg family interest in collecting and in mineralogy needs further investigation. Geoff Hancock has added the following reference to another part of R.P. Greg's collection:-

"Specimens of meteorites from 223 falls collected by R.P. Greg of Manchester merits notice" in the Geological Museum, Calcutta. Purchased by Dr. Oldham in 1865. Part of the enrichment of the collections in terms of foreign rocks and fossils begun by him in that year.

Ref: Howarth E. & Platnauer, H.M. (1911).
Directory of Museums in Great Britain & Ireland together with a section on Indian and colonial Museums. p. 249.

134. WHITE, Henry Hopley

1855. HENRY HOPLEY WHITE, youngest son of James White of Lincoln's Inn, Gent.

B. 1790; Educ. Oriel Coll., Oxford; Adm. 7 Oct. 1807;
Call 27 Nov. 1818; Bencher 31 Jan. 1855; Reader Aut.
1858; Treasurer 1865; Q.C. 1866; *d.* 10 Dec. 1876.

Arms: Gu., a bordure sa. charged with fourteen estoiles
or, on a canton arg. a lion rampant of the second (Panel).

Source: J.B. WILLIAMSON, 1937, The Middle Temple Bench Book Second edition, p. 226.

141. Wellcome Institute Geological Collection

Wellcome Institute Transfer of Geological Material

The Wellcome Institute's Geological collection has been deemed "surplus objects" (as defined by an order in Court of Mr. Justice Foster in 1977, ref. W 5098). As part of the review of its collections the Wellcome Institute has distributed its Geological Collection as follows:

- I. Fossil molluscs (from various sources) to the British Museum (Natural History), Dept. of Palaeontology. They included the type specimen of Arca Diluvii, but are otherwise unexciting.
- II. a) A typological collection of precious and semi-precious stones made (and catalogued minutely) by W.J. Lewis Abbott (c.1853-1933) of St. Leonards on Sea, Sussex. (See item 112 in found section).
b) A similar typological series of specimens of silica with particular reference to the effects of structure on the manufacture of tools. I enclose some notes on Abbott. (see p. 491)
- III. Numerous specimens bought from time to time in auction sales of the period, a few at a time. These have no collection provenance at all.

Groups II and III have all now been transferred to the Merseyside County Museums. (Dept. of Geology).

IV. Fossil pathological bones of Dinosaurs etc., from the Roy Moodie Collection are now in the Science Museum (Wellcome Dept.). These are all from California. (Moodie was^a palaeopathologist who collected an important group of human bone material from Indian cemeteries on the Isle of Santa Cruz and others off the Californian coast.) Plus a few Lewis Abbott fossil bones also now in the Science Museum.

Georgina Russell,
Transfer Officer,
The Wellcome Institute for the History of Medicine,
183 Euston Road,
London,
NW1 2BP.

COLLECTORS, COLLECTIONS & MUSEUMS OF NOTE
 No. 40. SAMUEL CHADWICK &
 THE GEOLOGICAL COLLECTIONS OF
 THE MALTON MUSEUM, NORTH YORKSHIRE
 by C. R. Edwards

'Among the local Museums of recent foundation, it would be difficult to find one of more scientific interest and importance than that of the Malton Field Naturalists' and Scientific Society'

A. Smith Woodward, 1889 (Woodward, 1889, p.361)

Within the palaeontological collections at Kingston upon Hull City Museums, there is a large number of excellently prepared specimens, collected from the Corallian (=Oxfordian, Upper Jurassic) rocks in the area around Malton in North Yorkshire. Many of these specimens were on display in the old Malton Museum, run by the Malton Naturalists' Society in the early 19th century.

The collection was acquired by Tom Sheppard, the then director of Kingston upon Hull Museums, in 1932, after the museum at Malton decided to specialise in Archaeology. Part of the collection was on display in the Albion Street Museum in Hull during World War 2, when, in 1943 the Museum was hit by an incendiary device, causing major damage and leading to the demolition of the building. Some of the Natural History collections were salvaged from the ruins shortly after and hurriedly packed away, much of the accompanying information being lost.

It is uncertain at present how many specimens from the Malton Museum collections were lost in the fire; the number in these collections now totals just over 600 specimens. About 10 specimens still bear scars of the fire, having been encrusted with molten lead from the roof.

Recent work in the Natural History Department has concentrated on re-establishing the Malton Museum collections, as many of the specimens had become separated from the main body of the collection. Research has been undertaken into the history behind the collections and the sites from which they were collected.

Samuel Chadwick and the Malton Naturalists' Society.

One of the founder members of the Malton Naturalists' Society and the Honorary Curator of the Society's museum was Samuel Chadwick (1845-1902).

Chadwick was born in Yorkshire in 1845, his family emigrated to New Zealand shortly afterwards, where they were engaged in sheep farming. He returned to Yorkshire, to the town of Malton, in the 1860's. He soon became known throughout the county as an enthusiastic collector of fossils and antiquities; many of his specimens were donated to the Yorkshire Museum at York and the Whitby Museum.

