



Landscape and Subsistence Reconstruction for Roman Rural Communities at the Danube's Mouth (South-East Romania)

Simina Margareta Stanc¹, George Nuțu²

¹ Faculty of Biology, A.I. Cuza University, Iași-Romania, Carol I Blvd., no. 20A, 700505
E-mail: simina_stanc@yahoo.com

² Eco-Museal Researches Institute, Tulcea - Romania, 14 Noiembrie Street, no. 1 bis, 820009
E-mail: nutugrg@yahoo.com

INTRODUCTION

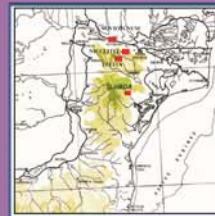
The coming of Rome at the Danube's Mouths led to the creation of a complex urban and rural landscape. New settlements like the vici from Telița and Niculițel, the villae from Niculițel and Horia prove the influence of the Roman "way of life" in the west area of the Western Pontus.

Archaeological evidence

Archaeological researches from the last decades show an intensive exploitation of the local resources of metal ore, clay and wood used for in the local pottery and metal workshops. The presence of the Legio V Macedonica at Troesmis and of the Classis Flavia Moesica at Noviodunum resulted in a demand of objects of daily life use and food supplies.



Dobruja and the Balkans



Roman rural settlements in Northern Dobruja as Case-Study



Map of Moesia Inferior



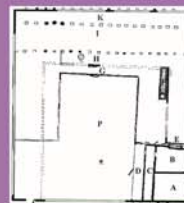
Iron ore kilns from Telița

The settlement from Telița prove the existence of installations for reducing the iron ore. This activity seems to be of Latène tradition and the Roman administration continues to exploit the local ore resources during the early Roman period. Starting with the early 2nd century AD these workshops will start to function until mid 3rd century AD. A brick bearing the stamp CLFM discovered inside one of the kilns could be connected with the activity of some soldiers from *Classis Flavia Moesica* having the main *statio* at *Noviodunum*, on the Danube, not far from Telița.

At the same time, one can emphasize the discovery of typical Roman pottery of Moesian origin together with eastern imports in the same stratigraphic units with pottery of Getian tradition. This fact is not unique among the early Roman settlements from the Lower Danube region. A good example is a recently excavated Roman *villa* in Niculițel (Tulcea county), also in the territory of *Noviodunum*.

Niculițel is located in the North of Tulcea county (Dobruja, South-East Romania) a few kilometers from the River Danube, near the ancient city *Noviodunum*. During the Antiquity, this area belonged to the northern side of the province *Moesia inferior* (between the 1st and 3rd centuries AD). Between 2009 and 2011 salivation archaeological researches were conducted in the north side of the today village, revealing an early Roman *villa*, which functioned starting with first half of the 2nd century and last until mid. 3rd when the entire area was destroyed by the Carpians and Gothic invasions.

Rural production of the Roman Brick "industry" was concentrated in the area of *vici* and *villae* and covered strictly the local needs involving a reduced or seasonal workforce, meaning that the factors influencing this production were reduced to the local demand. Following this idea, the type of production stated above can be characterized as self-sufficient and focused to the needs of local society, an element also characteristic to other geographical areas.



Grundriss of the Roman villa from Niculițel - Noviodunum territory (excavations V.H. Baumann)



Grundriss of the Roman villa from Horia - Troesmis territory (excavations V.H. Baumann)



Imported and local pottery from the Roman villa in Niculițel (excavations 2009, 2011)



Horn discovered in rural settlements in Northern Dobruja

Nmi

Species	Iatruș		Niculițel (1)		Niculițel (2)		Horia		Telița A 23b		Telița A 4b	
	NMI	%	NMI	%	NMI	%	NMI	%	NMI	%	NMI	%
Bos taurus	112	100	136	100	128	100	196	100	217	100	217	100
Ovis aries/ Capra hircus	0	0	0	0	0	0	0	0	0	0	0	0
Equus caballus	0	0	0	0	0	0	0	0	0	0	0	0
Canis familiaris	0	0	0	0	0	0	0	0	0	0	0	0
Felis domesticus	0	0	0	0	0	0	0	0	0	0	0	0
Total domestic mammals	112	100	136	100	128	100	196	100	217	100	217	100
Cervus elaphus	0	0	0	0	0	0	0	0	0	0	0	0
Ursus arctos	0	0	0	0	0	0	0	0	0	0	0	0
Canis lupus	0	0	0	0	0	0	0	0	0	0	0	0
Meles meles	0	0	0	0	0	0	0	0	0	0	0	0
Total wild mammals	0	0	0	0	0	0	0	0	0	0	0	0
Total mammals	112	100	136	100	128	100	196	100	217	100	217	100

Archaeozoological evidence

Analysis of archaeozoological assemblages provides important data about Roman and early Byzantine settlements and environment in the 1st-6th centuries AD. Domestic and wild mammal remains discovered in the roman sites from South-Eastern Romania are described in terms of their frequency, based on the number of identified specimens and the minimum number of individuals.

