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ARCHAEOLOGICAL INVESTIGATIONS IN COUNTY BÉKÉS 1986–1992

WITH CONTRIBUTIONS OF LÁSZLÓ BARTOSIEWICZ – ALICE M. CHOYKE – FERENC GYULAI



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CONTENTS

Fo	reword	11
Ał	obreviations	17
	Part I	
	Archaeological Investigations at Endrőd (Site No. END0170)	
	Archaeological Investigations at Entirou (Site 100. END0170)	
1.	Dénes Jankovich B.	
	Non-destructive investigations and excavations	21
	1.1. The site	21
	1.2. Methods	23
	1.3. The results from surface collections	26
	1.4. Geophysical measurements and soil cores	32
	1.5. Excavation observations	34
	1.6. The description of the features investigated	48
2	Dénes Jankovich B.	
۷.	Settlement details from the Avar Period and the Árpád Period	73
	2.1. Stray finds from the Avar Period and the Árpád Period	
	2.2. Avar Period settlement phenomena	
	2.2.1. Features	
	2.2.2. Find materials	
	2.3. Settlement from the Árpád Period	
	2.3.1. Features	
	2.3.2. Evaluation of the finds from the Árpád Period	
	2.3.2.1. Gravel-tempered ceramics	
	2.3.2.1.1. Kettles	. 111
	2.3.2.1.2. Pots	113
	2.3.2.1.3. Other vessels	115
	2.3.2.2. Ceramics with sandy temper	118
	2.3.2.3. Other finds	
	2.4. Chronology	122
	Literature	128
	Plates	137
2	Andrea H. Vaday	
٥.	Settlement details from the Sarmatian Period	159
	3.1. Description of features and materials	
	3.2. Stray finds	
	3.2.1. Additional stray finds from the settlement	
	3.2.2. Materials from the grid squares	
	3.3. The statistical evaluation of END0170	
	3.4. Evaluation	
	3.4.1. Settlement phenomena	

