



PRESS RELEASE

Press Release No: 277

Date: 12 November 2008

Neanderthals not only ate shellfish, they liked it as much as we do

Darren Fa, of the Gibraltar Museum's research team, has just published an article online in the prestigious peer-reviewed journal *Quaternary Science Reviews*. Dr Fa, who was awarded his Ph.D. in marine biology by the University of Southampton's National Oceanography centre in 1998, has brought together his expertise in this field (specifically, the oceanographic and biological dynamics of the Strait of Gibraltar) and coupled it with the Gibraltar Museum's ongoing research into the prehistoric inhabitants of the Rock and the surrounding hinterland to provide evidence that marine environments such as the intertidal could have played a significant role in the subsistence economies of these early humans.

The use of marine resources by humans has held a peripheral position in the prehistory of humanity until relatively recently, mainly because significant evidence for the collection and consumption of marine foods such as shellfish does not start to appear consistently in the archaeological record until after 10,000 years ago. However this period coincides with the end of the last ice age, when sea levels settled upon more or less the same levels they presently occupy.

During the ices ages, sea levels were much lower than today, averaging around 80m below present and at times as much as -120m. This means that most prehistoric shorelines, and any archaeological evidence they may contain, are now beneath tens of metres of seawater (an area currently under study by the Gibraltar Museum's Underwater Research Unit – Project Gibramar). However, some archaeological locations, which are near to steep sections of the continental shelf, and therefore where shorelines would not have moved too far with lowering sea levels, are providing evidence of the use of marine resources by early humans. This has been highlighted by the worldwide recognition of the recent findings by a multi-disciplinary team led by the Gibraltar Museum, which showed that Neanderthals consumed marine resources such as marine molluscs, seals and dolphins.

Dr Fa's work has focussed on the marine molluscs, in particular those that could be easily collected during low tide by foraging groups of humans. By comparing present-day differences in both accessibility and abundance of such common shoreline species such as mussels and limpets into the Atlantic Ocean and Mediterranean Sea with the results of archaeological excavations along the same areas, he has provided testable models which predict that a difference in factors that structure marine communities could significantly affect human population processes such as rates of dispersal and the development of more sedentary and increasingly complex human societies.

Of additional interest is the finding that, at least in the data from Gorham's Cave, there are no statistically significant differences between the type and number of intertidal

marine molluscs collected by Neanderthals and by later 'Modern' humans, our ancestors. It seems that (at least in this part of the world) Neanderthals and modern humans not only exploited marine resources, but did so in a generally similar manner - thus further emphasising the common ground between them.

Note to Editors: For further information please contact Marie Mosquera at the Gibraltar Museum on 200 74289. Alternatively, email: museumpr@gibraltar.gi