



FAUNAL REMAINS FROM LATE HELLADIC LERNA (ARGOLID, GREECE)

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ABSTRACT

Recent analysis of preserved fauna from the 1952-58 excavations at Lerna stored in Argos and Stockholm allows us to reexamine the fauna published in 1969 by the late Prof. Nils-Gustaf Gejvall as the first of the Lerna final report volumes. The present detailed study combines the revised phasing, detailed context information, and fuller analysis of the preserved samples including butchery and burning data.

KEYWORDS: Mammals, Marine shells, N.-G. Gejvall

INTRODUCTION

Lerna was excavated from 1952 to 1958, directed by the late John L. Caskey and under the auspices of the American School of Classical Studies at Athens. The site produced material from the Middle and Final Neolithic (Lerna I and II, pottery published by Karen D. Vitelli in 2007, rest to be published by Elizabeth C. Banks), Early Helladic II (Lerna III, published by Martha H. Wiencke in 2000), EH III (Lerna IV, pottery published by Jeremy B. Rutter in 1995, rest in press by Banks with fauna report by Reese [in press a]), Middle Helladic (Lerna V, to be published by Carol Zerner), Late Helladic I-II graves, bothroi and some settlement debris (Lerna VI, to be published by Michael Lindblom), LH II-III (Lerna VII, published by Wiencke in 1998), and post-Bronze Age material (to be published by Brice Eriksen).

THE LERNA FAUNA¹

For six weeks in the spring of 1958 the late Prof. Nils-Gustaf Gejvall of Sweden studied the animal bones and shells in Ancient Corinth, where they were stored at the time.

Gejvall wrote his identifications, in English, on a separate index card for each excavated lot. Sometimes more than one card was needed. Full sets of cards are held by Wiencke, Reese, and the Archives of the American School of Classical Studies in Athens. Gejvall wrote on his cards the period

assignment he had available in Spring 1958. In July 1958 Elizabeth C. Caskey sent him revised lists of the periods for these lots. Sometimes Gejvall corrected these on his cards and 1969 monograph but at other times he did not make these corrections.

Gejvall had many bones and shells sent to Sweden for further study. The specimens he removed, including all those in his published photographs, were sent to his lab in Solna and in 2005 were moved to the University of Stockholm. They will eventually be sent to the Argos Museum.

Gejvall saw but did not publish bones and shells sent in as objects which in 1958 were stored in Ancient Corinth and in 1959 moved from Corinth to the Argos Museum. He studied some worked bones which he found in the bone bags, but these were generally not extracted and added to the registered objects.

Gejvall recorded on his cards the human bones he found in the animal bone bags in 1958 and removed these bones. However, they were not studied by John L. Angel (who worked on Lerna material in 1954 and 1957) and cannot now be found.

Gejvall published his work on the fauna in 1969 as the first of the Lerna final publication volumes. Gejvall sometimes changed his identifications between writing his cards (1958) and his 1969 publication. These changes were probably due to comparison of the specimens with the fauna stored in the Museum of Natural History in Stockholm and consultations with experts in Sweden and Germany (Gejvall 1969:xi).

¹ See key to Abbreviations and Vertebrates / Intervertebrates below, before the Catalogue.

For 25 years it was assumed that the Lerna faunal remains were discarded. However, in 1984 I discovered in storage in the Old Museum at Ancient Corinth seven wooden crates of animal bones and seven crates of shells from the seven Lerna periods. At that time I studied the shells, and included this information in my 1988 University of Cambridge Ph.D. dissertation and made my identifications known to other members of the Lerna publication team. Wiencke published Gejvall's 1958 bone and shell identifications in her Lerna VII final report in *Hesperia* but added my revised shell identifications to her Lerna III monograph. The Banks Lerna IV volume includes a faunal report (Reese in press a). I have also completed a reanalysis of the Lerna land snails (Reese in press b).

Sometime after I studied the shells in 1984 all the fauna was sent to the Argos Museum. For a number of years the animal bone crates were stored in an the old storeroom near the ancient theater but in 2002 were moved to the Lerna storeroom in the Argos Museum. The seven crates of shells are no longer in Ancient Corinth but cannot be located in Argos.

In 2003-05 I studied the preserved bones in Argos and in 2005 studied the Lerna fauna in the University of Stockholm. The present study is a reanalysis of the LH faunal remains from Lerna excluding the infilling of the two shaft graves. This fauna will be published in the Lerna VI volume by Lindblom.

The unpublished 1950s Lerna animal

bone and shell collection continues to grow. Since 2003 Sevi Triantaphyllou worked on the human remains now stored in Argos and originally studied by Angel in the 1950s and published in 1971. Triantaphyllou found unwashed animal bone and shell material amongst the human bones which in 2004-05 were studied by the present author. Three of these early LH grave samples are published here.

Gejvall noted the bag size (small, medium, large, or a *teneke* [olive oil tin]), and it is clear from my reanalysis that he did not study all the bones in each sample, but only the most easily identifiable pieces.

The Catalogue given here follows the contexts published by Wiencke and includes her reading of Gejvall's 1958 cards, the actual card description, and my own analysis. I publish, at the end of the main catalogue, certain deposits as "Fauna Not Saved" with descriptions from Gejvall's cards, even though the record is incomplete and most of this material was discarded about 50 years ago.

Gejvall publishes the Lerna VII fauna in a number of categories: VII (79 identified bones, 32 identified shells from 19 small bags, 21 medium bags, 4 large bags and 1 *teneke*), V+VII (58 bones, 44 shells), VII+V (139 bones, 90 shells), and VII+Classical (11 bones, 10 shells) for a total of 287 bones and 176 shells, as follows:

2 *Ovis* (horncore, metatarsus; 1 adult MNI).

11 *Capra* (6 horncore, 3 mandible, radius, metatarsus, 1 cut;

4 MNI [2 young, 2 adult]).

59 *Ovis/Capra* (2 maxilla, 14

mandible, 8 molar, scapula, 5 humerus, 6 radius, ulna, 9 tibia, 4 calcaneus, 7 metacarpus, 2 metatarsus; 11 MNI [3 young, 2 subadult, 6 adult]).

76 *Sus* (skull fragment, 8 maxilla, 40 mandibles, 5 scapula, 5 humerus, 2 radius, 3 ulna, 2 femur, 4 tibia, astragalus, 3 metacarpus, metatarsus; 24 MNI [1 neonate, 6 young, 7 subadult, 10 adult]).

54 *Bos* (3 horncore, maxilla, 10 mandible, 2 molars, 2 scapula, 4 humerus, pelvis, 3 femur, 3 tibia, astragalus/ centrotarsale, calcaneus, 5 metacarpus, 5 metatarsus, 9 phalanx 1, 3 phalanx 2, rib; 7 MNI [3 young, 1 subadult, 3 adult]).

5 *Canis* (3 mandible [1 cut], radius, metatarsus; 2 adult MNI). The cut mandible, from a V+VII lot, is more likely to be MH than LH.

18 *E. caballus* (skull fragment, maxilla, mandible, 3 molars, ulna, 10 femur, metacarpus; 4 MNI [3 adult, 1 senile]).

11 *E. asinus* (6 mandibles [1 cut]; radius, metacarpus, 2 phalanx 1, phalanx 2, 1 gnawed; 4 MNI [1 young, 3 adult]).

12 *Cervus* (8 antler, mandible, molar, metatarsus, 1 worked; 4 adult MNI).

5 *Lepus* (mandible, fibula, pelvis, femur, vertebra; 3 adult MNI).

3 *Vulpes* (mandible, 2 metacarpus; 1 adult MNI).

1 *Sus* (wild) skull fragment.

29 *Testudo*.

1 *Alectoris*.

58 *Cardium*, 27 *Spondylus*, 14 *Arca*, 12 *Pinna*, 2 *Glycymeris*, *Venus rugosa*, 49 *M. trunculus*, 2 *Cerithium*, *Patella*.

