

## Appendix 1

Filey: sediment descriptions (composite descriptions from all samples from each context examined).

- 12022 Mid (slightly orange to pinkish) brown, crumbly (working plastic) silty clay to clay with stones 20-60+ mm present, and traces of mortar/plaster, mammal bone and marine shell and traces to moderate amounts of charcoal.
- 12024 Mid (orange to pinkish) brown (darker and lighter in places), brittle to crumbly (working plastic), slightly sandy silty clay, silty clay, clay silt or clay with traces of mortar/plaster, mammal bone and marine and terrestrial mollusc shell, and traces to moderate amounts of charcoal.
- 12025 Mid-dark brown (locally light pinkish-brown in the lining of channels and in other patches, sometimes reddish-brown or orange-brown), stiff, brittle or crumbly (working more or less plastic), slightly sandy, slightly silty clay, slightly silty clay, clay silt, or clay with traces of stones 20-60 mm, mortar/plaster, coal, mammal bone and marine shell, and traces to moderate amounts of charcoal.
- 12027 Dark brown to black (lighter internally), to mid-dark grey-brown, to mid-dark pinkish grey-brown, crumbly to brittle (working soft to more or less plastic) clay silt to slightly silty clay to clay with traces of stones >60 mm, rotted mortar, mammal bone and rotted marine shell, and traces to moderate amounts of charcoal.
- 12028 Mid-dark (pinkish) brown, crumbly (working slightly plastic), slightly sandy, slightly silty clay to clay silt with traces of stones >60 mm and charcoal.

## Appendix 2

Species list of mollusc remains from Carr Naze, Filey.

Species	Common name
Terrestrial	
<i>Cochlicopa lubrica</i> (Müller)	
<i>Vertigo pygmaea</i> (Draparnaud)	
<i>Pupilla muscorum</i> (Linnaeus)	
<i>Lauria cylindracea</i> (da Costa)	
<i>Vallonia excentrica</i> Sterki	
<i>Clausilia</i> sp.	
? <i>Trichia</i> sp.	
<i>Cepaea</i> sp.	
<i>Helix</i> sp.	
Marine	
<i>Patella</i> spp.	Limpets
<i>Littorina littoralis</i> (Linnaeus)	Flat winkle
<i>Littorina saxatilis</i> (Olivi)	Rough winkle
<i>Littorina littorea</i> (Linnaeus)	Winkle or Periwinkle
<i>Nucella lapillus</i> (Linnaeus)	Dog whelk
<i>Buccinum undatum</i> Linnaeus	Whelk
<i>Mytilus edulis</i> Linnaeus	Common mussel
<i>Ostrea edulis</i> Linnaeus	Oyster
? <i>Astarte</i> sp.	
Solenidae	Razorfish or Spoutfish

### Appendix 3

Hand-collected mollusc assemblage by context. Unid = unidentifiable.

#### Roman

##### Context 1213

Unid. fragments 1

##### Context 4030

*Patella* spp. 1

*Ostrea edulis* Linnaeus 1

##### Context 11004

*Patella* spp. 19

*Littorina* sp. 1

*Nucella lapillus* (Linnaeus) 1

*Mytilus ?edulis* Linnaeus 4

*Ostrea edulis* Linnaeus 1

Solenidae 1 (fragment)

Unid. fragments 14

##### Context 11008

*Patella* spp. 1

*Littorina littorea* (Linnaeus) 2

*Mytilus ?edulis* Linnaeus 1

Unid. fragments 8

##### Context 11013

Unid. fragments 3

##### Context 11015

*Patella* sp. 1

*Littorina littorea* (Linnaeus) 1

*Mytilus ?edulis* Linnaeus 1

Unid. fragments 1

##### Context 11017

*Littorina ?saxatilis* (Olivi) 5

##### Context 11019

Unid. fragments 1

##### Context 11032

*Patella* spp. 3

*Mytilus ?edulis* Linnaeus 24

Unid. fragments 17

#### Context 11033

*Patella* sp. 1

*Buccinum undatum* Linnaeus 1

*Ostrea edulis* Linnaeus 1

Unid. fragments 3

#### Context 11035

*Mytilus ?edulis* Linnaeus 4

Unid. fragments 3

#### Context 11038

*Patella* spp. 2

*Littorina littoralis* (Linnaeus) 1

*Littorina littorea* (Linnaeus) 2

*Mytilus ?edulis* Linnaeus 1

?*Astarte* sp. 1 (fragment)

Unid. fragments 3

#### Context 11047

*Patella* sp. 1

*Ostrea edulis* Linnaeus 1

#### Context 11049

*Littorina littoralis* (Linnaeus) 2

*Littorina ?saxatilis* (Olivi) 3

*Littorina littorea* (Linnaeus) 3

*Mytilus ?edulis* Linnaeus 3

*Ostrea edulis* Linnaeus 2

Unid. fragments 14+

#### Context 11050

*Patella* spp. 5

*Littorina littoralis* (Linnaeus) 2

*Littorina littorea* (Linnaeus) 1

*Buccinum undatum* Linnaeus 1

*Mytilus ?edulis* Linnaeus 1

*Ostrea edulis* Linnaeus 1

Unid. fragments 8+

#### Context 11052

*Littorina ?saxatilis* (Olivi) 6

*Nucella lapillus* (Linnaeus) 1

Unid. fragments 4

#### Context 11054

<i>Patella</i> sp.	1	
<i>Littorina littoralis</i> (Linnaeus)	1	
<i>Mytilus ?edulis</i> Linnaeus	1	
Unid. fragments	4	
<b>Context 11057</b>		
<i>Patella</i> sp.	1	
<b>Context 11058</b>		
<i>Mytilus ?edulis</i> Linnaeus	1	
Unid. fragments	2	
<b>Context 12022</b>		
<i>Cepaea</i> sp.	1	
Unid. land snails	2	
<i>Patella</i> spp.	4	
<i>Mytilus ?edulis</i> Linnaeus	2	
<i>Ostrea edulis</i> Linnaeus	1 (fragment)	
Unid. fragments	4	
<b>Context 12024</b>		
<i>Patella</i> spp.	5	
<i>Littorina littoralis</i> (Linnaeus)	1	
<i>Mytilus ?edulis</i> Linnaeus	2	
? <i>Astarte</i> sp.	1 (fragment)	
Solenidae	1 (2 fragments)	
Unid. fragments	4	
<b>Context 12025</b>		
<i>Cepaea</i> sp.	1	
<i>Patella</i> spp.	14	
<i>Littorina littorea</i> (Linnaeus)	2	
<i>Nucella lapillus</i> (Linnaeus)	2	
<i>Mytilus ?edulis</i> Linnaeus	5	
<i>Ostrea edulis</i> Linnaeus	2	
? <i>Astarte</i> sp.	2	
Solenidae	3 (8 fragments)	
Unid. fragments	22	
<b>Context 12027</b>		
? <i>Cepaea</i> sp.	2	
<i>Patella</i> spp.	87	
<i>Littorina littoralis</i> (Linnaeus)	22	
<i>Littorina saxatilis</i> (Olivi)	1	
<i>Littorina littorea</i> (Linnaeus)	39	
<i>Nucella lapillus</i> (Linnaeus)	10	
<i>Mytilus ?edulis</i> Linnaeus	23	
<i>Ostrea edulis</i> Linnaeus	3	
? <i>Astarte</i> sp.	2	
Solenidae	3	(16
fragments)		
Unid. fragments	141+	