One of the Chadwicks' important finds was a series of sponges from the local Corallian beds, which he donated to the British Museum (Natural History), the sponges were the subject of research by Dr. G.J. Hinde and are described



Samuel Chadwick

Fig. 1a Photograph of Samuel Chadwick, and lb, his signature; both from the Naturalist, 1903.

in the Palaeontographical Society Monograph for 1893. One sponge, Corynella chadwicki was named after him (Hinde, 1887-1912 p.223-224; plate XV, figs 6, 6a; plate XVI, figs 1-1d).

In 1879, his interest led him to form the Malton Naturalists' Society and its museum at Malton. This small museum soon held countrywide acclaim for its excellently prepared and presented Corallian fossils, together with a collection of well preserved fish remains from the Lias of Whitby (Woodward, 1889).

Many of these specimens are figured and cited in the literature (Boyd, 1983) and were utilised by the Geological Survey in their mapping of the area. Specimens from the Museum are referred to in the standard geology text books of the time, for example Geikie's 'Text Book of Geology' (Geikie, 1882 and subsequent editions). The collections at the Museum were also utilised by Hudleston in his survey mapping of the area, and subsequent monographs on the Oolitic Rocks (published between 1873 and 1896). In 1884 Hudleston became president of the Malton Naturalists' Society (see Hudleston, 1885).

A. Smith Woodward, the Keeper of Geology at the British Museum (Natural History) was obviously impressed with the collections at Malton (A. Smith Woodward, 1889) and he too was elected Honorary President of the Society in 1895.

The main collections were made by Samuel Chadwick from the numerous small pits and quarries in the local area. Also collecting at this time was J.R. Mortimer of the Mortimer Museum at Driffield, East Yorkshire (collections now at Hull). There was great rivalry between Chadwick and Mortimer to collect the best specimens, there are reports of both collectors faking parts of specimens in their fight for supremacy. Sheppard (1933 p.2) records:

"Speaking of large ammonites reminds us that there was strong competition between Mortimer and Chadwick as to which could get the largest chalk Ammonite, and each one accused the other of adding a certain amount of plaster of paris at the end of the specimen to make it a few inches larger than that of the competitor, and from subsequent examination it appears that both of them were right!"

The procedure at that time was for the collectors to pay the quarrymen for any fine specimens they found in the rock; each fossil had an agreed price depending on its conditions and rarity. This provided the quarrymen with a supplement to their income and a definite incentive to search the rock. This, combined with the methods of quarrying at the time, when much of the work was done by hand and each piece of rock was handled several times, ensured that the majority of fossils in the rock were collected.

In 1890, Chadwick was elected president of the Yorkshire Boulder Committee increasing his interest to include the glacial deposits in the area. His main written work is the fourth report of the Committee; with the exception of 3 papers (Chadwick, 1885, 1886 & 1888), his work is only written in the form of annual reports and reports of field excursions.



Fig. 1c The base of one of Chadwick's specimens, showing the style of the inscriptions.

Chadwick left Malton due to ill health and returned to New Zealand in 1895, where he continued his work as a naturalist. In his later years he originated a scheme to build the Waikopiro Institute and Library, of which he became president and trustee. His interest in the need for good education led to the formation of the Whitukura Public School, of which he was chairman of the committee. He was also well known in the area for helping to establish good roads for the settlers.

Chadwick died in New Zealand of heart disease, at the age of 58, in March 1903.

The preparation of the specimens

Chadwick was most meticulous in his preparation of the specimens for display in the Museum. The technique he used produced a result similar to the 'vibrotool' technique of today. All traces of matrix obscuring detail on the fossil were removed, to leave the fossil standing on a block of the preserving sediment. This block was cut, in most cases, to a size just larger than the fossil. Finally, the base of the block was ground flat and polished so the specimen would stand neatly on display.

On many of the specimens, the base of the block was inscribed in indelible ink with the locality from which it was collected and the date of collection (fig. 1c). Usually, just the year of collection was recorded, but some specimens also show the day and month.

218 of the specimens in the present collections are inscribed with the date of collection. Although this only represents just over one third of the Malton specimens known, it was assumed that these would prove to be representative of the collection as a whole and the dates were plotted as a graph to show the number of specimens per year. Figure 2 shows the result.

The dated specimens range from 1830 to 1894. From the graph, two areas are immediately obvious, within which over 90% of the dated specimens fall. The first of these peaks is in 1840, a total of 78 specimens being recorded for this year. The second is within a range of dates, between 1879-1889, when 124 dated specimens were collected. This second peak is easily attributed to the foundation of the Malton Naturalists' Society and its Museum at Malton. The fall-off in the number of specimens from 1888 onwards may be associated with a decline in Chadwick's health. The last dated specimens are recorded for the year prior to Chadwick emigrating.

The 1840 collections

As Chadwick lived in New Zealand until the 1860's, the collections prior to this date cannot be attributed to him. The preparation and presentation of these specimens, together with the inscriptions on the matrix closely resembles Chadwick's method. From a study of the inscriptions, certain letters of the alphabet confirm that the two sets of specimens, those from 1840 and the later 1880's were written by the same person, namely Chadwick.

