# Data on husbandry and hunting in the Early Starčevo-Criş settlement from Miercurea Sibiului – 'Petriş' (Sibiu County)

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***Abstract:*** *This article deals with the analysis of fauna, unearthed from the oldest level of living (note I), from culture Starčevo-Criş, of about 1356 fragments. Of these, 297 bones come from the level Ia (Starčevo-Criş IB-IC), 881 bones from level Ib (corresponding to phase IC-IIA) and 178 bones from level Ic (corresponding to phase IIB-IIIA. In the first part of the paper, we provide data on the distribution of samples in the complexes belonging to each level. Exploitation strategies are then analyzed in domestic species and in the end we insist on taxa share oscillation between levels.*

***Rezumat:*** *Articolul de faţă se ocupă de rezultatele analizei faunei, prelevate din cel mai vechi nivel de locuire (notat I), aparţinând culturii Starčevo-Criş, fiind vorba de aproximativ 1356 fragmente; dintre acestea, 297 oase provin din subnivelul Ia (aparţinând culturii Starčevo-Criş IB-IC), 881 oase provin din subnivelul Ib (corespunzător fazei IC-IIA) şi 178 oase din subnivelul Ic (corespunzător fazei IIB-IIIA). În prima parte a lucrării se oferă date asupra distribuţiei eşantioanelor în complexele fiecărui nivel în parte; apoi sunt analizate strategiile de exploatare a speciilor domestice iar la final se insistă pe dinamica speciilor pe nivelurile de locuire.*

***Keywords:*** *Starčevo-Criş culture, Miercurea Sibiului, survival rate, bustard, aurochs.*

***Cuvinte cheie:*** *Cultura Starčevo-Criş, Miercurea Sibiului, rată supravieţuire, dropie, bour.*

The archaeological site of 'Petriş' point is located in Secaşelor Depression, about 500 m east of Miercurea Băi, and 50-80 m north of the national motorway Sebeş – Sibiu, on the edge of a long terrace, 4-5 m higher than the floodable meadow of the Secaş River. The archaeological finds are spread on a surface of 300 m width, by 80-100 m length, along the terrace parallel to the river. Systematic archaeological research began in 1997 and currently continuing, by now several sections (S1 - S5) and surface (S I-II, S III, S IV and partly S V), located within the north-east of the site have been investigated. Section S6 was positioned at the south-eastern part of the site. The excavations revealed habitation structures, fireplaces, pits for pillars and poles, foundation trenches, belonging to Neo-Eneolithic, Bronze Age, La Tène and the 5th century Gepidic period Graves (S.A. Luca *et alii* 2006, p. 11, 13).

## ◈ 1. Material

The paper is focused on a faunal sample from the oldest level (noted "I") from Miercurea Sibiului, dated in Starčevo-Criş culture. 1356 osteological remains were brought to light, of which 297 come from the level Ia (Starčevo-Criş culture, phase IB-IC) cf. table 1, 881 from Ib (corresponding to phase IC-IIA) (tab. 2) and 178 from Ic (corresponding to phases IIB-IIIA) (tab. 9, S.A. Luca *et alii* 2006, p. 12, 13).

### ◈ 1.1. Level Ia

The huts noted B. 10/2003, B. 19/2005 and the pit Gr. 26/2005 were assigned to this cultural level in the site. Chronologically and culturally, the oldest hut B. 10, what functioned before 7050 ± 70 BP is one of the oldest such complex, north of the Danube (S.A. Luca *et alii* 2006, p. 9); B. 19 is closely related to Gr. 26 (ritual complex), it functioned in 7010 ± 40 BP (D. Diaconescu *et alii* 2009, p. 9). It is rectangular with rounded corners, partially intersected by the pit house B. 1/1998, 2003. The hut B. 19 is a deepened dwelling, oriented north-south, built after the pit Gr. 26, it functioned after 7010 ± 40 BP. The three complexes would fall on the first migration (cf. Gh. Lazarovici, Z. Kalmar) or Gura Baciului I (cf. N. Vlassa) or Precriş Ia (cf. I. Paul), assigned to the IB (S.A. Luca *et alii* 2008, p. 10). Of the 297 bones taken from pits, 193 have been fully identified, they derived exclusively from

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mammals. The faunal assemblage is poor in taxa, pig and dog missing from the domestic segment. Cattle is quoted by 63,7-65,38% (fragments-MNI) and small ruminants by 26%- 3,46%. Wild segment reaches 10-21%, including remains of aurochs, red deer and roe deer. The dispersal of skeletal elements of cattle is similar in the two houses, except horns pit deposit. About all the elements are present, a higher share of ribs in the complex no. 10 was recorded (tab. 7; fig. 1).

Cattle sample from B. 10 comes from two individuals of 6 months (estimation based on a pair of jaws with M1 towards the final eruption, and a mandible with M1 in crypt), two individuals up to 2 years (two radii proximal fused and a distal one not fused), three individuals between 2-4 years (three tibia distal epiphysed, one of them with visible suture) and an animal over 4 years (well eroded M3). B. 19 provided material from a calf in 7-10 months (coxale bones not fused), two animals up to 2 years (mandible, with M2 in crypt and M1 slightly eroded, and a maxilla with erupting M2), four specimens from 2-4 years (two maxilla with M3 erupting or erupted, a proximal humerus and ulna recently fused), a different animal (calcaneus epiphysed) over this limit. Horn dimensions are generally higher, close to the limits of aurochs. Besides the cores found in the ritual context of the pit 26 (detailed presentation was made in a specifically article) (G. El Susi 2007a, p. 74-75), two immature male pieces with Gd/Sd/C – 74,5/58/218 mm (Index of flattening – 77,85) and 65/50/190 (I. flattening – 76,92) were taken from B. 19. Overall, metric data of cattle horn cores are larger, characteristic to Early Neolithic in our region, with an apparent sexual dimorphism (fig. 3).

In the distribution of skeletal elements of ovicaprids (fig. 2), we note the large amount of maxillary fragments arising from B. 19 and the other balanced. In the hut B. 10, the vertebrae, the shoulder girdle, proximal part of thoracic limb, pelvic belt with proximal part of the lower limbs are numerous, in fact the food value parts. Not meaty parts are modestly represented, we wonder if they were thrown somewhere else, after cutting the animal, or used for different types of tools (metapodials, in this case). A portion of the neurocranium of a ram was taken from the pit 10. The left core was cut from the base, the piece has two sharp edges and rounded the third, the inner side is flat-convex; piece diameters are 47/27,5/120 mm, the foramen magnum 23/23,5 mm, GB at the occipital condyles 57 mm. The skull has been broken or the brain, resulting in our fragment. That male had until 2 years. Another fragment including a portion of the front, with a horn, and the occipital region, cut out from another ram skull comes from the same context. It is a sub-adult ram as well. The core has diameters at the base of 40/26 mm. The filling pit house B. 19 was collected another sub-adult ram horn; fragment length is 58,5 mm and diameters at the base 47,5/27,5/122 mm. The piece has two visible edges, the third one being poorly expressed. Sizes are moderate, being about subadulte exemplars; they fall into "the copper sheep" type. It seems, the prevalence of rams among killed specimens was dictated by economic reasons, implying the sub-adult culling for meat, protecting the females for milk.

The sheep material originates from at least three males; one is about 12 months (M2 just erupted), a scapula, a distal humerus epiphysed and an acetabular bone belonging to the same individual. Another exemplar is 12-18 months (barely visible the distal suture), and another one about 1,5-2,5 years (ulna in merger). At least one of the above specimens was slaughtered during cold season, confirming the housing in the cold season. Goat bones were not identified in this hut. In hut B. 19 bones from a young goat and three sheep were identified. Two specimens were killed to a year (two acetabular with fused bones), another one between 1-2 years (goat) and another between 3-4 years (M3 erosion J13). Of the game, aurochs is prevalent by 7,8% as fragments and 15,38% as individuals; its bones especially come from the limbs. Bones of each specimen were found in each hut, and six individuals have been suggested, according to the sample from Gr. 26 (D. Diaconescu *et alii* 2009, p. 9). Red deer rate is low, 1,85-2,1%. The hut B. 10 provided bones from at least, one individual not exceeding 2-2,5 years (distal tibia with suture still visible), and the hut B. 19 bones from an animal more than 18-24 months (maxilla with M2 erupted, M3 in eruption (C. Azorit *et alii* 2002, tab. 5). The hut no. 19 provided one blade from roe deer, which seems to have exceeded 6 months. If we consider the high proportion of bones from aurochs versus those of red deer, it seems that the landscape was open, wooded area being reduced in size.

