ZOOARCHAEOLOGICAL EVALUATION OF ANCIENT DATÇA (BURGAZ, SOUTH-WEST TURKEY)

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ABSTRACT

Recent excavations at the multi-period site of Datça/Burgaz in southwestern Turkey have revealed a sequence of occupation spanning from Geometric, Archaic and Classical periods. The zooarchaeological remains obtained from the Datça/Burgaz site provide a basic description of the faunal assemblages in the context of both local and regional dietary strategies of the various societies throughout the above-mentioned periods. All calculations are based upon a number of identified specimen frequencies. According to the results of this study, domestic cattle were the most plentiful species in the assemblage. Ovicaprine, including sheep and goats, and pigs were second and third most abundant respectively. In addition, wild species and equids are also represented in the fauna. Though frequencies of the samples change over the periods, cattle are found dominant in all periods. When consider the number of sample, the most statistically reliable among the groups at hand due to sample size (n=933) is the Classical Period.

1.   INTRODUCTION

Burgaz is the largest urban settlement in the Datça peninsula and is located 2 km northeast of the Modern Datça Harbour (Fig.1). Location geographically protrudes as a cape at 12 m above the sea level (Tuna, 1994:283). The site, Dalacak Cape, situated at the headland and identified as "Acropolis". Fertile plain and valley of Datça is rich in water resources and covered by olive and various fruit trees, which makes it a very suitable place for human inhabitance. Early investigators suggested that Cnidus of the Classical Period was most likely located at Burgaz (Datça) (Bean and Cook, 1952:202).

The archaeological site is surrounded by Classical fortification walls which are about 400 m in length. On the northwest of the fortification walls there are the remains of two ports, established by the towers and foundations of breakwater. The small promontory is encircled by ancient residential quarters extending over 45 ha. The extensive archaeological deposits dated to the Geometric, Archaic and Classical periods in the context of the Territorium of Knidians, maintain Burgaz in a high level of archaeological importance (Tuna, 1994:283).

Figure 1. Location map of Burgaz in Southwestern Turkey.

The site was identified initially by George Bean and John Cook as the settlement of the Knidians before their move to Tekir at the tip of the Datça peninsula. Since 1993 the Burgaz excavations have unearthed the foundations of courtyard houses, paved streets, and small public buildings, etc. belonging to Archaic and Classical settlements (Tuna, 1994:283). Later, in the 1980s, the archaeological surveys carried out by Prof. N. Tuna reemphasized the importance of the site. Since 1983 excavations have been directed by Tuna and have focused on the NE-SE (North-east- South-east) and SW(South-west) sectors to better understand the settlement plan and architecture (Aydın, 2004:15).

The excavation results indicate that the settlement was planned *insula* and bordered by streets. Although the streets were not intersected at right angles, the settlement seems to have an orthogonal plan. The houses in an *insulae* did not have a common dimension and orientation in Burgaz. Burgaz houses have a pastas house plan in which the houses rooms are situated around a courtyard. The courts generally include a well as water supply in which rainwaters were collected. The houses were entered directly from the street. Excavations have shown that the arrangement of the indoor spaces within homes was rearranged according to the needs of their habitants but the layout of the houses had not changed (Tuna and Kassab, 2009:523). The main work of the Burgaz excavations focused on exploring the extent and chronology of the occupation levels. The archaeological deposits of the Classical Period were extended and deeply buried over two meters below the existing topsoil, whereas the Hellenistic and Roman levels show some patches of graveyards with random habitation areas in mixed uses of agricultural processing, workshops and storage activities (Tuna, 1994:283). The coastal area was abandoned gradually in 3rd quarter of 4th century B.C. (Early Hellenistic), it is understood from alteration in spatial organization of the houses. After this abandonment, the coastal area was reorganized and served as storage for commercial goods and their loading onto cargo vessels during Hellenistic and Roman periods. On the other hand, the inland were developed as workshops for industrial –agricultural purposes (Tuna, 2012:72).