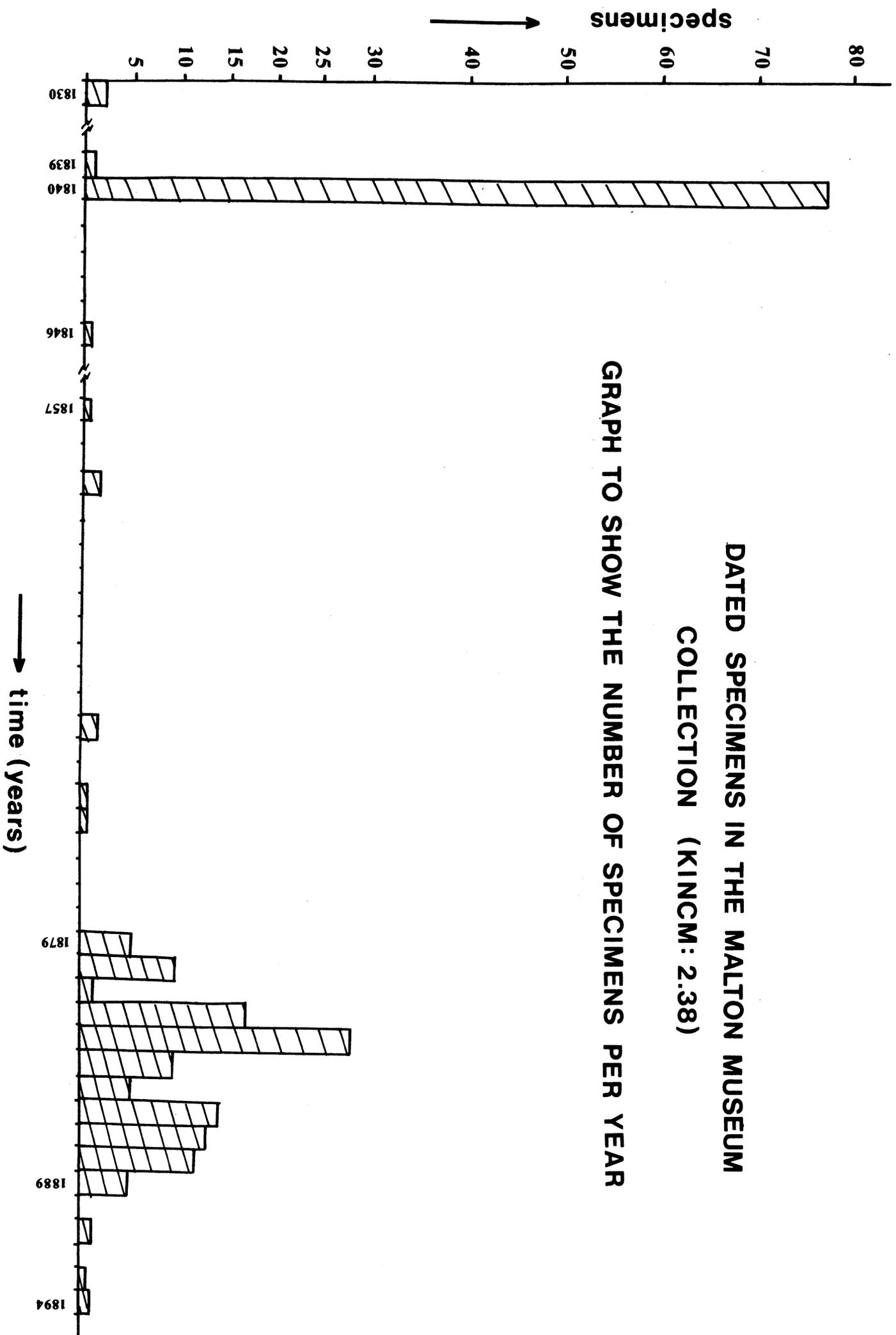


Fig. 2 The dated specimens in the Malton Museum collections, a graph to show the number of specimens recorded per year.

It can be concluded, therefore, that he prepared and 'accessioned' these specimens for the Museum, although they were not collected by him.

The specimens dated 1840 were collected by a Mr. S. King of Malton. In 1888, Mr. King wrote a booklet entitled "List of Coralline Oolite Fossils etc., Ancient British and Roman Remains. Presented to the Malton Museum by S. King Esq., Malton". These are presumably the 1840 specimens, but our copy of the booklet was destroyed by enemy action (we would welcome any information as to the whereabouts of another copy). It is also probable that many of the specimens dated between 1840 and 1860 were collected by Mr. King.

An early Malton Museum

The Museum of the Malton Naturalists' Society, of which Samuel Chadwick was curator, was founded in 1880. Following Chadwick's emigration to New Zealand, interest in the Natural History collections at the Museum declined, much of the Museum closed down and the specimens were packed away. The old Museum rooms were used for a Masonic Temple (Sheppard, 1933), with only one room being kept for Archaeological display. The geological collections came to Hull in 1932. The museum at Malton now concentrates on Archaeology and has recently moved into new premises.

However, there is evidence in the literature of a much earlier Malton Museum, in the early 19th century; the present day whereabouts of these collections are unknown. In Kendal & Wroot's "Geology of Yorkshire" (1924, p.677) the following paragraph has been found:

"The little Museum of Malton received much help from William Smith, the geologist, in its early days and he presented many fossils collected by himself, including type specimens"

Kendal and Wroot obviously did not realise that the museum which they visited at Malton (which at the time of the visit, is most likely to be that of the Malton Naturalists' Society) was not founded until 1880, whereas William Smith died in 1839. There is therefore confusion over the two museums, both being referred to as Malton Museum or 'the Museum at Malton'.