## ◈ 1.2. Level Ib

881 faunal remains were collected from several huts and pits of this level of housing (tab. 2, 3). Hut B. 17 has a round shape, equipped with sleeping "benches" and the hut B. 1 has a rounded plan, it is dated at around 6920 ± 70 cal. BP (S.A. Luca *et alii* 2008, p. 12). The huts B. 20 - 21 and pits no. 31, 35-36 disturb, on the southern side the hut B. 17. The huts no. 20-21 were abandoned

and filled in a very short time (S.A. Luca *et alii* 2008, p. 11); to say, this would be an explanation for the reduced amount of bones harvested from them. Overall, 879 bones have been attributed to mammals; two remainders are from great bustard*. There are two fragments from two right proximal humerii, collected from B. 17, with Bp 44,5 and 45 mm.

This ecotype adapted to the steppe environment (E. Gál 2004, p. 51) is suggestive, in outlining some features of the environment, in those times. Under natural conditions, the great bustard was confined to natural grasslands such as steppes and similar warm open habitats, clear views of over 1 km on at least three directions appears essential for its survival.

Compared to the first level of housing, there are new species, the pig, dog and boar. The sample of mammals is distributed unequally between the complexes, about 56,6% of bones coming from the house no. 17 and 36,5% of hut no. 1. The other complexes have provided little garbage, about 6,8% (60 fragments).

125 cattle bones (21% of the sample from level Ib), collected from hut B1 suggest at least 10 specimens; half of them were killed between 0,5-2 years. According to the dentition, the survival rate highlights the prevalence of juveniles and sub adults (tab. 4, fig. 7), similar values obtained from postcefalic elements. Even a higher percentage of juveniles were found (tab. 5, fig. 6). Based on a metacarpal from male, a height of 131,2 cm at the withers was estimated. Only 41 bones (6,87% of the sample determined for this level), from three sheep, two goats and an ovicaprid were identified as belonging to small ruminants.

Specifically, from the skeleton of a small ruminant parts of the column, femur, humerus have been preserved. After their size one appreciates the animal was very small, in 1-2 months. From a sheep, 6-12 months comes a mandible with M2 in eruption, and a scapula, just distal welded. The skeleton of a ram for 12-18 months skull parts (horn, occipital region) and forelegs were preserved. A sheep of 3-4 years was supposed based on a pair of recently welded distal femur and a calcaneus, giving a height of 61,56 cm. The value is small, even for an estimate on the calcaneus (which usually gives higher values). In terms of goat bones, one individual is 1-1,5 years to death, and another 5-6 years (erosion M3 - M16); that mandible has P2 fallen and dental alveolus closed. Both specimens are males. From the same context, two measurable ram's horns and non-measurable another one were gathered as well. The two horns of goats belonging to "aegagrus" type. Distribution of small ruminant bones (fig. 5) highlights the high rate of elements of the axial skeleton, jaw and metapodials (tab. 8). However, the distribution shows that not all remnants of slaughtered animal carcasses came filling the pits in question.

The six pig bones come from an animal slaughtered between 1,5-3/3,5 years (the limits are set by a mandible with P2 already erupted and a calcaneus plus a femur not fused.

From the skull of a dog was identified a fragment of parietal-occipital region, the piece shape clearly suggests the cutting of skull for brain consumption.

Of the 39 bones of hunted species, 21 are from two red dears, one hunted in 2-3,5 years (femur distal not fused) and another 2-3,5 years (proximal tibia with visible suture). Bones of all body parts were determined, including the skull, and a shed antler. The eight bones of roe deer originate in an animal of 14-16 months (caught in summer). The seven aurochs' bones suggest a mature male, estimation based on M3 "m" wear stage, having a length of 47 mm. A new identified species is the wild boar; the presumed exemplar is a male of 102,3 cm in height, a metacarpal IV, a proximal phalanx and a humerus with Bd 50 mm belongs to it. The hut no. 17 provided the largest sample, the 497 mammal bones are from at least 37 animals The 152 bones of cattle (25,5% of the sample of Ib) come largely from the cephalic and axial skeleton, compared to hut - B. 1, in which prevail the bones of the forelegs. According to data from teeth, the survival rate is 53% up to two years, decreased from 38% to four years, falling sharply to 7% above this limit. A similar picture is provided by data of long bone sutures (tab. 6; fig. 6). So, up to one year survival rate is 84% at two years decreased to 69%, 61,5% reduce to 2-3.5 years, and then toward the 4 years is 46%. The amount of small ruminant bones, harvested from this board is almost equal to that of cattle, the 142 bones representing about 24% of the material from the Ib. The bones are from a goat (a metacarpus distal epiphysed) from an ovicaprid in 1-2 months (humerus, tibia, femur very small) and eleven sheep. Of these, at least three-four exemplars were rams, according the four cores' fragments. Sub-adults parts come from, they keep the characters typical of "copper sheep", a triangular section, at least two sharpened edges, the third fainter.

* Determination made with help of colleagues V. Radu and A. Bălăşescu from the National History Museum of Romania, Bucharest.

Regarding the survival rate, determined on the teeth, I got the following picture: a rate of 90,91% up to six months, 72,73% up to one year, then reducing to 45,45% up two years, decreasing to 18,18% up to four years. The situation is slightly changed on the basis of the long bones, so we have a survival rate of 75% up to 6 months, it is only 41,67% up to a year, is reduced to 16,67% at 2,5 years, there are not exemplars over four years. On the whole, the sheep slaughter is very high in the first year of life, especially for meat (correlate with horns and pelvises from males), and less milk.

A metacarpus and radius, with lengths of 133 and 147 mm estimated two heights at the withers, 65 to 59,1 cm. The first value seems to characterize a male. That radius comes from a female culled about 2,5-4 years (cf. distal visible suture). From a pig killed about 3,5 years, comes one femur, distal in fusing. Of 44 bones of wild species, 30 pieces originate in three mature aurochs, 11 bones in a roe deer and three in a red deer. Sample of red deer, originates in an individual hunted in 12-15 months (tibia distal not fused), one of ca. 14-16 months, caught in the summer (proximal tibia with suture visible), and one in 3-4 years (cf. M3 dental erosion, C. Tomé, J-D. Vigne 2003, tab. 5, p. 165). The three bones of red deer come from a male specimen, preserving the frontal bone with the antlers cut (raw material for tools). The animal will be caught in winter, evidence that this hut was used all year-round, not seasonal. The other complexes have provided little bones, assigned randomly, why not claimed special mentions. To talk about only a female horn core with the GL of 65 mm and caprine type, found in pit no. 34. A calcaneus with GL 55 mm, which provided a height of 62,70 cm, comes from the same complex.

### ◈ 1.3 Level Ic

The deepened dwelling B. 9 belongs to a later horizon (IIB-IIIA) of Starčevo-Criş culture, for this complex there is a C14 date 6180 ± 40 cal BP (S.A. Luca *et alii* 2008, p. 13). 178 bones were taken from that hut and pit Gr. 43. Ca. 157 bones of mammals and 7 fish (from cyprinids) were gathered inside the hut B. 9. The largest sample derives from bovine (tab. 9, the 63 bones suggesting at least seven individuals, slaughtered as follows: three adult-mature specimens, two M3 in wear stage j, l and another one very eroded, according to dentition. According to the stages of long bone sutures, four animals were assumed as follows: three individuals under two years (one blade with tuberculum supraglenoidale, just merged ca. 7-10 months, two individuals in the 7-10 months), and one-up in four years (suture of distal femur still visible).

The small ruminants, with 10 remainders, from at least 5 individuals rank the second. One of them was killed at 5-6 months (M1 just erupted), two to one year (M2 erupting, proximal radius just welded), another in the 3-4 years (M3 erosion - g) and the fifth in the 18-24 months (one metatarsal distal epiphysed). A calcaneus and radius of sheep, 58,5 and 142 mm in length, provided values of 66,7 and 57,08 cm withers heights. Goat bones were not identified. A pig 14-16 months old it belongs, a remnant mandible with P4 just erupted. Wild species are listed with 13 bones, of which seven are from two red deer: one of 2,5-3,5 years (distal femur just fused), another one over the limit. Four bones of an adult aurochs complete the wild spectrum. A fragment of the parietal bone with minimum width of 27,5 mm belongs to a boar and a portion of the scapula is assigned to a badger. 14 bones of sheep, an adult aurochs and two cattle (one cut up to 12 months and another at 3,5-4 years) were collected from the pit Gr. 43.