The VII+Classical fauna specifically

includes: 1 *Ovis/Capra* (mandible; subadult MNI), 2 *Sus* (2 mandibles; 1 subadult MNI), 2 *Bos* (metacarpus, phalanx 1; 1 subadult MNI), 4 *E. asinus* (radius, metacarpus, phalanx 1, phalanx 2; 1 adult MNI), 1 *Cervus* (antler, adult), 1 *Testudo*; 2 *Cardium*, 2 *Spondylus*, *Arca*, 2 *Pinna*, 2 *M. trunculus*, *Patella*. It is considered to be too disturbed with post LH material.

From the 287 identified bones in these four VII groups, he published only three cut bones (*Capra* bone; *Canis* mandible; *E. asinus* mandible), no burnt bones, and one worked *Cervus* piece (probably an antler). His list compares with the 446 bones identified to species and element in the present Catalogue, from four small bags, ten medium bags, two large bags, and one *teneke* (142 *Ovis/Capra* [18 MNI], 116 *Sus*, 114 *Bos* [eight MNI], and 56 *E. caballus*, six *Lepus* [four MNI]) of 901 bone fragments present in the seven samples retained. My Catalogue also records 119 burnt bones and 173 cut/butchered bones.

Gejvall did not have the specific contexts and final dates available to him. We now can place the fauna recovered in its proper contexts at the site.

Some of Gejvall's identifications have had to be corrected. For the deposit above Room 1 what Gejvall calls *Ovis/Capra* humerus fragments must be a misidentification. For Area 5, upper floor his *Cervus* ulna is either *Ovis/Capra* or *Bos*, and he did not recognize the *Homo* vertebra. For fill deposit 7 what Gejvall publishes as a thin *Bos* distal metatarsus is actually *Cervus*. What Gejvall noted on his cards as *Ostrea* he published correctly

as *Spondylus* (except for one fill deposit 7 shell which actually is *Ostrea*).

The MNI for the preserved samples differs from what Gejvall suggested on his cards. The correct numbers are: Room 1 (3 MNI *Ovis/Capra*, 2 MNI *Sus*, 2 MNI *Bos*), deposit above Room 1 (3 MNI *Ovis/Capra*, 2 MNI *Sus*), Area 5, upper floor (2 MNI *Sus*), Area 5, lower floor (2 MNI *Ovis/Capra*, 2 MNI *Sus*, 2 MNI *Lepus*), fill deposit 7 (6 MNI *Ovis/Capra*, 5 MNI *Sus*, 3 MNI *Bos*, *Testudo*), and Lot D 560 (1 MNI *Ovis/Capra*, 2 MNI *Sus*).

COMPARANDA

There are a number of published or in press reports on other mainland Mycenaean faunal remains from palaces and settlements. In the Argolid there is material from Midea (Gejvall 1983; Reese 1998, 2007; Walberg and Reese in preparation; Gardeisen 2007), Tiryns (von den Driesch and Boessneck 1990), and Asine (Moberg 1992, Moberg Nilsson 1996; Reese 1982 and unpublished additions).

From elsewhere on the mainland there are published reports from Tzoungiza (Dabney *et al.* 2004), Nichoria in Messenia (Sloan and Duncan 1978; Mancz 1989; Reese 1992), the Palace of Nestor at Pylos (Nobis 1991, 1993; Isaakidou *et al.* 2002; Halstead and Isaakidou 2004; Stocker and Davis 2004), Eleusis (Cosmopoulos *et al.* 2003), Ayios Stephanos in Laconia (Reese in press c), and Ayios Konstantinos (Hamilakis and Konsolaki 2004).

Most of the comparanda fauna

(Midea, Asine, Tsoungiza, Pylos, Asy. Konstantions) are only partially published. All the settlement/palace faunas are rather similar in having mainly domestic food animals (in order of importance: *Ovis/Capra*, *Sus*, *Bos*), rare non-food domestic animals (*Canis*, *Equus*) and even rarer wild animals (*Testudo*, *Cervus*, *Lepus*, *Vulpes*, birds, fish).

There are also LH remains from several graves (Blegen 1937; Boessneck and von den Driesch 1984; Payne 1990; Reese 1995; Hamilakis 1996). The main animals intentionally buried with the dead were equid and dog skeletons.

Key to Abbreviations

Caskey 1958 list of final phasing sent by Elizabeth G. Caskey to Gejvall

D	diameter (in mm)
dP	deciduous premolar
F	fused
H	height (in mm)
JF	just fused
L	left
Le	length (in mm)
M/mo.	molar
max.	maximum
MNI	Minimum Number of Individuals
P/pm.	premolar
pres.	preserved
R	right
T	thickness (in mm.)
UF	unfused
W	width (in mm)
yr(s).	year(s)
→	NG-G symbol for erupting tooth
1/1	N-GG symbol for erupted tooth

Vertebrates

Alectoris = *Alectoris graeca* (rock partridge)

Bos = *Bos taurus* (domestic cattle)

Canis = *Canis familiaris* (dog)

Capra = *Capra hircus* (goat)

Cervus = *Cervus elaphus* (red deer)

E. asinus = *Equus asinus* (ass or donkey;

N-GG as *Asinus asinus*)

E. caballus = *Equus caballus* (horse)

Homo = *Homo sapiens* (human)

Lepus = *Lepus europaeus* (hare)

Ovis = *Ovis aries* (sheep)

Ovis/Capra = *Ovis aries/Capra hircus* (sheep or goat)

Sus = *Sus scrofa* (pig)

Testudo = *Testudo hermanni* (tortoise)

Vulpes = *Vulpes vulpes* (fox)

Invertebrates

Arca = *Arca noae* (ark shell)

Cardium (Gejvall's term for *Cerastoderma glaucum*)

Cerastoderma = *Cerastoderma glaucum*

(cockle; Gejvall as *Cardium*)

Cerithium = *Cerithium* (=Gourmya) *vulgatum* (cerith, horn shell)

Cyprina (Gejvall's term for *Glycymeris*)

Dosinia = *Dosinia lupinus* (artemis shell; Gejvall as *Docinia*)

Glycymeris = *Glycymeris insubrica* (dog cockle)

Mactra = *Mactra corallina* (trough shell)

M. brandaris = *Murex brandaris* (dye murex; also called *Bolinus b.*)

M. trunculus = *Murex trunculus* (rock murex; also called *Hexaplex t.* and *Trunculariopsis t.*)

Ostrea = *Ostrea edulis* (oyster) (most of what Gejvall calls *Ostrea* are in fact *Spondylus*)

Patella = *Patella coerulea* (limpet)

Pinna = *Pinna nobilis* (pen shell)

Spondylus = *Spondylus gaederopus* (spiny or thorny oyster)

Tonna = *Tonna galea* (tun shell)

Venus rugosa (Gejvall 1969 name for what he calls *Docinia* on his cards)

CATALOGUE

FAUNA SAVED

Area D

Room 1; LH IIIA2-B1. Lots D 238 + 554.

Wiencke (1998, 142, based on Gejvall's cards): 8 *Ovis/Capra* remains, 6 *Sus*, 3 *Bos*, 2 *Lepus*; *Cardium*, 2 *Arca*, *Pinna*, 6 *Murex*, 2 *Cerithium*.

Gejvall's card (18 bones/teeth noted; 2 medium bags; cards as VII+V but Caskey 1958 list as VII):

Ovis/Capra: mandible fragment (I₁→, L), M₃→, humerus fragment, metacarpus fragment (juvenile), metatarsus fragment,

3 calcaneus.

Sus: mandible fragment (M₁→, R), scapula fragment (newborn), radius fragment (juvenile), metacarpus fragment (juvenile),

2 metacarpus fragments (adult).

Bos: horncore fragment, humerus fragment, femur fragment (juvenile).

Lepus: mandible (R), pelvis fragment (Gejvall 1969, 91,

pl. XVII:11 [D 554]).

Cardium, 2 *Arca*, *Pinna* fragment, 6 *Murex*, 2 *Cerithium*.

