

SIUREN I: NEW ZOOARCHAEOLOGICAL RESULTS

INTRODUCTION

Archaeological discoveries in Crimea for Middle and Upper Palaeolithic periods tend to show that the anatomically Modern Human had sporadic settlements at the time of the transition (around 30 000 years BP). In fact, only two Upper Palaeolithic sites have been found, against thirty-five for the Middle Palaeolithic: the “Eastern Szeletian” level from the site of Buran-Kaya III and the Aurignacian Units from the site of Siuren I (Chabai 1998; 2001). The studies of those EUP levels are, then, important to understand the behaviour and the possible coexistence of the last Neanderthal and the first anatomically Modern Human from Eastern Europe.

The information that the archaeological analysis of the faunal remains of Siuren I can provide is important to answer those questions. Taphonomic studies of Units F, G and H, first, verify the anthropic nature of their accumulation. They also tend to reconstruct the environmental conditions believed to have prevailed at that time of transition, in which the Neanderthal and anatomically Modern Human evolved. Finally, with a paleoethnographic approach, analysis of faunal remains provide hypothesis about the strategies of

subsistence like prey acquisition, butchering treatment and site function.

Archaeozoological studies, taphonomic and paleoethnographic ultimately try to underline if there are any differences between the strategies of subsistence choose by *Homo neandertalensis* and by *Homo sapiens sapiens* to understand the crucial moment of the transitional period between the Middle and Upper Palaeolithic.

SITE PRESENTATION

Siuren I is a stratified rock-shelter situated in south-west Crimea, Ukraine (Fig. 1), on the left side of the Belbek River. The rock-shelter is 43 meters large, 15 meters deep and 9 to 10 meters in height. Known since 1879-1880, Siuren I has been the subject of multiple excavations during the years 1926 to 1929 (Demidenko *et al.* 1998), and finally in 1994 – 1997.

Three basic in situ Unit levels have been found during that last period of excavations, the middle Unit levels (Unit