## ◈ 2. Economic strategies

In the age of slaughter for cattle, we note the following: a rate of 40% by one year is recorded, in the early levels (fig. 8), meaning the milk production starts (by cutting calves). The same percentage of animals of 2-4 years is maintained, meaning meat production; a rate of 20% is registered over 4 years, for milk and traction. The figures underline the preponderant use of cattle for meat, a small percentage of animals for milk and traction. The same type of management is kept in the next chronologic segment (Ib), specifically, 35,5% individuals killed between 6-24 months, 32,2% between 2-4 years and 19,4% between 6-9 years, meaning milk, meat and labour. Management is not different than the previous sequence Ic: specifically, the cuts are still prevalent in the range of 0,5-2 years (44,44%), decreased slightly in the interval 2-4 years (22,22%), the proportion of specimens kept over 4 years increasing to 33,33%. Therefore, we suggest a more rational exploitation of secondary products, over Starčevo-Criş levels, cattle keeping role as main supplier of meat. The fact is even more obvious as analyze the immature / mature ratio. It has a value of 4/1 in level Ia, 3/1 in Ib, and 2/1 in Ic.

Patterns in sheep/goat, based on slaughter profiles are shown in figure 9, following the same chronological distribution. According them a high percentage of individuals killed between 6-12 months (42,8%) was found in the earliest level; we have to do with exploitation for meat, type A (apud E. Blaise 2009, p. 114-115). Values about 28,6% between 1-2 years (slaughter for meat-type B), and 2-4 years (milk exploitation-type B) supposed too. In the next chronological sequence (Ib), there is also reduced slaughtering of lambs 0-2 months (13,3%), then increasing between 2-12 months (26-24%), a rate of 26-29% recorded between 1-2 years. So this segment of time, meat product is primarily targeted. Exploitation of animals between 2-4 and 4-6 years (dairy) is about 30-31%. Then the percentage falls to 3,3% meaning animals for breeding. Goat is rare only 4 animals, one in the first phase of and three in the second. The pig is less exploited, anyway information is lacking on its management. In terms of hunting, we cannot talk about a strategy of exploitation of wild genetic fund. They captured what was out of reach; consequently there are quite many immature body specimens, among presumed exemplars.

## ◈ 3. Species frequencies in levels

Although samples are unequal in quantitative terms, some interesting variations of interspecific relationships were found. Depending on the presence, absence of some species would suggest some features of the environment. A look at frequencies of major domestic taxa (cattle, sheep/goat and pig) in each level put forward some interesting questions (fig. 10). The prevalence of cattle followed by sheep/goat and sometimes by pig is the general schema, applicable to all levels in the site. Specifically, cattle record 63,7% in Ia, decreasing up to 50% in Ib and re-growing to 66.7% in Ic. When considering MNI frequencies, the results slightly diverge. Thus, cattle reach 67% in Ia, decreasing to 38% in the next level, stabilizing at 42%. In level Ib, a sensitive decrease of rate, is offset by the ovicaprids, their value closing to cattle quota (as MNI). Despite these discrepancies, to remember as a main feature, the prevalence of bovines in the Early Neolithic horizon from the site. The small ruminants curve is downward, from 26% in Ia to 12,5% in Ic, a high percentage emphasising in Ib, 33%.

This is the picture offered by statistics on NISP. As MNI, they reach the same high value of 36,6% in the level Ib, only a percent below cattle. Certainly in our lands, the Early Neolithic started with a livestock economy with many ovicaprids (but not as in the southern areas); even if the environment will be favourable to them at first, cattle gave the keynote, however. The pig is the least exploited in the early habitation from Miercurea Sibiului, as well as in other settlements. The report domestic/wild taxa meaningful change, along the phases of occupation of the site, both quantitatively and qualitatively (fig. 11). If share game, 10%-20% (NISP-MNI) is the proportion estimated in the earliest level, increasing to 20%-28,5% in the last one. In terms of taxonomic composition, aurochs, red deer and roe deer were identified in Ia so that, by the end of habitation, the list to diversify, including new taxa as wild boar and badger. Changes also occur in terms of frequency curves of wild species. Aurochs prevails in the level Ia, by 7,8%, then slightly decreasing to 6%, and increasing to 10% in Ic. Red deer, with insignificant contribution, accounts for 2% in Ia, double its share in the next level and triples (7,3%) in Ic. Even if the aurochs, a typical element of an opened landscape keeps its dominant position among hunted mammals throughout the early housing, the red deer participation in supplying seems to gradually augmenting. Its higher density would suggest some changes in the landscape, as for instance an expansion of forested area, much more visible during Vinča levels (unpublished data). Roe deer, wild boar, badgers are seldom hunted. We recall the bustard bones in Ib, as a characteristic of an opened (forest-steppe) area. Fishing is documented only in the last level, Ic. As for biometric data and correlations with other faunal samples from contemporary settlements, I do not insist, it was largely presented on other occasions (El Susi 2007a, 2007b, 2010).

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| Taxon | B.10 | B.19 | Gr.26 | Total NISP | % | B.10 | B.19 | Gr.26 | Total MNI | % |
|---|---|---|---|---|---|---|---|---|---|---|
| *Bos taurus* | 54 | 44 | 25 | 123 | **63,7** | 8 | 9 | 17 | 34 | **65,38** |
| Ovis/Capra | 30 | 20 | | 50 | **25,9** | 3 | 4 | | 7 | **13,46** |
| **Domestic taxa** | **84** | **64** | **25** | **173** | **89,6** | **11** | **13** | **17** | **41** | **78,84** |
| *Cervus elaphus* | 2 | 2 | | 4 | **2,1** | 1 | 1 | | 2 | **3,85** |
| *Capreolus capreolus* | | 1 | | 1 | **0,5** | | 1 | | 1 | **1,92** |
| *Bos primigenius* | 4 | 2 | 9 | 15 | **7,8** | 1 | 1 | 6 | 8 | **15,38** |
| **Wild taxa** | **6** | **5** | **9** | **20** | **10,4** | **2** | **3** | **6** | **11** | **21,15** |
| Identified | 90 | 69 | 34 | 193 | **100** | 13 | 16 | 23 | 52 | **100** |
| *Bos* sp. | 1 | | 2 | 3 | | | | | | |
| Bos/Cervus | | 47 | | 47 | | | | | | |
| Splinters | 20 | 34 | | 54 | | | | | | |
| T O T A L | **111** | **150** | **36** | **297** | | | | | | |

**Tab. 1.** Species frequencies (NISP and MNI) in phase Starčevo-Criş IB-IC at Miercurea Sibiului (B. - hut; Gr. – pit).
Frecvenţa speciilor (Nr. resturi. şi NMI) în fazele Starčevo-Criş IB-IC la Miercurea Sibiului (B. - bordei; Gr. – groapă).

| Taxon | B.1 | B.17 | B.20 | B.21 | Gr.31 | Gr.34 | Gr.35 | Total | %NISP |
|---|---|---|---|---|---|---|---|---|---|
| *Bos taurus* | 125 | 152 | 5 | 14 | | 1 | 2 | 299 | **50,1** |
| Ovis/Capra | 41 | 142 | 6 | 7 | 1 | 3 | | 200 | **33,5** |
| *Sus domesticus* | 6 | 1 | | | | | 1 | 8 | **1,3** |
| *Canis familiaris* | 1 | | | | | | | 1 | **0,2** |
| **Domestic taxa** | **173** | **295** | **11** | **21** | **1** | **4** | **3** | **508** | **85,1** |
| *Cervus elaphus* | 21 | 3 | 1 | 3 | | | | 28 | **4,7** |
| *Sus s. ferrus* | 3 | | | 1 | | | | 4 | **0,7** |
| *Capreolus capreolus* | 8 | 11 | | 1 | | | | 20 | **3,4** |
| *Bos primigenius* | 7 | 30 | | | | | | 37 | **6,1** |
| **Wild taxa** | **39** | **44** | **1** | **5** | | | | **89** | **14,9** |
| Identified | 212 | 339 | 12 | 26 | 1 | 4 | 3 | 597 | **100** |
| *Bos* sp. | | 12 | | | | | | 12 | |
| Bos/Cervus | 62 | 3 | 1 | | | | | 66 | |
| Splinters | 48 | 143 | | 5 | 2 | 3 | 3 | 204 | |
| Mammals | 322 | 497 | 13 | 31 | 3 | 7 | 6 | 879 | |
| *Otis tarda* | | 2 | | | | | | 2 | |
| **T O T A L** | **322** | **499** | **13** | **31** | **3** | **7** | **6** | **881** | |

**Tab. 2.** Species frequencies (NISP) in phase Starčevo-Criş IC-IIA at Miercurea Sibiului.
Frecvenţa speciilor (Nr. resturi) în faza Starčevo-Criş IC-IIA la Miercurea Sibiului.