Reese analysis (134 bones/teeth; 27 burnt, 22 cut):

Ovis/Capra (3 MNI): maxilla fragment (M¹ worn, L), M³ (unworn, L, 2 pieces), anterior mandible (no teeth, L), 2 posterior mandible fragments (cut down behind last tooth, burnt black; coronoid process, broken, burnt gray), 2 mandible fragments (side; distal, burnt gray), M₃ (unworn, open roots), incisor, scapula (lacks glenoid, burnt gray, L, 2 pieces), distal humerus (F, L), 2 distal humerus shafts (burnt gray, R; L), distal radius/ulna (both F, cut down on angle above articulation, L), distal femur (UF and epiphysis, L), distal tibia (F, R), astragalus (R, Le 25.25, W 17.75), 4 calcaneus (3 L: 2 F, 1 broken [partly burnt gray]; R, F, cut on angle through *sustentaculum tali*), proximal metacarpus (burnt gray, R), proximal metatarsus and shaft (L), metatarsus shaft (cut down length), metapodial shaft (small), proximal phalanx 1 (F).

Sus (2 MNI): 2 mandible fragments (dP₄ alveolus; posterior, young), lower canine (young female), incisor (adult), scapula (very young, worn glenoid, burnt gray, L), radius (F proximal, UF distal, burnt gray, R), 2 radius shafts (1 cut on angle down shaft and burnt gray), 2 astragalus (small, worn, L; larger, Le 37.7, R), metacarpus III (UF, burnt gray, R), metatarsus III (UF, small, R), metatarsus III (F, goes with IV, L), metatarsus IV (F, goes with III, L), metapodial III/IV (broken, small).

Ovis/Capra or *Sus*: 3 skull

fragments, scapula fragment (side, burnt gray), tibia (all UF, very small, burnt gray),

25 shafts (6 cut down length, 4 burnt [3 gray; black]), 2 vertebra fragments (1 UF and burnt gray), 28 rib fragments

(7 heads [3 cut], 6 burnt [3 gray, 3 black]).

Bos (2 MNI): skull/horncore fragment, canine (root), incisor (adult), distal humerus (F, R), proximal femur and shaft (probably cut through lower portion of neck, burnt gray at proximal, L), proximal femur fragment (cut on angle below articulation, R; older than L), distal tibia (F, broken), proximal phalanx 1 (F), 9 shafts (5 cut down length, 2 join), 4 rib fragments (1 cut through on angle), fragment (burnt black).

Lepus: anterior mandible fragment (R), pelvis fragment (F, L) (1969, 91, 105, pl. XVII:11, in Stockholm).

Cerastoderma, 2 *Arca* (2 MNI), *Pinna* fragment, 12 *M. trunculus* fragments (6 MNI), 2 *Cerithium*.

Deposit above Room 1; LH IIIA2-B1. Lot D 553.

Wiencke (1998, 145): 8 *Ovis/Capra*, 4 *Sus*, 2 *Bos*; 4 *Ostrea*, 3 *Arca*, *Pinna*, 3 *Murex*.

Gejvall (14 bones/teeth noted; medium bag; card as VII+V but Caskey list as V):

Ovis/Capra: mandible fragment (M₁→, L), M₃ (1/1), 2 humerus fragments, 3 radius fragments, metacarpus fragment (juvenile).

Sus: 2 mandible fragments (M₁ 1/1, L; M₂→, R), ulna fragment, astragalus.

Bos: pelvis fragment, phalanx 1 fragment.

4 *Ostrea*, *Arca*, *Pinna*, 3 *Murex*.

Reese (88 bones/teeth; 31 burnt, 20 cut):

Ovis/Capra (3 MNI): 3 mandible fragments (3 side, 3 burnt gray), M₃ (broken, slightly worn), 3 distal radius (3 F, 3 R, 1 burnt gray, worn; 1 broken, burnt gray), 3 radius shafts (cut down dorsal side, burnt gray; cut down length; smaller, burnt gray), pelvis/acetabulum (L), astragalus (burnt gray/brown, R, Le 29, W 20.25), metacarpus shaft (slightly burnt black), proximal metatarsus and shaft (burnt gray, 4 pieces).

Sus (2 MNI): 2 mandible fragments (M₁ worn, M₂ erupting/ unworn, M₃ alveolus, burnt gray, R; M₁ unworn, burnt black, L), 3 lower canine fragments (2 male: toward tip, cut on 2 sides, recently broken distal end of piece; root end [ancient break]; female, bit worn, 2 pieces), distal radius (UF), proximal ulna and shaft (UF, burnt gray, R, 2 pieces), ulna shaft, tibia shaft (cut down part of length), 3 fibula fragments (1 with end), astragalus (rather large, L, Le 38.5, W 23.25).

Ovis/Capra or *Sus*: skull fragment, 2 scapula fragments,

2 pelvis fragments (1 ischium cut and burnt gray), 21 shafts

(5 cut down length [2 burnt gray], 2 burnt gray), vertebra spine, 4 rib fragments (2 burnt gray), 2 fragments burnt black.

Bos: distal humerus shaft (cut down length, L), proximal radius (F, cut down length from dorsal to ventral, L), pelvis/ acetabulum fragment (cut

through upper acetabulum and through lower acetabulum on L side, burnt gray, rather large, L), distal femur epiphysis (broken), distal tibia (F, cut down length, R), distal metatarsus shaft (cut across on angle in lower shaft), metapodial shaft (cut down length), phalanx 1 (F, 2 pieces), 6 shafts (5 cut down length [3 burnt gray]), fragment (burnt gray).

Worked bone awl: tip end, pres. Le 40, T 9 (Wiencke 1998, 145, fig. 13:MO8 [L4.789]).

Shells not saved.

Area 5, upper floor; LH IIIB1. Lots D 237 + 263.

Wiencke (1998, 158): 2 *Ovis*, 2 *Capra*, 3 *Sus*, 4 *Bos*, *E. caballus* or *E. asinus*, 3 *Cervus*, *Testudo*; 4 *Ostrea*, 3 *Cardium*, *Arca*, ?*Cyprina*.

Gejvall (16 bones/teeth noted; 2 medium bags; card for D 237 as VII+V but Caskey list as VII):

Ovis: horncore fragment, metatarsus fragment.

Capra: horncore fragment, metatarsus fragment.

Sus: maxilla fragment (1/1, R), 2 mandible fragments (1 M₁→, L; 1/1, middle).

Bos: 2 mandible fragments (1/1, L), tibia fragment, metatarsus fragment.

E. caballus M³ (Gejvall 1969, 36, 84, 104, pl. XVI:6 [D 237]).

Cervus: antler fragment, mandible fragment (1/1, R), ulna fragment.

Testudo carapace fragment.

4 *Ostrea*, 3 *Cardium*, *Arca*, ?*Cyprina*.

Reese (85 non-human bones/teeth; 8 burnt, 20 cut):

Ovis skull/horncore fragment (3 pieces).

Capra horncore fragment.

Ovis/Capra (2 MNI): 4 mandible fragments (coronoid and condyle processes, burnt black, L; coronoid process; 2 side [1 burnt gray]), 2 distal humerus (F, L; broken, smaller than F example, L), proximal radius (F, cut on angle through proximal), proximal radius and shaft (F, proximal burnt gray, R, 2 pieces), radius/ ulna shaft (cut down length of radius and on ventral R side of ulna), femur shaft (worn white, 2 pieces), proximal metacarpus (R), proximal metatarsus and shaft (gracile, worn white), 2 metatarsus shafts (gracile, cut down length; cut down length and partly burnt gray).

Sus (2 MNI): maxilla fragment (P⁴ unworn, R), 2 mandible fragments (dP₄, M₁ in hole, L; anterior with canine alveolus, 2 R and 2 L incisors, P₁ alveolus of L), scapula (F, L, 3 pieces), distal humerus (UF, cut down length above articulation, L), radius shaft (cut down length), pelvis/acetabulum fragment (L), proximal femur (all UF, L), distal tibia (F, cut on angle in lower shaft, R), tibia shaft (cut through in mid shaft, R), calcaneus (mid fragment, eroded, L).