**Context 12028**

<i>Patella</i> spp.	57
<i>Littorina littoralis</i> (Linnaeus)	5
<i>Littorina littorea</i> (Linnaeus)	9
<i>Mytilus ?edulis</i> Linnaeus	10
<i>Ostrea edulis</i> Linnaeus	2
? <i>Astarte</i> sp.	3
Solenidae	1
Unid. fragments	33+

**Context 12032**

<i>Patella</i> sp.	1
Unid. fragments	3

**Context 13001**

<i>Patella</i> spp.	9
<i>Littorina littorea</i> (Linnaeus)	1
<i>Mytilus ?edulis</i> Linnaeus	1
Unid. fragments	2

**Context 13007**

<i>Patella</i> spp.	2
<i>Mytilus ?edulis</i> Linnaeus	6
Unid. fragments	10

**Post Roman**

**Context 11003**

<i>Patella</i> spp.	13
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Littorina littorea</i> (Linnaeus)	1
<i>Mytilus ?edulis</i> Linnaeus	3
? <i>Astarte</i> sp.	1
Unid. fragments	20

**Context 11006**

<i>Cepaea</i> sp.	2
<i>Patella</i> spp.	5
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Littorina littorea</i> (Linnaeus)	1
? <i>Buccinum undatum</i> Linnaeus	1
<i>Mytilus ?edulis</i> Linnaeus	2
<i>Ostrea edulis</i> Linnaeus	1
Unid. fragments	24

**Context 11022**

<i>Patella</i> spp.	19
<i>Littorina littorea</i> (Linnaeus)	2
<i>Mytilus ?edulis</i> Linnaeus	1
<i>Ostrea edulis</i> Linnaeus	1
Unid. fragments	14

**Context 12008**

<i>Patella</i> spp.	7
? <i>Astarte</i> sp.	1 (fragment)
Unid. fragments	1

**Context 12016**

<i>Patella</i> sp.	1
<i>Littorina littorea</i> (Linnaeus)	1
<i>Mytilus ?edulis</i> Linnaeus	1
Unid. fragments	5

**Context 12020**

<i>Patella</i> spp.	6
<i>Ostrea edulis</i> Linnaeus	1
Unid. fragments	4

**Context 12021**

<i>Patella</i> sp.	1
Unid. fragments	2

**Context 12023**

<i>Patella</i> sp.	1
<i>Mytilus ?edulis</i> Linnaeus	1
<i>Ostrea edulis</i> Linnaeus	1

**Context 13005**

<i>Patella</i> spp.	22
<i>Littorina littorea</i> (Linnaeus)	3
<i>Mytilus ?edulis</i> Linnaeus	4
Unid. fragments	21

**Context 13015**

<i>Patella</i> spp.	8
<i>Mytilus ?edulis</i> Linnaeus	1
Unid. fragments	2+

**Context 13019**

<i>Mytilus ?edulis</i> Linnaeus	1
<i>Ostrea edulis</i> Linnaeus	1
? <i>Astarte</i> sp.	1
Unid. fragments	4

**Modern**

**Context 11002**

<i>Patella</i> spp.	3
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Littorina ?saxatilis</i> (Olivi)	2

<i>Littorina littorea</i> (Linnaeus)	2
? <i>Astarte</i> sp.	1 (fragment)
Unid. fragments	8

**Context 13002**

<i>Patella</i> spp.	2
? <i>Astarte</i> sp.	1 (fragment)
Unid. fragments	1

**Unknown phase**

**Context 11011**

? <i>Cepaea</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Mytilus ?edulis</i> Linnaeus	1
Unid. fragments	3

**Context 11023**

Solenidae	1 (fragment)
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**Context 11029**

<i>Mytilus ?edulis</i> Linnaeus	1
<i>Ostrea edulis</i> Linnaeus	1
Unid. fragments	2

**Context 12005**

<i>Helix</i> sp.	1
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**Context 13009**

Unid. fragments	2
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## Appendix 4

Bulk-sieved mollusc assemblage by context and sample. Unid = unidentifiable.

### Roman

#### Context 11038

Sample 51

<i>Cochlicopa lubrica</i> (Müller)	1
<i>Vertigo pygmaea</i> (Draparnaud)	1
<i>Vallonia excentrica</i> Sterki	1
<i>Littorina littorea</i> (Linnaeus)	1
Unid. fragments	40

#### Context 11049

Sample 57

? <i>Lauria cylindracea</i> (da Costa)	1 (juvenile)
<i>Patella</i> sp.	1 (fragment)
<i>Littorina littorea</i> (Linnaeus)	82
<i>Ostrea edulis</i> Linnaeus	1
Unid. fragments	c. 60

Sample 58

Unid. fragments	3
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Sample 59

<i>Vertigo pygmaea</i> (Draparnaud)	5
<i>Vallonia excentrica</i> Sterki	3
<i>Mytilus ?edulis</i> Linnaeus fragments)	4 (13)
Unid. fragments	73

#### Context 11050

Sample 53

<i>Littorina littoralis</i> (Linnaeus)	3
? <i>Littorina saxatilis</i> (Olivi)	1
<i>Littorina littorea</i> (Linnaeus)	1
<i>Nucella lapillus</i> (Linnaeus)	1
<i>Ostrea edulis</i> Linnaeus	1
Unid. fragments	35

Sample 54

<i>Patella</i> sp.	1 (fragment)
<i>Ostrea edulis</i> Linnaeus	1
? <i>Astarte</i> sp.	1
Unid. fragments	10