2.   MATERIAL AND METHODS

The assemblage considered in this paper comprises 1743 animal remains of which 1532 have been identified to the skeletal element and taxonomic level. Taxonomic descriptions in species, genus and family levels were ascribed depending on the degree of identification certainty and specimens' preservation status. If the degree of identification certainty was low and ascribing the specimen a taxonomic category was not possible, the methodological categories were employed and the material was separated into the following categories according to size: a) large-sized bones which include cattle but also other large mammals such as equids and cervids; b) middle-sized animals within the size range of ovicaprids, but may also include small cervids (roe deer), large dogs, and young pigs. The faunal remains analyzed here recovered from seven excavation campaigns between 2005 and 2012 (except 2008 season). The majority of the materials from Burgaz are currently stored in the METU (Middle East Technical University) Museum of Archaeology and the materials from 2009 season are kept at Anthropology Department of Van Yüzüncü Yıl University. The material was mainly hand-collected and no sieving was carried out during the excavation.

The faunal materials were identified by following several bone atlases (Boessneck, 1969, Hillson 1986 and 1992, Schmidt, 1972, Zeder and Pilaar, 2010). In addition, the presence/absence of butchery marks were recorded for each specimen. To understand the abundance of the skeletal parts and particular taxa in a collection of faunal remains the number of identified specimen (hereafter NISP) method was used.

This is probably the simplest quantification method and it helps to create the relative proportions of different species within an assemblage by a percentage of the total NISP. The analysis of kill-off patterns is based on documenting epiphyseal fusion and tooth wear. Tooth wear stages is the most accurate measure of age at death for animals, however, when small number of jaws and tooth recovered in the assemblage, at this stages epiphyseal fusion can be applicable. The kill-off pattern from dental wear was recorded following Payne (1982). State of fusion is recorded as unfused; with epiphysis is not attached to diaphysis, or fused; attached the diaphysis, which comprises with visible line and specimens with no visible line. The analysis of epiphyseal fusion for the animals follows the fusion age estimates proposed by Silver (1969) and groups them into age classes for each animal.

The animal remains included in this study have been collected mainly from the SE sector dated to the four different periods: Archaic = 6th century to 1st quarter of the 5th century BC; Classical = 2nd, 3rd and 4th quarters of the 5th century BC; Late Classical = 1st, 2nd, 3rd quarters of the 4th century BC; Early Hellenistic = last quarter of the 4th century to the 3rd century BC. The most statistically meaningful assemblages are represented in the Classical Period 56.3% (n:982), in the Archaic Period comprised 23.5% (n:410), Hellenistic Period is 12.3% (n:215), Classic/Hellenistic Period is 4.5% (n:80) and finally the at least samples were collected from Roman Period 3.2% (n:57). Although the faunal remains are given by separately in Table 1, findings of some periods are combined and evaluated together due to minimal sample size. In order to make the numbers more reliable, Late Classical and Classical Periods are lumped together, in addition Early Hellenistic and Hellenistic Periods are united.

3. RESULTS

The ancient Datça/Burgaz zooarchaeological assemblage is dominated by domesticated mammals. According to identified specimens (Table1) the majority of animal bones recovered from Burgaz during all periods belong to cattle (*Bos taurus*), Ovis/ Capra (sheep and goat), pig (*Sus domesticus*); 40.16%, 18.42%, 14.06% respectively. Middle size

(sheep/goat size animals) mammals are also frequently represented (11.59%) in the group. Considering the NISP, it can be seen that cattle, pig, and small livestock were the major part of the livelihood economy of the site.

Table 1. Composition of the all faunal assemblage from the site.