Ovis/Capra or *Sus*: scapula side fragment, 2 pelvis fragments (1 partly burnt gray), 9 shafts (3 cut down length [1 burnt gray]), 2 vertebra (UF, burnt gray; F, cut across below centrum), vertebra spine, 3 rib fragments (1 head cut).

Bos: skull fragment (3 pieces), 2 mandible fragments (anterior, P₁ alveolus, R+L; anterior, burnt gray, R),

incisor/ canine (much worn, 2 pieces), proximal ulna (broken, R), radius/ulna shaft (cut down length of radius and ulna), femur shaft (cut down length, has 10 cut marks perpendicular to cut edge [| | | | | | ^ | |]), distal tibia fragment (F, worn white, L), tibia shaft (cut down length), metatarsus shaft (rather gracile, cut on angle from ventral to dorsal on angle), phalanx 1 (F),

6 shafts (3 cut down length, 1 in 2 pieces), 4 rib fragments, fragment.

E. caballus M³ (1969, 36, 84, 104, pl. XVI:6)

Cervus mandible fragment (no teeth, R).

Testudo carapace fragment (mid body).

Homo vertebra.

4 *Spondylus* (2 collected dead, 4 MNI), 3 *Cerastoderma*

(3 MNI), *Arca* (collected dead), *Glycymeris* (collected dead, possibly holed umbo).

Area 5, lower floor (half sample); LH IIIA2-B1. Lot D 239.

Wiencke (1998, 163) lists Gejvall's card information for Lots

D 239 and 240 together.

Gejvall (5 bones noted; medium bag; card as V-VII but Caskey list as VII):

Ovis/Capra mandible fragment (M₁→, R).

Sus: 2 mandible fragments (M₁→, M₂→, R, L).

Bos mandible fragment (M₃ 1/1, L).

Lepus tibia fragment.

Ostrea, *Cardium*, 2 *Murex*.

Reese (57 bones/teeth; 4 burnt, 15 cut):

Ovis/Capra (2 MNI): mandible fragment (dP₃ roots, M₁ up/bit worn, M₂ unworn/open roots, R, 2 pieces), scapula fragment (body, R), distal humerus (F, cut down ventral side, L), radius shaft,

2 pelvis fragments (1 young, 1 older), tibia shaft (R), metacarpus (UF, cut down dorsal-ventral from proximal to lower shaft), metacarpus shaft, 2 proximal metatarsus (cut down from proximal, burnt black; L).

Sus (2 MNI): maxilla fragment (dP⁴ unworn and broken, M¹ up/unworn, L), 2 mandible fragments (dP₃ fragment, dP₄ up/unworn, M₁ below, R; P₄ alveolus, M₁ slightly worn, M₂ unworn, broken, L), tibia shaft.

Ovis/Capra or *Sus*: skull fragment, 5 shafts (1 cut down length, 1 in 2 pieces), 2 rib fragments (1 burnt gray).

Bos: mandible fragment (P₁ unworn, P₂₋₃ slightly worn, L), M₁ (worn, L), M₃ (slightly worn, L), distal humerus (F, cut on

R side, slightly burnt gray, L), proximal radius (F, cut down 2 sides), proximal metatarsus (cut down length [side-to-side],

3 pieces), 10 shafts (8 cut down length, 1 in 3 pieces).

Lepus (2 MNI): 2 distal radius (2 F, 1 burnt gray, 2 L).

Small mammal tibia shaft (not *Lepus*).

Pin made on *Ovis/Capra* femur: tip end, polished, pres. Le 7.9 (Wiencke 1998, 163 [L3.54]).

Spondylus (collected dead), *Cerastoderma*, 2 *M. trunculus*.

Area 5, Fill deposit 7; LH II-III A2.

Lots D 155, 168, 202, 210, 220, 242, 243, 245, 246.

Wiencke (1998, 175): 19 *Ovis/Capra*, 22 *Sus*, 16 *Bos*, *Canis*, *Cervus*, *Lepus*, *Homo*; 22 *Ostrea*, 4 *Cardium*, 4 *Arca*, *Pinna*, *Docinia*, ?*Cyprina*, 13 *Murex*.

Gejvall (c60 non-human bones/teeth noted; 3 small bags, 4 medium bags, 2 large bags; cards have all but 210 as VII+V but on Caskey list all are VII):

Capra: 2 horncore fragments, 2 mandible fragments (1 M₃^o, 1 1/1, R, L), radius fragment.

Ovis/Capra: maxilla fragment (1/1), mandible fragment (R), M₁ (1/1), scapula fragment, 7 tibia fragments, 2 metacarpus fragments, metatarsus fragment (juvenile).

Sus: skull fragment, lacrymal, 3 maxilla fragments (M₃[→], L; 1/1, R; 1/1 worn down, L), 12 mandible fragments (2 1/1, R, L; M₁[→], L; M₃[→] to 1/1, R; M₃[→], R; M₃[→], L; 1/1 worn down [L], M₁[→] [R], 3 M₂[→] [2 L, R], M₃[→] [L]), 4 humerus fragment (2 juvenile), metatarsus fragment (juvenile).

Bos: horncore fragment (short), maxilla fragment, M₃ (1/1), 2 mandible fragments (1/1, 2 L), scapula fragment, femur fragment, tibia fragment, metacarpus fragment, distal metatarsus with shaft (F, ♀) (Gejvall 1969, 83, 103, pl. X:12 [D 245]), metatarsus fragment, 5 phalanx 1, fragments.

Canis mandible fragment (L) (1969, 65 [D 243])

Cervus: 2 antler fragments (point).

Lepus vertebra fragment.

Homo: 3+ bones.

22 *Ostrea*, 4 *Cardium*, 4 *Arca*, *Pinna*, *Docinia* (removed by Gejvall and probably what he publishes as *Venus rugosa*), ?*Cyprina*, 12 *Murex* + 2 fragments.

Reese (417 non-human bones/teeth; 41 burnt, 91 cut):

Capra: horncore fragment, horncore/skull/oculus fragment

Ovis/Capra (6 MNI): premaxilla (R), M¹ (worn), maxilla fragment (P²⁻³ worn, M¹ worn, R), P¹ (unworn, open roots), M² (slightly worn, open roots), upper molar fragment, 9 mandible fragments (P₁₋₃ alveoli, R; P₁ root, P₂₋₃ worn, M₁ much worn, M₂ worn, R; M₂ bit worn/broken, M₃ erupting, has coronoid process, L, 2 pieces; no teeth, burnt gray, R, 3 pieces; anterior, gracile, L, 3 pieces; 2 condyle process [young, gracile, L; cut through bottom of coronoid process, burnt gray, R]; part coronoid and condyle processes, R; side), premolar fragment, M₁ (slightly worn), M₂ (slightly worn), M₃ (broken, worn, L), 3 scapula (F, L; F, R; side), distal humerus (broken, R), 3 distal humerus shafts (cut down shaft and burnt gray; cut down shaft except at distal, L; L), proximal radius (UF), radius shaft (cut down length, partly burnt gray), ulna shaft, pelvis/ilium fragment (young, gracile), tibia (all UF), proximal tibia and shaft (F, burnt gray, R), 9 distal tibia (9 F: 5 L [very slightly JF; cut on angle on upper shaft; cut down length except at very distal], 4 R [1 JF line visible, cut down shaft except at distal; cut on angle in mid shaft; broken]), 2 tibia shafts (1 cut

down length, 1 in 2 pieces), astragalus (Le 27.25, W 18.25, R), calcaneus (F, L), metacarpus (complete, F, R), 2 proximal metacarpus (R, 2 pieces; L), 2 distal metacarpus (2 F: cut on angle through R condyle; cut through above R condyle on angle and burnt gray), metacarpus shaft (small, burnt gray), metatarsus (rather complete but no distal, cut through shaft), 2 metatarsus shafts (gracile, burnt gray; burnt gray/black), 2 metapodial shafts (1 gracile), phalanx 1 (F).