### Context 12022

Sample 11

<i>Cochlicopa lubrica</i> (Müller)	3
<i>Vertigo pygmaea</i> (Draparnaud)	6
<i>Pupilla muscorum</i> (Linnaeus)	6
<i>Lauria cylindracea</i> (da Costa) juveniles)	33 (22)
<i>Vallonia excentrica</i> Sterki	26 (from 4
<i>Clausilia</i> sp.	2 (fragments)
Unid. fragments	c. 250

Sample 12

<i>Cochlicopa lubrica</i> (Müller)	4
<i>Vertigo pygmaea</i> (Draparnaud)	15
<i>Pupilla muscorum</i> (Linnaeus)	5
<i>Lauria cylindracea</i> (da Costa) juveniles)	71 (37)
<i>Vallonia excentrica</i> Sterki	91 (from 8
<i>Clausilia</i> sp.	6
<i>Cepaea</i> sp.	1
<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	1
Unid. fragments	>1000

Sample 13

<i>Mytilus ?edulis</i> Linnaeus	1
Unid. fragments	7

Sample 14

<i>Clausilia</i> sp.	2 (fragments)
<i>Cepaea</i> sp. fragments)	2 (1+8
Unid. fragments	13

Sample 15

? <i>Lauria cylindracea</i> (da Costa)	2 (juveniles)
Unid. fragments	4

Sample 17

<i>Littorina littoralis</i> (Linnaeus)	2
<i>Mytilus ?edulis</i> Linnaeus	2 (5 fragments)
Unid. fragments	5

Sample 18

<i>Cepaea</i> sp.	1
<i>Patella</i> sp.	1
<i>Mytilus ?edulis</i> Linnaeus	1 (3 fragments)
Unid. fragments	6

**Context 12024**

Sample 20

<i>Cochlicopa ?lubrica</i> (Müller)	1
<i>Vallonia ?excentrica</i> Sterki	6
<i>Clausilia</i> sp.	2 (fragments)
<i>Cepaea</i> sp.	1
<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Littorina saxatilis</i> (Olivi)	1
<i>Mytilus ?edulis</i> Linnaeus	2 (8 fragments)
Unid. fragments	88

Sample 21

<i>Clausilia</i> sp.	1 (fragment)
<i>Patella</i> spp.	2
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Littorina saxatilis</i> (Olivi)	1
<i>?Nucella lapillus</i> (Linnaeus)	1
Unid. fragments	278

Sample 22

<i>Cochlicopa lubrica</i> (Müller)	1 (2 fragments)
<i>Vallonia ?excentrica</i> Sterki	5
<i>Littorina littoralis</i> (Linnaeus)	1
Unid. fragments	17

Sample 23

<i>Pupilla muscorum</i> (Linnaeus)	1
<i>?Cepaea</i> sp.	2
<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Mytilus edulis</i> Linnaeus	3 (9 fragments)
Unid. fragments	15

Sample 24

<i>?Cepaea</i> sp.	1
<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	3
<i>Mytilus ?edulis</i> Linnaeus	3 (8 fragments)
Unid. fragments	11

Sample 25

<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	4
<i>Mytilus ?edulis</i> Linnaeus	2 (5 fragments)
Unid. fragments	70

Sample 26

<i>Patella</i> sp.	1	
<i>Mytilus ?edulis</i> Linnaeus	5	(15
fragments)		
<i>?Astarte</i> sp.	1	
Unid. fragments	7	

Sample 27

<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	1
<i>Mytilus edulis</i> Linnaeus	1 (2 fragments)
Unid. fragments	8

**Context 12025**

Sample 30

<i>?Cochlicopa lubrica</i> (Müller)	1 (fragment)
<i>Pupilla muscorum</i> (Linnaeus)	3
<i>Vallonia ?excentrica</i> Sterki	1
<i>?Trichia</i> sp.	6
<i>Patella</i> spp.	2
<i>Littorina littoralis</i> (Linnaeus)	2
<i>Littorina saxatilis</i> (Olivi)	1
<i>Buccinum undatum</i> Linnaeus	1
Unid. fragments	108

Sample 31

<i>Pupilla muscorum</i> (Linnaeus)	4
<i>Vallonia ?excentrica</i> Sterki	3
<i>?Trichia</i> sp.	4
<i>Patella</i> sp.	1
<i>Littorina littoralis</i> (Linnaeus)	2
Unid. fragments	166

Sample 32

<i>Cepaea</i> sp.	1	
<i>Patella</i> spp.	3	
<i>Littorina littoralis</i> (Linnaeus)	2	
<i>Mytilus ?edulis</i> Linnaeus	3	(10
fragments)		
Unid. fragments	14	

Sample 33

<i>Littorina littoralis</i> (Linnaeus)	2
<i>Littorina littorea</i> (Linnaeus)	1

<i>Mytilus ?edulis</i> Linnaeus	1 (7 fragments)	Sample 42	
Unid. fragments	62		
Sample 34		<i>Patella</i> sp.	1
		<i>Littorina littoralis</i> (Linnaeus)	2
<i>Patella</i> sp.	1	Unid. fragments	16
<i>Littorina littoralis</i> (Linnaeus)	1		
<i>Mytilus ?edulis</i> Linnaeus	3 (14	Sample 43	
fragments)			
Unid. fragments	25	<i>Patella</i> sp.	1
Sample 35		Unid. fragments	16
		Sample 44	
<i>Patella</i> sp.	1		
<i>Littorina littoralis</i> (Linnaeus)	3	<i>Littorina littoralis</i> (Linnaeus)	1
<i>Nucella lapillus</i> (Linnaeus)	1	Unid. fragments	16
<i>Mytilus ?edulis</i> Linnaeus	2 (11	Sample 45	
fragments)			
Unid. fragments	14	<i>Littorina littoralis</i> (Linnaeus)	4
Sample 36		Unid. fragments	41
<i>Vallonia excentrica</i> Sterki	1	<b>Context 12028</b>	
<i>Patella</i> spp.	2	Sample 47	
<i>Littorina saxatilis</i> (Olivi)	1		
Unid. fragments	31	<i>Pupilla muscorum</i> (Linnaeus)	1
Sample 37		<i>Vallonia ?excentrica</i> Sterki	2
		<i>Patella</i> spp.	3
<i>Littorina littoralis</i> (Linnaeus)	1	<i>Littorina littoralis</i> (Linnaeus)	1
<i>Littorina saxatilis</i> (Olivi)	1	<i>Nucella lapillis</i> (Linnaeus)	1
<i>Littorina littorea</i> (Linnaeus)	2	<i>Mytilus ?edulis</i> Linnaeus	1 (6 fragments)
<i>Mytilus ?edulis</i> Linnaeus	1 (6 fragments)	Unid. fragments	28
Unid. fragments	27	Sample 49	
<b>Context 12027</b>		<i>Patella</i> spp.	3
Sample 40		<i>Littorina ?saxatilis</i> (Olivi)	1
		<i>Mytilus ?edulis</i> Linnaeus	4 (18
<i>Pupilla muscorum</i> (Linnaeus)	11	fragments)	
<i>Vallonia ?excentrica</i> Sterki	1	Unid. fragments	68
<i>Patella</i> spp.	3	Sample 50	
<i>Littorina littoralis</i> (Linnaeus)	3		
<i>Mytilus ?edulis</i> Linnaeus	2	<i>Littorina littoralis</i> (Linnaeus)	4
Unid. fragments	42	<i>Littorina saxatilis</i> (Olivi)	2
Sample 41		<i>Mytilus ?edulis</i> Linnaeus	1
		Unid. fragments	17
<i>Pupilla muscorum</i> (Linnaeus)	8		
<i>Vallonia ?excentrica</i> Sterki	3	<b>Post Roman</b>	
<i>Patella</i> spp.	3		
<i>Littorina littoralis</i> (Linnaeus)	2	<b>Context 13019</b>	
<i>Littorina saxatilis</i> (Olivi)	1	Sample 69	
<i>Nucella lapillus</i> (Linnaeus)	1		
<i>Mytilus ?edulis</i> Linnaeus	4 (20	Unid. fragments	12
fragments)			
Unid. fragments	125		

