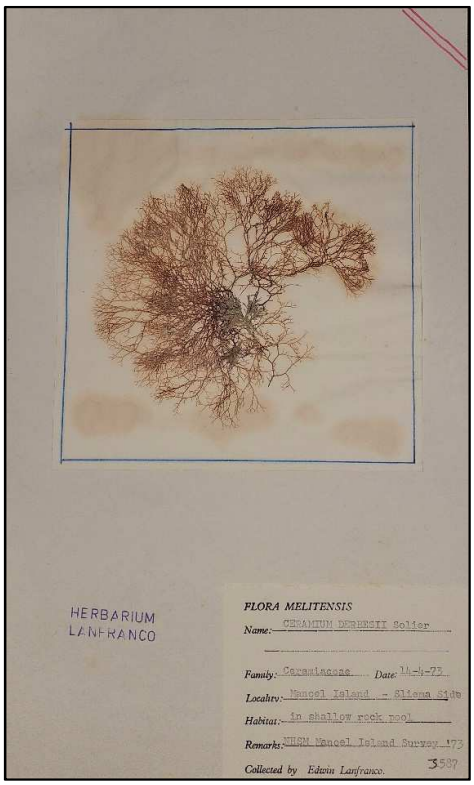
DoB Museum Newsletter No. 1 **October 2019**

Curator's note

You are reading the first issue of the Department of Biology Museum Newsletter, issued at the start of Academic Year 2019-2020. The newsletter will be issued monthly and will include matters related to the museum, including news and recent acquisitions, articles on selected reference collections housed in the museum, and detailed information about a selected "specimen of the month". It will be emailed in pdf form to the Department's academic and technical staff and of course to all undergraduate and postgraduate students. It is hoped that this newsletter will prove useful in familiarising its readers with the museum's rich range of zoological, botanical and fossil specimens.

News

- Restoration of the algal herbarium compiled by Edwin Lanfranco between 1960 and 1990 has just been completed. The herbarium sheets were restored where specimens had become detached, and new Family covers were provided. A database of the herbarium, which is particularly rich in rhodophytes, was also prepared. For algae identified to species level, the database includes current names with authorities as given in the World Register of Marine Species (WORMS). I have also provided hyperlinks to online images of these species. The specimens in the herbarium were mostly collected by Edwin himself, but specimens collected by other botanists (e.g. Mike Briffa, Guido Lanfranco) are also included as are several sheets of historical value compiled by Carmelo Penza, who was Curator of Argotti Botanic Gardens between 1919 and 1952. Anyone interested in viewing the herbarium is welcome to visit the museum on Wednesday and Thursday mornings. A pdf copy of the database can be sent to anyone requesting it.



One of the sheets in the restored Lanfranco algal herbarium

- During October the museum was visited by three groups of 3rd year undergraduates who were following BIO 3050 Animal Form and Function. They had been assigned projects concerning

vertebrate necks, gastropod mollusc shells and decapod legs respectively. They photographed and measured the relevant specimens at the museum. Good luck for their projects.

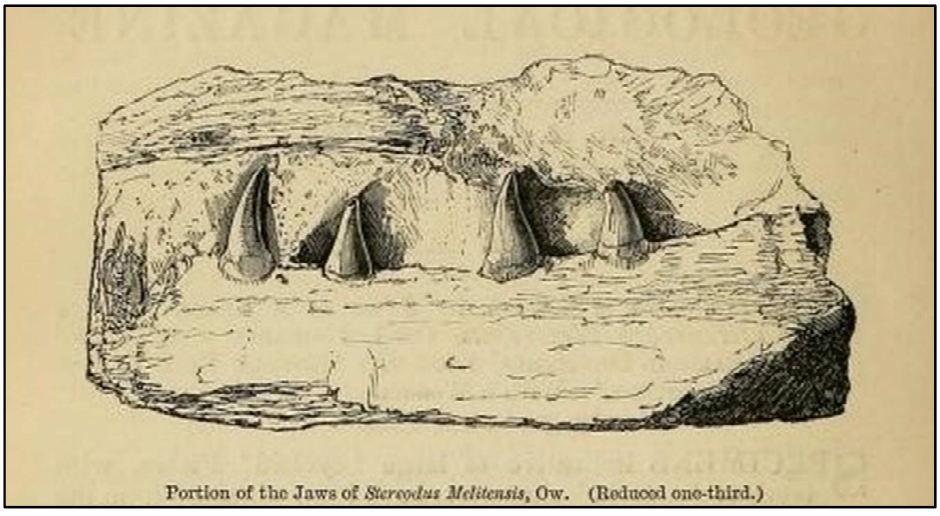
- Recent acquisitions by the museum include the following:

  - *Procambarus clarkii* (Decapoda 2 specimens, a recent freshwater alien introduction) (ex Prof. Patrick Schembri)
  - *Delonix regia* seedpod (Flame tree, Fam. Fabaceae, David Dandria leg).
  - *Agabiformius obtusus* (freshwater isopod, Constantine Mifsud leg.)
  - *Siganus luridus* (marine fish, Fam. Siganidae (a recent alien introduction) (ex. Dr. Leyla Knittweis, Reno Micallef leg.).
  - *Atelerix algirus* (Vagrant hedgehog, 1 adult and 1 newborn, ex. Prof Patrick Schembri).
  - *Rattus rattus* (Black rat).
  - *Suncus etruscus* (Etruscan Shrew, Fam. Soricidae, ex Prof. Joseph A. Borg).
  - A small collection of as yet unidentified freshwater insects from Simar Nature reserve (ex Prof. Joseph A. Borg, N. Grech leg.)

Specimen of the month

The museum specimen being featured this month is a fossil of the actinopterygian fish from the Mesozoic *Stereodus melitensis* Owen, 1865.

The species was established by Prof. Richard Owen in a paper* in the Geological Magazine of April 1865 on the basis of "a portion of upper and lower jaws" submitted to Owen by A. Leith Adams. The specimen formed part of a skeleton of the same fish from the middle beds of the Maltese Miocene which was submitted to him by Leith Adams and which at the time was housed "in the Museum of the Malta University". Owen provided a detailed description of the jaws and also of the rest of the skeleton as given to him by Leith Adams, which, according to the latter "ends abruptly at the tenth vertebra". While the whereabouts of the fossilized jaws described by Owen are unknown, the rest of the Leith Adams fossil is now housed at Malta's Museum of Natural History at Mdina.


Portion of the Jaws of *Stereodus Melitensis*, Ow. (Reduced one-third.)

The fossil of *Stereodus melitensis* described by Prof. Richard Owen.

The *Stereodus* fossil at the Natural History Museum, Mdina.

Stereodus melitensis is also featured in a doctoral thesis by K. A. Monsch**, who had access to a fossil of the caudal region at the British Museum of Natural History (BMNH), also from the Maltese Miocene. This fossil is labelled "BMNH P6207a, Malta, Early Miocene (Burdigalian-Landinian, vertebrate beds of Globigerina Limestone)". Based on the dimensions of this fossil, Monsch estimated the length of the fish to be ca. 1.4 metres.