Sus (5 MNI): skull fragment (has oculus, cut, 2 pieces), lacrymal (in Stockholm [155]), 3 maxilla fragments (P³⁻⁴ unworn, M¹ somewhat worn, M² unworn, M³ erupting/mainly below, R; M² unworn, M³ not fully up [unworn, open roots], R; M² very worn, M³ [Le 18.25, W 29], L, 2 MNI), 16 mandible fragments (dP₃ unworn, dP₄ unworn; dP₄ unworn, R; dP₄ much worn, M₁ unworn/broken, M₂ below, R; dP₄ much worn, M₁ roots, M₂ below, L; M₁ slightly worn, M₂ erupting/unworn, M₃ below, L; M₂ slightly worn, M₃ mainly up/ unworn [Le 30.75, W 15.25], L; M₂ alveolus, M₃ hole, L; M₂ bit worn, M₃ erupting [1/3rd up], L; P₁₋₃ alveoli, M₁₋₂ much worn, M₃ not fully up/unworn [Le 36, W 14.75], R; M₂ broken, M₃ much worn [Le 29.25, W 17.75]); M₂ up/unworn, M₃ alveolus/roots, adult, burnt gray); M₂ unworn/broken; anterior [R+L halves, has canine alveolus]; 2 distal fragments [1 young]; distal posterior fragment [adult], 5 MNI), incisor, premolar fragment, 5 scapula (small, young, R; F, L, 2 pieces; broken glenoid, adult, L), cut down middle, R; body fragment, burnt gray, R),

proximal humerus shaft (adult), 5 distal humerus (2 UF, 2 R; small, R; 2 F, R, L), 3 distal humerus shafts (cut down ventral side, L; adult, cut on lower shaft on angle, R; L), 2 proximal radius (2 F, R, L), distal radius (UF, R), 3 radius shafts (cut on angle at one end; gracile, burnt gray; adult), proximal ulna (broken, R), distal ulna shaft (adult, burnt gray), pelvis/acetabulum fragment (UF, L), 3 proximal tibia (3 UF; broken, burnt gray, 2 pieces; broken, R; unsided), distal tibia (F, cut on angle through lower mid shaft, R), tibia shaft (burnt gray, R), distal tibia shaft (burnt gray, R), calcaneus (body fragment, adult, burnt light gray, R), metacarpus III (UF, burnt gray, L), metacarpus IV (F, R), proximal metatarsus III (adult), metatarsus III (F, cut through proximal, L), proximal metatarsus IV (L).

Ovis/Capra or *Sus*: 10 skull fragments (1 oculus, 1 cut),

3 scapula fragments (1 side, 1 burnt gray), 2 tibia shafts (2 young), 67 shafts (22 cut down length [2 burnt gray, 2 burnt black], 1 cut on angle near proximal, 1 burnt black, 1 burnt gray/black), vertebra (UF, cut down center), vertebra fragment,

8 vertebra spines (1 cut), 13 rib fragments (4 heads [1 cut, 1 burnt gray, 1 burnt black], 1 burnt gray, 1 burnt black/gray; 1 in 2 pieces).

Bos (3 MNI): horncore fragment (short), skull fragment, 2 anterior premaxilla (2 L), 7 mandible fragments (M₃ bit worn, 2 pieces; anterior fragment before teeth, L; coronoid process; side; 3 distal fragments), M₂ (slightly worn), M₃ (slightly worn, L),

4 scapula (4 F: cut through glenoid and down length on R side, L, 2 pieces; cut through glenoid, 2 chop marks on upper part of glenoid before cut area, cut along bone on collum, R; cut along *spina*, L; F, R, 5 pieces), scapula fragment (side), 2 distal humerus (UF, L; F, cut down between 2 halves of distal and also on angle through ventral side, burnt light gray, L), proximal radius (F, ancient break down shaft, R, 2 pieces), proximal ulna (cut across above articulation, L), pelvis/ acetabulum fragment (L, 2 pieces), femur head (UF), proximal femur (F head, lacks *trochanter majus*, chop mark and cut through end of head and cut across on angle below articulation and also cut through head on side near *troch. majus*, L, 2 pieces), 2 distal tibia (JF, R; F, cut on angle above articulation, L), astragalus (cut off proximal lateral side, Le 54, W 38, R), 3 proximal metacarpus (3 R, 1 cut down length in 2 areas; 1 in 2 pieces), 6 phalanx 1 (6 F, 1 gracile [Le 54.25]), 63 shafts (32 cut down length [1 in 2 directions, 2 burnt gray, 2 in 2 pieces; 1 cut down part of length], 2 vertebra (2 UF, 1 burnt gray), 4 vertebra spines (1 in 2 pieces; 1 large), 10 rib fragments (1 has cut mark on body; 1 has head; 1 in 4 pieces; 1 in 2 pieces), 9 fragments (2 cut; burnt black/white; charred gray/brown).

Canis: mandible fragment (P and M₁₋₃ alveoli, worn, L) (1969:65, in Stockholm [D 243]), proximal radius (F, L).

Cervus: distal metatarsus and shaft (F, distal W 40.75) (1969:33 [thin], 83, 103, pl. X:12 [D 245] as *Bos* distal metatarsus and shaft, ♀), distal

metatarsus (F, burnt gray, max. W 44.75, depth 26.25, 3 pieces), 2 phalanx 1 (2 F; Le 56, proximal W 22.25; Le 60, proximal W 21.5) (all in Stockholm).

Bos or *Cervus*: 2 scapula fragments (2 body), radius shaft, proximal metatarsus (gracile, 2 pieces), phalanx 1 (F, thin, gracile, Le 51.25, proximal W 19.25).

Lepus vertebra (F).

Testudo carapace fragment.

Homo: 36 bones (to be published by Triantaphyllou).

Worked *Cervus* antler "comb": broken at both ends, 18 teeth preserved, pres. Le 84, W 33.25, max. T 6.5 (Wiencke 1998, 175, fig. 29: MO36 [L3.203], pl. 30).

Worked *Cervus* antler: cut and smoothed down for 45 mm on 2 faces; tine, probably smoothed down, L c165, recent and ancient breaks at end, visible smoothed area 16 x 12; 3 pieces.

Worked bone pin (?*Lepus* bone): tip and shaft, pres. Le 41 (Wiencke 1998, 175, fig. 29:MO8 [L3.55]).

22 *Spondylus* (18 MNI, 6 collected dead), 4 *Arca* (3 MNI), *Ostrea*, *Pinna*, *Glycymeris* (collected dead), 12 *M. trunculus* + 3 fragments (13 MNI).

Shells from D 210 were not saved. Gejvall's card notes 2 *Ostrea*, *Arca*, *Cardium*, *Dosinia* (probably what he publishes as *V. rugosa*).

Lot D 560

Gejvall's card and Caskey list as VII. Not noted in Wiencke 1998. A combined lot from the area of the walls west of Room 1, in particular W-13 and W-14, at levels +6.25-+5.77 (meaning levels sometimes below the bottom levels of those walls). Pottery:

60% "coarse", 25% LH (both plain and painted), 15% MH (personal communication from Wiencke, 12 January 2005).

Gejvall (3 bones noted; small bag):

Sus: 2 mandible fragments (R, L), scapula fragment (juvenile).

Ostrea.

Reese (21 bones/teeth; 8 burnt, 5 cut):

Ovis/Capra: distal humerus shaft (R), proximal ulna (UF, R), ulna shaft, 2 pelvis fragments (1 with acetabulum cut along ventral side and burnt black).

Sus (2 MNI): anterior mandible (I, P₁ alveolus, R), mandible (dP₄ worn, M₁ up, L), lower canine (broken, adult male, 2 pieces), scapula fragment (very small, cut through glenoid on angle, burnt black, L), metatarsus III/IV (F, cut through anterior, burnt black, 2 pieces).