William Smith was resident in North Yorkshire between 1826-1834, suggesting that the early museum was open around these dates. The collections at this early museum appear to have been of great scientific value, as they included some of Smith's type specimens and also fish remains which were viewed by Agassiz in 1834 whilst he was on a tour of Yorkshire museums with Buckland. At this time, Agassiz was preparing the work "Recherches sur le Poissons Fossils" (1833-1844) (Kendal & Wroot, 1924, p.435).

It appears unlikely that the Malton Naturalists' Society would have opened a museum in Malton, if there was another established geology museum in the town, so presumably the early museum had closed down by this date.

There are several possibilities as to the whereabouts of these specimens, they may have been sold or donated to other establishments before the Society's Museum was founded, or they may have been in storage in Malton

and later been placed on display in the Society's Museum. If the specimens were incorporated into the Society's collections, there is a possibility that Chadwick's method of cutting and polishing the preserving sediment may have led to vital information on the specimens being lost.

The Collecting Area

Specimens in the Malton Museum collections are known to have come from all over East and North Yorkshire, but the majority of specimens were collected in the immediate vicinity of Malton.

The history of quarrying in the Malton area dates back to before Roman times. The quarries in later times were owned by the churches and the Estates, much of the stone being used for local building.

One of the earliest quarries on record is thought to be represented by an area of hummocky ground in Old Malton at O.S. Map ref: SE 79747245. This was probably connected with Malton Priory, which owned stone quarries in the area from the 13th century onwards. There are records of an incident at a lime kiln in 1195 at this locality when monks were killed by fumes in a nearby pit (Robinson, 1978).

At least 25 localities are known from inscriptions on the specimens, some however are very vague, for example 'Malton' or 'Langton Wold' the areas of which include several quarries. The majority of these localities are now disused quarries, many being overgrown, and a few infilled. The only present day working quarries from which Chadwick made collections are Whitewall (Corner) Quarry (SE 79106980) in Malton, and Settrington Quarry (SE 82907000), both of which have been recently re-opened.

Pye Pits

One of the main quarries at Malton is Pye Pits (SE 78947190). There are 47 specimens known to have been collected from this locality in the Malton Museum collections. The history of these pits can be traced back to 1730, when the pits were known as High Pitts (Robinson, 1978).

Since then, the pits have been recorded as Pye Pits, Pye Pitts, Pie (Pit(t)s and Old Pye(Pie) Pit(t)s. The first reference to them in the literature as Pye Pits is in 1753, when major Archaeological finds were made at the site. On a map of 1825, the pits are un-named, but a majority of the area is marked as 'Old pits', only a small area is labelled 'lime quarry'.

An area of the site was re-opened in 1857 when the Malton to Thirsk railway railway was built, bisecting the quarry area. The railway is now disused and has been dismantled. Since this date, much of the quarry area has been used for private gardens and allotments, although the central area still remains almost untouched since it was last worked. This central area is now waste land and is owned by the Yorkshire Water Authority.

Recently, the pits have come back in to the limelight as the site where gunman Barry Prudom was tracked down and shot in the summer of 1982.

Malton Museum specimens from this site include the only known English plesiosauroid material of certain Oxfordian age, which is a current subject of research by Dr. David Brown of the University of Newcastle upon Tyne.

The history of other pits in the area is, however, more difficult to trace. Many of the pits were named after the tenant or land-owner, for example Lyons (Jack Lyons) Pit, Malton (SE 77107110), a pit now completely overgrown which has been found on old maps as an un-named quarry in Lyons Plantation.

The majority of quarries named in this manner are only marked on the O.S. maps as 'quarry' or 'old quarry', the name of the owner not being recorded. The large number of pits in the area, combined with this naming problem only allows us to infer an area for the locality, perhaps covering 4 or 5 quarries. Through local papers and radio, the help of residents in the area has been sought with reference to this naming problem, but the response has been poor.

Material in the Collections

Specimens in the Malton Museum collections are mostly from the Jurassic and Cretaceous rocks, with the bulk of the specimens coming from the local Corallian (=Oxfordian, Upper Jurassic) colites and sandstones.

The Corallian specimens in the collection include over 250 bivalves, representing 41 genera; several large ammonites and many smaller ones and representatives of most of the phyla commonly found in Corallian rocks of this type. The figured and cited material in the Malton Museum collections is not listed here as it is included in a catalogue of figured and cited material in Kingston upon Hull Museum (Boyd, 1983).

In addition to the above material, other groups well represented in the Corallian collections include:

- a. decapod crustaceans, notably Paraglyphea rostrata PHILLIPS, (KINCM 2.38.47, 35 specimens).
- b. fish remains, a large number of fish teeth of various genera, including some shark teeth figured by Platnauer in 1888 (Boyd, 1983).
- c. vertebrate remains, pliosaur and plesiosaur bones and teeth.
- d. gastropods, large and well preserved specimens of Pseudomelania heddingtonensis (J.SOWERBY) and Bourguetia striata (J.SOWERBY).