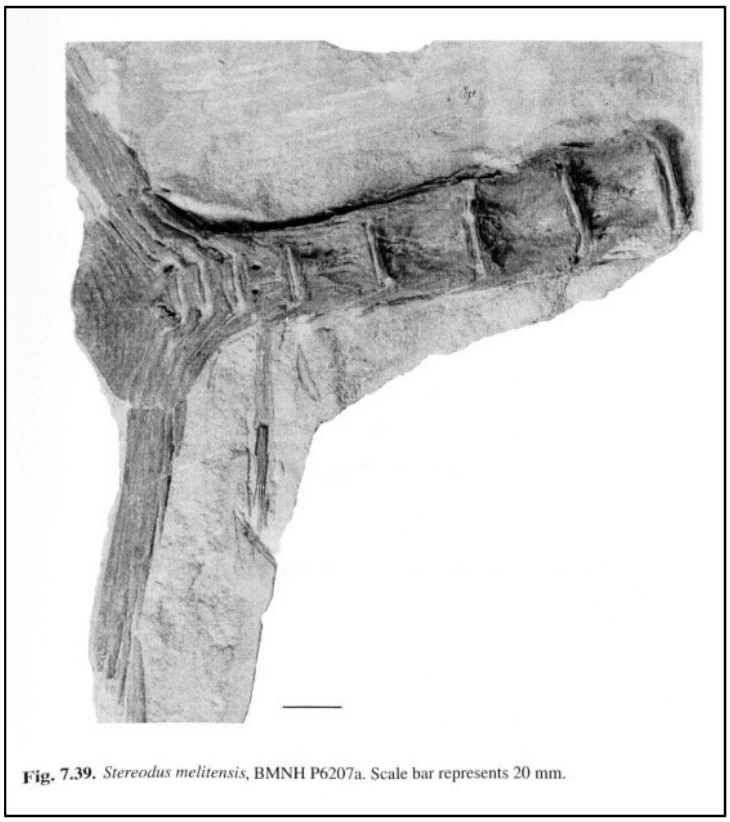
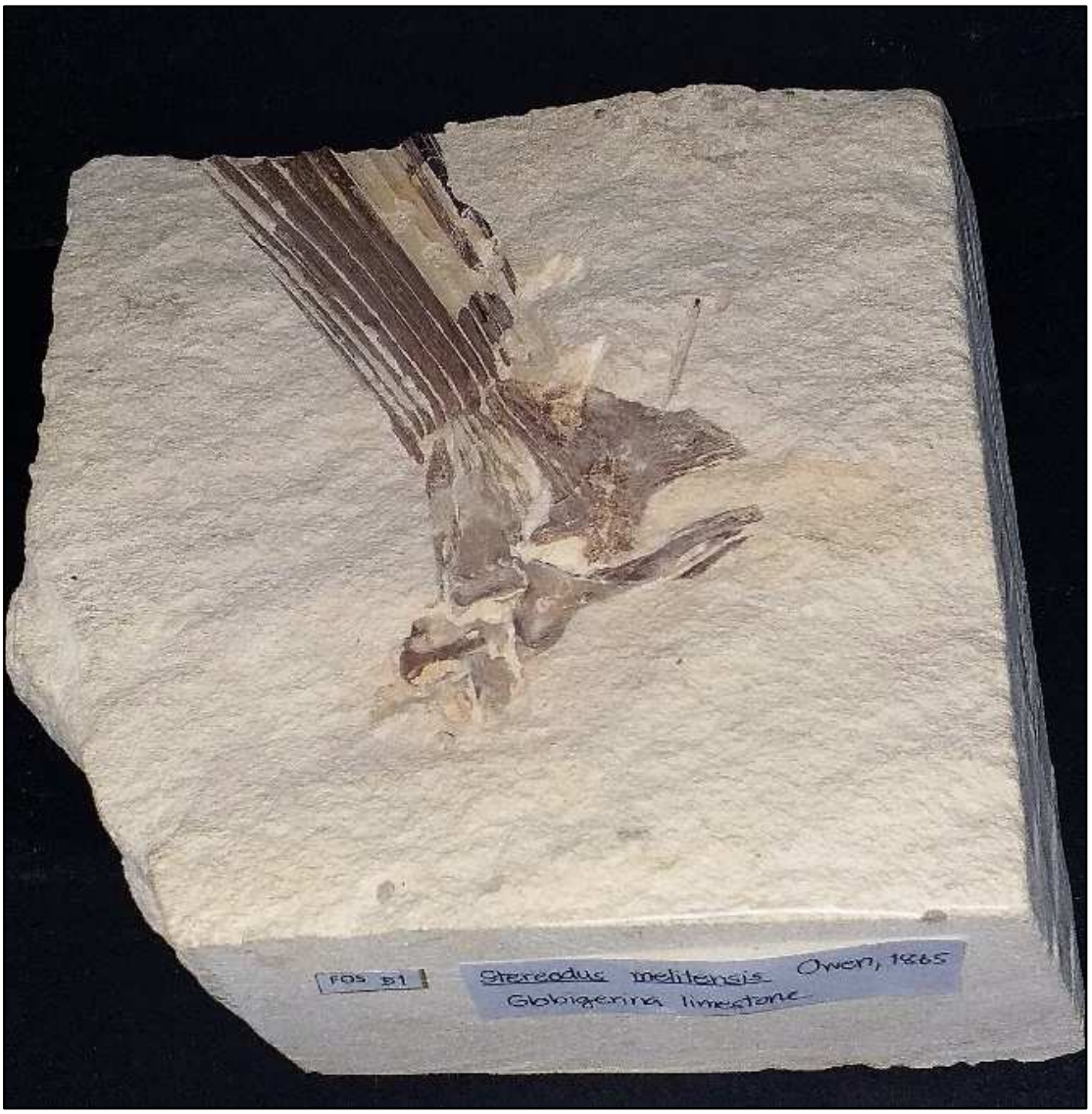