## Appendix 5

Measurements of the main domesticates.

All measurements are in mm, and follow those outlined by von den Driesch (1976); Davis (1992); Dobney *et al.* (forthcoming); Payne and Bull (1988).

### Cattle measurements

Context	Bone id. no	Species	Element	HTC	BT	HT	Date
3049	1035	cow	humerus	31.6	66.2	39.4	POST-ROMAN
11006	563	cow	humerus	28	64.7	38.3	POST-ROMAN
3034	652	cow	humerus	30.5	78.3	41.9	ROMAN
11050	138	cow	humerus	28.9	66.6		ROMAN
12027	340	cow	humerus	34.2	75.9		ROMAN
12027	341	cow	humerus	31.6	72		ROMAN
Context	Bone id. no	Species	Element	Dd	Bd	SD	Date
3030	772	cow	tibia	41.9	56.1	33.3	POST-ROMAN
3030	773	cow	tibia	40.4	55.7		POST-ROMAN
12016	124	cow	tibia	37.8	55.8	24.1	POST-ROMAN
3034	656	cow	tibia	42.5	59.6		ROMAN
3042	969	cow	tibia	43.4	57.4	24.1	ROMAN
3042	970	cow	tibia	39.9	53.1		ROMAN
12028	444	cow	tibia	40.5	54.7		ROMAN
12028	445	cow	tibia	38.9	54		ROMAN

### Caprine measurements

Context	Bone id. no.	Species	Element	SLC	GLP	ASG	Date
3030	750	sh/g	scapula	18			POST-ROMAN
3030	751	sh/g	scapula	16.2	30		POST-ROMAN
1038	832	sh/g	scapula	21.2	32.4		ROMAN
1038	833	sh/g	scapula	15.7	27		ROMAN
3034	672	sh/g	scapula	17.8	28.9		ROMAN
3034	674	sh/g	scapula	17.4	30.2		ROMAN
3042	780	sh/g	scapula	15.1	26.4		ROMAN
11008	617	sh/g	scapula	17.2	23.2		ROMAN
11050	141	sh/g	scapula	18.3	29.4	18.2	ROMAN
11050	142	sh/g	scapula	16.3	27.7	19.7	ROMAN
11050	143	sh/g	scapula	15.2	26.8	17.9	ROMAN
12024	508	sh/g	scapula	17.3			ROMAN
12027	267	sh/g	scapula	19	30.7	16.9	ROMAN
12027	268	sh/g	scapula	16.8	31.6	19.8	ROMAN
12027	269	sh/g	scapula	18			ROMAN
12027	387	sh/g	scapula	16.7	28.1	18.1	ROMAN
12027	388	sh/g	scapula	16.6	29.1		ROMAN
12027	389	sh/g	scapula	16.4	28.4		ROMAN
12027	392	sh/g	scapula	17	25.9		ROMAN
12027	394	sh/g	scapula	17.8	28.5		ROMAN

Context	Bone id. no.	Species	Element	HTC	BT	HT	SD	Date
3027	955	sh/g	humerus	13.6	26.9	18.1	14.1	POST-ROMAN
3030	752	sheep	humerus	13.5	27	18.1		POST-ROMAN
12008	190	sh/g	humerus	16.6	24.7	15.7	13.3	POST-ROMAN
12008	191	sh/g	humerus	12.5	25.5	15.4		POST-ROMAN
12020	636	sh/g	humerus	11	24	14.1		POST-ROMAN
13015	1048	sheep	humerus	17.3	27.1	13.5		POST-ROMAN
1038	834	sheep	humerus	13.7	25.5	16.5	13.3	ROMAN
1038	836	sheep	humerus	12.1	23.9	15.3		ROMAN
1038	837	sheep	humerus	13	27	17.7		ROMAN
3034	676	sheep	humerus	12	24	15.8		ROMAN
3034	677	sheep	humerus	13.3	26	17.3		ROMAN
3034	678	sheep	humerus	12.2	25.5	16.4		ROMAN
3034	679	sheep	humerus	14	27.3	17.9		ROMAN
3034	680	sheep	humerus	11.9	23.5	16.5		ROMAN
3042	781	sheep	humerus	12	23.5	14.4		ROMAN
3042	783	sheep	humerus	16.7	24.9	12.5	11.8	ROMAN
3042	784	sheep	humerus	12.9	27.1	18	12.8	ROMAN
3042	785	sheep	humerus	11	23.4	14.9		ROMAN
11038	99	sheep	humerus	11.8	25	15.7		ROMAN
12025	464	sheep	humerus	12.5	25.1	16.1	13.6	ROMAN
12025	465	sheep	humerus	14.1	26.9	17.5		ROMAN
12025	466	sheep	humerus	14	26.5	18		ROMAN
12027	273	sheep	humerus	13.1	26.1	16.9	12.4	ROMAN
12027	274	sheep	humerus	12.5	24.3	16.1	12.5	ROMAN
12027	275	sheep	humerus	12.2	23.6	15.3		ROMAN
12027	276	sheep	humerus	11.1	22.1	14.4		ROMAN
12027	386	sheep	humerus	13.5	25.7	18.4		ROMAN
1048	918	sheep	humerus	13.6	26.7	18.3		ROMAN
2027	886	sheep	humerus	15.6	28.2	19.2	14.4	ROMAN
2027	887	sheep	humerus	11.5	23.5	14.6		ROMAN
2027	888	sheep	humerus	11.1	23.5	14	12.3	ROMAN
3046	1016	sheep	humerus	12.4	23.5	15.2	11.9	ROMAN
3046	1017	sheep	humerus	12.7	26.4	17.2	13.7	ROMAN
11033	1039	sheep	humerus	12.9	26.6	17.3	12.9	ROMAN