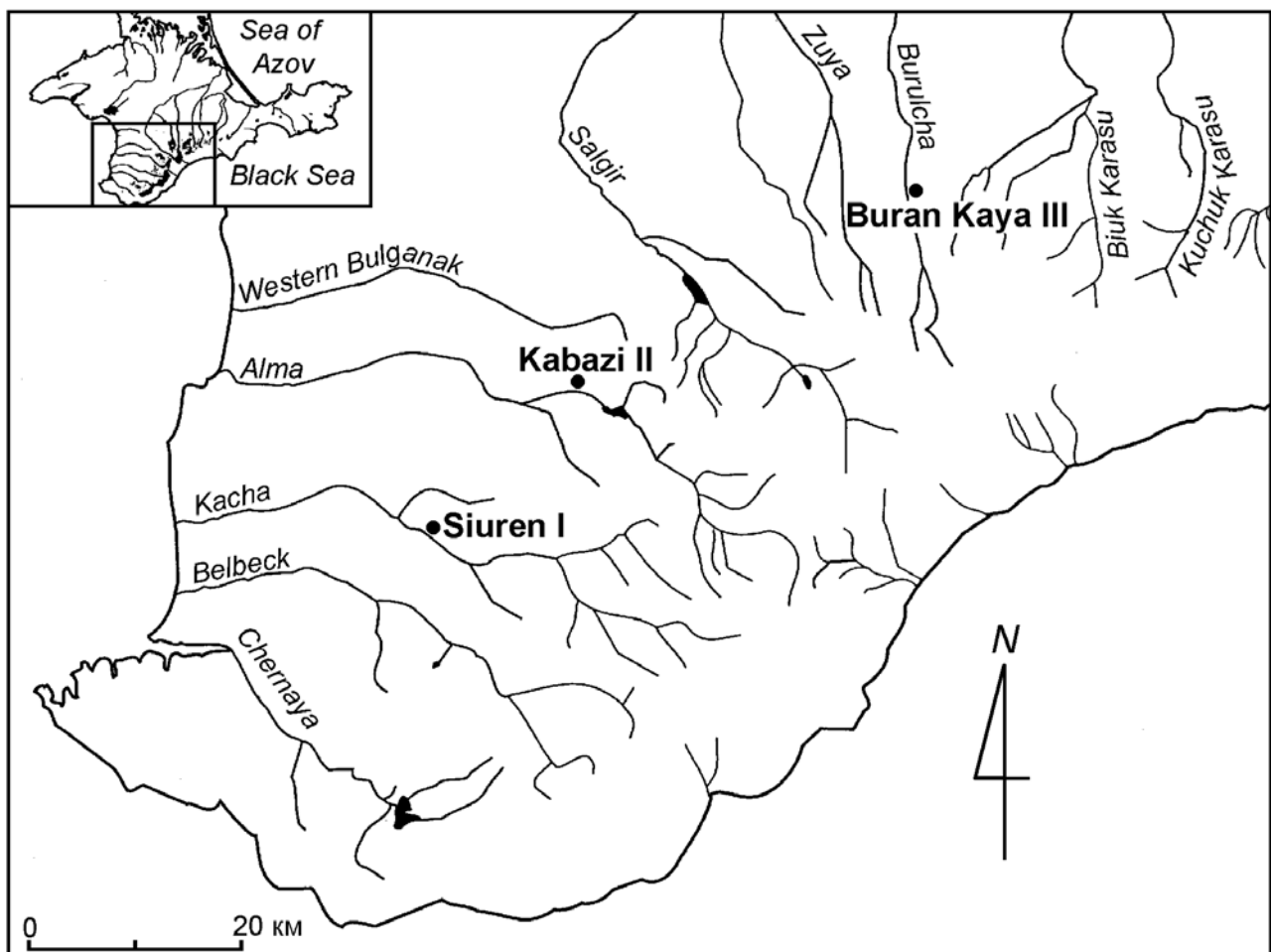


Figure 1. Middle and Upper Paleolithic Crimean sites (redrawn from Чабай, 2004a).

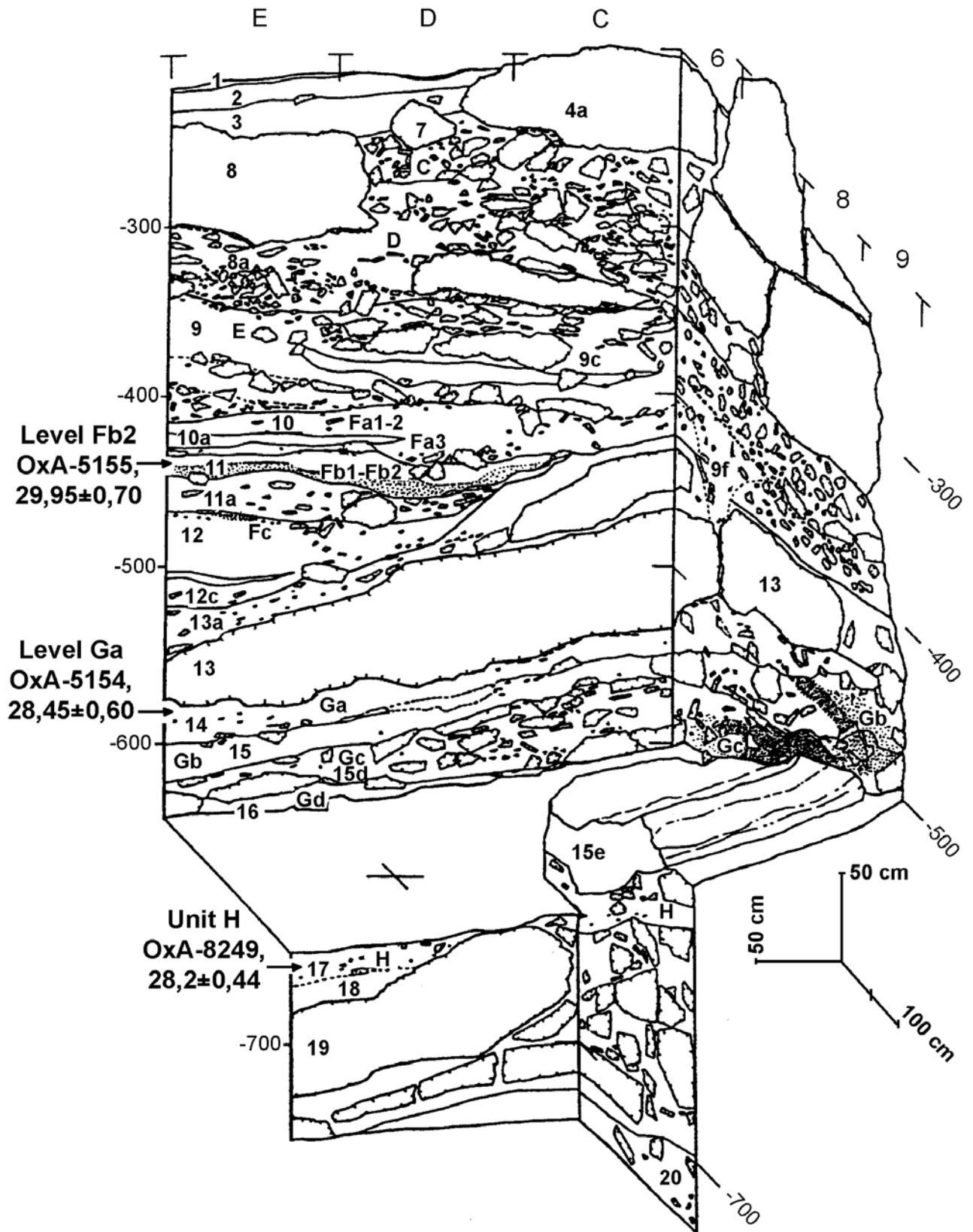


Figure 2. Siuren I: stratigraphy and AMS chronology. The western and northern sections of the excavated area; the Arabic numerals indicate the position of the lithological layers; the combination of Latin letters and Arabic numerals showing the position of archaeological levels (redrawn from Чабай, 2004a).

F), and two lower Unit levels (Units G and H) which would be the subject of that article.