In addition to the Corallian material, there are good collections of fossils from the Lias (the specimens of Liassic fish and reptile remains were of prime importance in the Malton Museum of the 1800's, but unfortunately many of these specimens were destroyed by enemy action at Hull in 1943), and a large number of sponges, bivalves and brachiopods from the Chalk of the Yorkshire Wolds.

Acknowledgements

Many thanks to my husband, fellow geologist, Paul Edwards for his helpful discussions and many hours spent with me in field research. Thanks to Dr. Hugh Torrens of the University of Keele for information regarding literature on Samuel Chadwick, and to Michael Boyd from Hull Museum for his many helpful comments.

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Christine R. Edwards,
 Natural History Department,
 Kingston upon Hull City Museums.
 Town Docks Museum,
 Queen Victoria Square,
 Kingston upon Hull,
 North Humberside.

No. 41. THE BARGRAVE 'MUSEUM', CANTERBURY

by Hugh Torrens

As part of the fascinating Ashmolean Tercentenary Symposium at Oxford 10th - 16th July, participants were invited to visit the cabinet of curiosities formed by Dr. John Bargrave and preserved in Canterbury Cathedral library. (see Geological Curator 3 no. 6 p. 364, 1983).

John Bargrave (c.1610-1680)'s collection despite its antiquity had become forgotten, although the catalogue of the Museum was published in 1867 by J.C. Robertson in Camden Society Publication no. 92, pp. 113-140. It was thus a considerable treat to see a surviving, if modest, cabinet of curiosities of the 17th century, still as it was originally. It was also interesting to see how many geological objects were included, among them pumice and volcanic ash samples from Italy, where much of the collection was acquired originally. Fossils and minerals are also represented, including a fine large quartz crystal which Bargrave described thus:-

a very clear, handsome, elegant piece, something longer than my middle finger, 4 or 5 inches compass, sexangular, inaequilateral, cylindrical, pyramidal.† This I met with amongst the Rhaetian

Alps. One would wonder that nature should so counterfeit art. There is no man but [that?] seeth it but would verily believe that by tools and art it had binn put into that figure. I remember that the Montecolian man that sold it me told me that he ventured his life to clamber the rocks to gett it. Where it grew I cannot say; but where it was, it was covered, he said, with long sedgy grass growing about it, under the dripp of an higher rock, where the snow continually melteth and droppeth; and so all the mountayn chrystall is increased *ab extra* by an external addition, and groweth not from any rock.

† The same article is described on a separate paper as "a cristall as it naturally groweth, sexangular, which I met with on the Penine Alps, on the Sempronian Mount, now called Mount Samplon." Sir Henry Wotton, among his bequests, mentions "a piece of cristall, sexangular (as they grow all), grasping divers things within it, which I bought among the Rhaetian Alps, in the very place where it grew." (Walton's Lives, 109, ed. Oxf. 1824.)

David Sturdy and Martin Henig produced for participants an illustrated guide to the collector and his collection The Gentle Traveller John Bargrave Canon of Canterbury, and his Collection (16 pages).

H.S. Torrens,
Dept. of Geology,
University,
Keele,
Staffs.

MODEL REPTILES IN THE WARWICKSHIRE MUSEUM or RHYNCHOSAURUS RHIDES AGAIN (WHILST DASYCEPS DOZES!)

by T. P. Besterman

The Warwickshire Museum has been attempting to breathe a little life into some of its more important fossil material. A full-size reconstruction of Dasyceps bucklandi (Lloyd) is now on display in the geology gallery next to the holotype skull. And Rhynchosaurus sp. lurks as the first of a planned group of three models (1/3 scale) of animals from the local Trias.

Background to the fossils

D. bucklandi (Fig. 1) is a temnospondylous amphibian of Lower Permian age (Paton, 1975). The unique skull (G42) was discovered sometime before 1849 when it was described by Dr. George Lloyd as Labyrinthodon bucklandi. In 1859 T.H. Huxley redescribed it as a new genus Dasyceps. It was found by Joseph Sturley, stonemason and quarry master, in red sandstone 'in Kenilworth,' presumably in one of the quarries there, though the exact location remains a mystery. This confirms an Autunian age, but both the Kenilworth Breccia and overlying Ashow Group have well-developed sandy facies which would match the matrix of the skull. Joseph Sturley donated the fossil to the Museum of the Warwickshire Nat. Hist and Arch. Soc. where it passed into the care of Dr. George Lloyd, medical practitioner, Fellow of the Geological Society, founder member of the Society and its Honorary Curator of Geology at the time.

Dr. Lloyd evidently made something of a study of fossil amphibians and reptiles, since a large proportion of the important vertebrate remains from the 'Lower Keuper Sandstone' (the Bromsgrove Sandstone Formation of current terminology) seem to have come to the Society's museum through his agency. Whether he was actually involved in field-collecting it is hard to say - I suspect he actively cultivated the quarrymen at Coten End, Warwick, and Cubbington, Leamington Spa, to keep an eye out for material of interest and put it on one side for him. Although these rocks are very sparsely fossiliferous, much of this Triassic material is recorded as originating in 'The Dirt Bed', where it was found in a fragmentary and largely disarticulated state. The palynological evidence, on the basis of Warrington's work (1967, 1980) indicates that the rocks of the Bromsgrove Sandstone Formation extend from late Scythian to Ladinian. Recent studies of the tetrapod fauna of Warwick and Leamington confirms a Ladinian age for these locally fossiliferous horizons (Walker, 1969, and Paton, 1974).