Context	Bone id. no.	Species	Element	Bp	BFp	SD	GL	Date
3027	956	sh/g	radius	29.1	26	16.7		POST-ROMAN
3049	1036	sh/g	radius	30.5	28.1	16.2		POST-ROMAN
11003	584	sh/g	radius	28	15.5	15.2		POST-ROMAN
12020	635	sh/g	radius	28	26	13.6		POST-ROMAN
1038	844	sh/g	radius	26.7	24.2	13.7		ROMAN
1038	845	sh/g	radius			17.5		ROMAN
2027	890	sh/g	radius	29.6	25.5			ROMAN
3034	682	sheep	radius	29.5	26.9	14.4	138.7	ROMAN
3034	683	sheep	radius	27.5	25	13.6	136.2	ROMAN
3034	684	sh/g	radius	26.1	24.2	13.4		ROMAN
3034	686	sh/g	radius	30	27.9			ROMAN
3042	786	sh/g	radius	23.3	22.1	11.9		ROMAN
3046	1018	sh/g	radius	27.4	26.5			ROMAN
3046	1019	sh/g	radius	25.1	23.6	13.4		ROMAN
11038	100	sheep	radius	27.4	25	14		ROMAN

Context	Bone id. no.	Species	Element	Bp	BFp	SD	GL	Date
12022	539	sheep	radius	27.7	25.3	14	139.7	ROMAN
12025	467	sheep	radius	25.6	23.4	14.4	134.3	ROMAN
12025	468	sh/g	radius	28.7	26.8	15.8		ROMAN
12027	281	sh/g	radius	27.8	24.6	15.1		ROMAN
12027	282	sh/g	radius	28	26	16.8		ROMAN
12027	283	sh/g	radius	26.3	24.5	15.6		ROMAN
12027	284	sh/g	radius	28	25.5	14.5		ROMAN
12027	285	sh/g	radius	26.5	23.8	15.2		ROMAN
12027	286	sh/g	radius	25.8	23.7	14.5		ROMAN
12027	287	sh/g	radius	25.3	22	13.5		ROMAN
12027	288	sh/g	radius	29.1	27.2			ROMAN
12027	289	sh/g	radius	26.2	23.8	14.8		ROMAN
12027	290	sh/g	radius	28.5	25.8			ROMAN
12027	396	sh/g	radius	26.1	24.3			ROMAN

Context	Bone id. no.	Species	Element	Dd	Bd	SD	Date
3030	757	sheep	tibia	19.1	22.3	12.3	POST-ROMAN
3030	758	sheep	tibia	19	23.2	12.1	POST-ROMAN
12016	127	sheep	tibia	17.8	21.7	9	POST-ROMAN
13005	1049	sheep	tibia	17.6	22.6	9.7	POST-ROMAN
1038	838	sheep	tibia	18.5	24.4	10.4	ROMAN
1038	839	sheep	tibia	20.1	24	10.9	ROMAN
1038	840	sheep	tibia	17.9	22.7	10.4	ROMAN
1038	841	sheep	tibia	18.7	23.9	9.8	ROMAN
1048	922	sh/g	tibia	17.1	22.8	11.5	ROMAN
1051	933	sh/g	tibia	16.9	21.1		ROMAN
3034	698	sh/g	tibia	17.9	23.1	13.4	ROMAN
3034	699	sheep	tibia	18.5	25.3	12.9	ROMAN
3034	700	sh/g	tibia	17.5	24		ROMAN
3042	980	sh/g	tibia	19.7	24.6	10.6	ROMAN
3046	1021	sheep	tibia	19.4	25.6	11.5	ROMAN
11033	1040	sheep	tibia	21.2	27	12.3	ROMAN
11038	101	sheep	tibia	18.9	22.5	9.8	ROMAN
12024	518	sheep	tibia	18.1	22.8	11.7	ROMAN
12024	519	sheep	tibia	19.9	25.4		ROMAN
12024	520	sheep	tibia	19.2	24		ROMAN
12025	480	sheep	tibia	16.6	23.1	12	ROMAN
12025	481	sheep	tibia	19	23.5		ROMAN
12025	482	sh/g	tibia	18.6	23.4	11.1	ROMAN
12027	316	sheep	tibia	18.3	22.6	9.4	ROMAN
12027	317	sheep	tibia	17.6		10	ROMAN
12027	318	sheep	tibia	18.3	24.2	10.9	ROMAN
12027	319	sheep	tibia	17.9	22.2	10.3	ROMAN
12027	321	sheep	tibia	17.2	22		ROMAN
12027	322	sheep	tibia	16.9	22.3	9	ROMAN
12027	412	sheep	tibia	18.1	21.7		ROMAN
12027	413	sheep	tibia	19.1	24.7		ROMAN

Context	Bone id. no.	Species	Element	C	C + D	DS	GL	Date
3030	759	sheep	calcaneum	12.1	21.1	17.1	52.9	POST-ROMAN
11003	590	sheep	calcaneum	9.5	18.2	17		POST-ROMAN
12008	193	sheep	calcaneum	12	21.1	16.7		POST-ROMAN

1038	853	sheep	calcaneum	11	18.5	14.6	46	ROMAN
1048	923	sheep	calcaneum	11.1	20	15.6	49.9	ROMAN
3034	707	sheep	calcaneum	11.4	19.6	15.5	47.8	ROMAN
3034	708	sheep	calcaneum	11.3	19.8	16.7	49.9	ROMAN
3042	981	sheep	calcaneum	10.5	18.5	9.6	49.6	ROMAN
11058	1045	sheep	calcaneum	10.7	19.6	15.6	49	ROMAN
12024	516	sheep	calcaneum	11	19	14.5	47.9	ROMAN
12027	314	sheep	calcaneum	9.4	18.9	16.8	49.5	ROMAN
12027	315	sheep	calcaneum	10.9	19.5	16.4	50	ROMAN