	3.4.2. Characteristics of the archaeological material	213
	3.4.2.1. Storage vessels	213
	3.4.2.2. Globular vessels	214
	3.4.2.3. Barrel-shaped vessels	216
	3.4.2.4. Bowls	216
	3.4.2.5. Wheel-thrown bowls	217
	3.4.2.6. Hand-formed bowls	220
	3.4.2.7. Plates	220
	3.4.2.8. Jugs	221
	3.4.2.9. Lids	225
	3.4.2.10. Bottles	225
	3.4.2.11. Ember covers	225
	3.4.2.12. Pots	226
	3.4.2.13. Hand-thrown pots	227
	3.4.2.14. Surface treatment	229
	3.4.2.15. Decoration	230
	Literature	235
	Plates	237
١.	László Bartosiewicz, Alice M. Choyke Sarmatian and Early Medieval Animal Exploitation at the site of Endrőd 170	285
	4.1. Sarmatian animal exploitation at the site of END0170 (László Bartosiewicz)	
	4.1.1. Introduction	285
	4.1.2. Materials	
	4.1.2.1. Circumstances of recovery	285
	4.1.2.1. Circumstances of recovery	285 286
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition	285 286 286
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods	285 286 286 287
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones	285 286 286 287
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits	285 286 287 287 288
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation	285 286 287 287 288
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results	285 286 287 287 288 288
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions	285 286 287 287 288 288 288
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions 4.1.4.1.1. Cattle (Bos taurus L. 1758)	285 286 287 287 288 288 288 288
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions. 4.1.4.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758)	285 286 287 287 288 288 288 288 288
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions. 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785)	285 286 287 287 288 288 288 288 288 288 289
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions. 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777)	285 286 287 287 287 288 288 288 288 288 288 289 290
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions 4.1.4.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758)	285 286 287 287 288 288 288 288 288 289 290 291
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions 4.1.4.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758) 4.1.4.1.6. Cat (Felis domestica L. 1758)	285 286 287 287 288 288 288 288 288 289 290 291 291
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758) 4.1.4.1.6. Cat (Felis domestica L. 1758) 4.1.4.1.7. Goose (Anser sp.)	285 286 287 287 287 288 288 288 288 289 290 291 291 291
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions. 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758) 4.1.4.1.6. Cat (Felis domestica L. 1758) 4.1.4.1.7. Goose (Anser sp.) 4.1.4.1.8. Roe deer (Capreolus capreolus L. 1758)	285 286 287 287 288 288 288 288 289 290 291 291 292
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758) 4.1.4.1.6. Cat (Felis domestica L. 1758) 4.1.4.1.7. Goose (Anser sp.) 4.1.4.1.8. Roe deer (Capreolus capreolus L. 1758) 4.1.4.1.9. Brown hare (Lepus europaeus Pall. 1776)	285 286 287 287 287 288 288 288 288 289 290 291 291 291 292 292
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions. 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758) 4.1.4.1.6. Cat (Felis domestica L. 1758) 4.1.4.1.7. Goose (Anser sp.) 4.1.4.1.8. Roe deer (Capreolus capreolus L. 1758) 4.1.4.1.9. Brown hare (Lepus europaeus Pall. 1776) 4.1.4.2. Exploitation for meat	285 286 287 287 287 288 288 288 288 289 290 291 291 291 292 292 292
	4.1.2.1. Circumstances of recovery 4.1.2.2. Preservation and recovery 4.1.2.3. Faunal composition 4.1.3. Methods 4.1.3.1. The quantification of animal bones 4.1.3.2. Qualitative traits 4.1.3.3. Metric evaluation 4.1.4. Results 4.1.4.1. Faunal descriptions 4.1.4.1.1. Cattle (Bos taurus L. 1758) 4.1.4.1.2. Horse (Equus caballus L. 1758) 4.1.4.1.3. Sheep (Ovis aries L. 1758) and goat (Capra hircus L. 1785) 4.1.4.1.4. Domestic pig (Sus domesticus Erxl. 1777) 4.1.4.1.5. Dog (Canis familiaris L. 1758) 4.1.4.1.6. Cat (Felis domestica L. 1758) 4.1.4.1.7. Goose (Anser sp.) 4.1.4.1.8. Roe deer (Capreolus capreolus L. 1758) 4.1.4.1.9. Brown hare (Lepus europaeus Pall. 1776)	285 286 287 287 287 288 288 288 288 289 290 291 291 291 292 292 292

Appendix tables: Bone measurements as per von den Driesch						
Plates	303					
	205					
4.2. Sarmatian worked animal bones from END0170 (Alice M. Choyke)						
4.2.1. Introduction						
4.2.2. Material and method						
4.2.2.1. Chronological position						
4.2.2.2 Identification						
4.2.2.3. Osteological composition						
4.2.3. Results and discussion						
4.2.3.1. Individual tool descriptions						
4.2.3.1.1. Skate remains						
4.2.3.1.2. Massive tubular points						
4.2.3.1.3. Miscellaneous types						
4.2.3.2. Typological evaluation						
4.2.3.3. The choice of raw materials						
4.2.3.4. Manufacturing continuum						
4.2.4. Conclusions	313					
Literature						
Plates	315					
4.3. Early Medieval animal exploitation at the site of END0170 (László Bartosiewicz)						
4.3.1. Introduction	321					
4.3.2. Materials	321					
4.3.2.1. Recovery						
4.3.2.2. Faunal composition						
4.3.2.3. Comparative data	323					
4.3.3. Methods	324					
4.3.3.1. The quantification of animal bones	324					
4.3.3.2. Qualitative traits	324					
4.3.3.3. Metric evaluation	325					
4.3.4. Results	325					
4.3.4.1. Faunal descriptions	325					
4.3.4.1.1. Cattle (<i>Bos taurus</i> L. 1758)	325					
4.3.4.1.2. Horse (<i>Equus caballus</i> L. 1758)	326					
4.3.4.1.3 Sheep (Ovis aries L. 1758)	326					
4.3.4.1.4. Domestic pig (Sus domesticus Erxl. 1777)	327					
4.3.4.1.5. Dog (Canis familiaris L. 1758)	327					
4.3.4.1.6. Domestic hen (Gallus domesticus L. 1758)	327					
4.3.4.1.7. Goose (<i>Anser sp.</i>)	327					
4.3.4.1.8. Roe deer (Capreolus capreolus L. 1758)	327					
4.3.4.1.9. Pike (<i>Esox lucius</i> L. 1758)	328					
4.3.4.1.10. River mussel (Unio sp.)						
4.3.4.2. Meat consumption						
4.3.4.2.1. Age distributions						
4.3.4.2.2. Anatomical composition						
4.3.4.2.2. Anatomical composition						