Murchison and Strickland (1837) first described and figured this material, depicting a rhynchosaurian premaxilla (determined by Paton, pers. comm), 'as a tooth', a specimen (G1046) which Owen described later (1842) (having cut a transverse section from it) as the terminal phalanx of the toe of Labyrinthodon pachygnathus.

Making the models

The production of scientifically acceptable models from such fragmentary and incomplete remains is fraught with pitfalls and I wouldn't be surprised if we've fallen into one or two. However I relied heavily on the guidance of Roberta Paton (Royal Scottish Museum), Alick Walker and Alec Panchen (University of Newcastle-upon-Tyne), and Alan Charig (British Museum Natural History)). Drs. Paton and Walker are familiar with the Warwickshire material

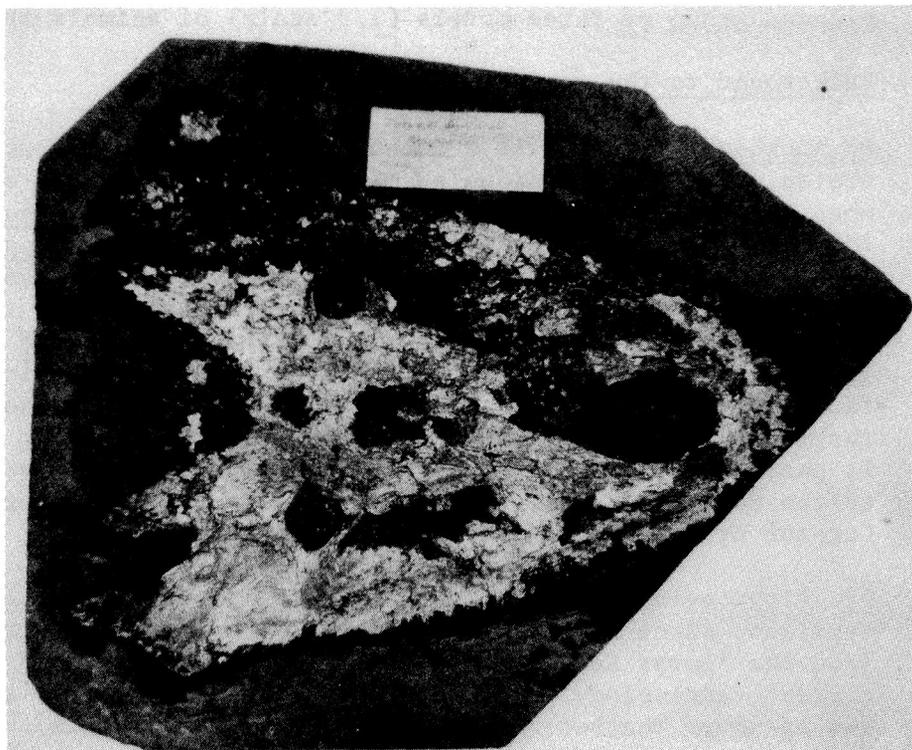


Fig. 1. Dasyceps bucklandi (Lloyd)
G42 holotype skull.
Autunian, L. Permian,
Kenilworth,
Warwickshire.
coll Joseph Sturley, Co. 1849.
Descr. George Lloyd (1849)

on which they've worked and published (Walker 1969, Paton 1974, 1975). I'm particularly grateful to them for their help and encouragement, and the useful criticisms they made of photographs of prototype models. However, there was a spectrum of opinion on what was anatomically 'correct' in our reconstructions, so eventually it was up to us to choose the way to go. So, for the things we've got right, all credit to our modeller, Robert Alcorn and our specialist consultants. If the models do offend in some areas then the blame is mine and in no way reflects on their involvement!

For D. bucklandi, no postcranial material has yet been discovered so the body reconstruction, posture and proportion is based by analogy with related permian eryopoids such as Eryops and Zatrachys. Paton (1975) infers from fossil, lithological and palaeogeographical evidence, a wholly terrestrial mode of life, and also makes some interesting suggestions regarding the possible defensive functions both of the bony frill on the posterior margin of the skull, and of the median nasal vacuity. She also infers from the dentition a diet of 'small, fairly inactive animals'. The original model (cover) was sculpted in plasticine supported on a wood and metal armature. Because of the large size of the model, a rigid mould was used, and the complexity of shape required that this was separable into about 20 parts. Resin moulding compound was applied direct to the plasticine model and, after hardening the component parts of the mould, removed, reassembled and bolted together. Into this was poured resin to coat the inside of the mould to build up a wall approximately $\frac{1}{2}$ " thick to produce a hollow cast. After extraction from the mould flash marks on the cast were removed mechanically. The resin cast was then painted with matt enamel paint, and a sheen to give the impression of an amphibian's mucous secretion added by an application of a single coat of Mander's eggshell 'Card'.