Species	Common Name	N	%
Bos taurus	Domestic Cattle	700	40.16
Caprinae	Domestic Sheep or Goat	321	18.42
Capra hircus	Domestic Goat	92	5.28
Ovies aries	Domestic Sheep	78	4.48
Sus domesticus	Domestic Pig	245	14.06
Equs caballus	Domestic Horse	12	0.69
Equidae		20	1.15
Cervus sp.		6	0.34
Canis familiaris	Domestic Dog	34	1.95
Canis lupus	Wolf	5	0.29
Carnivora		3	0.17
Felis sp.		1	0.06
Pisces		4	0.23
Lagomorpha		5	0.29
Testudo sp.	Tortoise	1	0.06
Aves indent	Bird	5	0.29
Large size		9	0.52
Middle size		202	11.59
Total		**1743**	**100**

Carnivore remains ascribed to *Canis familiaris* (n:34), *Canis lupus* (n:5), and taxonomic position of 3 specimens were classified under general category of canids due to restricted information. Dog bones were recovered mainly from the Classic/Hellenistic and Classical **(**Table 5) periods, while bones from Archaic and Roman Periods are represented fairly low. Mandible (n:11) bones were the most frequent findings in the collection, while tooth findings was fairly low. Less number of teeth material in the collection was limiting the development of a detailed dental age profile for the dog specimens. However, the fusion stage of post cranial elements indicates that (6 humerus and 6 tibia bones) all the findings are fused. Thus, it can be assumed that all of the dog remains are of adult animals.

Equids (*Equus. caballus, Equus.* sp.) represents 1.84% of total NISP. A total of 32 equid bones were recovered from Datça/Burgaz, of the 12 remains are identified as *E. caballus*. It was not possible to identify all equid remains in a higher taxonomic level; these are listed as *Equus* sp. (n:20). The equid bones were mostly observed from Classical Period

(71.87%). Two mandibular burnt teeth (M_3 and M_2), were ascribed to *E. caballus*. As very few teeth were recovered a dental age profile could not be generated. Furthermore, 22 post-cranial bones show fully fused morphology, which depict all animals are adult.

The Datça/Burgaz faunal assemblage contains very few (n:6) cervid fragments and these findings are represented by two species; red deer *Cervus elaphus* (n:3) and fallow deer (*Dama dama*) (n:2), and one proximal radius (right) is defined as Cervid sp. Three red deer and two fallow deer remains were recovered from Classical Period. In addition, red deer is represented by one worked metatarsal. Deer remains were found in small numbers only and the single worked deer bone shows that secondary use of deer bones by human was a minor activity.

Other wild animals present only 1.47% of the total number of identified remains and are comprised by a few bird species, cat, fish, lagomorph, and turtle. In any case, hunting did not play an important role in the subsistence of Datça/Burgaz people (Table 1).

The typical domestic species (cattle, sheep, goat and pig) comprised the main supply of the diet. The total number of identified pig (*Sus domesticus*) remains is 245 (14.06%); pigs are the third best represented animals at Datça/Burgaz. The most abundant pig remains were found in Classical Period 58.77%, while the Roman Period was the lowest (n:4). The approximate age at death of pigs are created from the state of epiphyseal fusion (Silver, 1969). Table 2 shows the number and stage of epiphyseal fusion in the pig specimens (N:139). At Datça/Burgaz six pigs were killed at an age between 3-3.5 years, while three animals were slaughtered at the age of 1-2 years, and only two animals were consumed at before 1 years old.

Ovicaprines are the second most dominant groups of animals at Datça/Burgaz. A total of 92 bones were defined as Capra and 78 as Ovis. It is often difficult to separate both sheep and goat especially in the case of fragmented material. As a consequence, 321 bone remains are listed as 'ovicaprine'. The highest number of ovicaprine remains was found from the Classical Period (20.90%). Whereas the proportion of ovicaprid remains was high in Archaic and Classical Periods, the importance of this animals seem to decrease abruptly for other periods. Mandibular sections and individual teeth were assigned to an age stage following Payne (1973). The data based on tooth wear are presented for both sheep and goat species were considered (Graph1). Unfortunately, due to fragmentation, we do not have many mandible materials. The wear stages were established for 27 mandibles and six isolated teeth. Whilst, most animals were killed between 3-4 years old (adult),

the overall impression from the dental wear stages, is that very few animals were killed before 1-year-old (Graph 1).

