

Curator's note

The first issue of this newsletter has received positive feedback from many readers. I will continue to issue the newsletter on a monthly basis and will endeavor to make it interesting to all readers.

The month of November is marked by a number of undergraduate practical sessions for which many museum specimens, including plastomounts, wet-preserved items and microscope slides, are required. For the first practical on animal diversity, for example, 22 wet-preserved specimens, 18 plastomounts and 51 microscope slides were supplied by the museum. A word to all users: please treat all specimens with great care; some of them are unique items and may be difficult and/or expensive to replace. Special attention should be given to microscope slides as these are occasionally found damaged, especially when high-power and oil immersion objectives are used.

News

Following are recent acquisitions by the museum:

Suncus etruscus, (Etruscan or white-toothed pygmy shrew). D. Dandria leg.

Scolopendra cingulata. (Mediterranean banded centipede). Thomas Cassar leg.

Pachyulus flavipes, (Common millipede, 2 specimens). Mark Mifsud leg.

Specimen of the month

This month I have selected *Potamon fluviatile* ssp. *lanfrancoi*, the Maltese Freshwater Crab. The crab is found in or near watercourses. The species is found in or streams, rivers and lakes in Southern Europe and North Africa while the local subspecies is rare and found only in a few localities, including Bahrija, Mtahleb and San Martin in Malta, and Wied il-Lunzjata in Gozo. It is an omnivore which inhabits burrows in the banks of freshwater bodies. Adults can reach up to 7 cm in size. The first historical reference to the crab dates back to 1647 when the Maltese historian Gian Francesco Abela referred to the locality “*Marsa picciola data Sciat el Kuabar, cioe lido di granci*”. The Grand Harbour wharf is still known to the present day as “*Xatt il-Qwabar*”, *qwabar* being the plural of *qabru*, the Maltese name for the crab. Unfortunately the crabs have long since disappeared from this site where the old power station was located.

The DoB museum has four specimens of the crab, three of which are important because they are paratypes of the subspecies. A paratype is defined as each specimen of a type series other than the holotype, the latter being the single physical example of an organism, known to have been used when the species (or lower-ranked taxon) was formally described. The subspecies *lanfrancoi* of *Potamon fluviatile* was described and named by D. Capolongo and J.L. Cilia in 1990¹. The epithet *lanfrancoi* was chosen to honour Guido G. Lanfranco, “founder of the

¹ Capolongo, D. & Cilia, J.L. (1990) *Potamon fluviatile lanfrancoi*, a new subspecies of a Mediterranean freshwater crab from the Maltese Islands (Crustacea, Decapoda, Potamidae) *Ann. Naturhist. Mus. Wien* 91B: 215 – 224

Natural History Society of Malta, conservationist of the Maltese flora and fauna in general and of *Potamon* in particular”.



The Maltese Freshwater Crab in its natural habitat (left) and the watercourse at Bahrija Valley, type locality of *P. fluviatile lanfrancoi*.