The problems of producing a Warwickshire Rhynchosaurus model (cover) were of a rather different order. The local remains, though fragmentary, are mainly represented by parts of skull, jaws and teeth, though Paton (pers. comm.) has also identified a left ilium and ?left ischium in the Warwick material. More important, for the purposes of this project, well documented rhynchosaur material has been found in other British localities as well as from abroad, and a number of published pictorial reconstructions of these exists, as for example Charig (1979). It was important to sort out the relative ages of this comparative material so that, for example, a guesstimate of postural advancement could be made. Although Walker (1969) considers the Warwick Rhynchosaurus as a 'more typical and advanced rhynchosaur than previous accounts', comparison with Stenaulorhynchus from the Anisian Manda Formation of Tanzania reveals some features comparatively more advanced whilst others are more primitive. Walker (1969) considers the Devonshire Rhynchosaurus as more primitive than the Midlands genus, and therefore suggests the former to be of Anisian age (early Middle Trias).

The Scottish genus Hyperodapedon, from the Lossiemouth Sandstone Formation, is a much later and more advanced Upper Triassic rhynchosaur of Lower Norian age (Benton, pers. comm.). The Grinshill, Bromsgrove, and Warwick tetrapod material is considered to be a single unit biostratigraphically by Walker (1969), and are ascribed by him to the early or mid-Ladinian, and by Paton (1974) to the early Ladinian, i.e. later Middle Trias. Anatomical details such as the chopping 'beak', herbivorous dentition and lizard affinities are well documented by Romer (1933) and Charig (1979).

Again, the original model was made in plasticine supported on an armature. The small size of the model permitted a simple two-piece flexible mould to be made by applying a cold-curing moulding compound directly to the plasticine. This was then supported in a rigid, easily detached resin outer jacket. Resin was poured into the mould to form a solid cast. The cast model was painted with matt enamel the finish of which approximates closely to that of a modern lizard.

Future reconstructions

The MSC scheme ran its course before the other Warwickshire Triassic reconstructions could be realised. Robert Alcorn now works as a freelance model-maker in Scotland, and we hope to commission him to produce a model of Mastodonsaurus, a capitosauroid labyrinthodont amphibian and what will be an inevitably contentious attempt at an archosaur whose Warwick remains have been variously described as Thecodontosaurus by von Huene (1908), and poposaurid by Walker (1969), though the latter author is far from being convinced by the present evidence (pers. comm.). If any other institutions are interested in acquiring casts of Dasyceps or Rhynchosaurus, or are interested in the projected models, please contact me at the Warwickshire Museum. Similarly, if anyone is interested in commissioning Robert direct for other models, I would be delighted to supply his address.

Postscriptum

The ghost of Richard Owen (vide the splendid Waterhouse Hawkins dinosaur reconstructions for the Crystal Palace move to Sydenham in 1853) must stalk anyone foolish enough to embark on a project such as this. But I comfort myself with the knowledge that when palaeontologists decide in some future elegant analysis that Dasyceps bucklandi was an aquatic species peculiarly adapted to swimming upside down and Rhynchosaurus climbed trees using its beak as an extra limb like a parrot, our models will at least provide an historic document of geo-antiquarian interest.

I should like to thank Dr. Roberta Paton, Dr. Alick Walker, Dr. Alec Panchen and Dr. Alan Charig for their palaeontological advice on this project, and Arthur Hayward of the British Museum (Natural History) modelling and taxidermy workshops for showing us the techniques used there; and above all to Robert Alcorn for months of painstaking and highly skilled model-making.

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Tristram Besterman,
Deputy Curator & Keeper of Geology,
Warwickshire Museum,
Market Place,
Warwick.

ETHANOLAMINE THIOGLYCOLLATE AS A CHEMICAL AGENT FOR THE NEUTRALIZATION & REMOVAL OF OXIDISED PYRITE

by L. Cornish & A. M. Doyle

A new technique for the removal of decay products from pyritized fossil material is now employed in the British Museum (Natural History) Palaeontology Laboratory involving the use of ethanolamine thioglycollate. Dilute alcoholic solutions of this reagent effectively neutralize acidic pyrite oxidation products and removes the sulphates produced in one operation. As the reaction takes place in a water-free solvent there is little risk of damaging the intact pyrite and an added bonus is that the reagent is alkaline, allowing calcareous specimens to be cleaned safely.

Prior to treatment, specimens are examined for general condition, and the technique is varied according to the state of preservation.

Technique 1

Specimens which will tolerate immersion in a liquid medium are placed in a 2-5% solution of ethanolamine thioglycollate in 95% Industrial Methylated Spirit (I.M.S.), or anhydrous isopropanol, for a period not exceeding four hours. During this time, neutralization and iron complexing occurs resulting in the production of purple iron ferrothioglycollate. To remove extensive decay products this treatment may need to be repeated several times.

After each immersion the specimen should be washed in I.M.S. or isopropanol for at least three times longer than the treatment time to ensure removal of reaction products. Once the reaction has slowed down or ceased altogether, as evidenced by decreasing purple colouration to the solution, and after a final wash, the specimen should be allowed to dry in air.

Friable specimens and those too large for immersion can be treated by adopting technique 2.