Context	Bone id. no.	Species	Element	Bd	GLI	DI	Date
1038	854	sheep	astragalus	17	26.8	14	ROMAN
1038	855	sheep	astragalus	16	25.6	13.9	ROMAN
1048	924	sheep	astragalus	15.7	24.7	13.3	ROMAN
2027	896	sheep	astragalus	18.1	26.5	15.5	ROMAN
3034	709	sheep	astragalus	16.9	25.6	14.1	ROMAN
3034	710	sheep	astragalus	17.7	26.4	15.5	ROMAN
3034	711	sheep	astragalus	19.1	28.1		ROMAN
12025	484	sheep	astragalus	16.8	27.1	14.2	ROMAN
12025	485	sheep	astragalus	16.1	25.2	14.1	ROMAN
12027	311	sheep	astragalus	16.5	25	13.7	ROMAN
12027	312	sheep	astragalus	17.6	25.9	14.9	ROMAN
12027	313	sheep	astragalus	17.1	26.6	15.3	ROMAN

Context	Bone id. no.	Species	Element	Bp	Dp	SD	Bd	Dil	Dim	GL	Date
12008	192	sh/g	metacarpal	20.5	15.1	12.7					POST-ROMAN
12027	327	sh/g	metacarpal	19.6	13.9	10.6					ROMAN
12027	419	sheep	metatarsal			12.4	24.8	14.3	14.4	135.2	ROMAN

**Pig measurements**

Context	Bone id. no.	Species	Element	SLC	GLP	Date
11006	575	pig	scapula	18.6	30	POST-ROMAN
1048	909	pig	scapula	21.1	34.5	ROMAN
1048	910	pig	scapula	22.2	31.7	ROMAN
3046	1028	pig	scapula	18.5	27.7	ROMAN
12027	200	pig	scapula	17.8	26.6	ROMAN
12027	201	pig	scapula	21	31.7	ROMAN
12027	204	pig	scapula	19.8		ROMAN
12027	205	pig	scapula	14.5		ROMAN

Context	Bone id. no.	Species	Element	BT	HTC	SD	Date
3034	717	pig	humerus	31.1	16.1		ROMAN
3034	718	pig	humerus	31.3	17.7		ROMAN
11038	106	pig	humerus	23.5	19.1	14.4	ROMAN
12027	207	pig	humerus	28	16.1	12.5	ROMAN
12027	208	pig	humerus	22.9	17.1	12.5	ROMAN
12027	209	pig	humerus	22.4	16.6	13.8	ROMAN
12027	210	pig	humerus	27.6	17.3		ROMAN
12027	211	pig	humerus	32.5	19.1		ROMAN

Context	Bone id. no.	Species	Element	Bp	SD	Date
1038	815	pig	radius	26.3		ROMAN
1038	816	pig	radius	25.9		ROMAN
1051	940	pig	radius	25.5		ROMAN
3034	722	pig	radius	26.9		ROMAN
3042	795	pig	radius	27.1		ROMAN
3042	796	pig	radius	25.6		ROMAN
3042	985	pig	radius	25.7	14.9	ROMAN
3042	986	pig	radius	25	14.1	ROMAN
12025	491	pig	radius	23.8		ROMAN
12027	217	pig	radius	23.8	13.5	ROMAN
12027	218	pig	radius	24.8	14.4	ROMAN
12027	219	pig	radius	24.9	14.6	ROMAN

Context	Bone id. no.	Species	Element	C	C + D	DS	Date
1038	825	pig	calcaneum	12.5	25.6	18.9	ROMAN
1038	826	pig	calcaneum	11.5	24.8	20	ROMAN
3034	729	pig	calcaneum	11.2	25.1	21.2	ROMAN
3034	730	pig	calcaneum	10	23.5	20.4	ROMAN
3034	731	pig	calcaneum	10.5	23.3	18	ROMAN
3042	805	pig	calcaneum	10.9	25.1	22.1	ROMAN
3042	806	pig	calcaneum	8.6	23.9	20.6	ROMAN
11038	115	pig	calcaneum	9.4	24.4	19.6	ROMAN
11049	169	pig	calcaneum	12.5	27.7	22	ROMAN
12022	551	pig	calcaneum	12.3	25.3	18	ROMAN
12025	501	pig	calcaneum	11.2	26.8	22.5	ROMAN
12027	241	pig	calcaneum	13.8	28.7	22.7	ROMAN
12027	242	pig	calcaneum	10.4	24.1	20	ROMAN

Context	Bone id. no.	Species	Element	Bd	Dd	SD	Date
1048	913	pig	tibia	27.3	22.4	15.3	ROMAN

11038	113	pig	tibia	25.5	22	12.3	ROMAN
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Context	Bone id. no.	Species	Element	GLI	GLm	Bd	Date
11003	597	pig	astragalus	38	35.5		POST-ROMAN
3034	732	pig	astragalus	36.9	35.1		ROMAN
3042	807	pig	astragalus	37.4	39.1		ROMAN
3042	996	pig	astragalus	36.9	35.5		ROMAN
3042	997	pig	astragalus	37.8	36.4		ROMAN
3042	998	pig	astragalus	36.9	34.6		ROMAN
11038	114	pig	astragalus	30.4		17.2	ROMAN
11050	153	pig	astragalus	40.2	37.9		ROMAN
12027	240	pig	astragalus	37.2	34.1		ROMAN

Context	Bone id. no.	Species	dP4 (wp)	M1 (wa)	M1 (wp)	M2 (wa)	M2 (wp)	M3 (wa)	M3 (wp)	Date
11006	576	pig	7.9							POST-ROMAN
1038	811	pig				11.9	12.5	14	13.5	ROMAN
1038	812	pig	8.8	9.5	10.7	12.2	13.9			ROMAN
1038	813	pig	7.9	8.7	9.5					ROMAN
1051	941	pig		9.9	10.5	12.3	12.5			ROMAN
3042	793	pig						13.9	13.5	ROMAN
3046	1027	pig				13	13	14.5	13.4	ROMAN
12022	546	pig					13.1			ROMAN
12025	488	pig	8.6	10.2	10.6					ROMAN
12027	262	pig	8	9.9	10.2					ROMAN
12027	263	pig		9	9.7					ROMAN