| Taxon | B. 1 | B. 7 | B. 20 | B. 1 | Gr. 31 | Gr. 34 | Gr. 35 | Total | %MNI |
|---|---|---|---|---|---|---|---|---|---|
| *Bos taurus* | 10 | 16 | 1 | 2 | | 1 | 1 | 31 | **37,8** |
| Ovis/Capra | 6 | 13 | 3 | 3 | 3 | 2 | | 30 | **36,59** |
| *Sus domesticus* | 1 | 1 | | | | | 1 | 3 | **3,66** |
| *Canis familiaris* | 1 | | | | | | | 1 | **1,22** |
| **Domestic taxa** | **18** | **30** | **4** | **5** | **3** | **3** | **2** | **65** | **79,27** |
| *Cervus elaphus* | 2 | 1 | 1 | 2 | | | | 6 | **7,32** |
| *Sus s. ferrus* | 1 | | | 1 | | | | 2 | **2,44** |
| *Capreolus capreolus* | 1 | 3 | | 1 | | | | 5 | **6,09** |
| *Bos primigenius* | 1 | 3 | | | | | | 4 | **4,88** |
| **Wild taxa** | **5** | **7** | **1** | **4** | | | | **17** | **20,73** |
| **T O T A L** | **23** | **37** | **5** | **9** | **3** | **3** | **2** | **82** | **100** |

**Tab. 3.** Species frequencies (MNI) in phase Starčevo-Criş IC-IIA at Miercurea Sibiului.
Frecvenţa speciilor (NMI) în faza Starčevo-Criş IC-IIA la Miercurea Sibiului.

| Context | Element | R/L | Wear stage* | Age at death | Age class | Stage |
|---|---|---|---|---|---|---|
| B.1 | Md+M1 | R | a | 5-6 months | 0-0,5 years | Infants |
| B.1 | Md+M1 | R | c | 6-12 m | 0,5-2 y | Juvenile |
| B.1 | M1 | R | d | 6-12 m | 0,5-2 y | Juvenile |
| B.1 | Md+M2 | R | U | 16-18 m | 0,5-2 y | Juvenile |
| B.1 | M3 | S | E | 24-30 m | 2-4 y | Subadulte |
| B.1 | Md+M3 | R | a | 28-30 m | 2-4 y | Subadulte |
| B.1 | Md+M3 | L | a | 28-30 m | 2-4 y | Subadulte |
| B.1 | M3 | R | k | 48+ | 4-6,5 y | Adult |
| B.1 | Mx+M3 | L | very worn | 48+ | 6,5-9 y | Mature |
| B.1 | Mx+M3 | R | very worn | 48+ | 6,5-9 y | Mature |
| B.17 | Md+M1 | R | U | 5-6 m | 0-0,5 y | Infants |
| B.17 | Md+M1 | L | b | 6-12 m | 0,5-2 y | Juvenile |
| B.17 | Md+M1 | L | a | 6-12 m | 0,5-2 y | Juvenile |
| B.17 | Md+M2 | L | a | 16-18 m | 0,5-2 y | Juvenile |
| B.17 | Md+M3 | L | U | 16-18 m | 0,5-2 y | Juvenile |
| B.17 | Mx+M3 | L | in crypt | 18-24 m | 0,5-2 y | Juvenile |
| B.17 | M3 | R | c | 30-36 m | 2-4 y | Subadulte |
| B.17 | Mx+M3 | L | very worn | 48+ | 6.5-9 y | Mature |
| B.17 | Mx+M3 | L | very worn | 48+ | 6.5-9 y | Mature |
| B.17 | Mx+M3 | L | very worn | 48+ | 6.5-9 y | Mature |
| B.17 | Mx+M3 | L | very worn | 48+ | 6.5-9 y | Mature |
| B.17 | Mx+M3 | R | very worn | 48+ | 9+ | Mature |
| B.21 | Md+M3 | L | k | 48+ | 6,5-9 y | Mature |
| B.21 | Md+M2 | L | h | 36-48 | 2-4 y | Adult |

* Grant 1982; Grigson 1982; Higham 1967.

**Tab. 4.** Teeth wear stages and age estimates – cattle in phase Starčevo-Criş IC-IIA.
Estimarea vârstei la bovine pe baza uzurii dentare în faza Starčevo-Criş IC-IIA.

| Stage/Age | **6-12 m** | | **12-24 m** | | **24-42 m** | | **42-48 m** | |
|---|---|---|---|---|---|---|---|---|
| | Unfused | Fused | Unfused | Fused | Unfused | Fused | Unfused | Fused |
| Scapula-D | 1R | 3R+2L | | | | | | |
| Radius-P | | | 1R | 4R+ 3L | | | | |
| Pelvis | | 2R | | | | | | |
| Humerus-D | | | | 2L+ 1R | | | | |
| Ph. I, II | | | | 2+3Ph1* | | | | |
| Metapodials | | | | | 3 Mc+5 Mt | 5 Mc+2 Mt | | |
| Tibia-D | | | | | | 1R*+1L | | |
| Calcaneus | | | | | 1R | 1R* | | |
| Humerus-P | | | | | | | 1L | 1R+ 1L* |
| Radius-D | | | | | | | 2R+1L | |
| Ulna-P | | | | | | | 2L+2R | |
| Femur-P | | | | | | | 2R+ 1L | |
| Femur-D | | | | | | | | 2* |
| Tibia-P | | | | | | | 2R+ 2L | |
| MNI | 1 | 3 | 1 | 5 | 5 | 6 | 2 | 3 |

* fusing

**Tab. 5.** Fusion stages in cattle sample from B. 1.
Stadii de sutură în eşantionul vitei din B. 1.

| Stage/Age | **6-12 m** | | **12-24 m** | | **24-42 m** | | **42-48 m** | |
|---|---|---|---|---|---|---|---|---|
| | Unfused | Fused | Unfused | Fused | Unfused | Fused | Unfused | Fused |
| Scapula-D | 1 R+1 L | 1 R | | | | | | |
| Radius-P | | | 1 R | 1 L | | | | |
| Pelvis- | 1 L | 1 L | | | | | | |
| Humerus-D | | | | 2 L+2 R | | | | |
| Ph. I, II | | | | 4 | | | | |
| Metapodials | | | | | 3 Mc+2 Mt | 1 Mt+1 Mc | | |
| Tibia-D | | | | | | 1 R | | |
| Calcaneus | | | | | | | | |
| Humerus-P | | | | | | | | 1 R*+1 L* |
| Radius-D | | | | | | | 2 L | |
| Ulna-P | | | | | | | 2 R+1 L | |
| Femur-P | | | | | | | 2 | 1 L* |
| Femur-D | | | | | | | | 1 R+1 L |
| Tibia-P | | | | | | | 2 L+1 R | 1 L+1 R* |
| Total | 1 R+ 1 L | 1 R+ 1 L | 1 R | 2 L+2 R | 3 | 1 | 2 L+2 R | 1 R+1 L+1L* |
| MNI | 1 | 1 | 1 | 2 | 3 | 1 | 2 | 2 |

* fusing

**Tab. 6.** Fusion stages in cattle sample from B. 17.
Stadii de sutură în eşantionul vitei din B. 17.

| Element | B. 10 | B. 19 | Gr. 26 | B. 1 | B. 17 | B. 20 | B. 21 | Gr. 34 | Gr. 35 | B. 9 | Gr. 43 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Horn cores | | 3 | 25 | 1 | | 1 | | | | | | **30** |
| Skull | 3 | 6 | | 3 | 12 | | | | 1 | 2 | | **27** |
| Maxilla | 2 | 2 | | 7 | 19 | | | | | 4 | | **34** |
| Mandible | 4 | 2 | | 13 | 10 | | 2 | | | 7 | | **38** |
| Scapula | 1 | | | 6 | 5 | | 2 | | | 4 | | **18** |
| Humerus | 3 | 3 | | 5 | 6 | | 1 | | | 2 | | **20** |
| Radius | 2 | 2 | | 13 | 5 | | 1 | | | 1 | | **24** |
| Ulna | 1 | 2 | | 4 | 3 | | | | | 1 | | **11** |
| Metacarpal | 1 | 4 | | 17 | 5 | 1 | 1 | | | 4 | | **33** |
| Sosa mc. | | 1 | | 1 | 3 | | | | | | | **5** |
| Pelvis | 2 | 1 | | 2 | 5 | | 1 | | | 1 | | **12** |
| Sacrum | | | | | 1 | | | | | | | **1** |
| Femur | 3 | 1 | | 8 | 5 | | 1 | | | 2 | 1 | **21** |
| Tibia | 4 | | | 6 | 6 | | | | | 3 | | **19** |
| Patella | | | | | 2 | | | | | | | **2** |
| Centroq. | 1 | | | 1 | 5 | | 1 | | | | | **8** |
| Talus | | | | 4 | 2 | | | | | 3 | | **9** |
| Calcaneus | | 3 | | 2 | | 1 | | | | 1 | | **7** |
| Metatarsal | 5 | 5 | | 10 | 6 | | | | | 3 | | **29** |
| Phalanges | 1 | 2 | | 8 | 10 | | 1 | | | 1 | | **23** |
| Ribs | 14 | 4 | | 3 | 12 | 1 | 2 | 1 | 1 | 11 | | **49** |
| Vertebra | 7 | 3 | | 11 | 30 | 1 | 1 | | | 13 | | **66** |
| **Total** | **54** | **44** | **25** | **125** | **152** | **5** | **14** | **1** | **2** | **63** | **1** | **486** |