Table 2. Epiphyseal fusions for pig (Sus domesticus) at Datça/Burgaz (MT: Metatarsal, MC: Metacarpal, PH: Phalanges).

Elements	Fused (n)	Unfused (n)	Stages
MT	18	2	Stage II <2 years
MC	14	2	Stage II <2 years
1st Ph	10	3	Stage II <2 years
Calcaneus	6	1	Stage II <2 years
Humerus	11	2	Stage I < 1 years
Radius	9	2	Stage III< 3.5 years
Ulna	15	1	Stage III< 3.5 years
Tibia	20	6	Stage III< 3.5 years
Scapula	16	1	Stage III< 3.5 years
Femur	0	1	Stage III< 3.5 years
Total	**119**	**20**	

Fusion stages of post-cranial elements were used to compile age groups for combined data of sheep and goat individuals. The results are represented in Table 3. The remains of ovicaprid herds at Burgaz consisted primarily of adult individuals (93.43% fused). The ratio of individuals that survived between 12-28 months is 25.84% of the examined population, while the number of those surviving 30-36 months is quite low. In addition, although most of the animals were slaughtered and consumed at adult age, three neonate remains were obtained from Classical Period, and one neonate pelvis was burnt. Only one worked metapodium bone from the Classical/Hellenistic was found, and cut marks were observed on five fragmented bone remains from the Archaic Peri od.

Table 3. Estimated ages for ovicaprids based on post-cranial fusion stages (PH: Phalanges).

Elements	Fused (n)	Unfused (n)	Stages
1st Ph	44	3	Stage II (12-28m)
2ndPh	5	0	Stage II (12-28m)
Metapodium	92	2	Stage II (12-28m)
Calcaneus	15	5	Stage III(30-36m)
Femur	4	1	Stage III(30-36m)
Tibia	53	6	Stage IV(36-42m)
Ulna	6	0	Stage III(30-36m)
Humerus	66	4	Stage I(6-12m)
Scapula	19	4	Stage I(6-12m)
Total	**356**	**25**	

Cattle was the most frequently slaughtered animal and also represented the main source of animal protein. In total 700 finds were identified as cattle (*Bos taurus*). The majority (n:340) of the cattle bones at Datça/Burgaz were recovered from Classical Period and so very little can be said about cattle use in the other periods, especially in the Early Hellenistic Time (n:9). About 15 of the identified cattle remains are the waste of bone working. Nearly all worked

bones were from metapodia due to their preferable straight and thick shafts. In addition, other skeletal elements except one radius, were never used for tool making. Based on the worked bones, it is observed that the mid-shaft removed after cutting the distal part and as stated the middle shaft was used as tool making (Fig. 2).

In this study, the estimated bone fusion is grouped according to sequence of epiphyseal fusion based on which presented by Silver (1969). Not one of the Group I and III cattle elements recovered was unfused indicating that very few, if any, immature cattle were killed and deposited in the site (Table 4). 36.44% of cattle survived beyond 24-36 months of age. In all periods at Datça/Burgaz, 44.91% of the cattle in the assemblage survived at juvenile age, and 13.98% of the cattle survived beyond old age, while only 4.66% animals were slaughtered at a very young age. According to epiphyseal age analysis, these animals were kept mostly beyond juvenile and adult of age. Thus, undoubtedly, their meat and milk products would have been used, furthermore, secondary products would also be important for the Burgaz occupants. A very few cattle mandibular tooth was recovered so, this data is not sufficient to develop an age profile based on dental eruption and wear.
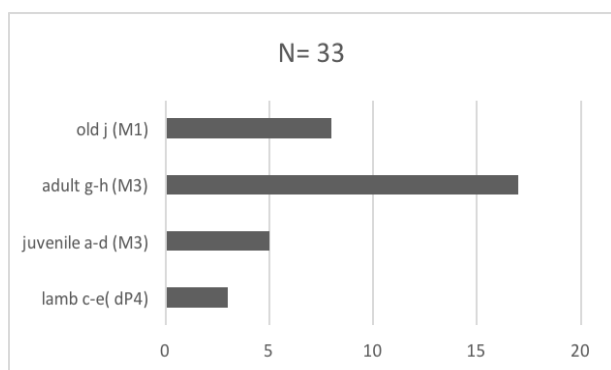
Graph1. Mandible and isolated teeth wear for Ovicaprids.