CHRONOSTRATIGRAPHY

In three meters of sediment, there are nine basic periods of settlement that have been discovered during the 1994 and 1997 excavations: four levels in Unit F (Fa1-Fa2, Fa3, Fb1-Fb2 and Fc), four levels in Unit G (Ga, Gb1-Gb2, Gc1-Gc2 and Gd) and one level in Unit H.

The Unit G is subdivided into four basic levels (Ga, Gb1-Gb2, Gc1-Gc2 and Gd) each of them being excavated on twelve square meters area. By sediments, they are basically composed of different coloured brown fine sediments containing and separated by different sized limestone *éboulis*, as well as characterized by some hearth and ashy internal lenses. The single level of Unit H, also excavated on the same twelve square meters area, is associated with dark yellowish-brown clay with rare limestone *éboulis*. Unit H is separated from Unit G levels by huge limestone blocks of the rock-shelter's fifth rock-fall horizon. All in all, the Units H and G do constitute ca. 1 meter thick cultural bearing sediments sequence (see for details Demidenko *et al.* 1998, p. 371-377).

Radiocarbon dating told us that these three units have been rapidly formed, between 31500 and 27000 years ago, during Arcy (Unit G) and Maisières Interstades (Unit F) (Demidenko, Otte 2000-2001) (Fig. 2).

CULTURAL CONTEXTS

Since the recent excavations, two cultural assemblages have been defined: the first one corresponding to unit F and attributed to a late Aurignacian (with Dufour bladelets of Dufour sub-type). The second one, corresponding to Units G and H, has been attributed to an old Aurignacian (with Dufour bladelets of Roc de Combe sub-type and Krems points).

4709 lithic pieces have been found in the Unit G. The artefacts are principally end scrapers, burins, blades, bladelets, notched blades, microliths and cores. There are also 17 flint tools attributed to the Middle Palaeolithic Micoquian assemblage. Five bone points and an awl of Aurignacian types, as well as two Micoquian bone retouchers have been discovered during the 1990s excavations. Fifty Aurignacian bone points and awls, and two Micoquian bone retouchers were also found during the 1920s excavations (Демиденко, Ахметгалеева, *в печати*). Also, a series of beads were discovered as well, some made on *Aporrhais pes pelicani* marine shells and some on *Taeodoxus fluviatilis* L. и *Theodoxus transversalis* C. Pff. river shells (Demidenko *et al.* 1998; Mikhailesku, *in preparation*).

In the Unit H, 682 lithic pieces have been found including 3 Middle Palaeolithic Micoquian tools, but no one bone or personal ornament artefact.

The 20 flint tools and 23 unifacial and bifacial tool treatment flakes and chips attributed to the Middle Palaeolithic Micoquian assemblage in the 1990s excavations Units H and G and similar Micoquian 40 flint tools and some rejuvenation chips in the 1920s excavations have been attributed to the Kiik-Koba facies of Crimean Micoquian.

Two hypotheses have been proposed to explain their presence:

1) Chabai (1998): exchanges between two cultures (local and intrusive).

2) Demidenko (Демиденко, 2000): an alternation between two human groups. An ephemeral occupation by Neanderthal and a more intensive occupation, but on a short period of time, by anatomical modern humans (like at Buran Kaya III; Patou-Mathis 2004).

PALAE ECOLOGY

Siuren is situated at the intersection of two regions: the foothills of the Second ridge of Crimean Mountains and steppe. The species found in Units G and H, Saiga (*Saiga tatarica*), Aurochs (*Bos primigenius*) or Bison (*Bison priscus*), Red Deer (*Cervus elaphus*), Giant Deer (*Megaloceros giganteus*), Horse (*Equus caballus*), Wolf (*Canis lupus*), Red Fox (*Vulpes vulpes*), Polar Fox (*Alopex lagopus*) and Common Hare (*Lepus europaeus*), indicate a mosaic landscape composed of steppe and trees near the river. The weather was quite cold and not arid. There are signs of warming since the level Gc1-Gc2 with an apparition of Cervids and an augmentation of Common Fox instead of Polar Fox; in Unit H there are only Polar Fox (Massé 2008) (Fig. 3).

The unit H was probably formed in the stadial phase before the Arcy interstadial.

TAPHONOMY

The faunal remains discovered in the two Units are represented by more than 14000 bones: 88% of those are unidentifiable (Table 1).

In unit G, we can note a great conservation of bone surfaces without important alterations; more than ¾ of the bones have a length less than or equal to two centimetres (Table 2). Marks from weathering are not overly abundant which would indicate that the bones might only have been exposed for a short time in the open air (a short time for levels Ga and Gb1-Gb2: stage 2, Berhensmeyer 1978; Auguste, 1994, and a shorter time for levels Gc1-Gc2 and Gd). Percolation and streaming marks, more important for level Gc1-Gc2, have been identified, which means that the climate was relatively humid. There are also marks made by small roots of plant that are noticeable, more intense and on a more important amount of bones for level Gd (Fig. 4) and for squares 8E and 9E. That can identify an area more humid (Auguste 1994). Carrying marks are rare. Also, there

are just fifteen bones that show carnivores activity (four in level Gb1-Gb2: one on a wolf canine, on a tibia, on a mid-shaft of an indeterminate long bone of a large mammal and on a saiga phalanx, Fig. 4; nine in level Gc1-Gc2: one on a tooth, on a first and on a second phalanx of saiga, on three

that the inhabitants of Siuren I hunted a small amount of prey ranging from up to seven different species. The occupation was short in time and/or by a small number of people. Those observations seem to correspond to an opportunist strategy of subsistence (Farizy, David 1989).

