

## RECENT ADDITIONS TO THE IOW COUNCIL GEOLOGICAL COLLECTION

Martin Clive Munt

### *Introduction*

There has always been a steady flow of new material into the Island's only registered public geological collection. New additions to the collection comprise donations, purchases and staff finds. It is very pleasing to note the generosity of some collectors and members of the public who have made casual finds and are happy to donate them into public ownership. Recently we have increased access to collection information by putting on-line a Type, Figured and Cited Catalogue which lists those objects in the collection which have recognised scientific importance. The intention of this short report is to put into print a few of the interesting finds which have come into the museum's care which may otherwise go un-remarked upon and to act as pointers to what may be over-looked as common finds.

### *Recent Acquisitions*

*Plagiolophus* sp jaw IWCMS.2005.50 was found in 1983 by National Trust warden Robin Lang and donated in 2005. The 5 cm long jaw fragment has four teeth still in place and was found in the Bembridge Limestone Formation (Solent Group, Late Eocene) at Prospect Quarry. *Plagiolophus* is a Late Eocene to Early Oligocene horse, isolated teeth of which are not uncommon in the Lower Hamstead Member (Bouldnor Formation: Solent Group) at Bouldnor, but are otherwise rare finds.

*Inoceramus* sp IWCMS.2005.90 comprising both valves, it is an interesting addition to the collection. It was found and donated to the collection by Clint Bouwer, from the Upper Greensand Formation in Compton Bay. Inoceramid bivalves were abundant during the Late Cretaceous; they have great value in correlation as individual species have extensive geographical distributions. They are medium to gigantic in size, and often have one valve flat and the other domed.

Goniasterid starfish IWCMS. 2002.218 found by then Assistant Curator Dan Pemberton. It comprises a segment of marginal frame in a small block of Glauconitic Marl (Grey Chalk Subgroup). It was found in the broken down remains of a dry-stone wall on the Coastal Footpath near St Lawrence. Goniasterids are pentagonal shaped starfish with short arms, but sometimes without arms, marginal blocks are rectangular.

*Melanoides (Tarebia) acuta* (J. Sowerby, 1822) is probably the most common gastropod found in the Solent Group, if not the whole of the Isle of Wight. However IWCMS.2003.41 is different, the specimen is in a small block of the Insect Limestone of the Bembridge Marls Member (Bouldnor Formation: Solent Group). With the exception of '*Lymnaea*' spp and planorbid gastropods, molluscs are uncommon in this limestone. *Lymnaea* belongs to the pulmonate group of gastropods and is therefore an air breathing snail, whereas *Melanoides* is a gill bearing prosobranch. It is unlikely that *Melanoides* would have lived for long in what was probably an anoxic lake.

In recent years there have been a number of interesting finds of corals from the Perna Bed (Lower Greensand Group), notably at Yaverland. Denver Fowler donated a specimen of a colonial coral similar to *Isastrea* (IWCMS.2005.20) as did David and George Whisson (IWCMS.2002.54). Other finds include solitary mushroom-like corals assigned to the genus *Fungiina*, two associated specimens were found by the author (IWCMS.2005.46), these corals lived attached to large shells.

The pterosaur *Istiodactylus latidens* (Seeley, 1901) formerly known as *Ornithodesmus latidens* has

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a broad duck-like rostrum. A rostrum fragment in the form of an internal cast preserved as pyrite, found on the beach in Compton Bay by Tessa Brooks, probably Vectis Formation (Wealden Group) IWCMS.2003.40.

A partial but well persevered specimen of the fish *Pachyrhizodus salmoneus* (Günther, 1872) was found by Oliver Cronin and his family in February 2004 from the Gault Clay Formation at Binnel Bay. This donated specimen is in four parts comprising the skull and anterior portion of the body (IWCMS.2004.53).

Albert Budden has made some very important finds since coming to live on the Island. His finds include a cycadeoid stem (IWCMS.2005.102), and a new species of fish from the Gault Clay Formation (IWCMS.2005.101).

A sandstone cast of a cycadeoid stem IWCMS.2005.53 was donated by Harry Daine. It probably originated from the Sandrock Formation (Lower Greensand Group) and was found in Binnel Bay. Harry also donated a trace fossil from the Carstone (IWCMS.2005.40).

Mollusc shells record the life history of the animal: drill holes in bivalve and gastropod shells indicate predation by naticid or muricid gastropods, the peeling of gastropod apertures, attack by crabs. Typically gastropod shells will show laminar shell growth caused by the slowing down of whorl expansion in maturity. *Granulolabium plicatum* (Bruguière, 1792) is an abundant potamidid gastropod in the Cranmore Member (Bouldnor Formation: Solent Group). IWCMS.2002.59 found by former Assistant Curator Dan Pemberton is an unusual example of *G. plicatum*, showing eccentric growth.

Eccentric growth pattern is seen occasionally in *G. plicatum* and also in large specimens of the potamidid *Tympanotonos (Eotympanotonos) funatum* (Mantell, 1822) var. from the Bembridge Marls (Bouldnor Formation: Solent Group). Examination of the surface of the shells has revealed the pattern of the plates of barnacles of *Balanus* sp. Barnacle infestation of the shells was evidently *in vivo* as whorl growth eventually surrounded the barnacle, generating the growth eccentricity.

Crabs are well known from the London Clay Formation (Thames Group). IWCMS.2002.232 is a good example, though preserved in pyrites. It was found and donated by Dominic Ward.

### **Conclusion**

It is always pleasing to report interesting new finds, clearly spectacular and rare finds of dinosaurs readily grab headlines. The find, which attracted most media attention, was that of the new form of ornithocheirid *Caulkicephalus trimicrodon* Steel et al 2005. First brought to the museum by Gavin Leng and then added to by John Winch, Martin New, Dan Davies, Lorna Steel and the author. This pterosaur was found in the Wessex formation at Yaverland. It was the subject of a Channel 4 documentary based loosely around events. If the documentary reported what actual events the story would have been a far greater. However, it is the smaller finds which form the core of collections, and such finds can very often inform us much more about the past.

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### ***Acknowledgements***

Clearly we can't list all recent acquisitions and their finders, and there are other important finds not included in this report, however, the museum wishes to thank all the people mentioned above and everybody who has supported the Island by placing their finds in the geological collection. Peter Forey (NHM) is thanked for identifying the fish remains from the Gault Clay Formation.

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*Author:* Dr Martin Munt. Dinosaur Isle, Culver Parade, Sandown,  
Isle of Wight, PO36 8QA. martin.munt@iow.gov.uk