4.3.4.3. Pathological deformations	332
4.3.4.3.1. Effects of age	
4.3.4.3.2. Effects of sex	333
4.3.4.3.3. Effects of deposition and recovery	333
4.3.5. Conclusions	
4.3.5.1. Exploitation of animals for meat	
4.3.5.2. Cattle skull with horn cores	
4.3.5.3. Arthropathies on horse phalanges	
Literature	
Appendix	
Plates	
4.4. Early medieval worked animal bones from END0170 (Alice M. Choyke)	351
4.4.1. Introduction	
4.4.2. Artifact descriptions	351
4.4.3. Discussion	
4.4.4. Conclusions	
Literature	
Plate	
5.1. Introduction	
5.1. Introduction	359
5.1.1. Plant remains from Roman Period Barbaricum	
5.1.2. Plant cultivation east of the Tisza River before the Hungarian Conquest	360
5 1 2 Plant aultivation by the conquering Hungarians	
5.1.3. Plant cultivation by the conquering Hungarians	
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period	364
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 367
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 367
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373
 5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site 5.2.1. The botanical study of the site's environment 5.2.2. The natural landscape of the Great Hungarian Plain 5.2.3. The climatic history of the Great Hungarian Plain during the Migration Period . 5.2.4. The natural landscape of the Great Hungarian Plain during the Late Migration Period and the Period of the Hungarian Conquest 	364 367 369 373
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 377
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 377 381
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 377 381 381
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 376 381 383
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 376 381 383 391
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 377 381 383 391
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 376 381 381 383 391 393
5.1.4. Plant finds from the Period of the Hungarian Conquest and the Árpád Period 5.2. The environment of the site	364 367 369 373 374 376 376 381 381 381 383 391 393

Part II Excavations at Örménykút (Site No. ÖRM0052)

6.	Andrea Vaday	
	Late Sarmatian settlement at ÖRM0052	405
	6.1. Introduction	405
	6.2. The excavation	406
	6.2.1. Antecedents	406
	6.2.1.1. Field walks	406
	6.2.1.2. Soil boring	406
	6.2.1.3. Sounding method and stratigraphic marking system	407
	6.2.1.4. Determining the extent of the settlement	408
	6.2.1.5. Archaeomagnetic measurements	409
	6.2.2. The site	409
	6.2.3. Description of features	411
	6.2.4. The archaeological material	419
	6.3. Quantitative analysis	489
	6.3.1. Methods and problems	489
	6.3.2. Excavation characteristics	490
	6.3.3. Correspondence and anomalies	491
	6.3.4. The distribution of finds	492
	Literature	505
	Plates	507
7.	László Kovács – Andrea Vaday	
	Örménykút Site 52: Section of a cemetery from the Period of the	
	Hungarian Conquest	
	7.1. Introduction	587
	7.2. Grave and find descriptions	587
	7.2.1. Grave descriptions	588
	7.2.2. Stray find (Feature 30; Plate 10/1)	600
	7.3. Burial customs and grave goods	600
	7.3.1. Burial customs	600
	7.3.2. Grave goods	601
	7.4. The dating and system of burials	612
	Literature	613
	Plates	619