Table 1. Siuren I: composition of the bones remains from units G and H (in Massé 2008). NR: Number of total Remains; NRI: Number of Remains Indeterminate; NRDa: Number of Remains Determinate (anatomically); NRDt: Number of Remains Determinate (taxonomically).

	Unit G										Unit H	
	Ga	%	Gb	%	Gc	%	Gd	%	G	%	H	%
NRDt	12	4,63	284	12,98	390	6,17	251	9,49	937	8,21	210	7,87
NRDa	11	4,25	99	4,52	345	5,46	209	7,90	582	5,10	181	6,78
NRI	236	91,12	1805	82,50	5583	88,37	2186	82,61	9893	86,69	2278	85,35
NR	259	100,00	2188	100,00	6318	100,00	2646	100,00	11412	100,00	2669	100,00

fragments of metatarsal of Bovid, on a humerus, on a second phalanx of Bovine and one on a mid-shaft of long bone of large mammal; two in level Gd: on a tibia of red fox and on an ulna of indeterminate fox). Sometime, there are tooth

In levels Ga-Gb1-Gb2 (regrouped because the two levels can not be separated), fifteen individuals have been estimated. Five of them have probably been hunted: two Saigas (one prime-adult and one old-adult), one Giant Deer

Table 2. Siuren I: bones repartition by their maximal length, levels of the unit G (in Massé, 2008).

Classes	Ga		Gb		Gc		Gd	
	NRT	%NRT	NRT	%NRT	NRT	%NRT	NRT	%NRT
>10mm	82	31,66	796	36,38	1842	29,15	877	33,14
10>20mm	127	49,03	762	34,83	2185	34,58	855	32,31
20>50mm	48	18,53	558	25,50	2035	32,21	823	31,10
50>100mm	2	0,77	66	3,02	240	3,80	89	3,36
>100mm	–	–	6	0,27	16	0,25	2	0,08
TOTAL:	259	100,00	2188	100,00	6318	100,00	2646	100,00

marks covering anthropoid marks. There are trace amounts of ochre on eight bones (two in Ga, on skull fragment of saiga, one in Gb1-Gb2, on a mid-shaft of long bone of large mammal, one in Gc1-Gc2, on a rib of a medium-size mammal and four in Gd, on ribs from a Hare, a Bovine, a middle-size mammal and a large mammal), that could have been used, for example, for working skin.

In Unit H, the bones are highly fragmented too. There is not a great evidence for climato-edaphic agents. The faunal remains have been exposed to the air for a shorter duration than in Unit G. There are some carrying marks, but nothing significant, and no carnivore's marks. Water and plants are the two principal agents of alteration; same intensity as in Unit G. Like in G, ochre traces have been identified on a large mammal's rib.

In both Units, assemblages of faunal remains are certain to have a human origin with an anecdotic role of carnivore.

PREY ACQUISITION

After a quantification of the faunal remains, an estimation of the number of individuals and their ages, we can deduce

(old prime-adult), one Bovine (one sub-adult or prime-adult *s.l.*) and one Polar Fox (prime-adult). Three other have been hunted or scavenged: one Horse (prime-adult, two foetus bones, probably Horse, indicated that the individual was a pregnant female), one Deer (prime-adult *s.l.*) and one Bovine (a sub-adult or prime-adult *s.l.*) (Table 3; Fig. 6 and 7).

In level Gc1-Gc2, of the nineteen individuals estimated, two Saigas (one prime-adult and one old-adult male), two Bovines (one young and one prime-adult *s.l.*), one Giant Deer (sub-adult), one Red Fox, one Polar Fox (female prime-adult) and one Hare have probably been hunted. Three Horses (one young, one, aged 5-7 years-old, one, aged 9 or 10 years-old; two foetus bones aged 230-300 days-old indicated that one of this individual was a pregnant female dead in winter (Prummel 1987; Fig. 5) and one Deer (sub-adult) have been hunted or scavenged (Table 3; Fig. 6 and 7).

In level Gd, on thirteen individuals estimated, two Saigas (one prime-adult and one old-adult), one Bovine (prime-adult *s.l.*) and one Polar Fox (female prime-adult) have probably been hunted. Three Horses (one, aged 3 or 4 years-old, one, aged 5 or 6 years-old and one around 10 years-old) and one Deer (very young adult) have been