**Tab. 7.** Cattle bones distribution in pits and huts.
Distribuţia oaselor de vită în gropi şi locuinţe.

| Element | B.10 | B.19 | B.1 | B.17 | B.20 | B.21 | Gr.31 | Gr.34 | B. | Gr.43 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Horn cores | 1 | 2 | 4 | 8 | | | | 1 | | | **16** |
| Skull | 1 | | 2 | 2 | | | | | 1 | | **6** |
| Maxilla | 1 | | 1 | 6 | 1 | 1 | | | | 1 | **11** |
| Mandible | | 6 | | 16 | | 2 | | | 1 | | **25** |
| Scapula | 2 | 1 | 4 | 10 | 2 | | 1 | | | | **20** |
| Humerus | 3 | 2 | 3 | 8 | | | | | | | **16** |
| Radius | 2 | 2 | 3 | 7 | 1 | 1 | | 1 | 1 | | **18** |
| Ulna | 2 | 1 | 1 | 3 | | | | | | | **7** |
| Metacarpal | 1 | 2 | 1 | 11 | 1 | 1 | | | 1 | | **18** |
| Pelvis | 4 | 2 | 3 | 15 | | 1 | | | 1 | | **26** |
| Femur | 3 | | 3 | 9 | | | | | 1 | | **16** |
| Tibia | 1 | 1 | 5 | 8 | | | | | | | **15** |
| Centroq. | 1 | | | | | | | | | | **1** |
| Talus | | | 1 | | | | | | | | **1** |
| Calcaneus | | | 1 | | | | | 1 | 1 | | **3** |
| Metatarsal | 1 | 1 | 1 | 4 | | | | | | 1 | **8** |
| Phalanges | | | | 2 | | | | | | | **2** |
| Ribs | 3 | | | 7 | 1 | | | | 1 | | **12** |
| Vertebra | 4 | | 8 | 26 | | 1 | | | 2 | | **41** |
| **Total** | **30** | **20** | **41** | **142** | **6** | **7** | **1** | **3** | **10** | **2** | **262** |

**Tab. 8.** Ovicaprid bones distribution in pits and huts.
Distribuţia oaselor de ovicaprine în gropi şi bordeie.

| Taxon | B. 9 | Gr. 43 | Total | % NISP | B. 9 | Gr. 43 | Total | % MNI |
|---|---|---|---|---|---|---|---|---|
| Bos taurus | 63 | 1 | 64 | 66,7 | 7 | 2 | 9 | **42,86** |
| Ovis/Capra | 10 | 2 | 12 | 12,5 | 4 | 1 | 5 | **23,81** |
| Sus domesticus | 1 | | 1 | 1,04 | 1 | | 1 | **4,76** |
| **Domestic taxa** | **74** | **3** | **77** | **80,21** | **12** | **3** | **15** | **71,43** |
| Cervus elaphus | 7 | | 7 | **7,29** | 2 | | 2 | **9,52** |
| Sus s. ferrus | 1 | | 1 | **1,04** | 1 | | 1 | **4,76** |
| Bos primigenius | 4 | 6 | 10 | **10,41** | 1 | 1 | 2 | **9,52** |
| Meles meles | 1 | | 1 | **1,04** | 1 | | 1 | **4,76** |
| **Wild taxa** | **13** | **6** | **19** | **19,78** | **5** | **1** | **6** | **28,56** |
| Identified | 87 | 9 | 96 | **100** | 17 | 4 | 21 | **100** |
| Bos/Cervus | 7 | 1 | 8 | | | | | |
| Splinters | 63 | 4 | 67 | | | | | |
| Mammals | 157 | 14 | 171 | | | | | |
| Fish | 7 | | 7 | | | | | |
| **T O T A L** | **164** | **14** | **178** | | | | | |

**Tab. 9.** Species frequencies in phase Starčevo-Criş IIB-IIIA at Miercurea Sibiului (B - hut; Gr.-pit).
Frecvenţele speciilor în faza Starčevo-Criş IIB-IIIA la Miercurea Sibiului (B - bordei; Gr. - groapă).

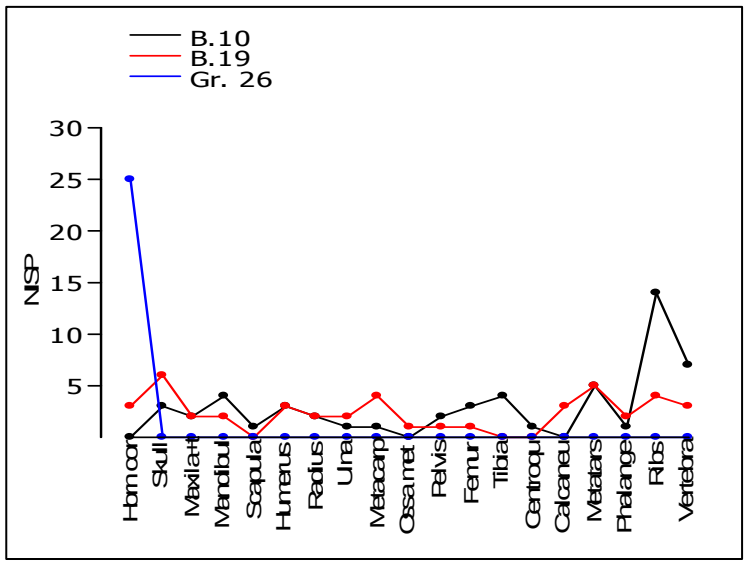


**Fig. 1.** Distribution of cattle bones in Ia level.
Distribuţia oaselor de vită în nivelul Ia.

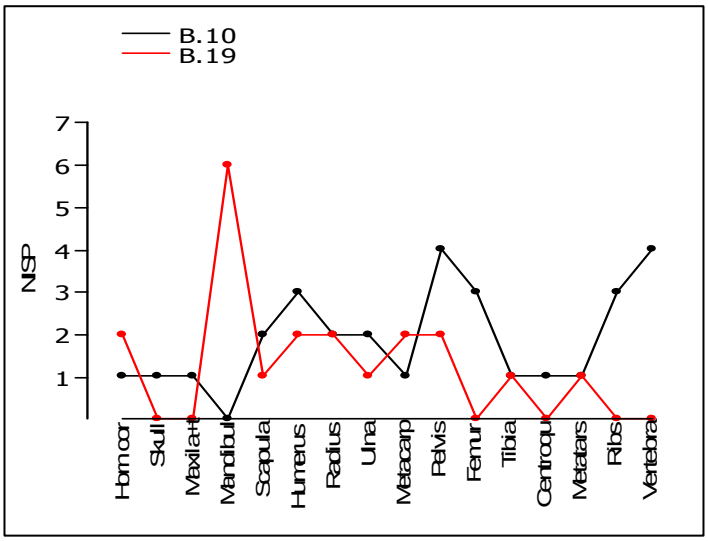


**Fig. 2.** Distribution of ovicaprid bones in Ia level.
Distribuţia oaselor de ovicaprine în nivelul Ia.

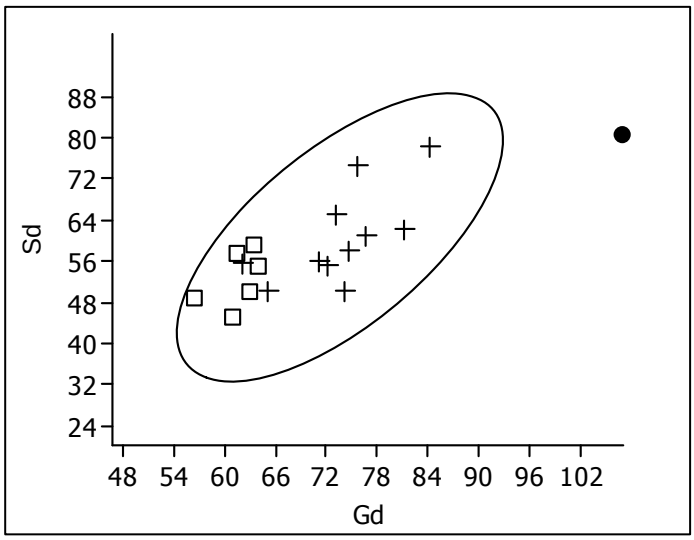


**Fig. 3.** Scatter diagram GD/SD bovine cores: +bull; ● aurochs; □ cow.
Diagrama Gd/SD pe coarnele bovinelor: +mascul domestic; ● bour; □ femelă domestică.