FOREWORD

In 1984, the Archaeological Institute of the Hungarian Academy of Sciences decided to organize a comprehensive archaeological research program on settlements in the Great Hungarian Plain. The area of Gyomaendrőd in Békés County was selected for the purposes of this project. The study of this micro-region aimed at reconstructing changes over time in settlement structure as well as identifying settlement types that had coexisted during various archaeological periods. Additional attention was paid to phenomena that reflected the influence the natural environment and human settlement had on each other. The chronological boundaries of this project extended from the Neolithic Period to the end of the Ottoman Turkish period in Hungary in the 17th century. The precise research area, measuring some 35 km², was demarcated within the region lying between the communities of Gyomaendrőd (until 1980, separately Endrőd and Gyoma), Szarvas and Örménykút.¹

During the selection procedure, one of the main criteria considered that lead to the choice of this area was its concentration of numerous sites in a small area that also represented all archaeological periods. Field work performed within the framework of the intensive Topographic Survey Project of Hungary (MRT) was carried out in Békés County in 1980's. The research area was identified using the results of that project, which had directed attention to this micro-region.² It may be worth mentioning that the topographic surveys discovered 220 new archaeological sites in this small area, which corresponds to a mean density of 6.2 sites per km².³ This concentration is particularly high not only for the Great Hungarian Plain but also on a nationwide level. As is illustrated by the figures in the following table, all archaeological periods were represented among the 220 sites identified:

Distribution by archaeological period:

Periods	1	2	3	4	5	6	7	8	9	10	11	Total
Towns												
Endrőd	36	17	19	23	42	9	47	9	22	39	4	267
Gyoma	11	9	9	11	8	9	20	7	16	5	4	99
Örménykút	18	4	4	9	5	4	30	6	14	25	5	124
Szarvas	6	1	5	2	1	2	12	1	10	4	1	45
Total	71	31	37	45	56	24	109	23	62	73	14	

Legend:

- 1: Neolithic Period
- 2: Copper Age
- 3: Kurgan era
- 4: Bronze Age
- 5: Scythian era (Early Iron Age)
- 6: Celtic Era
- 7: Sarmatian era (A.D. 1–4th c)

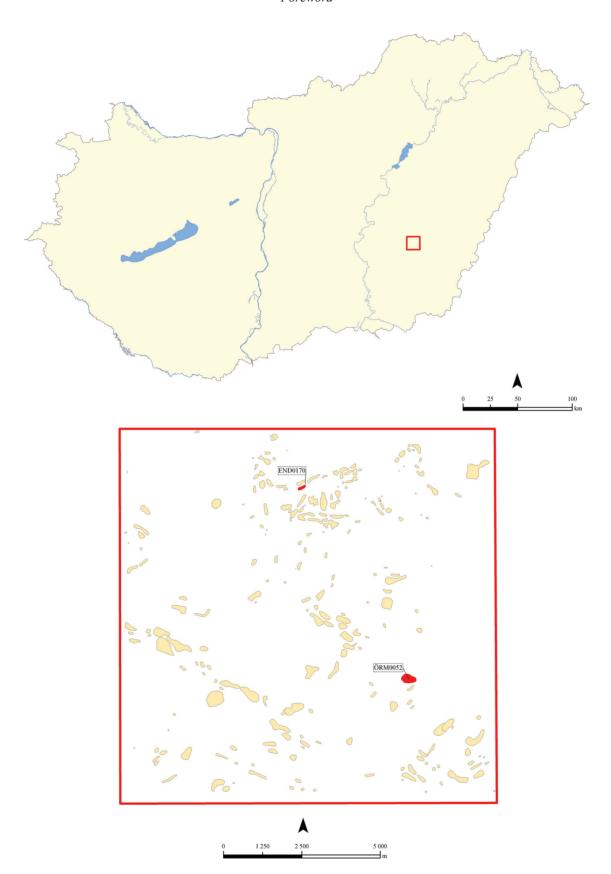
- 8: German era $(5-6^{th} c)$
- 9: Avar era (7–9th c)
- 10: Early Hungarian era and the Árpád Period (10–13th c)
- 11: Late Mediaeval Period (up to the end of the 17th c)

¹ Jankovich (1989) 1, 18–26.