*Greatest length (GL) of modern comparative chickens*

EAU no.	Species	coracoid	humerus	radius	ulna	femur	tibiotarsus	tarsometatarsus
519	Red jungle fowl (f)	42.8	53	46.9	51.4	60.5	86.5	55.7
518	Old English game bird (f)	55.7	69.4	60.8	67.9	79	109.2	74.1
KD	Old English game bird (f)	50.2	65.2	54.7	62.3	71.3	101.5	69.1
611	Old English game bird (m)	59.3	80.8	72.5	80.2	88.9	131.1	92.7
616	Bantam	52.9	70.8	62	68.9	75.7	109.4	73.6
537	Silver grey dorking (f)	64.6	82.1	71.5	79.1	86.8	123.9	82.5
528	Dark dorking (m)	73	97.4	87	96.1	108.2	147.5	99.7

EAU 518 - Old English game bird (f) was used as the 'standard' bird

**Chicken measurements** (?fowl represents bones identified as fowl/pheasant).

Context	Bone id. no.	Species	Element	BF	Bb	GL	Lm	Date
3034	742	?fowl	coracoid	11	13.6	49.9	46.7	ROMAN

Context	Bone id. no.	Species	Element	Bp	Did	GL	Date
11022	642	?fowl	carpometacarpus	10.2	7.5	33.5	POST-ROMAN

Context	Bone id. no.	Species	Element	Bp	Bd	GL	SC	Date
11006	580	fowl	humerus		16.1			POST-ROMAN
3034	733	fowl	humerus		13.3			ROMAN
3042	1001	fowl	humerus		15.2			ROMAN

3042	1002	fowl	humerus		13.9				ROMAN
12027	372	?fowl	humerus	12.6	13.6	68.9	6.1		ROMAN
12027	373	?fowl	humerus		13.9				ROMAN

Context	Bone id. no.	Species	Element	Bd	GL	SC	Date
12027	378	?fowl	radius	6	57.3	3.4	ROMAN
12027	379	?fowl	radius	7.1			ROMAN
12028	454	?fowl	radius	7.8			ROMAN

Context	Bone id. no.	Species	Element	Bp	Dip	Did	GL	SC	Date
1038	867	fowl	ulna	8.8	14				ROMAN
3042	1010	?fowl	ulna	7.8	12.1	8.8	64.1		ROMAN
11054	1043	fowl	ulna	8.5	13.1	10	71.1	4.2	ROMAN
12027	374	?fowl	ulna	9.5	12.9	9.7	69.1	4.5	ROMAN
12027	375	?fowl	ulna	8.1	11.1	9	63.4	4	ROMAN
12028	513	fowl	ulna			10.3		4.3	ROMAN

Context	Bone id. no.	Species	Element	Bp	Dp	Bd	Dd	GL	Lm	SC	Date
3027	966	fowl	femur	15.6	10.9						POST-ROMAN
1051	946	fowl	femur	13.7	10.2	13.9	11.9	72.1	69.5	6	ROMAN
3034	737	fowl	femur	13.2	10.1	13.2	11.2	70.5	66.7	6	ROMAN
3034	743	?fowl	femur			13.6					ROMAN
3034	740	fowl	femur			16.3	13.1				ROMAN
3034	738	fowl	femur	13.4	10.5						ROMAN
3034	739	fowl	femur	13.3	10.1						ROMAN
3042	1004	fowl	femur	12.8	9.9	13.2	11.8	71.1	65.6	5.9	ROMAN
3042	1003	fowl	femur	12.6	9.8	13.3	12	70.4	66.1	6.1	ROMAN
11008	626	?fowl	femur	16.3							ROMAN
11049	187	fowl	femur			15.9	12.9				ROMAN
12025	486	fowl	femur	16.2	11.1	15.7	13.1	79.3	74.3	7.3	ROMAN
12027	370	fowl	femur	13.8		13.6		70.3	66.7	6.4	ROMAN
12027	371	fowl	femur	16.6							ROMAN

Context	Bone id. no.	Species	Element	Bd	Dd	Bp	GL	La	SC	Date
1048	931	fowl	tibiotarsus	11.2	13.6					ROMAN
3034	734	fowl	tibiotarsus	10.1	11		98.5	95.1	5.3	ROMAN
3034	735	fowl	tibiotarsus	11.7	12.6					ROMAN
3042	1006	fowl	tibiotarsus	12.1	13.2		121.9	116.9	6.9	ROMAN
3042	1007	fowl	tibiotarsus	9.9	10.9		98	94.6	9.9	ROMAN
11050	136	fowl	tibiotarsus	11	11.6					ROMAN
11054	1044	fowl	tibiotarsus			13.2				ROMAN
12028	451	?fowl	tibiotarsus	9.4	10.6					ROMAN

Context	Bone id. no.	Species	Element	Bp	Bd	GL	SC	Date
1020	878	fowl	tarsometatarsus	13.7	13.2	80.5	6.8	ROMAN
3034	741	fowl	tarsometatarsus	11.7				ROMAN
3042	1009	fowl	tarsometatarsus	11.6		71.1	5.7	ROMAN
3042	1008	fowl	tarsometatarsus	12.3	11.4	67.8	5.9	ROMAN
12027	369	fowl	tarsometatarsus		14.3	82.9	7.6	ROMAN
12028	448	fowl	tarsometatarsus	13.9	13.4	78.8	7	ROMAN
12028	449	fowl	tarsometatarsus		13.6			ROMAN
12028	89	fowl	tarsometatarsus		11.6		5.6	ROMAN

## Appendix 6

Total fragment counts by context for taxa from bulk-sieved assemblage.

*Mammal taxa from the bulk-sieved assemblage by context (fragment counts).*

Species		11038	12022	12024	12025	12027	12028	13019	Total
<i>Talpa europaea</i> L.	mole	0	1	9	0	0	0	0	10
<i>Sorex araneus</i> L.	common shrew	1	54	29	6	1	0	0	91
<i>Sorex minutus</i> L.	pygmy shrew	0	3	9	2	0	0	0	14
<i>Neomys fodiens</i> (Pennant)	water shrew	0	6	5	2	0	0	0	13
cf. <i>Neomys fodiens</i> (Pennant)	?water shrew	0	2	0	0	0	0	0	2
<i>Lepus</i> sp.	hare	0	0	1	0	0	0	0	1
Microtine	vole species	1	48	58	4	2	0	0	113
<i>Microtus agrestis</i> (L.)	field vole	5	61	66	17	2	3	0	154
<i>Arvicola terrestris</i> (L.)	watervole	0	3	7	2	0	0	0	12
Microtine/murine	vole/mouse	0	21	25	6	2	0	0	54
<i>Apodemus</i> spp.	wood/yellow necked mouse	0	28	13	3	0	0	0	44
cf. <i>Apodemus sylvaticus</i> (L.)	?wood mouse	0	1	2	0	0	0	0	3
<i>Micromys minutus</i> (Pallas)	harvest mouse	0	0	1	1	0	0	0	2
<i>Canis</i> f. domestic	dog	0	1	0	0	0	0	0	1
<i>Mustela nivalis</i> L.	weasel	0	0	1	0	0	0	0	1
<i>Equus</i> f. domestic	horse	0	0	1	0	0	0	0	1
<i>Sus</i> f. domestic	pig	3	2	13	14	22	1	2	57
<i>Bos</i> f. domestic	cattle	0	0	7	3	4	0	0	14
<i>Ovis</i> f. domestic	sheep	0	1	1	3	1	1	0	7
Caprine	sheep/goat	6	6	13	5	12	10	3	55
<b>Total</b>		<b>16</b>	<b>238</b>	<b>261</b>	<b>68</b>	<b>46</b>	<b>15</b>	<b>5</b>	<b>649</b>

Bird taxa from the bulk-sieved assemblage by context (fragment counts).

