

The fauna of La Vela di Trento: preliminary analysis

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ABSTRACT - This work reports the preliminary results of the analysis carried out on the faunal remains found at the multi layer site at Vela di Trento. Materials from the early and late Mesolithic and early and middle Neolithic layers, which were recovered during a campaign of excavations in 1987-1988, were analysed.

Key words: Italy, Trentino, Adige Valley, Early Mesolithic, Late Mesolithic, Early Neolithic, Middle Neolithic

Parole chiave: Italia, Trentino, Valle dell'Adige, Mesolitico antico, Mesolitico recente

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1. INTRODUCTION

Faunal remains recovered during a campaign of excavations during 1987-1988 at the multi-layer site at Vela di Trento were analysed. The site provided materials from the Early Mesolithic ("Sauveterriano"), the Late Mesolithic ("Castelnoviano"), the Late Neolithic ("Gruppo di Gaban") and the Middle Neolithic (square mouth pottery linear geometric style, VBQ1, and meander-spiral style, VBQ2).

The osteological specimens consist of 682 remains (NR). In detail there are 189 from the Early Mesolithic (27.7%), 32 NR from the Late Mesolithic (4.7%), 145 NR from the Early Neolithic (21.3%), 96 NR from VBQ1 (14.1%) and 208 NR from VBQ2 (30.5%) (Fig.1)¹.

The high level of fragmentation of the osteological materials, especially in the upper levels of the settlement (VBQ1 and VBQ2), with the consequent high incidence of unidentifiable bones (17.3%), is due to intense amount of trampling the layers were exposed to and the act of breaking the bones to extract the marrow. At a macroscopic level, several bones showed signs of carnivore bite marks.

It is emphasised that in general the remains are in a fairly good state of conservation. The species found include deer (*Cervus elaphus*), ox (*Bos Taurus*), wild

goat (*Capra ibex*), chamois (*Rupicapra rupicapra*), roe deer (*Capreolus capreolus*), goat (*Capra hircus*), sheep (*Ovis aries*), wild boar (*Sus scropha*), pig (*Sus domesticus*)², the mustelids are represented by the badger (*Meles meles*). Also represented are Lagomorpha (*Lepus europaeus*) and birds.

2. THE MESOLITHIC LAYERS

Two US, 249 and 234, respectively represent the Early Mesolithic, Sauveterriano (late middle phase), and the Late Mesolithic, Castelnoviano (initial phase), of the site³.

For the Late Mesolithic faunal remains are scarce. These are two levels where, in general, the faunal remains found were fairly limited and where deer was the predominant animal. Goats and chamois represent only marginal importance for the economy of the site, while roe deer remains were not found amongst those of both the Early Mesolithic or Late Mesolithic layers. They only begin to appear later during the Neolithic.

The absence of fish remains can most definitely be attributed to the excavation method, (the earth was not sieved as this was an emergency excavation),

as in all the other contemporary sites in the Adige Valley: Riparo Gaban, Pradestel, Romagnano, Vatte di Zambana (BOSCATO & SALA, 1980), Bus de la Vecia di Besenello (LANZINGER & PASQUALI, 1978), and Dos della Forca di Salorno (BAZZANELLA & WIERER, being published), remains of this type have been found.

2.1. *Early Mesolithic*

Although it represents a single US, the Early Mesolithic comprises 27.7% of all the faunal remains at the site. Hunting was directed almost exclusively at roe deer and in a smaller measure at wild goats and chamois. Badger and wild boar bones were also found.

With regards the paleoecology of the site, the low number of wild goats indicated by this period (4.2%), the predominance of deer (50.8%) and the absence of roe deer, when compared with the data from Romagnano III, Pradestel and Vatte di Zambana (BOSCATO & SALA, 1980), would seem to favour an environment with few forests and a boreal climate (corresponding to that of levels AC3-AC1 at Romagnano).

2.2. *Late Mesolithic*

Again deer is the predominant species, followed by wild goat. There are few chamois remains. The reduction of the species in respect to the Early Mesolithic can be attributed to the lack of the faunal remains available, as evidenced by the above table.

3. THE NEOLITHIC LAYERS

3.1. *Early Neolithic*

The Early Neolithic is characterised by the appearance of the first domestic animals: goat/sheep⁴, ox and probably pigs⁵.

Although deer still predominates, the percentage of domestic animal remains (37.2%) is slightly higher than that of wild animals (26.2%). Livestock raising would therefore be for this period the prevailing economic activity or at least it should be considered to have the same importance as hunting activities. For the first time roe deer appear amongst the species hunted, although it is of small importance. Given that this animal can be considered as a good indicator of a humid forested environment, there was probably an environmental and climatic change in respect to the Mesolithic levels, which is also confirmed by the final disappearance of the wild goat.

With regards the prevalence of livestock raising over hunting, the data gathered for the Early Neolithic period during the excavations of 1987/1988, does not correspond with the results of the preliminary analysis of the faunal remains of the 1975 excavations, relative to the same chronological period (SALA, 1977a). In this latter case remains of wild animals prevail over those of domestic animals. This might be explained by a revision of the Early Neolithic levels of the 1987/88 excavations in respect to those of 1975, which is also corroborated by radiometric dating (DEGASPERI & PEDROTTI, this volume)⁶.

3.2. *Middle Neolithic*

A more definite change in the economic direction of the site takes place with the Middle Neolithic levels, VBQ1 and VBQ2. Deer progressively lose its predominance to oxen and domestic animals represent the main source of meat.

3.2.1. *VBQ1*

Oxen represents 25%, followed by goat/sheep (23%), pigs (14.5%) and deer (10.4%). Hares only appear sporadically. In general, hunting has finally assumed a secondary role.