² MRT 8.

³ Compare with the following mean values (per km²): Szeghalom district (MRT 6): 0.9, Szarvas district (MRT 8): 1.4, the surroundings of Békéscsaba (MRT 10) 2,2: In the Hahót micro-region project the mean number of sites was 1.5 per km². *Szőke* (1995) 18.

Foreword



The site distribution of the central part of the investigated area, with the highlighted two sites discussed in this volume.

It was important for the success of our program that extensive and systematic field walks were performed to make it possible to localize *each* archaeological site available for study. The archaeological importance of this area was further emphasized by the fact that preceding our work, 16 excavations had already been carried out here at various times.

During the selection process for our research area, the conventional practice of choosing a single, relatively self-contained, geographical unit was abandoned. Instead a border zone between two smaller territories was singled out for study, where an analysis of different concurrent settlement characteristics was made possible. The northern third of this artificially delineated micro-region thus fell within the Hármas Körös River valley. The larger, southern section, on the other hand, was located on the Pleistocene alluvial river plain deposited by the Maros River.

The Körös River valley is, in fact, nothing but a shallow basin which lays only a few meters below the surrounding environment. Its altitude varies between 83 to 102 m above sea level. Its surface is covered by Holocene alluvial loess. Loess-like deposits, containing silt and sand, had been deposited on the lower elevations of the alluvium in the river beds. Redeposited late Holocene silted loess, silted clay and meadow clay cover the areas in-between. Sections under water for extended periods developed deposits of peat and silted clay. Even today, the appearance of the surface is defined by oxbows, abandoned meanders and river beds, as well as seasonally flooded areas and marshland. Higher areas formed by alluvial deposits, riverbanks and segmented terraces emerge as seasonally or permanently dry areas above these features. The archaeological sites are located on the top of these higher areas, elevated 1 to 3 m above the surrounding landscape.

Consequently, until the time of river regulation, a very special aquatic environment characterized this region. A marshland (formerly known as the "Sárrét" – Mud Meadow) covering hundreds of square kilometers existed here where various rivers sought, changed and sometimes moved from their beds. Frequent changes in the directions of these slow rivers also contributed to the formation of swamps. This effect was further exacerbated by the human impact on hydrological conditions. This was represented, for example, by late medieval water mill dams, fish enclosures and small bridges at locations where the waters narrowed. Ever increasing deforestation in the catchment areas of the rivers led to an increase in flood levels.

The former boundaries of areas of typical marshland vegetation are clearly marked by the distribution of obdurate meadow soils and sporadically occurring areas of peat. The marshland forests were completely destroyed, although the ancient vegetation again started taking over on the banks of artificial riverbeds and channels. Parkland forests comprised of elm, ash and oak as well as of willow, poplar and osier alternate with floodplain meadows along the river beds confined by flood-control dams. ⁵

Meadow soils with high clay content characterize former marshlands that had been frequently flooded. More highly elevated areas that are less exposed to river activity are covered by salinated soils. On the highest elevations grassland soil formations occur. These latter always coincide with archaeological sites as well, while the two previously mentioned types of soil can be cultivated only using advanced methods of contemporary tillage. Consequently, prior to the river regulation projects, crops could only be cultivated on arable land in a limited area that largely corresponded to the dry slopes of river banks. Other sections of the floodplain had to be seasonally harvested or grazed as pastures. The marshlands were used as fishing grounds or additionally exploited for their flora and terrestrial fauna by the inhabitants.

⁴ *Marosi – Szilárd* (1969) 272–274.

⁵ *Marosi – Szilárd* (1969) 294–295.