Technique 2

Specimens are placed in a well ventilated area and a paste composed of 3 to 5% ethanolamine thioglycollate in I.M.S. or isopropanol added to sepiolite in equal proportions by volume is applied to the decayed area. The specimen is then covered in polythene or aluminium foil to prevent rapid evaporation of the solvent and left for 1 to 3 hours, during which time the dissolved decay products are drawn up into the slowly drying paste by capillary action. Once dry the paste and decay products can be brushed or carefully vacuumed off. Washing is achieved by the application of a paste composed of sepiolite and clean solvent and repeated until the paste is free of contamination. The whole cycle may be repeated until all decay products are removed.

Consolidation or repair of specimens after either treatment using resins, etc., may be necessary. Subsequent storage or exhibition of treated material must be in an environment with low relative humidity, 40-50% is ideal, as above 60% further decay will occur readily. The treatment outlined here, i.e. the use of ethanolamine thioglycollate, will not confer long term protection to stored specimens.

As well as being an effective reagent for the removal of pyrite oxidation products without endangering calcareous structures, ethanolamine thioglycollate is safer and easier to use than previous techniques. Additionally it can be readily adapted to suit the requirements of individual specimens. Ethanolamine thioglycollate should be used in accordance with the manufacturers safety sheet but in general requires the operator to use gloves in a well ventilated area, preferably a fume cupboard. A complete description of the treatment including detailed photographs is to be published in a future issue of Palaeontology.

Suppliers

Ethanolamine thioglycollate,
Robinson Brother Limited,
Ryders Green,
West Bromwich.

Lorraine Cornish and Adrian Doyle,
British Museum (Natural History)
Department of Palaeontology,
Cromwell Road,
London,
SW7 5BD.

LETTERS TO THE EDITOR

This letter refers to a review by Hugh Torrens of the Catalogue of the Type and Figured specimens of Fossil Cephalopods (excluding Mesozoic Ammonoidea) in the British Museum (Natural History) by D. Phillips (BMNH, 1982). The review was published in Vol. 3. No. 7 pages 460-462, of the Geological Curator.



British Museum (Natural History)
Cromwell Road London SW7 5BD

Telephone 01-589 6323 ext

Department of Palaeontology

Thank you for reviewing the second part of the "Type and Figured" catalogue in the latest issue of G.C.G. Learning that "Mr. Day" was "Edward Cecilius Hartsinck" leaves me quite unrepentant!

I think there are excuses for other shortcomings you mention, but my reason for writing lies in your observation on the relationships between Nautiloidea, Coleoidea and Ammonoidea. I can see I should have explained that the catalogue arrangement only reflected the evolution of the cephalopod section in the museum, and avoided a time-consuming double re-arrangement of index cards. However, even if one rejects de Koninck's, 1843 Devonian belemnite, and accepts the bactritids as ammonoid, and as the root of Coleoid evolution, I still think your remark will be very misleading to many G.C.G. readers, and possibly merits qualification in the next issue.

Dennis Phillips.

Hugh Torrens replies;

I quite agree about "Mr. Day" and Dennis can stay unrepentant! He was there only to make a serious point which I still think is valid. By indexing names of donors one can get a lead into where a collection might have gone to. The fact is that none of Mr. Day's collection in the BM(NH) gets reported in Ron Cleavelly's recent magnus opus either. The point about the evolution of cephalopod curation at the BM(NH) is crucial but I think might have been made in the catalogue. I still think catalogues of fossils should group together categories closely linked by evolution and separate categories which were farther apart.

Hugh Torrens.

MINUTES IN A PHONE BOX!

by Hugh Torrens

A short tale of mystery

The newspaper cutting (reproduced below) appeared in the Sentinel, our local evening paper, on 14th September, 1983. How the minutes got into a Hales (near Market Drayton) phone box we will probably never know Anyway I rescued it and since it is the minutes of a Birmingham staff/student geology club which read and discussed papers in the 1930's I have passed it on to Birmingham University for safe preservation.

Kiosk book riddle plea

A MYSTERIOUS leather-bound document dating back half a century has had police at Madeley scratching their heads.

The 162-page book contains the minutes of a group calling themselves the Lapworth Club between 1932 and 1935.

It was found in a telephone kiosk in the village of Hales, near Market

Drayton, last month and handed over to police.

But since then, no one has stepped forward to



Sergeant Phil Hopkins with the mystery book found in a telephone kiosk at Hales.

claim the ledger, which officers believe may contain important historical details.

A police spokesman said: "The minutes are handwritten and are difficult to read, but the club appear to be a geological society.

"The book is bound in green leather and is in mint condition. We just can't understand why no one has claimed it.

"We are not sure whether the group have any local connection, but the document does make reference to their foundation meeting, which was held at Conway, North Wales.

"We would like anyone who can shed light on this mystery to contact us."

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(affiliated to the Geological Society of London)

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THE GEOLOGICAL CURATORS GROUP

The purpose of the Group is to improve the status of geology in museums and similar institutions, and to improve the standard of geological curation in general, by:

- holding meetings to promote the exchange of information
- providing information and advice on all matters relating to geology in museums
- the surveillance of collections of geological specimens and information with a view to ensuring their well being
- the preparation of a code of practice for the curation and deployment of collections
- the advancement of the documentation and conservation of geological sites
- initiating and conducting surveys relating to the aims of the Group