



## Archaeomalacology Working Group

http://www.archaeomalacology.com/

Contributed by Daniella E. Bar-Yosef Mayer, Tel Aviv University (<u>baryosef@post.tau.ac.il</u>)

The most recent meeting of the AMWG was organised by Annalisa Christie and took place in Kirkwall, Orkney, UK, 5th – 9th April 2016 (it followed the meeting of the Association for Environmental Archaeology in the same location).

## Themes included:

- Current research in archaeomalacology
- · Socio-cultural value of shells
- Shells as raw material
- Archaeomalacological methodologies
- · Taxonomy, classification and quantification
- Palaeo-environmental studies

Daniella Bar-Yosef from Tel Aviv Univeristy's Steinhardt Museum of Natural History is the WG's liaison to ICAZ. Please contact me (<a href="mailto:baryosef@post.tau.ac.il">baryosef@post.tau.ac.il</a>) if you would like to join the group. Kat Szabo from University of Wollongong, Australia, continues to serve as webmaster (<a href="http://www.archaeomalacology.com">http://www.archaeomalacology.com</a>).

Please also visit our FB page (Archaeomalacology Working Group) and consider a contribution to our newsletter by writing to Annalisa (amwg.icaz@gmail.com).



## Fish Remains Working Group

http://waihinga.ac.nz/foss/ICAZ/

Contributed by László Bartosiewicz (WG Liaison), Stockholm University (bartwicz@yahoo.com)

The 18th meeting of the Fish Remains Working Group took place in Lisbon between 28 September and 3 October. It was hosted by Sónia Gabriel and her dedicated team at the Archaeosciences Laboratory (LARC) of the Directorate General of Cultural Heritage and the Environmental Archaeology Research Group of the Research Centre in Biodiversity and Genetic Resources.

The title of the conference was "Fishing through time: Archaeoichthyology, Biodiversity, Ecology and Human Impact on Aquatic Environments" and the abstracts were published as volume 8 in the series *Trabalhos do LARC*, edited in the laboratory. The conference logo was the drawing of an Upper Paleolithic rock carving of a fish from the site of Penascosa 5, Côa Valley, Portugal (Figure 1).

The venue was the atmospheric old building of the Lisbon Geographical Society (founded in 1875) near the old city centre (Figure 2). In addition to the elegant, plush-seated lecture room of perfect size (Figure 3), the spacious dining area where coffee and buffet lunches were served provided an excellent social arena (Figure 4). Ideas tend to be profitably exchanged over delicious food and drinks - a key anthropological phenomenon not to be underestimated - and the conference again radiated the warm, informal atmosphere so characteristic of this oldest of the ICAZ working groups. This was not simply the impression of long-committed members. It was also noted by the numerous newcomers; several young scholars and some senior participants who took part in a FRWG meeting for the very first time.

This meeting mustered work from 120 participants and contributors in the form of 42 oral presentations and 16 posters. Only two of the presentations had to be cancelled: the program thus remained rich and tight. It consisted of the following relatively short (4-6 presentations long) thematic sessions:

- 1 Taxonomy and Molecular Analysis
- 2 Cost Oceans Past Platform (OPP)
- 3 Roman Fisheries, and Fish Products
- 4 Fish, Ritual, Feasting, and Social Status
- 5 Morphometry and Osteometry



Figure 1: The conference logo showing Upper Paleolithic rock art from Penascosa 5, Côa Valley, Portugal. Drawing kindly provided by António Martinho Baptista (Fundação Côa Parque)



Figure 2: Conference participants in front of the building of the Lisbon Geographical Society

- 6 Fish as Palaeoclimatic and Palaeoenvironmental Proxies Isotopic Data
- 7 Fishing Cultures of the World
- 8 Natural Deposits vs. Fishing, Fish Processing and Consumption Evidence
- 9 Multi-Disciplinary Approaches to the Study of Fish Remains: Archaeology, Written and Illustrated Sources

The largest was Session 7, sub-divided into presentations by continent (1: South America and the Caribbean; 2: North America, Alaska and Asia; 3:Europe). Session 10 included poster presentations of diverse topics.