Figure 2. Worked unfused cattle bone.

Table 4. The age profile of cattle from post-cranial elements (Prox.: Proximal, Dist.: Distal).

Elements	Fused (n)	Unfused (n)
GroupI(0-18months)		
Scapula	8	0
Prox. radius	18	0
1st ph	26	0
2nd ph	17	0
Dist. humerus	33	0
Pelvis	4	0
GroupII (24-36 months)		
Dist. metapodium	67	9
Dist. tibia	6	1
Calcaneus	13	1
GroupIII (> 42 months)		
Dist. radius	8	0
Ulna	19	0
Femur	3	0
Prox. tibia	3	0

4. DISCUSSION

Investigating the variety of animals found at each period generates the results. The abundance of identified specimens is represented in Table 5. The highest number of bones was found from the Classical Period (56.3%), the next most abundant remains were collected from the Archaic Period (23.5%), and the lowest number of animals were identified during Roman Period (3.2%). Cattle is the most frequently occurring taxa in all periods, following cattle, the next most abundant species is ovicaprids, and pig is the third. Briefly, although, the predominant domestic animal's species fluctuated between cattle, sheep/goats, and pigs, cattle were always most preferred animal for the occupants. It is clear that the dietary strategy was primarily based around domestic animals; however, the rest of the taxa is also essential.

While, the highest number of cattle elements was gathered from Classical Period, cattle were found in fewer numbers in other periods because of cultural preference rather than environmental conditions (Popkin,2009:106). The use of cattle is very diverse. Cattle produce large quantities of milk that can be processed dairy products. In addition, their physical power can be used for the transport of goods or for hard labour on the fields (De Cupere, 2001: 91). Slaughtered cattle not only provide meat and labour but also bone and hide are used as raw materials. The late ages of death are in keeping with a strategy of using cattle primarily for their draught capabilities rather than as sources of meat or milk (Popkin, 2009:107).

Sheep and goat are very important husbandry animals because they produce milk, wool and hair; also their dung can be used for heating or fertilizing the fields (De Cupere, 2001:83). During Hellenistic and following periods the ovicaprine remains were

found very few in number. This might be explained by changes in the organization in the settlement. As stated above, during the Hellenistic Period the coastal area was abandoned and then the area was reorganized as commerce area. In addition, this result is also supported with the archaeological evidences and architectural changes. Goats appear to be more important than sheep in the assemblage, this is not an unexpected situation because it has already known that the natural environment around Datça; dry and rocky with maquis vegetation, is an environment much better suited to goats than sheep (Pişkin and Baykara, 2011:413). The kill-off pattern for ovicaprids in Datça/Burgaz, however, indicates a trend in which progressively more animals had been kept until adult age. These animals were presumably primarily kept for their secondary products; wool production, in particular in consideration of dental age data. This implies that sheep and goat herds were exploited in order to provide secondary products, which require keeping animals alive beyond their optimal age of meat production.

The Archaic Period is presented with high number of pig remains. As for the ovicaprines, this animal is well represented again in the Classical Period. Very few pig remains were detected from other periods, including the Early Hellenistic Time in which pig remains are completely absent. Overall, pigs were mainly killed during sub-adult and adult stages at Burgaz. It is therefore highly probable that these animals were kept for maximum meat use. In addition, because pigs do offer secondary products, they were kept for meat production. It is known that pork meat was much appreciated in Roman and Classical times (De Cupere, 2001:78).