River regulation had a significant impact on this landscape. These projects started in 1818 with the surveying and mapping activities of Mátyás Huszár, which resulted in a colored, hand drawn map of 68 pages that is the most detailed and precise documentation of the conditions that preceded river regulation. Large scale works had been accomplished by the 1880's and the newly drained surfaces were gradually brought under cultivation. It was during the second half of the 1940's that the first steps were made to spread large scale irrigation agriculture. From that period onwards, innumerable drainage channels were dug and reburied here. Today, with the exception of the floodplains along the rivers that are forced between artificial levees, intensive agriculture has taken over the entire region. Marshlands have ceased to exist, while stagnant waters are frequently a source of problems in lower lying areas.

The other natural geographical unit to be discussed here is the area between the Maros, Tisza and Körös rivers (formerly known as "Mezőség" – Meadow Land) also refereed to as the Békés-Csanád Heights. This area encompasses a semicircle with a radius measuring some 80 km. Its altitude is, on average, 2–3 m higher than that of the Körös River valley. Its southern section, forming approximately two thirds of the research area, falls within this territory. In terms of soil genealogy, this surface corresponds to the Pleistocene alluvial deposit left behind by the Maros River which flowed significantly further north than it does today: it ran parallel to the modern day Körös River valley, and was later gradually transposed to the south. The deposit under discussion here was accumulated by the various branches of the ancient Maros River. As the river retreated, its abandoned oxbows were buried, to a great extent due to the wind. Infusion loess, an admixture of riverine sand and windblown dust, was the dominant factor in creating the present day surface.

Quite a few of the ancient riverbeds (probably the youngest ones) have remained visible until today. Some of them even form distinct river valleys. Naturally, the traces of numerous smaller oxbows can also be discovered in the landscape. Their original course is sometimes best marked by the location of the archaeological sites that occupied the banks of these rivers. It is important from the viewpoint of settlement history that this area has become increasingly impoverished in its supply of running water since Holocene times (today, there are no sources present in the area investigated!). Water could be procured then only from wells, ground water that came to surface in dry riverbeds or by gathering rain water. This observation is supported by the evidence from numerous historical and archaeological data.⁷

In the absence of running surface water, the effect of river regulation was indirect in the area under discussion here: having blocked the path of "stray" floodwaters, regulation works made water shortages even more apparent. This problem has not been entirely resolved even by the increasing number of recently installed drainage works.

Chernozem, a soil type with an excellent capacity for cultivation has formed in this region on infusion loess. Of its sub-types, meadow chernozem and lime-coated chernozem are especially common here. Altogether, beginning in Holocene times, this territory has always been more fertile than most parts of the Körös River valley. Periodical depopulation therefore must have been the result of factors other than the area's carrying capacity.

The original, natural vegetation has completely disappeared from this territory. Today this agricultural area is one of the best wheat and corn producing regions in Hungary. Most of the ancient vegetation consisted of loess grassland flora. The continuous survival of postglacial vegetation

Huszár (1822). The original of this map is available in the National Archives in Budapest under the reference number S 82 II. No. 39. The text as well as facsimile copies of three pages were published by the Körösvidéki Vízügyi Igazgatóság (Regional Directorate of the Körös Waterworks): Kósa (1985).

⁷ Blazovich (1985) 23, 48–49.

typical of a steppe climate is a view widely held by experts in natural geography.⁸ It is suggested here that this hypothesis is better supported by historical data than by the rare occurrence of relic plant species. It should be sufficient to glance over the pages of the first military survey map (1788), in which endless grassy plains are conspicuous and the gradual expansion of human settlement can also be evaluated. The development of grassland vegetation during the Holocene, however, should be considered a secondary phenomenon. The relative paucity of prehistoric settlement in the area was replaced by high population densities during the Migration Period and Árpád Period, when intensively occupied settlements started to become common in the region. A sudden depopulation followed only during the second half of the 16th century. This phenomenon can be unquestionably explained by the Ottoman Turkish occupation of the Carpathian Basin.