To the credit of Sónia and the scientific committee, this high resolution structure helped arrange the rich variety of topics into a sequence in which ideas seamlessly followed each other, making it extremely easy to carry on discussing new ideas for three long days in a row. It was unsurprising but very reassuring to see that the meeting was distinctly international both in terms of the participants (who represented 26 coun-

tries) and research carried out on five continents (Figure 5, top). While topics from Europe dominated and papers from Africa and Australia were underrepresented, the conference reflected the geographical diversity of our working group. The chronological distribution of presentations was far more even. Aside from "Holocene" summaries and a few miscellaneous papers with no emphasis on the time period, the meeting included comparable proportions of papers ranging from prehistoric to post-medieval times (Figure 5, bottom).

What I found particularly striking was the rich, interdisciplinary diversity of the presentations that could be summed up by three "i"-s: ichthyology from isotopes to imagery. As if fish bones in themselves were not interesting enough to talk about, elaborate and exciting details were provided on a number of associated topics from salt production through amphora typology and 18th-19th century artwork in North America (Figure 6), making the ensuing discussions all the more exciting. Functional parallels could be revealed be-



Figure 3: Conference in progress (Image kindly provided by Antonio Saez Romero)



Figure 4: Coffee break (Image kindly provided by Antonio Saez Romero)

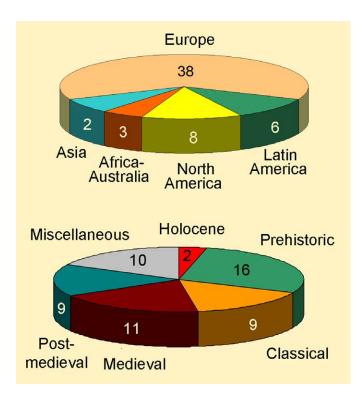


Figure 5: The representation of continents (top) and archaeological periods (bottom) by pooled oral and poster contributions presented at the 18th FRWG meeting (after Trabalhos do LARC 8).



Figure 6: Hogfish (Lachnolaimus maximus Walbaum, 1792) by Mark Catesby, 1725. (https://commons.wikimedia.org/wiki/File:Schweinsfisch.jpg)

tween geographically distant areas and cooperation could be fostered between individuals and groups working side by side.

One new initiative of potential interest to archaeozoologists is the Oceans Past Platform (OPP), a research network sponsored by the European Cooperation in the field of Scientific and Technical Research (COST). The overall network is led from Trinity College Dublin (<a href="https://www.tcd.ie/history/opp/">https://www.tcd.ie/history/opp/</a>), and a working group regarding the study of coastal settlements and fish bones is coordinated by James Barrett (Cambridge) and Lembi Lõugas (Tallinn). A short video introducing the aims of the group is online at <a href="https://www.nt

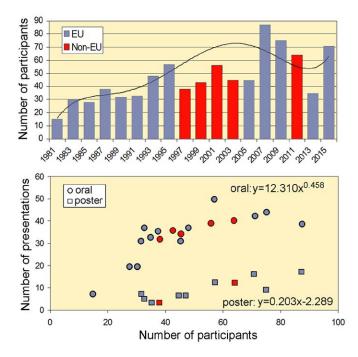
youtube.com/watch?v=F-pL3qvzegM. The OPP is intended to be an enabling platform, with funding in support of workshops and short-term research visits between participating European countries. Inquiries can be directed to James (jhb41@cam.ac.uk) and Lembi (lembilgs@tlu.ee).

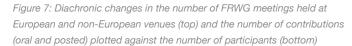
Andrew Jones is working on project titled Fishstory is an attempt to tell the public what we know about the way humans have interacted sustainably with populations of aquatic animals for millennia and is looking for information, images, and other help from ICAZ members.

Most serious impacts have occurred since the introduction of steam trawlers during the last few decades if the 19th century CE. Over the last 150 years we have seen serious declines in many populations of food fishes and other organisms as humans have harvested fish faster than they can reproduce and, at the same time, we have polluted or destroyed habitats for juvenile animals. Fishstory tells of this decline, but offers a hopeful message because fisheries scientists know what levels of exploitation are sustainable and environmental scientists understand how marine no take zones and other conservation measures can enable us to continue to live in harmony with healthy populations of wild animals.