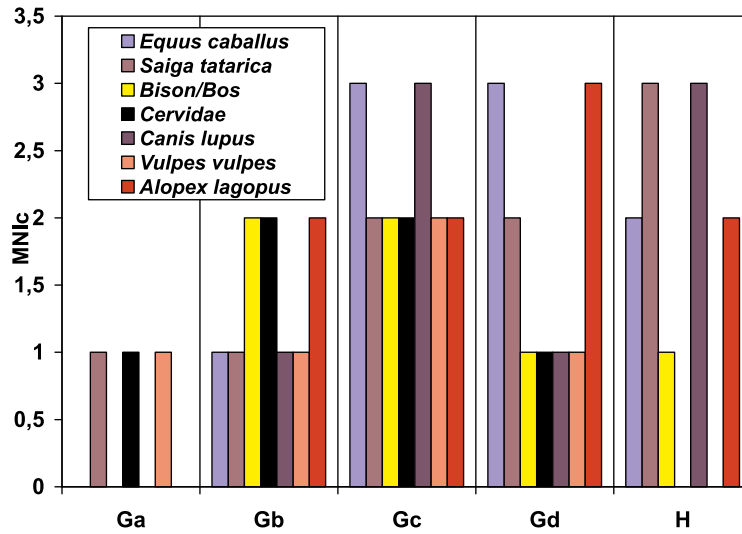


Figure 3. Siuren I, Units G and H: minimal number of individuals (by combination).

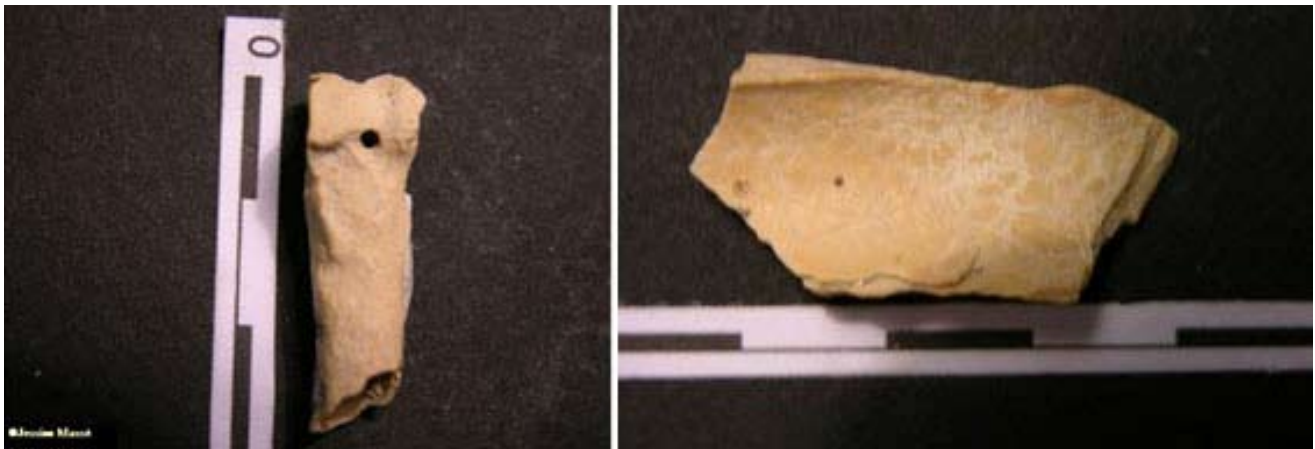


Figure 4. Siuren I: to the left: marks from Carnivore activities (Saiga phalanx, level Gc) and to the right: marks from plants activities (Level Gd).



Figure 5. SiurenI, level Gc: horse foetus bone aged between 230 and 300 days old.

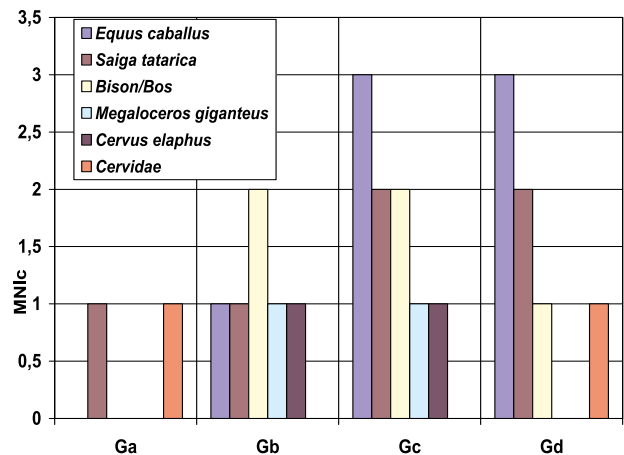


Figure 6. Siuren I, Unit G: number of ungulate individuals.

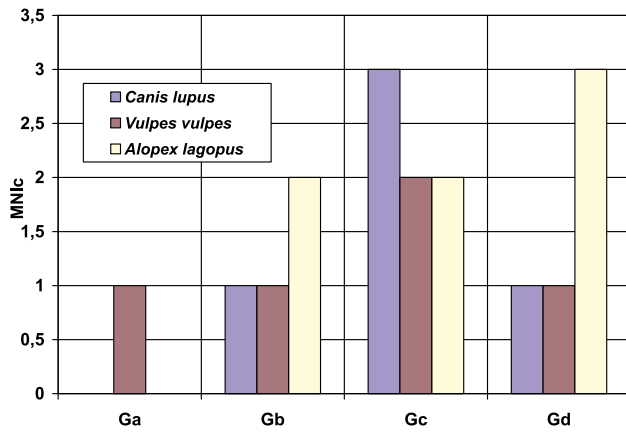


Figure 7. Siuren I, Unit G: number of carnivore individuals.