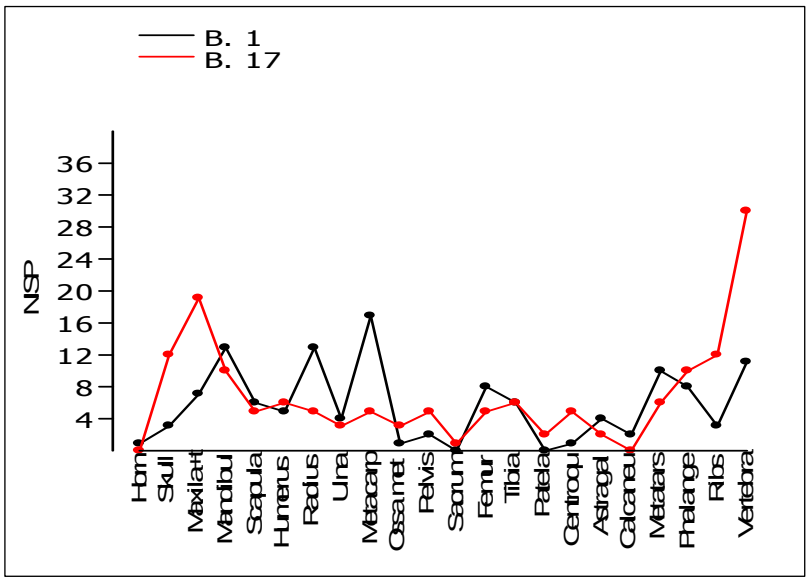


**Fig. 4.** Distribution of cattle bones in Ib level.
Distribuţia oaselor de vită în nivelul Ib.

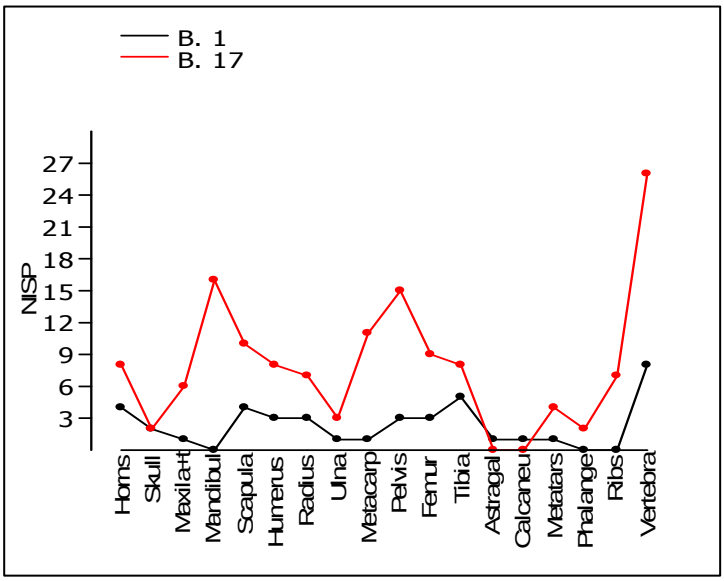


**Fig. 5.** Distribution of ovicaprid bones in Ib level.
Distribuţia oaselor de ovicaprine în nivelul Ib.

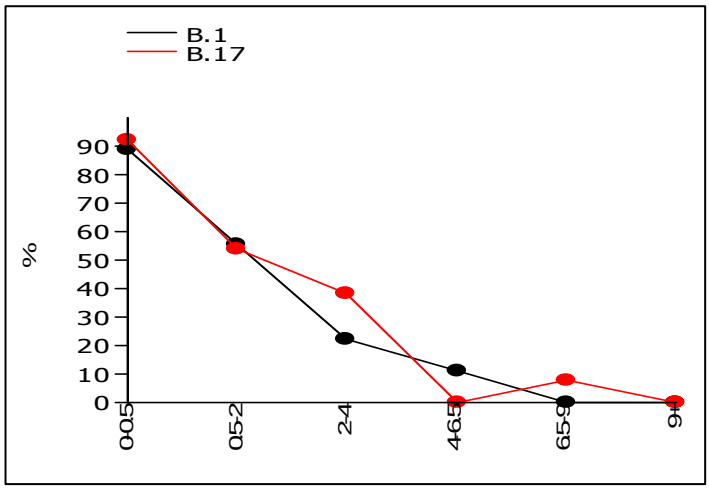


**Fig. 6.** Cattle survival rate, according to long bones fusion in Ib.
Rata de supravieţuire la bovine conform suturii oaselor lungi în nivel Ib.

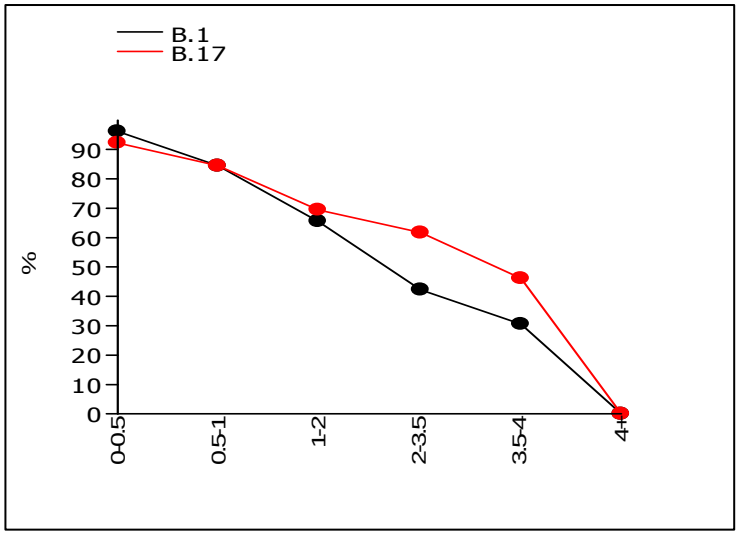


**Fig. 7** Cattle survival rate, according to dentition in Ib.
Rata de supravieţuire la bovine conform dentiţiei în nivel Ib.