Ovis/Capra or *Sus*: tibia (very small, proximal broken,

distal UF, burnt black, R), 4 shafts (1 in 2 pieces, 2 cut down length and burnt black; 1 burnt black).

Spondylus (fresh, upper, Le 61+), *Pinna* fragment, *M. trunculus* (body fragments).

Trench F

Trench F, stone paving; LH II-III B1. Lots F 7, 15, 20.

Wiencke (1998, 185, 187, pl. 19a-c [horse bones]): 2 *Ovis/Capra*, 1 *Sus*, crushed *E. caballus*.

Gejvall (8 bones noted; 1 *teneke*):

Ovis/Capra: mandible fragment (1/1, R), tibia fragment.

Sus mandible fragment (M₂^o, R).

E. caballus: maxilla (Gejvall 1969, 36, 84, pl. XVI:8 [M³]), mandible (1969, 36, 85, pl. XVI:7), proximal ulna (F) (1969, 36, 85, pl. XVI:10), distal femur (F) (1969, 36, pl. XVI:9), metacarpus (F) (1969, 36, 86, pl. XVI:3).

Murex.

Reese (99 bones/teeth [unwashed]; 0 burnt, 0 cut):

Ovis/Capra: anterior mandible (P₁ alveolus, P₂₋₃, M₁ slightly worn, L), ulna shaft, distal tibia (F, R).

Sus: mandible (dP₄ alveolus, M₁ unworn, M₂ below, R),

metatarsus (F, L).

E. caballus: skull fragments, maxilla (has M¹⁻³) (1969, 36, 84, pl. XVI:8 [M³]), mandible (2 molars worn down) (1969, 36, 85, pl. XVI:7), jaw fragment (has incisor), incisor, scapula fragment (F, R), proximal humerus (F), distal humerus (F, R, 2 pieces), 2 humerus shaft fragments, proximal radius (F, broken), distal radius (F, R), proximal ulna (F, L) (1969, 36, 85, pl. XVI:10), pelvis fragment, 2 proximal femur (2 F, R, L), 2 distal femur (F, R; F, broken) (1969, 36, pl. XVI:9 [R one]), distal tibia fragment (F), carpus/tarsus, metacarpus (F, slightly burnt on upper L side, R) (1969, 36, 86, pl. XVI:3), proximal metapodial, distal phalanx 1, vertebra (F), 28 rib fragments (5 heads) (Reese 1995, 36).

M. trunculus (collected dead).

Area DC

Grave DC-1, skeleton 2 (LH I), about 49 years old (female) (Angel

1971:66 [146 Ler]).

1 bone - *Sus* phalanx 1 (UF, robust).

Grave DC-1-2 (LH I), about 3 years old (possibly male) (Angel 1971, 66 [148 Ler]).

1 bone - *Canis* posterior mandible (has M₁ root, M₂ alveolus, R); *M. brandaris* siphon (fresh, medium).

Area DE

Grave DE-1 (early LH IIB), 7 months old (male) (Angel 1971, 61 [150 Ler, as LH I]; Wiencke 1998, 125, 196).

M. trunculus body/internal columella (worn, medium); cf. *Maetra* fragment (encrusted exterior, shiny interior).

FAUNA NOT SAVED

Area D

Area 5, lower floor (second half); LH IIIA2-B1. Lot D 240. Card as VII with some V+VI, Caskey list as VII with some V, 1969 volume as VII+V).

Wiencke (1998, 163) combines card information for Lots D 239 and 240.

Gejvall (medium bag):

Ovis/Capra: 2 mandible fragment (M₃→, R; L); *Sus*: lacrymal (in Stockholm), femur (fetus or newborn); *Bos*: tibia fragment, calcaneus, phalanx 1; *Canis*: mandible fragment (R), radius fragment, metatarsus; *E. asinus* phalanx 1 (F [but young], worn) (Gejvall 1969, 86, 104, pl. XV:5; not noted by Wiencke); *Cervus*: 3 antler fragments (not noted by Wiencke); *Vulpes*: mandible (lacks teeth, has M₁

root, slightly charred, L) (1969, 39, 87, 105, pl. XVIII:6; card and Wiencke 1998, 163 as *Canis vulpes*), 2 metacarpus fragments; *Alectoris* proximal tibiotarsus and upper shaft (1969, 97, 106, pl. XX:12; not noted by Wiencke).

West of Room 1; LH II to IIIA2-B1. Lots D 264 and 555-59. Card has 264 as VII with some V+VI but 1969 volume as VII+V. Cards for 555-59 as VI with some V. Caskey list as all VII with some V.

Wiencke (1998, 179): 12 *Ovis/Capra*, 7 *Sus*, 5+ *Bos*, *E. caballus*, *Cervus*, 3 *Homo*; 3 *Ostrea*, 4 *Cardium*, 2 *Arca*, *Pinna*, 2 *Murex*.

Gejvall (6 small bags):

Ovis/Capra: mandible fragment (L) (D 264); M₂ (worn down)

(D 555); mandible fragment (M₁→, R), humerus fragment, radius/ ulna fragment, tibia fragment, metacarpus fragment (D 556); tibia fragment (juvenile), calcaneus fragment (juvenile) (D 557);

M₃ (worn down), humerus fragment, radius fragment (D 559); *Sus*: mandible fragment (M₁→, L) (D 264); ulna fragment, femur fragment (juvenile) (D 557); maxilla fragment (M²→, L), mandible fragment (M₂→, L) (D 558); mandible fragment (M₃→, L), ulna fragment (D 559); *Bos*: metacarpus fragment, fragments (D 555); metatarsus fragment (D 556); phalanx 1 (♂) (D 557); mandible fragment (R) (D 558); phalanx 2 (D 559); *E. asinus* mandible fragment (M₁ broken, M₂, M₃, young, L) (Gejvall

1969, 36, 85, 104, pl. XV:4, D 264; card and Wiencke as *E. caballus*); *Cervus* M³ (1/1, worn) (D 557); *Homo*: metacarpus (adult), metatarsus (adult) (D 556); phalanx fragment (D 559); *Ostrea*, *Cardium*, *Murex* (D 264); 4 *Spondylus* (3+ MNI), 3 *M. trunculus*, *Cerastoderma* fragment, *Arca*, 2 *Pinna* (1+ MNI) (D 555 = 511, studied by Reese); *Arca*, *Cardium* (D 556); *Ostrea* fragment, *Pinna* fragment (D 557); *Cardium* (D 558); *Ostrea*, *Pinna* (D 559).

Street south of Wall W-6; LH III.

Lots D 265-66. Cards as VII with some V. Caskey list has 265 as VII with some V and 266 as V with some VII). Wiencke 1998, 180 notes only the 265 fauna: 1 *Sus*, 1 *Cardium*. The pottery was not retained.

Gejvall (1 small and 1 medium bag):

Ovis/Capra mandible fragment (R) (266); *Sus*: canine fragment (265), fragments (266); *Bos*: M₃, fragments (266); *Cardium* (265); 2 *Ostrea*, 3 *Murex* (266).

Lot D 244 - Card and Caskey list as V with some VII; Lindblom as VI (large bag).

Sus: 4 mandible fragments (3 1/1, 1 M₂→, 4 R); *Ovis/Capra*: M₂ (1/1), M₃→(?); *Bos* mandible fragment (1/1, R); *E. caballus* ?M² (worn, large) (Gejvall 1969, 36, 84, pl. XVI:5, as V+VII); *Testudo*: 2 carapace fragments; *Ostrea*, *Arca*, 2 *Pinna*, *Murex*.

Trench F

First level below stone paving; LH II to IIIA2-B1. Lots F 16-17, 21. Cards as LH III with some early Mycenaean,

Caskey list as all VII.

Wiencke (1998, 190): 3 *Ovis/Capra*, 2 *Sus*; 1 *Murex*.

Gejvall (small bag):

Ovis/Capra: 2 mandible fragments (2 R, 1/1), metacarpus fragment; *Sus*: mandible fragment (1/1, L), tibia fragment; 2 *Murex*.