The following contemporaneous nearby sites can be considered for data comparison: Archaic Klazomenai (Çakırlar et al., 2015:189), Archaic Zeytin Tepe (Peters, 1993:89), Archaic Kalabak Tepe (Peters, 1993:88), and Hellenistic-Roman site of Sagalassos (Neer and DeCupere, 1993:97). While, the faunal remains from Sagalassos and Kalabak Tepe reflect same subsistence economy, Klazomenai and Zeytin Tepe show differences (Graph 2). Cattle is the most dominant animal group for both archaeological settlements, however, ovicaprines were mainly abundant in Klazomenai and Zeytin Tepe. The pattern of pig utilization was very scarce in Zeytin Tepe (0.11%), the frequency of pig remains are 11% in Kalabak Tepe, the percentage for Sagalassos is 26.5 %, while a highest percentage of pig bones at 35% was observed from Klazomenai. Thus, it may be assumed that this animal was more important for Klazomenai occupants. According to Zeder (1985), pig remains are rarely found in public or temple areas. Archaeological evidence shows that Burgaz was

not associated with a temple area, however, Zeytin Tepe served as a sanctuary area explaining why the pig remains are nearly absent (Peters,1993:90). Although proportional differences are observed in regional faunal records, the main food supplier animals were more or less the same. In other words, we can see that the dietary strategy concentrated on herding cattle, pigs, and ovicaprines. A very low number of wild animals are represented in these archaeological sites, however, deer in Klazomenai is noticeable. Furthermore, those animals were never more important than domesticated animals for all sites.

Graph 2. Proportion of animals from different archaeological sites in Western Anatolia.
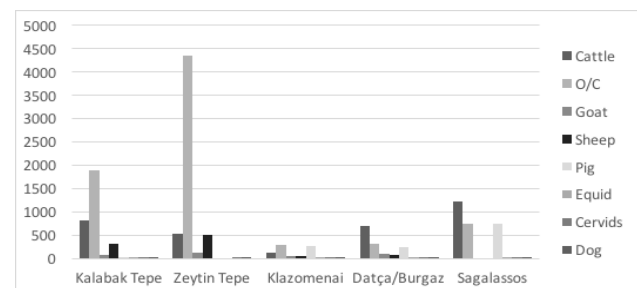
The comparison of the slaughtered age of ovicaprids at Datça/Burgaz with the other localities shows similar strategies. High numbers of ovicaprids were slaughtered between the ages of 2- 4 years at Zeytin Tepe, in addition at Kalabak Tepe a high proportion of sheep and goats were killed between 2 and 6 years of age. In Sagalassos, Klazomenai and Burgaz these animals were also kept until adult of age. The age profile must have been characterized by usage of secondary products rather than meat production. It is suggested that the age profile of ovicaprids probably indicates wool production at Kalabak Tepe. According to Peters (1993), because Classical Milet was a famous wool-manufacturing city, there is no reason to explain the observed kill-off patterns in a different way (Peters, 1993:89). It is clear that adult animals were preferred mostly in all examined sites. The age structure of pigs varies from site to site, while pigs were slaughtered after 2 years old at Klazomenai, animals were killed before reaching the age of 2 at Kalabak Tepe. The young age profile indicates, the animals that were kept for their meat. Pig remains at Zeytin Tepe are almost absent therefore an age profile was not created. Most of the animals at Datça/Burgaz were consumed during sub adult and adult age. The pig mortality profile can be explained in terms of a husbandry strategy aimed at optimum meat production. The data points to the assumption that animals were killed at adult age due to maximum size for the highest meat weight yeild. The age structure of cattle

is quite similar for all examined sites. Based on the age profile, cattle were slaughtered at adult age, they were thus, not only kept for their meat but also for other purposes such as milk and power. This idea is also supported with the presence of pathological deformation samples in Klazomenai and Sagalassos. Draught-related anomalies were recorded from both sites.

Figure 3. Worked cattle metapodium and tool artefact from Datça.