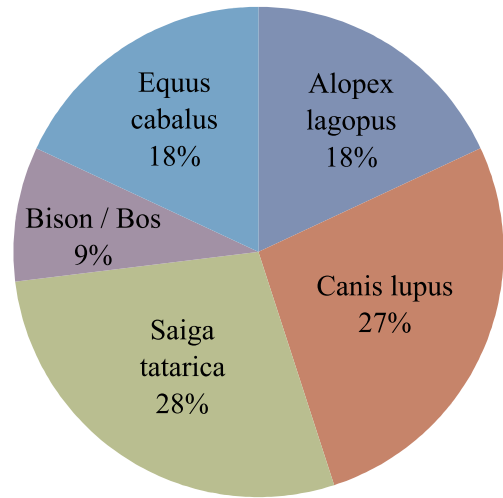


Figure 8. Siuren I, Unit H: number of individuals.



Figure 9. Siuren I, level Gb: Saiga pyramidal (to left) and Polar Fox tibia (to right) bones showing disarticulation marks.



Figure 10. Siuren I, level Gd: mid-shaft of a long bone of a great mammal showing stigmata of fracturation to obtain the marrow.

Table 3. Siuren I: number of bones elements and individuals determinate in the faunal remains of unit G. NR: Number of total Remains; NRI: Number of Remains Indeterminate; MNE: Minimal Number of Element; MNIC: Minimal Number of Individuals by combination.

LEVEL	Ga			Gb			Gc			Gd		
	NR	MNE	MNIC	NR	MNE	MNIC	NR	MNE	MNIC	NR	MNE	MNIC
<i>Equus caballus</i>	–	–	–	6	5	1	44	23	3	23	9	3
<i>Equus hydruntinus</i>	–	–	–	–	–	–	–	–	–	–	–	–
<i>Saiga tatarica</i>	11	9	1	67	28	1	176	93	2	170	52	2
<i>Bison/Bos</i>	–	–	–	121	26	2	25	11	2	24	12	1
<i>Megaloceros giganteus</i>	–	–	–	91	8	1	34	19	1	–	–	–
<i>Cervus elaphus</i>	–	–	–	27	3	1	4	3	1	–	–	–
<i>Cervidae</i>	3	2	1	–	–	–	–	–	–	2	2	1
<i>Bovinae/Megaloceros</i>	–	–	–	–	–	–	3	1	–	–	–	–
<i>Artiodactyla</i>	1	1	–	–	–	–	13	1	–	–	–	–
Sub-Total Herbivores:	15	12	2	312	70	6	299	151	9	219	75	7
<i>Canis lupus</i>	–	–	–	5	5	1	50	38	3	5	5	1
<i>Vulpes vulpes</i>	1	1	1	3	3	1	21	18	2	6	5	1
<i>Alopex lagopus</i>	–	–	–	12	12	2	46	42	2	59	41	3
<i>Vulpinae</i>	1	1	–	31	16	–	111	33	1	44	13	–
<i>Small Carnivore</i>	–	–	–	–	–	–	1	1	1	–	–	–
Sub-Total Carnivores:	2	2	1	51	36	4	229	132	9	114	64	5
<i>Lepus sp.</i>	1	1	1	1	1	1	12	11	1	9	7	1
<i>Lepus/Vulpinae</i>	–	–	–	–	–	–	3	2	–	37	15	–
TOTAL:	18	15	4	364	107	11	543	296	19	333	139	13
Large Mammals	2	2	–	5	–	–	72	–	–	23	–	–
Medium-size Mammals	–	–	–	1	–	–	75	–	–	13	–	–
Small Mammals	1	1	–	0	–	–	17	–	–	18	–	–
Indeterminate Mammals	–	–	–	6	2	–	9	7	–	3	–	–
NRDa	3	–	–	12	–	–	173	–	–	57	–	–
TOTAL:	21	18	4	376	–	11	716	–	19	390	–	13
Rodent	2	2	1	8	8	1	10	9	2	8	7	1
Bird	1	1	1	24	12	2	20	14	3	13	9	1
TOTAL:	24	21	6	408	–	14	746	–	24	411	–	15
NRI	236	–	–	1805	–	–	5583	–	–	2186	–	–
NR	260	–	–	2213	–	–	6329	–	–	2597	–	–

hunted or scavenged (Table 3; Fig. 6 and 7).

In Unit H, of the twelve individuals estimated, three Saigas (one young, one prime-adult and one old-adult), one Bovine (prime-adult *s.l.*) and one Polar Fox (prime-adult) have probably been hunted and two Horses (one young and one prime-adult), hunted or scavenged (Table 4 and Fig. 8).

BUTCHERING TREATMENT

There is an important deficit of bones in all levels. Which would be due to poor conservation, to different climatodaphics agents, to carnivorous action after the human departure and/or simply because the hunted or scavenged animals have been butchered outside of Siuren I and brought

in different pieces.

In every level, cut marks from butchery and hammer stone bone breaking stigmata (for marrow recuperation) have been observed on a large number of bones (Lyman 1994; Patou-Mathis 1994, 1997). Those marks would indicate human intervention on most of the herbivores and on a select few Fox.