Second level below stone paving:
LH II with MH. Lots F 18-19. Cards as VI with LH I-I and latest MH but Caskey list and 1969 volume as VI.

Wiencke (1998, 190): *Ovis/Capra*, 2 *Sus*, *Canis*; 2 *Ostrea*, 2 *Arca*, *Tonna*.

Gejvall (1 small bag):

Ovis/Capra metacarpus fragment; *Sus*: skull fragment, tibia fragment; *Canis* mandible (C, P₁₋₄ roots, M₁, M₂ broken posterior, exhibits oligodonty, L) (Gejvall 1969, 17, 65; in Stockholm); 2 *Ostrea*, 2 *Arca*, *Tonna* fragment.

Third level below stone paving:
mainly MH, some LH II (V-VI). Lot F 22.

Wiencke (1998, 192): *Capra*, *Sus*, 3 *Bos*; *Ostrea*, *Cardium*, *Arca*, *Murex*.

Gejvall (small bag):

Capra horncore fragment; *Sus* mandible fragment (M₃→, R); *Bos*: humerus fragment, 2 pelvis fragments; *Ostrea*, *Cardium*, *Arca*, *Murex*.

Area DB

Pit Grave DB-1 (Lot DB-38) Card as V, Lindblom as VI (medium bag).

Sus: maxilla fragment (M³→, L), mandible fragment (M₁→, L);

Ovis/Capra scapula fragment; *Bos*: P² (1/1), M₁ (worn down); *Testudo*: 3 carapace fragments; 2 *Ostrea*, *Cardium*, 4 *Murex*.

Grave DB-3 (Lot DB-1 12) Card as V; Lindblom as VI (Blackburn 1970, 178) (small bag).

Sus: pelvis fragment, 2 metacarpus fragments (2 juvenile); *Ostrea*, *Murex*.

Lot DB-9 Associated with Graves DB-1 and 3. Card as V with some VI and later, Lindblom as VI (large bag).

Sus: canine, scapula fragment; *Capra*: 3 horncore fragments, mandible fragment (1/1, L); *Bos*: horncore fragment (has small piece of skull, has large cut area [W 40], broken proximal end) (Gejvall 1969, 33, 79, pl. XIII:6, as DB1-9, V+VI, as castrate), horncore fragment (small piece, in Stockholm), radius fragment; *Canis* mandible fragment (R); *Testudo* carapace fragment; *Arca*, 2 *Murex*.

Lot DB-26 Associated with Graves DB-1 and 3. Card as V+VI, Lindblom as VI (small bag).

Sus: canine fragment, scapula fragment, metacarpus, metatarsus; *Ovis/Capra*: M₃→, tibia fragment; *Bos*: 2 metacarpus fragments; *Ostrea*, 2 *Murex*.

Lot DB-27 Associated with Graves DB-1 and 3. Card as V+VI, Lindblom as VI (small bag).

Sus: maxilla fragment (C→, L), ulna fragment (juvenile); *Ovis*: skull fragment, mandible fragment (1/1, L); *Testudo*: 2 carapace fragments; 2 *Murex*, 2 *Lunatia*.

Area DE

Lot DE 433 - Card and Caskey list as Mixed; Lindblom as VI (small bag).

Bos humerus fragment; *Testudo* carapace fragment; *Pinna*, *Murex*, *Cerithium*, *Tonna*.

Lot DE 440 - Card as VII, Caskey list and Lindblom as VI (small bag).

Sus: 3 maxilla fragments ($M^3 \rightarrow$, 2 L, 1 R), ulna fragment (juvenile); *Ovis/Capra* (2 MNI): 2 mandible fragments ($M_3 \rightarrow$, R, L), metacarpus fragment (newborn); *Bos*: M^3 (1/1), metapodial (adult); *Cervus*: antler fragment, mandible fragment (R); 2 *Ostrea*, *Pinna*, *Murex*.

Lot DE 443 - Card as VII, Caskey list and Lindblom as VI (medium bag).

Sus: humerus fragment, femur fragment (juvenile), astragalus fragment; *Ovis/Capra*: M^3 (1/1), mandible fragment (M_3 1/1, L); *Bos*: M^2 or $M^3 \rightarrow$; *Cervus*: antler fragment, mandible fragment (R); 3 *Ostrea*, *Pinna*, 2 *Murex*.

Lot DE 452 (Bothros DE-2) VI (2 large bags).

Sus: 2 maxilla fragments (1 1/1, L; 1 1/1?, R), 4 mandible fragments ($M_3 \rightarrow$, 3 1/1, 2 L, 2 R), radius fragment (juvenile)

Ovis/Capra: horncore fragment, maxilla fragment (1/1, R), 2 mandible fragments ($M_1 \rightarrow$, L; $M_3 \rightarrow$, R); *Bos*: mandible fragment (R), tibia fragment, calcaneus, 2 phalanx 1, phalanx 3; *Canis*: mandible fragment (mainly alveoli, has P_2 worn, R, medium or rather large) (Gejvall 1969, 17, 65), distal radius (F, adult, L) (1969:67, as

senile) (both in Stockholm); *Lepus* proximal tibia fragment; 17 *Ostrea*, 3 *Arca*, 2 *Pinna*, 2 *Murex*.

Cervus antler awl: point tip not preserved, polished (particularly toward tip), pres. Le 81.5, max. W (base) 14.9 x T 10, butt W 9.7 x 5 (L6.530, in Argos Museum).

Lot DE 453 - Card as maybe VII, Caskey list and Lindblom as VI (large bag).

Sus mandible fragment (M_1 C1/1, R); *Ovis/Capra* mandible fragment (M_3 1/1, R); *Bos* phalanx 1; *Cervus*: radius fragment, metatarsus fragment; *Testudo* carapace fragment; *Homo* tibia (fetus); 10 *Ostrea*, *Cardium*, 2 *Murex*.

Lot DE 455 - Card as VII, Caskey list as VI+later; Lindblom as VI (medium bag).

Sus humerus fragment (fetus or newborn); *Bos*: M_3 (1/1), phalanx 3.

Lot DE 456 (Bothros DE-1) VI (2 large bags).

Sus: maxilla fragment ($M^1 \rightarrow$, R), mandible fragment (1/1 worn down, R), ulna fragment; *Ovis/Capra*: 3 mandible fragments ($M_1 \rightarrow$, L; 1 $M_1 \rightarrow$, 1 1/1, 2 R), $M_3 \rightarrow$, metacarpus fragment (juvenile); *Bos*: $M^{2\circ}$, M_3 (1/1), astragalus, phalanx 2; *Canis* mandible fragment (only alveoli, small, L) (Gejvall 1969, 17, 65, pl. II:11); *E. caballus* proximal metatarsus (adult, R) (1969, 35, 36, 86, pl. XVI:2); *Cervus*: antler point, radius fragment, tibia fragment; *Lepus* femur fragment; *Testudo* carapace fragment; 18 *Ostrea*, 2 *Arca*, 2 *Pinna*, 8 *Murex*, *Cerithium*.