The aims of the 1986–1992 research program therefore included the establishment of differences and similarities between settlement patterns in these two, separate regions. Meanwhile, an attempt was made to maximize the information that could be gathered for the purposes of reconstructing the vegetation and forms of farming (land cultivation and animal husbandry) during the periods studied. In addition, the clarification of special chronological problems, population centers and settlement hierarchies were also attempted for some well-represented archaeological periods (the 3rd to 5th and 8th to 10th centuries A.D.). During the course of this work, excavations were carried out at 32 sites, in several cases to the extent of full recovery. Another 12 sites were investigated using various methods of prospecting including soil cores and geophysical measurements. As a result of this research activity, a significant body of archeological, archeo-zoological, archeo-botanical and, to a lesser extent, physical anthropological material could be accumulated.

Unfortunately, neither the financial resources nor the labor available to the Archaeological Institute were sufficient to cover the expenses of an overall study of all historical periods with the same intensity, in spite of considerable support from a number of international cooperation programs. Consequently, it was the investigations into the Neolithic Period, treated as a research priority in the initial planning phase, which had to be abandoned first. Bronze Age and Avar Period investigations soon followed. Meanwhile, the significance of the work concerning the Sarmatian Period increased both in terms of the quantities of material being processed and the resulting conclusions. The opportunities for research concerning settlement patterns characteristic of the Árpád Period were able to be maintained for the longest time. Until now, the opportunities for publication have been even more abysmal than those for field work. For a long time, only a single volume appeared, representing six years of excavation activity, and this contained simple site reports for the most part. It took another six years to have results from the project's largest excavation published in detail. Paradoxically enough, this large-scale work was carried out in the form of rescue excavations.

Marosi – Szilárd (1969) 317–319. It is a different issue that according to these authors the formation of a forest-steppe environment was prevented by anthropogenic factors during the Neolithic Period and the Bronze Age. The data from archaeological topography have shown that the Mezőség territory was uninhabited during prehistoric times. The underlying reason must have been the difficulty of procuring water.

This phenomenon was also the consequence of the fact that the initiator of the entire project, the late *Sándor Bökönyi*, member of the Hungarian Academy of Sciences and who had served as the director of the Archaeological Institute, retired in 1994. The negative impact of the unfortunate trend that both the personnel and the budget of the Archaeological Institute of the Hungarian Academy of Sciences have steadily decreased since 1988 should not be underestimated either.

¹⁰ Bökönvi (1992).

¹¹ *Vaday et al.* (1996) Site GyO0133.

Nevertheless, post-excavation work has continued over the past six years in spite of financial constraints. As a result, the book presented here was assembled in the beginning of 1996. It contains the results of excavations carried out at the sites of Endröd 170 (END0170) and Örménykút 52 (ÖRM0052) respectively (*See map*). The two excavations are chronologically connected by the late Sarmatian artifacts that came to light in high quantities at both locations. The resulting wealth of information provided opportunities to draw conclusions concerning both chronological relations and settlement history. Meanwhile, both excavations also uncovered finds from other archaeological periods. Therefore, this book also includes analyses of partially excavated settlements from the 8th–9th and 10th–11th centuries respectively. Last but not least, a 10th century cemetery is also presented here. While finds from the Sarmatian Period could be evaluated in detail in terms of settlement history, similar analyses concerning 10th–13th century settlement patterns will be discussed within the context of several other sites in a separate book to be published in the future.

Of the work done in the fields of natural science, only the analyses of the zoological and botanical materials could be performed. These will also appear in this book. Unfortunately, pedological studies were discontinued at a very promising phase, thus the body of individual results offers nothing more than information gleaned from phosphate analyses, which will be presented among the excavation data. The same situation occurred with geophysical measurements, systematic aerial photography and ¹⁴C dating. It was not possible to even begin palynological research and phytolith analyses.

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ABBREVIATIONS

Acta Archaeologica Academiae Scientiarum Hungaricae (Budapest)

Acta Veterinaria Hungarica

AÈB Arheologija i Ètnografija Baškirii. II. Red.: Raul' Gumerovič Kuzeev -

Konstantin Vladimirovič Sal'nikov. Ufa 1964.