There are certain hypotheses that can be proposed considering the conservation of the different skeletal elements and the cut marks observed on the bones. In levels Ga and Gb1-Gb2, the saigas were probably transported in one piece (presence of osteal cartilage) and probably dismembered outside of the rock-shelter. The three large species, Horse, Bovine and Giant deer, have been processed near the hunting place, then chosen pieces, certainly the

higher utility parts (the one with a better amount of meat), have been brought to the camp. In levels Ga-Gb1-Gb2, the Red Deer is represented only by cranial remains, which can suggest that the prehistoric were looking for antler, unfortunately not discovered on the site. Butchering marks, observed on six bones confirm the dismembering of a Saiga (pyramidal, Fig. 9), a Horse (posterior foot), one Bovine (anterior foot), one Deer (posterior foot) and one Polar Fox (posterior foot, Fig. 9). Twenty-one long bones from middle-size to large herbivores, for example, from Bovine (five), Deer (two), Saiga (two) and Horse (two), have been fractured to obtain the marrow. The principal area, where the carcasses were processed was probably squares 8C and 7C.

Like in levels Ga and Gb1-Gb2, in level Gc1-Gc2, the Saigas were probably transported in one piece and dismembered in front of the rock-shelter. The three larger species, Horse, Bovine and Giant Deer, and the Red Deer, have been processed near the hunting place. Then, chosen pieces, certainly the higher utility parts have been brought to the camp. Thirty-five bones show butchering marks. Some animals have been dismembered: a Horse (posterior foot), a Bovine (anterior foot), a Cervid (*Megaloceros?*, anterior foot), a Red Fox, a Polar Fox and an Hare. Some filleting marks have been identified on two ribs from a Deer and an indeterminate large mammal. Sixty-four long bones from middle-size to large herbivores, for example, Bovine

Table 4. Siuren I: number of bones elements and individuals determinate in the faunal remains of unit H. NR: Number of total Remains; NRI: Number of Remains Indeterminate; MNE: Minimal Number of Element; MNIC: Minimal Number of Individuals by combination.

SPECIES/DENOMBREMENT	NR	MNE	MNIC
<i>Equus caballus</i>	38	14	2
<i>Bison/Bos</i>	25	14	1
<i>Saiga tatarica</i>	89	52	3
Sub-Total Herbivores:	152	80	6
<i>Canis lupus</i>	9	9	3
<i>Alopex lagopus</i>	11	9	2
<i>Vulpinae</i>	89	63	1
Sub-Total Carnivores:	109	81	6
TOTAL:	261	161	12
Large Mammals	54		
Medium-size Mammals	49		
Small Mammals	40		
Indeterminate Mammals	3		
NRDa	146		
TOTAL:	407		12
Rodent	5	3	1
Bird	14	9	1
TOTAL:	426		14
NRI	2278		
NRT	2704		

(seven, six of them are metapodials), Cervid (eight, five or them come from Giant Deer, seven are metapodials), Saiga (fifteen, coming from all type of bones) and Horse (five, three of them are tibias), have been broken to obtain the marrow. The principal area for butchery was probably squares 6D and 7C.

In level Gd, the Saiga were probably transported complete at the site (presence of osteal cartilage). The Bovine have been butchered near the hunting place. Skeletal parts from Horses and from one Deer have also been collected. Fourteen bones show butchering marks, four of them remain to Saiga (dismembered) and another one to a Polar Fox. Nines bones from middle-size mammals show all the steps of butchery (skinning, dismembering, filleting and fragmentation of long bone). Twenty-two long bones from middle-size to large herbivores, for example, Bovine (three), Deer (two metacarpals), and Saiga (three), have been fractured to obtain the marrow (Fig. 10). The principal area, where the carcasses were processed was probably squares 6C and 6D.

In Unit H, the Saiga has probably been transported in one piece (presence of osteal cartilage) and probably dismembered in front of the rock-shelter. The Bovine have been butchered on the hunting site and certain parts, those with a lot of meat, have been transported to the camp. Pieces from the two Horse carcasses have also been collected. Eleven bones show butchering marks: three from a Saiga (dismembering), two from a Horse (dismembering of a posterior foot), one from a Fox (skinning?), four from a large mammals (dismembering and filleting) and one from a medium-size mammal. Thirteen long bones from middle-size to large herbivores, for example, Bovine (six) and horse (one), have been broken to obtain the marrow. The square 6E is probably the principal area where the butchering activities took place.

Two Wolf canines, the only cranial section present at Siuren I, could have resulted from an intentional collect by the prehistoric.

Whatever the level, it appears that the Fox were hunted for their fur. The long bones from the herbivores have been fractured for marrow.

It is also important to notice that some bones, undetermined and determinate, show burning marks in all levels of Unit G and in Unit H; for example one rib of a medium-size mammal in level Gb1-Gb2 and one metatarsal of Polar Fox in level Gc1-Gc2 are burnt.

CONCLUSION

The fast covering of the faunal remains, particularly in Gc1-Gc2, Gd and H, offered a relatively large conservation estate (Auguste 1994). In both Units, the carnivores played only a small role in the history of the faunal remains, and that role is posterior to the human occupations. Then, the human is the principal accumulating agent of those bones remains.