3.2.2. *VBQ2*

The percentage of ox remains is slightly less than that of VBQ1 (22%), as is that of goat/sheep (17.8%), while pigs maintain the same numbers (14.4%). Deer is the only species to increase (15%). The percentage of unidentified species is relatively high (19.7%).

4. CONCLUSIONS

The data obtained from the analysis of the faunal remains from Vela di Trento, has made plain the predominance of deer over other species in Mesolithic levels. From a paleoenvironmental viewpoint, the presence of badger, as well as the low number of wild goats, indicate the presence of forests in the surrounding environment (SALA, 1977b). The absence of roe deer from the faunal spectrum at these levels probably

indicates the existence of an ecological niche that was particularly unfavourable for these animals. Roe deer only begin to appear with the changing climatic changes of the Early Neolithic period. The main domestic species: oxen, goat/sheep, pigs are all documented in the levels of the Early Neolithic period of Vela, which represent a late phase of this chronological period. Altogether, domestic animals, with their total numbers over 54%, contribute to relegating hunting to a secondary activity in respect to livestock raising, even though deer are still the predominant species.

This trend is also confirmed during the middle of the Neolithic period, square mouth pottery culture.

NOTES

1 - In addition there were 12 osteological specimens (1.7%) that were not given a chronological attribution and are indicated in the graph fig.1 with IND. This paper presents a preliminary analysis, which may be modified following further study of the stratigraphy (DEGASPERI & PEDROTTI, this volume).

2 - To date the two species, *S. scrofa* and *S. domesticus*, have not been separated.

3 - Chronological attribution was made on the basis of analysis of the lithic industry (BAZZANELLA *et al.*, this volume).

4 - It was not possible to distinguish between the bones of these two animals.

5 - As mentioned earlier, for now *Sus* remains include those of both the wild boar and domestic pig.

6 - These results could change on the basis of the revision of several levels where chronological attribution is still uncertain (A. Pedrotti, personal communication).

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US	<i>Cervus</i>	GR	<i>Capra ibex</i>	<i>Rupicapra rup.</i>	PR	<i>Sus</i>	<i>Meles meles</i>	PC	IND	Totale
MA	96	21	8	17	11	1	3	2	30	189

Tab. 1 - Number of remains found and identified species for the Early Mesolithic (MA). Gr = Large ruminants, PR = Small ruminants, PC = small carnivores

US	<i>Cervus</i>	<i>Capra ibex</i>	<i>R.rupicapra</i>	PR	IND	Totale
MR	18	5	1	2	6	32

Tab. 2 - Number of remains found and identified species for the Late Mesolithic (MR). PR = small carnivores

US	<i>Bos</i>	<i>Cervus</i>	GR	<i>Ovis/Capra</i>	PR	<i>Sus</i>	<i>Capreolus</i>	<i>Avifauna</i>	IND	Totale
NA	22	30	6	32	6	12	7	1	29	145

Tab. 3 - Number of remains found and identified species for the Early Neolithic (NA). Gr = Large ruminants, PR = Small ruminants

US	<i>Bos</i>	<i>Cervus</i>	GR	<i>Ovis/Capra</i>	PR	<i>Sus</i>	<i>Lepus</i>	IND	Totale
VBQ 1	24	10	6	22	6	14	2	12	96

Tab. 4 - Number of remains found and identified species for the VBQ1. Gr = Large ruminants, PR = Small ruminants

US	<i>Bos</i>	<i>Cervus</i>	GR	<i>Ovis/Capra</i>	PR	<i>Sus</i>	IND	Totale
VBQ2	46	31	14	37	9	30	41	208

Tab. 5 - Number of remains found and identified species for the VBQ2. Gr = Large ruminants, PR = Small ruminants

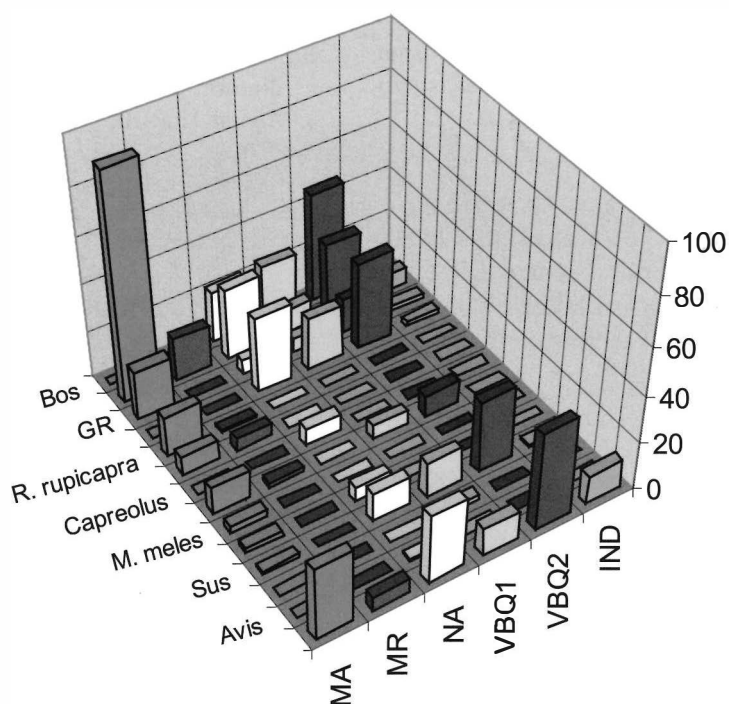


Fig. 1 - Graph of the numbers of remains by species (MA: Early Mesolithic, MR: Late Mesolithic, NA: Early Neolithic, VBQ1: square mouth pottery culture linear geometric style, VBQ2: square mouth pottery meander-spiral style, IND: levels that have not been given a chronological attribution).