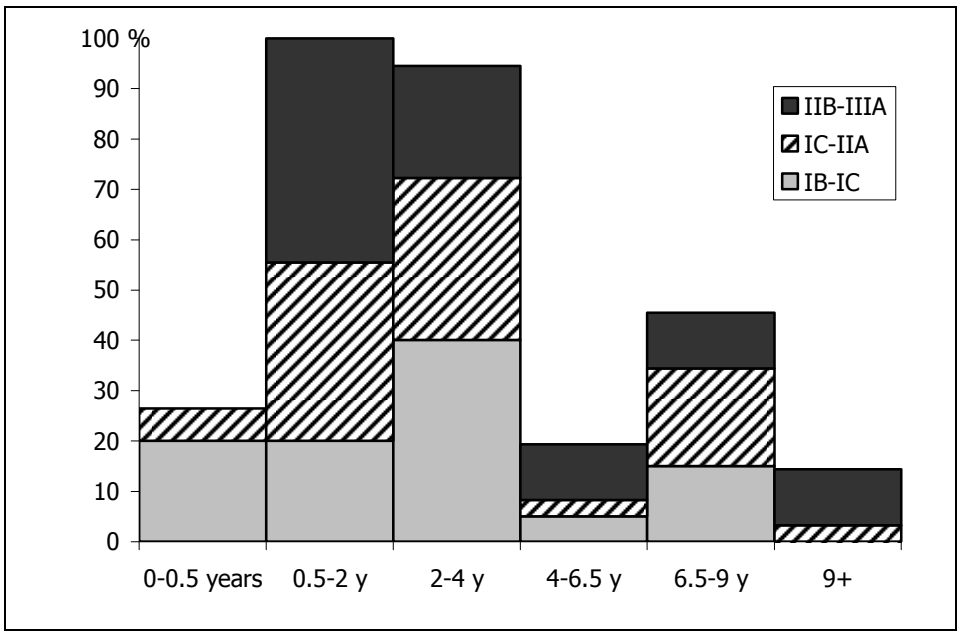


**Fig. 8.** Kill-off patterns of cattle in Ia-c levels.
Vârste de sacrificare a vitei în nivelurile Ia-c.

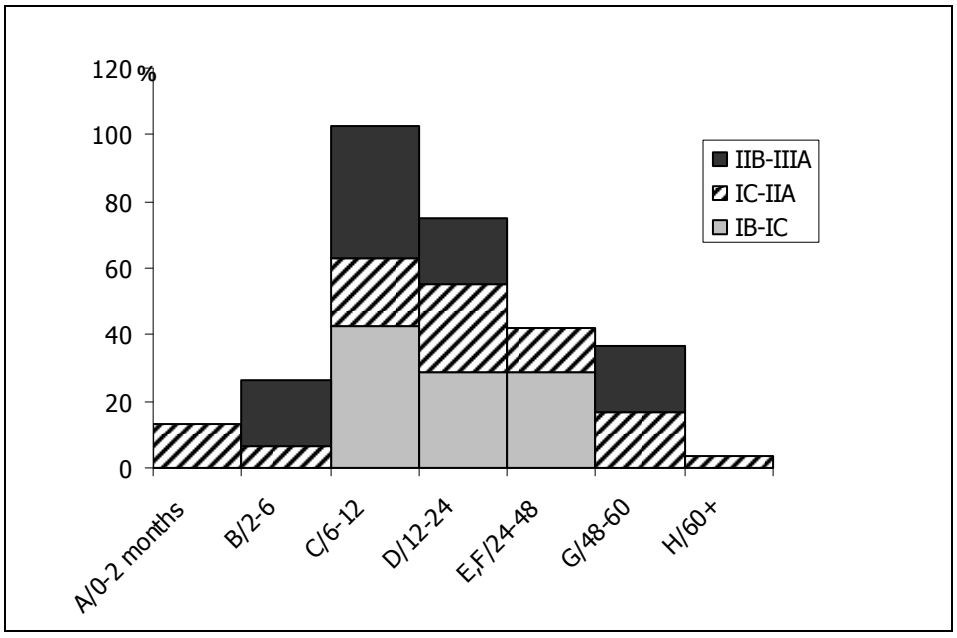


**Fig. 9.** Kill-off patterns of ovicaprids in Ia-c levels.
Vârste de sacrificare a vitei în nivelurile Ia-c.

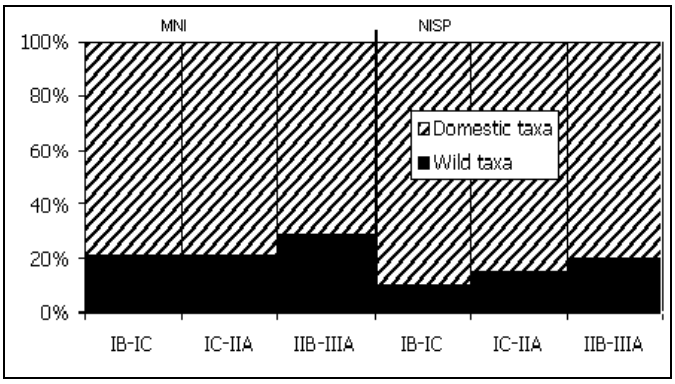


**Fig. 10.** Domestic/wild ratio in I-III levels.
Raportul specii domestice/sălbatice în nivelurile I-III.

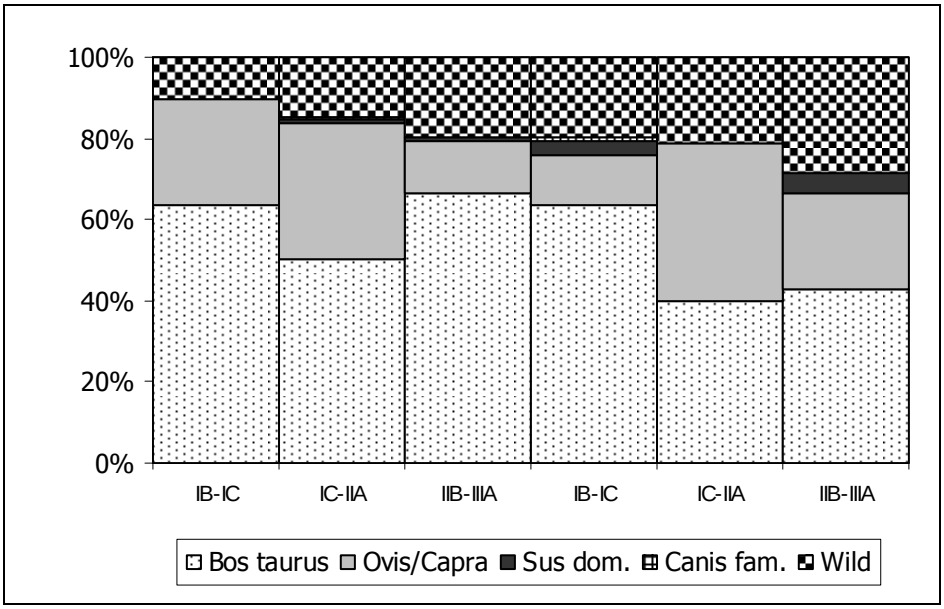


**Fig. 11.** Species frequencies in I-III levels at Miercurea Sibiului.
Frecvenţa speciilor în nivelurile I-III de la Miercurea Sibiului.

## Measurements

**Horns**

| Context | Taxon | GL | Gd | Sd | Circonf. |
|---|---|---|---|---|---|
| B. 19 | M/Cattle* | | 74,5 | 58 | 218 |
| B. 1 | M/Goat | | 37,5 | 24,5 | 99 |
| B. 1 | M/Goat | | 37,5 | 27,5 | 103 |
| B. 17 | M/Sheep | 65 | 45,5 | 29 | 129 |
| B. 17 | M/Sheep | | 51 | 30,5 | 132,5 |
| B. 19 | M/Sheep | 58.5 | 47,5 | 27,5 | 122 |
| Gr. 34 | F/Sheep | 65 | 28 | 19 | 76 |
| B. 10 | M/Sheep | | 47 | 27,5 | 120 |

** Bos taurus/Bos primigenius. Horns cattle measurements from Gr. 26 were excluded from, being published in another context (S.A. Luca et alii 2009, p. 8-9).*

**Maxilla**

| Context | Taxon | L P2-M3 | L M1-M3 | L M3 |
|---|---|---|---|---|
| B. 1 | Cattle | | 84,5 | 30,5 |
| B. 9 | Cattle | | | 34,5 |
| B. 17 | Cattle | | 88 | 34 |
| B. 17 | Cattle | | | 33,5 |
| B. 17 | Cattle | | | 32,5 |
| B. 17 | Cattle | | | 31 |
| B. 17 | Goat | 74 | 51,5 | 23,5 |
| B. 19 | Cattle | | | 31 |
| Layer | Sheep | | | 17,5 |

**Mandible**

| Context | Taxon | L P2-M3 | L M1-M3 | LM3 |
|---|---|---|---|---|
| Gr. 26 | Cattle | | | 38,5 |
| B. 21 | Cattle | | | 40 |
| B. 21 | Cattle | | | 41 |
| B. 1 | Goat | 78 | 52 | 24,5 |
| B. 17 | Sheep | | | 23,5 |
| B. 17 | Sheep | | | 23,5 |
| Layer | Sheep | | | 23,5 |
| B. 19 | Sheep | 75 | 53 | 24 |
| Layer | Ovic. | | | 24,5 |
| B. 17 | Ovic. | | 50.5 | 20 |
| B. 17 | Ovic. | 68 | 43 | 24 |
| B. 17 | Ovic. | 72 | 52 | 22 |
| B. 1 | Aurochs | | | 47 |
| Gr. 26 | Aurochs | | 94 | 44 |
| B. 17 | Roe deer | 68,5 | 42 | 16 |
| B. 17 | Roe deer | | | 17 |

**Scapula**

| Context | Taxon | SLC | GLP | LG |
|---|---|---|---|---|
| B. 1 | Cattle | | | 58 |
| B. 9 | Cattle | 60,5 | 75 | 65,5 |
| B. 17 | Cattle | 53 | | 65 |
| B. 1 | Sheep | 20 | 32,5 | 27,5 |
| B. 1 | Sheep | 20 | 33,5 | 25 |
| B. 17 | Sheep | 18,5 | 33,5 | 26,5 |
| B. 17 | Sheep | 18,5 | 30 | 25 |

**Scapula**

| Context | Taxon | SLC | GLP | LG |
|---|---|---|---|---|
| B. 10 | Sheep | 18,5 | | |
| B. 20 | Sheep | 18,5 | | |
| B. 10 | Sheep | 18 | | |
| B. 1 | Sheep | 16 | 27 | |
| B. 9 | Carnivore | 16,5 | 17,5 | 13,8 |
| B. 19 | Roe deer | 21,5 | | 26,5 |
| B. 17 | Aurochs | 67,5 | 87,5 | 73 |