The domestic species discussed are cattle (*Bos taurus*), sheep (*Ovis aries*), goat (*Capra hircus*), pig (*Sus domesticus*), horse (*Equus caballus*), donkey (*Equus asinus*), cat (*Felis domesticus*) and dog (*Canis familiaris*). The predominance of cattle (between 53% and 71% of the total remains identified for mammals) is typical for the roman sites indicating that this group contributed more to the subsistence economy.

Nine wild mammal species were archaeozoologically identified in the roman sites, but the samples size has an important effect on the number of wild species identified. The red deer and wild boar were the most frequently hunted species.

The identified wild mammals were grouped corresponding to ecological characteristics in: forest species (*Cervus elaphus*, *Sus scrofa*, *Ursus arctos*), forest-skirts (transitional zones between forest and steppe) species (*Capreolus capreolus*, *Lepus europaeus* and *Bos primigenius*), and eurytopic species (*Canis lupus* and *Meles meles*). Forest species are dominant in all the assemblages.

Red deer and bear are nowadays located in the Carpathians area, but in the first century AD were also present in Dobruja (another clue regarding the large forests in the area at that time). Due to intense deforestation and excessive hunting, they receded to the Carpathian area. Aurochs, an extinct species today, was living in the skirt of the forests in the area.

As man exploited animal group, the domestic and wild artiodactyls served different economic (food, clothing, raw materials for tool manufacture) and ceremonial purposes.

Species

Species	Iatruș		Niculițel (1)		Niculițel (2)		Horia		Telița A 23b		Telița A 4b	
	NMI	%	NMI	%	NMI	%	NMI	%	NMI	%	NMI	%
Bos taurus	7	0.3	13	17.03	43	49.43	10	11.28	14	29.17	18	11.08
Ovis aries/Capra hircus	4	19	7	18.51	14	16.09	7	21.88	8	10.42	10	11.24
Equus caballus	0	0	0	0	0	0	0	0	0	0	0	0
Equus asinus	0	0	0	0	0	0	0	0	0	0	0	0
Canis familiaris	1	4.8	0	0	0	0	2	6.25	3	6.25	2	2.44
Felis domesticus	0	0	0	0	0	0	0	0	0	0	0	0
Total domestic mammals	17	60.8	21	77.7	54	58.86	10	33.74	14	68.78	18	74.13
Cervus elaphus	3	4.8	2	7.4	3	3.45	0	0	0	0	0	0
Sus scrofa	1	4.8	1	7.4	3	3.45	1	3.12	3	10.42	3	6.62
Capreolus capreolus	1	4.8	1	7.4	2	2.3	1	3.12	1	2.96	2	3.44
Ursus arctos	0	0	0	0	0	0	0	0	0	0	0	0
Bos primigenius	0	0	1	3.7	2	2.3	0	0	1	2.08	1	2.17
Lepus europaeus	1	4.8	0	0	3	3.45	0	0	0	0	0	0
Canis lupus	0	0	0	0	0	0	0	0	0	0	0	0
Ursus arctos	0	0	0	0	0	0	0	0	0	0	0	0
Meles meles	0	0	0	0	0	0	0	0	0	0	0	0
Vulpes vulpes	0	0	0	0	0	0	0	0	0	0	0	0
Canis lupus	0	0	1	3.7	0	0	0	0	1	2.08	0	0
Ursus arctos	0	0	1	3.7	0	0	0	0	1	2.08	1	2.17
Meles meles	0	0	0	0	0	0	0	0	1	2.08	1	2.17
Vulpes vulpes	0	0	0	0	0	0	0	0	1	2.08	0	0
Total wild mammals	4	19.2	6	22.2	13	14.94	2	6.24	4	19.34	13	25.86
Total mammals	21	109.7	27	100	67	100	12	100	18	100	23	100



Construction building materials kiln from a Roman villa in Topolog (Tulcea County)