Antaeus Communicationes ex Instituto Archaeologico Academiae Scientiarum

Hungaricae (Budapest)

ArchÉrt Archaeologiai Értesítő (Budapest) ArchHung Archaeologia Hungarica (Budapest)

ArchKorr Archäologisches Korrespondenzblatt (Mainz)

ArhSSSP Arheologija SSSR s drevnejših vremen do srednevekov'ja v 20 tomah

(Moskva)

AULPP Acta Universitatis Latviensis Philologorum et Philosophorum... (Riga)

AVANS Archaeologické Výskum a nálezy na Slovenska (Nitra) BMMK Békés Megyei Múzeumok Közleményei (Békéscsaba)

BZD Biblioteka Znanstvenih Djela (Split)

CommArchHung Communicationes Archaeologicae Hungariae (Budapest)

Cumania (Kecskemét)

DolgSzeged Dolgozatok a Szegedi Tudományegyetem Régiségtani Intézetéből

(Szeged)

Egri Múzeum Évkönyve (Eger) FA Folia Archeologica (Budapest)

FontArchHung Fontes Archaeologici Hungariae (Budapest)
IHAD Izdanja Hrvatskog Arheološkog Društva (Zagreb)
JAMÉ Jósa András Múzeum Évkönyve (Nyíregyháza)

KSIIMK(IM) Kratkie Soobščenija Instituta Istorii Material'noj Kul'tury (Imeni N. Ja.

Marra) (Moskva)

KSIIMK Kratkie Soobščenija o Dokladah i Polevyh Issledovanijah Instituta

Arheologii (Moskva)

Materiale Materiale şi Cercetări Arheologice (Bucharest)
MFMÉ Móra Ferenc Múzeum Évkönyve (Szeged)

MHKÁTL Magyarország honfoglalás és kora Árpád-kori temetőinek leletanyaga

(Das Fundmaterial der landnahmezeitlichen und frühárpádenzeitlichen

Gräberfelder Ungarns). Red. István Dienes (Budapest)

MittArchInst Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der

Wissenschaften (Budapest)

MMMK Magyar Mezőgazdasági Múzeum Közleményei (Budapest)

MRT 8 D. Jankovich B. – J. Makkay – B. M. Szőke: Magyarország Régészeti

Topográfiája 8. [Archaeological Topographic Research in Hungary]. IV/2

A szarvasi járás. Budapest, 1989, 500 p.

MTA RI Archaeological Institute of the Hungarian Academy of Sciences

(Budapest)

P–P Pliska–Preslav (Šumen)

RAD Rad Vojvodan'skih Muzeja (Novi Sad)

RégFüz. Régészeti Füzetek Ser. I. (Budapest) RégTan Régészeti Tanulmányok (Budapest) SA Sovjetskaja Arheologija (Moskva)

SAZU-RZDV = IA Slovenska Akademija Znanosti in Umetnosti. Razred za Zgodovinske in

Družbene Vede = Inštitut za Arheologijo (Ljubljana)

SlovArch Slovenská Archeológia (Nitra) StudArch Studia Archaeologica (Budapest)

ŠtZv Študijné Zvesti Archeologického Ústavu Slovenskej Akademie Vied

(Nitra)

TKFAN-SGN Trudy Kazanskogo Filiala Akademii Nauk SSSR – Serija Gumanitarnyh

Nauk (Kazan')

Trudy Trudy. Marijskij naučno-issledovatel'skij institut jazyka, literatury i istorii

(Joškar-Ola)

TSM Tessedik Sámuel Museum (Szarvas)

TTKAÈÈ Trudy Tyvinskoj Kompleksnoj Arheologo-Ètnografičeskoj Èkspedicii

(Moskva-Leningrad)

Varia Archaeologica Hungarica (Budapest) VAU Voprosy Arheologii Urala (Sverdlovsk)

VMMK Veszprém Megyei Múzeumok Közleményei (Veszprém)