**Humerus**

| Context | Taxon | BT | Bd | Dd |
|---|---|---|---|---|
| B. 17 | Cattle | 58 | 87,5 | 89 |
| B. 1 | Cattle | 67,5 | 73,5 | 74 |
| Layer | Cattle | 74,5 | 81,5 | 82 |
| Layer | Cattle | 80 | 88 | 87 |
| Layer | Cattle | 82 | 85 | 85,5 |
| B. 1 | Cattle | 88 | 93 | 94 |
| B. 10 | Cattle | | | 84 |
| B. 17 | Cattle | | 80,5 | 81,5 |
| B. 19 | Sheep | 24 | 26,5 | 25,5 |
| B. 17 | Sheep | 24,5 | 26,5 | 24,5 |
| B. 17 | Sheep | 24,5 | 26,5 | 24,5 |
| B. 17 | Sheep | 25 | 27,5 | 25 |
| B. 17 | Sheep | 26,5 | 28,5 | 26,5 |
| B. 17 | Sheep | 26,5 | 29,5 | 27,5 |
| B. 10 | Sheep | 28,5 | 26,5 | |
| B. 1 | Boar | 40 | 50 | |
| B. 1 | Roe deer | | 31,5 | |
| B. 1 | Aurochs | 105 | 110 | 113 |

**Radius**

| Context | Taxon | GL | Bfp/Bp | Bp | Dp | Bd | Dd |
|---|---|---|---|---|---|---|---|
| B. 1 | Cattle | | | | 43 | | |
| B. 1 | Cattle | | | | 52 | | |
| B. 1 | Cattle | | | | 41 | | |
| B. 1 | Cattle | | | | 47 | | |
| B. 1 | Cattle | | 76 | 82 | 43 | | |
| B. 1 | Cattle | | 80,5 | 89 | 43 | | |
| B. 17 | Cattle | | 81 | | | | |
| B. 21 | Cattle | | 87,5 | 86 | 51,5 | | |
| Gr. 46 | Cattle | | 87 | 96,5 | 47,5 | | |
| Layer | Cattle | | | | | 85 | 62,5 |
| B. 17 | Sheep | 142 | 27,5 | 29 | | 26 | 18,5 |
| Layer | Sheep | 147 | 27,5 | 30,5 | 16 | 26 | 18,5 |
| B. 1 | Goat | | 28,5 | 29 | | | |
| B. 17 | Goat | | 29,5 | 30,5 | 16,5 | | |
| B. 1 | Goat | | | 29 | 15 | | |
| B. 10 | Sheep | | 30 | 31,5 | 16,5 | | |
| B. 10 | Sheep | | 27 | 28,5 | 14,5 | | |
| B. 17 | Sheep | | 28 | 31 | 15,5 | | |
| B. 17 | Sheep | | | | | 26 | 17 |
| B. 1 | Pig | | 27 | | 17,5 | | |
| B. 9 | Aurochs | | 96 | | 60 | | |
| B. 19 | Aurochs | | 94 | 106 | 55,5 | | |

**Metacarpal**

| Context | Taxon | GL | Bp | Dp | SD | Bd | Dd |
|---|---|---|---|---|---|---|---|
| B. 1 | Cattle | 203 | 63 | 39 | 33,5 | 62 | 34,5 |
| B. 1 | Cattle | | 65,5 | 41 | 38,5 | | |
| B. 1 | Cattle | | | 33,5 | | | |
| B. 1 | Cattle | | | 34 | | | |
| B. 1 | Cattle | | | 35,5 | | | |
| B. 1 | Cattle | | | 37 | | | |
| B. 1 | Cattle | | | 40,5 | | | |
| B. 1 | Cattle | | 56,5 | 34 | | | |
| B. 17 | Cattle | | 64,5 | 40 | | | |
| Layer | Cattle | | 75 | 35,5 | | | |
| B. 1 | Cattle | | | | | | 32 |
| B. 1 | Cattle | | | | | | 35 |
| B. 9 | Cattle | | | | | | 35 |
| B. 17 | Cattle | | | | | 65 | 35,5 |
| B. 19 | Cattle | | | | | | 39,5 |
| B. 9 | Cattle | | | | | 69 | 36,5 |
| B. 17 | Sheep | 133 | 22 | 16 | 13 | 25 | 16 |
| B. 17 | Sheep | | | | | | 15 |
| B. 17 | Sheep | | 26 | 16 | | | |
| B. 19 | Sheep | | 20 | 17 | | | |
| B. 17 | Goat | | | | | 24 | 14,5 |
| B. 17 | Roe deer | | 20,5 | 16 | | | |
| B. 10 | Aurochs | | 69 | 42 | | | |
| B. 17 | Aurochs | | 74 | 46.5 | | | |
| B. 17 | Aurochs | | 81,5 | 54 | | | |
| B. 17 | Aurochs | | 81 | 51,5 | | | |
| B. 17 | Aurochs | | 84 | | | | |
| B. 17 | Aurochs | | | | | 80 | 44 |
| B. 17 | Aurochs | | | | | 78 | 44 |
| B. 19 | Aurochs | | | | | 82 | 41,5 |
| Gr. 26 | Aurochs | | | | | | 41,5 |
| B. 1 | Boar | 97,5 | | | | | |

**Metatarsal**

| Context | Taxon | GL | Bp | Dp | SD | Bd | Dd |
|---|---|---|---|---|---|---|---|
| B. 19 | Cattle | | 48 | 41 | | | |
| B. 17 | Cattle | | 53,5 | 54 | | | |
| B. 17 | Cattle | | 65 | 68,5 | | | |
| B. 10 | Cattle | | | | | 60 | 33,5 |
| B. 19 | Cattle | | | | | 62 | 35,5 |
| B. 1 | Cattle | | | | | 66 | 38,5 |
| B. 19 | Cattle | | | | | 68 | 39 |
| B. 9 | Cattle | | | | | | 34 |
| B. 9 | Cattle | | | | | | 35,5 |
| B. 17 | Sheep | | | | | 23 | 16,5 |
| B. 9 | Aurochs | | 75,5 | | | | |
| B. 17 | Aurochs | | | | | 71 | 43 |

**Tibia**

| Context | Taxon | Bd | Dd |
|---|---|---|---|
| B. 1 | Cattle | 63,5 | 47,5 |
| B. 10 | Cattle | 68 | 52 |
| B. 10 | Cattle | 69 | |
| B. 17 | Cattle | 71,5 | 52 |
| B. | Aurochs | 70 | 67,5 |
| Gr. 43 | Aurochs | 75,5 | 57 |
| B. 10 | Aurochs | 80 | 56 |
| B. 17 | Aurochs | 86 | 61 |
| B. 1 | Ovic. | 26,5 | 18,5 |
| B. 17 | Ovic. | 25,5 | 20 |
| B. 17 | Ovic. | 25 | 20 |
| B. 10 | Red deer | 58 | 42 |

**Calcaneus**

| Context | Taxon | GL |
|---|---|---|
| Layer | Cattle | 140 |
| B. 19 | Cattle | 142 |
| B. 1 | Sheep | 54 |
| Gr. 34 | Sheep | 55 |
| B. 9 | Sheep | 58,5 |

**Centroquartal**

| Context | Taxon | GL |
|---|---|---|
| B. 17 | Cattle | 54 |
| Layer | Cattle | 56 |
| B. 17 | Cattle | 57 |
| B. 17 | Cattle | 57 |
| B. 1 | Cattle | 57,5 |
| B. 10 | Cattle | 61 |
| B. 21 | Cattle | 66 |
| B. 10 | Ovic. | 23 |
| B. 1 | Red deer | 54,5 |

**Pelvis**

| Context | Taxon | LA |
|---|---|---|
| B. 9 | Cattle | 68,5 |
| B. 1 | Cattle | 74 |
| B. 10 | Cattle | 80 |
| B. 9 | Sheep | 25 |
| B. 17 | Sheep | 26 |
| B. 17 | Sheep | 27 |
| B. 17 | Sheep | 27 |
| B. 17 | Sheep | 27,5 |
| B.17 | Sheep | 28 |
| B.17 | Sheep | 28,5 |
| B. 21 | Sheep | 32 |
| Layer | Hare | 14,5 |

**Talus**

| Context | Taxon | GLl | GLm | Bd |
|---|---|---|---|---|
| B. 1 | Cattle | 67 | 61 | 42 |
| B. 1 | Cattle | 72 | 66,5 | 42,5 |
| B. 9 | Cattle | 73 | 67 | 45 |
| B. 17 | Cattle | 74 | 67,5 | 43 |
| B. 1 | Cattle | | 67,5 | 43 |
| B. 9 | Cattle | 67,5 | 61 | |
| B. 9 | Aurochs | 77 | 70,5 | 48 |

**Phalanx I**

| Context | Taxon | GL | Bp |
|---|---|---|---|
| Layer | Cattle | 59,5 | 32 |
| Layer | Cattle | 62,5 | 33,5 |
| B. 1 | Cattle | 66 | 31 |
| B. 17 | Cattle | 71,5 | 38,5 |
| B. 17 | Cattle | 73 | 40 |
| B. 17 | Aurochs | 71 | 43 |
| B. 17 | Aurochs | 75 | 40 |
| B. 17 | Aurochs | 72 | 43,5 |
| B. 17 | Aurochs | 72 | 43,5 |
| B. 1 | Red deer | 65,5 | |