Besides main domestic animals, wild animals also were represented in assessed sites' fauna. The percentages of cervids are less than 1% for Kalabak and Zeytin Tepe, 0.8% for Sagalassos, 0.34% for Datça/Burgaz, whereas, 2%-8% for Klazomenai. It is stated that the consumption of *Dama dama* played an important role in the economy in Klazomenai, while cervids were obtained in much smaller numbers from other sites. In addition, worked cervid metatarsal was detected from the Classical Period Burgaz and Sagalassos fauna. As for the worked bone materials, cattle bones were the most preferred specimens in Ancient Times. The worked metapodial samples were observed all sites except Archaic Zeytin and Kalabak Tepe. It is clear that cattle metapodium bones were mostly used as a raw material and the shape, size and density, as well as the accessibility to the animals can affect the selection of this bone (Fig.3). Equid remains are also identified in all sites' faunal assemblages; however, this animal was not recorded in Zeytin Tepe. The majority of equid bones are defined as donkey in Sagalassos, in addition the number of this animal was higher than the horse in the Kalabak Tepe assemblages. The highest number of equids was identified in Burgaz, and very few samples were observed in the rest of the sites. According to Burgaz excavation results after gradual abandonment some spaces in coastal areas were re-organized as wine-oil, meat, and weaving work-shops. The coastal area served as port for the storage of commercial goods and an area for loading them onto cargo vessels (Tuna, 2012:72). The presence of equids is probably related to certain important economic activities at those sites. Such animals of burden would have acted as means of transport for the import and export of goods, including pottery and raw materials (Neer and De Cupere,1993:99). While the complete absence of butchery marks indicates that the meat of these animals was not consumed at Sagalassos, Klazomenai, and Datça/Burgaz, cut marks show horses were eaten in Kalabak Tepe. Finally, the remains of dogs were found at different frequencies at those sites. While a small number of dog elements were found from Klazomenai (n:5) and Zeytin Tepe (n:2), those samples are more abundant in Datça (n:34), Sagalassos, and Kalabak Tepe (n:23). A small number of dog bones show cut marks indicating that dog carcasses were processed in the Archaic Period at Burgaz and Kalabak Tepe. Several cut marks were observed on mandible (right) and humerus (left) dog bones in the 2009 collection at Burgaz (Fig.4). It is unclear whether dogs were being eaten, but if they were it was a rare occurrence. None of the dog bones found at Klazomenai, Sagalassos and Zeytin Tepe showed evidence of butchery marks, suggesting that dogs were not consumed at those sites. Dogs are, therefore, presumed to have been kept for work and also as animals of companion.

Figure 4. Cut marks on dog humerus.

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APPENDIX 1: Number of Identified Specimens at Burgaz.

Species	Archaic		Classic/Hellen		Classical		Early Hellenistic		Hellenistic		Late Classical		Roma	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Bos taurus	168	40,98	39	48,75	340	36,44	9	40,91	96	49,74	19	39,58	29	50,88
Caprinae	84	20,49	10	12,5	195	20,9	1	4,55	18	9,33	10	20,83	3	5,26
Capra hircus	25	6,1	1	1,25	52	5,57	6	27,27	2	1,04	4	8,33	2	3,51
Oviesaries	24	5,85	1	1,25	51	5,47					1	2,08	1	1,75
Sus scrofa dom.	70	17,07	6	7,5	144	15,43			13	6,74	8	16,67	4	7,02
Equus caballus	2	0,49			10	1,07								
Equid			4	5	13	1,39			3	1,55				
Cervussp	1	0,24		0	5	0,54								
Canis familiaris	7	1,71	12	15	13	1,39			1	0,52			1	1,75
Canis lupus	4	0,98			1	0,11								

Carnivor					2	0,21			1	0,52				
Felis sp.											1	2,08		
Fish	1	0,24			2	0,21					1	2,08		
Lagomorf	2	0,49			3	0,32								
Testudo sp.					1	0,11								
Aves indent	3	0,73			2	0,21								
Large size	1	0,24	1	1,25	6	0,64					4	8,33	1	1,75
Middle size	18	4,39	6	7,5	93	9,97	6	27,27	59	30,57			16	28,07
Total	410	100	80	100	933	100	22	100	193	100	48	100	57	100