The hunting of limited preys living in different environments: steppe areas (Saiga, Horse, Bovine) in G and

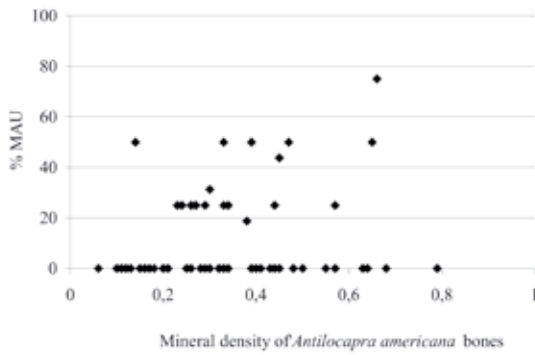


Figure 11. Siuren I, level Gc1-Gc2: percentage of MAU by mineral density of bones, test made on *Saiga tatarica* elements (in Massé, 2008).

H; forest (Red Deer, Giant Deer) in G and ubiquity in G and H (Fox), looks relatively opportunist. The scavenging of certain individuals from large species cannot be excluded.

The smaller species (Saiga, Fox, Hare) have been transported in one piece and the bigger (Horse, Red Deer, Giant Deer, Bovine) in parts. The acquisition strategies and the butchering treatment are stable from a level to another, even with the climatic variations (Unit H appears to have been more fresh than the Unit G).

The conservation of bones of Saiga is not correlated to their density (% MAU/mineral density of *Antilocapra americana*, the nearest specie with available data, Lyman, 1994, Fig. 11; statistic test for level Gc1-Gc2: $r = 0,194$, $p = 0,05$, $d.f. = 81$), but result from a human activity. The nutritive strategy curve (% MAU / % MGUI), put in evidence in the levels Gc1-Gc2 (Fig. 12), Gd and H, correspond to the reserve “bulk” strategy” (from Binford 1978). The exploiting strategies of the resources show an inverse skeletal element utility, which would suggest a secondary transport of the nutritive parts to another camp or a partial consumption on

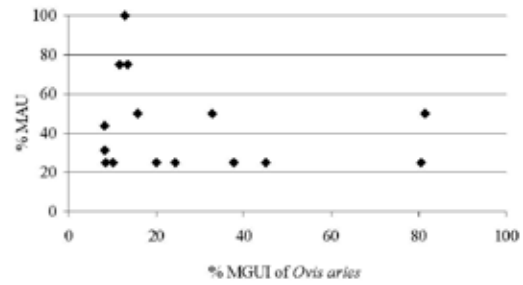


Figure 12. Siuren I, level Gc1-Gc2: nutritive strategy defined by *Saiga tatarica* (in Massé, 2008).

the hunting site.

Siuren I is a site with mixed strategies where the economics activities and technologies have been practiced (knapping, butchery, consumption). Hearths have also been discovered (Demidenko et al. 1998; Demidenko, Otte 2000-2001). The number of artefacts, bones and lithics, is relatively poor, which would suggest that the period of occupation was short in time.

The Siuren I rock-shelter can be assimilated, during the formation of Units G and H, to a temporary habitat (in winter for level Gc1-Gc2, and maybe for the level Gb1-Gb2 as well). Our archaeozoological interpretations are similar to the stratigraphic and lithic data and lead to a human behaviour which is similar in all levels. Unfortunately, they cannot distinguish the different inhabitants, Neanderthal or Anatomically Modern Human.

This study was supported by the 2004-08 Research Program “PPF Structure et Evolution des Ecosystemes” (head: P. Grandcolas, Museum National d’Histoire Naturelle, Paris) of the French Ministry of Research and Tertiary Education.

Резюме

МАССЭ ДЖ., ПАТУ-МАТИС М.

**СЮРЕНЬ I: НОВЫЕ РЕЗУЛЬТАТЫ
ЗООАРХЕОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ**

Грот Сюрень I – это многослойная палеолитическая стоянка. Технично-типологическим анализом артефактов установлено, что материалы пачек горизонтов F, G и H относятся к ориньякской индустрии двух типов. Радиоуглеродным датированием был установлен возраст ориньяка Сюрени I: 28,5 – 30,0 тыс. лет назад. Предположительно, авторами ориньякских артефактов были люди современного антропологического типа. Некоторое количество микокских орудий, ассоциирующихся с неандертальцами, обнаружено в пачках горизонтов G и H.

На основании тафономического анализа костного материала сделан вывод о том, что основная роль в аккумуляции фауны в гроте принадлежит гоминидам.

Остатки многочисленных поселений достаточно быстро консервировались обломочным материалом. Первобытными охотниками, в зависимости от размеров добытых животных, применялись разные подходы к их потреблению. Различий между способами эксплуатации фауны в горизонтах пачек G и H не установлено, как, впрочем, нельзя соотнести определенные способы использования фаунистических ресурсов с антропологическим типом охотников. Во время аккумуляции пачек горизонтов G и H грот Сюрень I многократно использовался как кратковременный охотничий лагерь, на территории которого происходили разделка и потребление добычи.