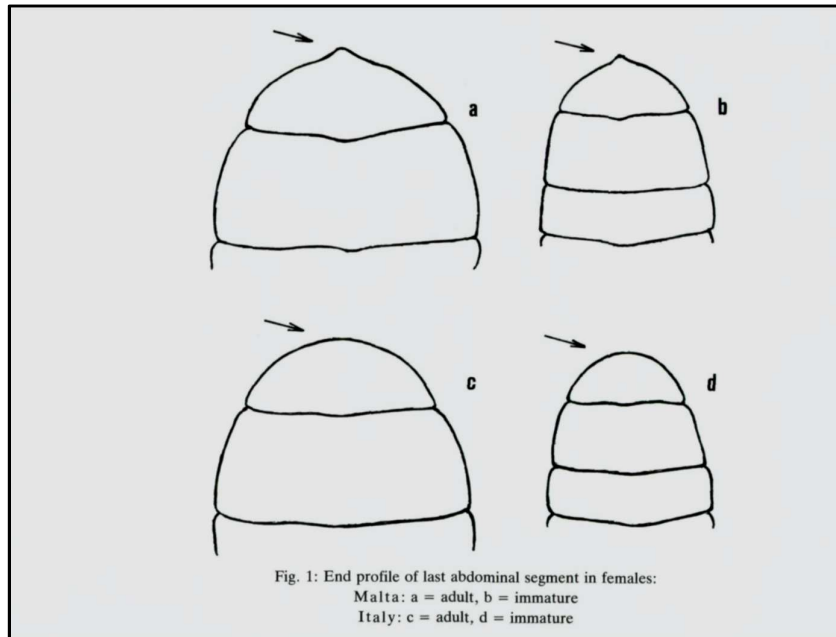
Capolongo and Cilia compared morphological features of Maltese specimens with others from mainland Italy, Sicily and North Africa and concluded that there were sufficient differences to justify the designation of the Maltese crab as a separate subspecies. The holotype was an adult female collected by J. L. Cilia in Wied Bahrija (Malta) on 10th August 1985 and deposited in the Naturhistorisches Museum, Vienna. One allotype male (also at the Naturhistorisches Museum, Vienna) and 17 paratypes were designated. The paratypes were deposited at the Museo Zoologico dell'Università di Firenze (2 specimens), at the Museo di Storia Naturale di Verona (2 specimens), at the University of Malta, Biology Dept. (1 male and 2 females, now in the DoB museum) and in the private collections of D. Capolongo, J.L. Cilia, P.J. Schembri and M. Zammit (10 specimens).

There is, however, a taxonomic twist to this tale. In a wide-ranging paper on freshwater crabs published in 2000², Brandis *et al.* did not recognise *Potamon fluviatile lanfrancoi* as a valid subspecies. They divided the genus *Potamon* into a number of sub-genera and revised the nomenclature of the Maltese freshwater crab to *Potamon (Eutelphusa) fluviatile*. The World Register of Marine Species (WORMS), which also includes a section on freshwater taxa, indicates that the trinomial *Potamon fluviatile lanfrancoi* Capolongo and Cilia 1990 is “unaccepted” and that the currently accepted name is simply *Potamon fluviatile* (Herbst, 1785).

This endemic subspecies, which has become a local conservation icon, is therefore no longer recognised as morphologically distinct from the crabs found in Italy, Sicily and North Africa, the slight differences found by Capolongo and Cilia being deemed insufficient for subspecific designation. The acceptance of the Maltese freshwater crab (Malt. Qabru) as a separate subspecies endemic to Malta is therefore in doubt.

Besides this taxonomic threat and dangers from habitat degradation, this endemic crab may also be at risk from the recently introduced alien crayfish *Procambarus clarkii*, although the aggressive *Potamon* has been recorded as outcompeting crayfish species in Europe.

² Brandis, D., Storch, V. & Türkay, M. (2000) Taxonomy and zoogeography of the freshwater crabs of Europe, North Africa and the Middle East. *Senckenbergiana biologica* 1(2): 5-56.



The difference between the last abdominal segment of the Maltese (top) and Italian crab populations, one of the features on which the subspecific designation was based.



The three paratypes of *Potamon fluviatile lanfrancoi* at the DoB museum.

Reference Collections - The Vacelet & Borg Porifera Collection

This reference collection consists of 27 species of sponges in 21 genera. Except for three specimens, they were collected in 1990 by Joseph A. Borg and the renowned Porifera expert J. Vacelet, and identified by the latter. Based on this collection and other material, a survey of shallow water sponges in Maltese waters was published by Schembri & Borg³ in 1996. They recorded a total of 33 species, most of which were new records for the Maltese Islands. No commercially useful species were recorded in this survey, although documentary accounts exist of commercial sponge fishing in Malta during the nineteenth century. A database of the collection is available in pdf form on request.



Left: The specimen of *Cacospongia mollior* in the DoB museum collection. Right: the same species in its natural habitat

Quote of the month

"A number of times we were asked: Why do you this thing, this picking up and pickling of little animals?.....Finally we learnt why we did this thing. The animals were very beautiful. Here was life from which we borrowed life and excitement."

John Steinbeck (*Log from the Sea of Cortez*)

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³ Borg, J.A. & Schembri, P.J. (1996) Preliminary data on the occurrence and distribution of shallow water marine sponges (Porifera) around Maltese coasts. *Xjenza* 1:1 24 – 28.