Andrew Jones is also hoping to establish an international team of archaeologists, zoologists, historians and fisheries scientists to collaborate with molecular biologists to investigate Mediterranean fish populations. Already there are many samples of scales and bones from excavations in Pompeii, Herculaneum and a host of other sites which would benefit from innovative techniques now being used by archaeological scientists. For example, by using a combination of stable isotopes and aDNA, it is now clear that King Henry VIII was sourcing dried cod from three different fish populations in the 16th century CE. Proteomics has been used to distinguish bone fragments from different species of gadid and cyprinid fishes as well as identifying to species small fragments of avian shell recovered from archaeological sites. It is hoped that the project team will built a virtual reference collection using 3D laser scanning of selected bones of reliably identified food species. Small, medium and large individuals of each species will be sourced with the help of experienced fisheries biologists around the Mediterranean. The team will hold a series of project meetings, workshops and develop the next generation of archaeoichthyologists by recruiting a number of postgraduate bioarchaeologists to PhD programmes throughout Europe.

At the end of the abstract book prepared for the Lisbon conference, Sónia carefully compiled a table of basic data characterizing the development of the FRWG ever since its first meeting in Copenhagen in 1981. I analyzed these numbers in





order to offer a glimpse on the state of our organization. The generally increasing trend of attendance shows some oscillations, the three largest conferences attracting over 70 participants having recently been held in Europe. The numbers of participants show only a slight reduction during a period of four meetings between 1997 and 2003, when four conferences in a row took place outside Europe (Figure 7, top). However, the average number of participants at 13 meetings in Europe (mean=45.8, standard deviation=21.0) was not significantly different from those at the five conferences organized in other continents (mean = 49.2, standard deviation=10.6; P=0.740). Even if parameters in Europe are influenced by earlier, small FRWG meetings, I find this trend encouraging in terms of our shared effort to promote and maintain the global character of ICAZ. The number of presentations plotted as a function of attendance shows a somewhat degressive trend: more participants tend to be involved in preparing fewer presentations (Figure 7, bottom). Meetings held outside Europe fit smoothly within this main trend. The smaller number of posters displays a linear increase. Interestingly, no posters were presented at three conferences far away from Europe, although this could be a good way of somewhat balancing selective geographical representation.

The observation in Figure 4 that more participants prepare relatively fewer presentations was further studied in the case of the Lisbon meeting. Figure 8 shows the distribution of all contributions by the number of co-authors involved. Regardless of the physical absence of entire teams from the meeting,

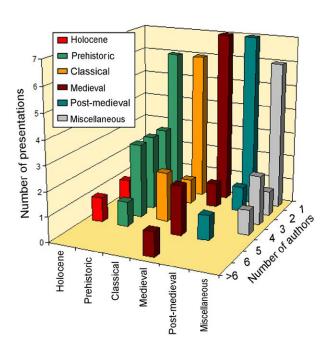


Figure 8: The chronological distribution and number of authors of pooled oral and poster contributions presented at the 18th FRWG meeting

many contributions –especially those dealing with the most numerous Prehistoric and Medieval topics –show the involvement of numerous experts. This team work indicates methodological advancement as well as increasing interest on the part of excavating archaeologists. This positive trend became very clearly visible in the session discussing roman fisheries, and fish products.

To everyone's satisfaction, the host institution offered to have the proceedings of this meeting published in the monographic series of the Directorate General of Cultural Heritage Trabalhos de Arqueologia. This is a very important gesture as an edited volume will help keeping the wealth of papers together. Authors will be informed of submission details in due time.

The next FRWG meeting was kindly invited by Barbara Wilkens and Gabriele Carenti to Sassari University on the island of Sardinia. Our next conference will thus have the honour to become the first ever ICAZ meeting organized in Italy, a country of respectable achievements in archaeozoology.

It would be unfair to even try to compare FRWG biennial conferences to one another in qualitative terms. They have been taking places at a great variety of venues, and the only constant elements linking them have been the high level of academic discourse and the often mentioned amiable, family-like style. Scholarly quality and positive attitudes work synergistically during these meeting as well as the two years separating them.