REFERENCES

- Angel, J.L., (1971) *Lerna, A Preclassical Site in the Argolid II The People*. Princeton: American School of Classical Studies at Athens and Washington, D.C.: Smithsonian Institution.
- Banks, E.C., (in press) *Lerna, A Preclassical Site in the Argolid VI The Architecture, Stratification, and Finds from Lerna IV*. Princeton: American School of Classical Studies at Athens.
- Blackburn, E.T., (1970) *Middle Helladic Graves and Burial Customs with special reference to Lerna in the Argolid*. Ph.D. thesis, University of Cincinnati.
- Blegen, C.W., (1937) *Prosymna: The Helladic Settlement Preceding the Argive Heraeum*. Cambridge.
- Boessneck, J. and von den Driesch, A., (1984) Die zoologische Dokumentation der Reste von vier Pferden und einem Hund aus einem mykenischen Schachtgrab in Kokla bei Argos (Peloponnes). *Spixiana* 7/3, 327-33.
- Cosmopoulos, M.B., Greenfield, H.J. and Ruscillo, D., (2003) Animal and marine remains from the new excavations at Eleusis: an interim report, in E. Kotjabopoulou, Y. Hamilakis, P. Halstead, C. Gamble, and P. Elefanti (eds), *Zooarchaeology in Greece: Recent Advances*. London: British School at Athens, 145-52.
- Dabney, M.K., Halstead, P. and Thomas, P., (2004) Mycenaean Feasting on Tsoungiza at Ancient Nemea, in J.C. Wright (ed), *The Mycenaean Feast (=Hesperia 73/2)*. Princeton: American School of Classical Studies at Athens, 77-95.
- von den Driesch, A. and Boessneck, J., (1990) Die Tierreste von der Mykenischen burg Tiryns bei Nauplion/Peloponnes, in K. Kilian (ed), *Sonderdruck aus Tiryns Forschungen und Bericht XI*, Mainz am Rhein: Verlag Philipp von Zabern, 87-164.
- Gardeisen, A., (2007) Economie vivrière et alimentation carnée en Grèce méridionale du Néolithique moyen à la fin de l'âge du Bronze, in *Cooking up the Past: Food and Culinary Practices in the Neolithic and Bronze Age Aegean*, in C. Mee and J. Renard (eds), Oxford: Oxbow Books, 49-70.
- Gejvall, N.-G., (1969) *Lerna, A preclassical site in the Argolid I The Fauna*. Princeton: American School of Classical Studies at Athens.

- Gejvall, N.-G., (1983) Animal Bones from the Acropolis. In P. Åström, *The Cuirass Tomb and other Finds at Dendra 2*. Göteborg: Paul Åströms Förlag, 51-54.
- Halstead, P. and Isaakidou, V., (2004) Faunal Evidence for Feasting: Burnt Offerings from the Palace of Nestor at Pylos, in P. Halstead and J.C. Barrett (eds), *Food, Cuisine and Society in Prehistoric Greece*, Oxford: Oxbow Books, 136-54.
- Hamilakis, Y., (1996) A Footnote on the Archaeology of Power: Animal Bones from a Mycenaean Chamber Tomb at Galatas, NE Peloponnese. *The Annual of the British School of Archaeology at Athens* 91, 153-66.
- Hamilakis, Y. and Konsolaki, E., (2004) Pigs for the Gods: Burnt Animal Sacrifices as Embodied Rituals at a Mycenaean Sanctuary. *Oxford Journal of Archaeology* 23/2, 135-51.
- Isaakidou, V., Halstead, P., Davis, J. and Stocker, S., (2002) Burnt animal sacrifice at Mycenaean 'Palace of Nestor', Pylos. *Antiquity* 76/291, 86-92.
- Mancz, E.A., (1989) *An Examination of Changing Patterns of Animal Husbandry of the Late Bronze and Dark Ages of Nichoria in the Southwestern Peloponnese*. Ph.D. thesis, University of Minnesota, Minneapolis, UMI 89-18286.
- Moberg, K., (1992) The animal bones, in R. Hägg and G.C. Nordquist, Excavations in the Levandis Sector at Asine, 1989. *Opuscula Atheniensia* XIX/5, 66-68.
- Moberg Nilsson, K., (1996) Animal Bones from Terrace III in the Lower Town of Asine, in R. Hägg, G.C. Nordquist, and B. Wells (eds), *Asine III. Supplementary Studies on the Swedish Excavations 1922-1930* 1. Stockholm: Skrifter utgivna av Svenska institutet i Athen 4°, XLV:1: 111-15.
- Nobis, G., (1991) Das Gastmahl des Nestor, Herrscher über Pylos - Mythos und Wahrheit über mykenische Tafelfreuden-. *Tier und Museum* 2/3, 67-77.
- Nobis, G., (1993) Archäozoologische Untersuchungen von Tierresten aus dem "Palast des Nestor" bei Pylos in Messenien, SW-Peloponnes. *Zeitschrift für Archäologie* 27, 151-73.
- Payne, S., (1990) Field report on the Dendra horses, in E. Protonotariou-Deilaki, The Tumuli of Mycenae and Dendra in R. Hägg and G.C. Nordquist (eds) *Celebrations of Death and Divinity in the Bronze Age Argolid*. Stockholm: Skrifter utgivna av Svenska institutet i Athen 4°, XL, 103-06.
- Reese, D.S., (1982) The Molluscs from Bronze Age to Post-Geometric Asine in the Argolid, Greece, in S. Dietz, *Asine II. Results of the Excavations East of*

- the Acropolis 1970-74* 1. Stockholm: Skrifter utgivna av Svenska institutet i Athen, 4^o, XXIV, 139-42.
- Reese, D.S., (1988) *Marine Invertebrates and Mediterranean Archaeology*. Ph.D. thesis, University of Cambridge.
- Reese, D.S., (1992) Recent and Fossil Invertebrates (with a Note on the Nature of the MH I fauna), in W.A. McDonald and N.C. Wilkie (eds), *Excavations at Nichoria in Southwest Greece II The Bronze Age Occupation*. Minneapolis: University of Minnesota Press, 770-78.
- Reese, D.S., (1995) Equid Sacrifices/Burials in Greece and Cyprus: An Addendum. *Journal of Prehistoric Religion* IX, 35-42.
- Reese, D.S., (1998) The Faunal Remains, in G. Walberg, *Excavations on the Acropolis of Midea I:1 The Excavations on the Lower Terraces 1985-1991*. Stockholm: Skrifter utgivna av Svenska institutet i Athen, 4^o, XLIX:I:1, 277-91.
- Reese, D.S., (2007) The Faunal Remains. In G. Walberg, *Midea: The Megaron Complex and Shrine Area. Excavations on the Lower Terraces 1994-1997*. Prehistory Monographs 20. Philadelphia: INSTAP Academic Press, 397-467.
- Reese, D.S., (in press a) The Lerna IV Fauna. In E.C. Banks, *Lerna, A Preclassical Site in the Argolid VI The Architecture, Stratification, and Finds from Lerna IV*. Princeton: American School of Classical Studies at Athens.
- Reese, D.S., (in press b) A Note on the Land Snails from Neolithic and Bronze Age Lerna (Argolid, Greece). *Annales Musei Goulandris*.
- Reese, D.S., (in press c) The Faunal Remains, in W. Taylour and R. Janko (eds), *Ayios Stephanos, Results of Excavations in Laconia, 1973-77*. London: British School at Athens.
- Rutter, J., (1995) *Lerna, A Preclassical Site in The Argolid III The Pottery of Lerna IV*. Princeton: American School of Classical Studies at Athens.
- Sloan, R.E. and Duncan, M.A., (1978) Zooarchaeology of Nichoria, in G. Rapp, Jr. and S.E. Aschenbrenner (eds), *Excavations at Nichoria in Southwest Greece I Site, Environs and Techniques*. Minneapolis: University of Minnesota Press, 60-77.
- Stocker, S.R. and Davis, J.L., (2004) Animal Sacrifice, Archives, and Feasting at the Palace of Nestor, in J.C. Wright (ed), *The Mycenaean Feast (=Hesperia 73/2)*. Princeton: American School of Classical Studies at Athens, 59-75.

- Vitelli, K.D., (2007) *Lerna, A Preclassical Site in The Argolid IV The Neolithic Pottery of Lerna I and II*. Princeton: American School of Classical Studies at Athens.
- Walberg, G. and Reese, D.S., (in preparation) *Feasting at Late Helladic Midea (Argolid, Greece)*.
- Walden, H.W., (1983) Molluscs, in P. Åström, *The Cuirass Tomb and other Finds at Dendra 2*. Göteborg: Paul Åströms Förlag, 46.
- Wiencke, M.H., (1998) Mycenaean Lerna. *Hesperia* 67/2, 125-214.
- Wiencke, M.H., (2000) *Lerna, A Preclassical Site in The Argolid IV The Architecture, Stratification, and Pottery of Lerna III*. Princeton: American School of Classical Studies at Athens.