Fig. 7.39. *Stereodus melitensis*, BMNH P6207a. Scale bar represents 20 mm.

Fossil of the caudal region from the BMNH featured in the Monsch thesis.

The fossil currently in the DoB museum appears to be part of the pectoral girdle of *Stereodus melitensis* and is labeled as being found in globigerina limestone. The provenance of this fossil (Ref. No. FOS 51) is interesting as it was found during excavations at the University in Tal-Qroqq (P.J. Schembri, personal communication).



The *Stereodus melitensis* fossil at the DoB museum.

* Owen, R. 1865, Description of portions of jaws of a large extinct fish (*Stereodus melitensis* Ow.), probably a 'cycloid' with 'sauroid dentition', from the 'middle beds of the Maltese Miocene'. *The Geological Magazine*. Decade I (Vol. II): 145-147

** Monsch, K.A. (2000), *The phylogeny of the scombroid fishes Vol 1 Text, Vol 2 Figures*. Ph D dissertation submitted to the University of Bristol.
Online at: https://www.researchgate.net/profile/Kenneth_Monsch/publications).

Acknowledgements. Thanks to Professor Patrick Schembri and Dr John J. Borg (Museum of Natural History) for sharing useful information.

Reference Collections - The De Lucca Bird Collection

Oriolus oriolus **(Golden Oriole Malt. Tajra Safra), one of the birdskins in the De Lucca collection.**

This reference collection consists of a number of birdskins of Maltese and foreign origin collected by the prominent ornithologist Dr. Carmelo De Lucca (1916 – 1971). The collection comprises 149 bird skins dated between 1954 and 1970 belonging to 36 species in 19 families. A series of 45 skins of *Anthus pratensis pratensis* (Meadow Pipit, Malt. Pespus) and another series of 49 skins of *Passer hispaniolensis* (Spanish Sparrow, Malt. Ghasfur tal-Bejt) are of special interest. 16 specimens of the latter species are labelled *P. hispaniolensis ?maltae*.

Quote of the month

Some people dismiss taxonomies and their revisions as mere exercises in abstract ordering – a kind of glorified stamp collecting of no scientific merit and fit only for small minds who need to categorise their results. No view could be more false and more inappropriately arrogant. Taxonomies are collections of human thought; they express our most fundamental concepts about the objects of our universe. Each taxonomy is a theory about the creatures it classifies.

Stephen Jay Gould

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