Species		11049	12022	12024	12025	12027	12028	Total
<i>Anas</i> cf. <i>platyrhynchos</i> L.	?mallard	0	0	1	0	0	0	1
<i>Gallus</i> f. domestic	chicken	0	1	3	2	1	2	9
cf. <i>Gallus</i> f. domestic	?fowl	0	1	1	0	0	1	3
<i>Scolopax rusticola</i> L.	woodcock	0	1	0	0	0	0	1
cf. <i>Larus ridibundus</i> L.	?black-headed gull	0	1	0	0	0	0	1
Alcidae	Alcidae	0	0	0	1	0	0	1
<i>Uria aalge</i> (Pontoppidan)	guillemot	0	0	0	0	4	0	4
cf. <i>Uria aalge</i> (Pontoppidan)	?guillemot	0	0	0	2	0	0	2
<i>Fratercula arctica</i> (L.)	puffin	1	0	0	0	0	0	1
Columbidae	Columbidae	0	0	0	0	0	1	1
cf. <i>Troglodytes troglodytes</i> (L.)	?wren	0	0	1	0	0	0	1
Turdidae	Turdidae	0	4	3	3	0	0	10
cf. Turdidae	?Turdidae	0	0	4	0	0	0	4
cf. <i>Turdus merula</i> L.	?blackbird	0	2	0	0	0	0	2
cf. <i>Turdus philomelus</i> Brehm	?thrush	0	0	1	0	0	0	1
Passeriforme	Passeriforme	0	2	4	0	0	1	7
<i>Sturnus vulgaris</i> L.	starling	0	1	0	0	0	0	1
cf. <i>Sturnus vulgaris</i> L.	?starling	0	0	0	1	0	0	1
<b>Total</b>		<b>1</b>	<b>13</b>	<b>18</b>	<b>9</b>	<b>5</b>	<b>5</b>	<b>51</b>

Amphibian and reptiles from the bulk-sieved assemblage by context (fragment counts).

Species		11038	12022	12024	12025	12027	12028	Total
Amphibian		1	71	40	7	0	1	120
<i>Bufo bufo</i> L.	toad	0	9	3	2	0	0	14
cf. <i>Bufo bufo</i> L.	?toad	0	0	0	1	0	0	1
<i>Rana temporaria</i> L.	frog	0	1	0	0	0	0	1
cf. <i>Rana temporaria</i> L.	?frog	0	1	1	0	0	1	3
Lizard sp.	lizard	0	9	7	2	1	0	19
cf. Lizard sp.	?lizard	0	0	1	0	0	0	1
Snake		0	0	3	0	0	0	3
<b>Total</b>		<b>1</b>	<b>91</b>	<b>55</b>	<b>12</b>	<b>1</b>	<b>2</b>	<b>162</b>

Fish taxa from the bulk-sieved assemblage by context (fragment counts).

Species		11038	12022	12024	12025	12027	12028	Total
<i>Raja clavata</i> L.	thornback ray	1	0	1	1	1	0	4
Gadidae	cod family	0	1	0	0	0	1	2
<i>Anguilla anguilla</i> (L.)	eel	0	1	4	0	0	0	5
<i>Trachurus trachurus</i> (L.)	horse mackerel	0	3	6	1	6	0	16
cf. <i>Trachurus trachurus</i> (L.)	cf. horse mackerel	0	7	3	0	0	0	10
<b>Total</b>		<b>1</b>	<b>12</b>	<b>14</b>	<b>2</b>	<b>7</b>	<b>1</b>	<b>37</b>

**Appendix 7**

Total fragment counts of skeletal elements from hand-collected and bulk-sieved assemblages.

*Total fragment count of cattle skeletal elements from the hand-collected assemblage.*

<b>Element</b>	<b>Post-Roman</b>	<b>Roman</b>	<b>Total</b>
mandible	0	5	5
DP3	0	1	1
P2	0	1	1
scapula	2	6	8
humerus	3	14	17
radius	4	13	17
ulna	1	5	6
metacarpal	0	2	2
pelvis	1	15	16
femur	1	5	6
tibia	7	18	25
astragalus	0	4	4
calcaneum	1	7	8
metatarsal	3	2	5
metapodial	0	1	1
carpals/tarsals	0	2	2
phalanx 1	1	15	16
phalanx 2	1	10	11
phalanx 3	2	8	10
<b>Total</b>	<b>27</b>	<b>134</b>	<b>161</b>

*Total fragment count of caprine skeletal elements from the hand-collected assemblage.*

<b>Element</b>	<b>Post-Roman</b>	<b>Roman</b>	<b>Total</b>
horncore	1	3	4
mandible	7	20	27
incisor	1	0	1
DP4	1	0	1
M1/M2	0	3	3
M3	0	2	2
scapula	4	32	36
humerus	7	41	48
radius	8	47	55
ulna	5	15	20
metacarpal	1	2	3
pelvis	7	43	50
femur	2	23	25
tibia	9	54	63
astragalus	0	12	12
calcaneum	3	9	12
metatarsal	3	5	8
cuboid-navicular	0	1	1

Element	Post-Roman	Roman	Total
phalanx 1	0	2	2
phalanx 2	1	0	1
<b>Total</b>	<b>60</b>	<b>314</b>	<b>374</b>

Total fragment count of pig skeletal elements from the hand-collected assemblage.

Element	Post-Roman	Roman	Total
mandible	1	19	20
deciduous incisor	0	2	2
incisor	0	5	5
canine	0	2	2
P2	0	1	1
M3	1	0	1
scapula	2	17	19
humerus	4	26	30
radius	1	21	22
ulna	2	29	31
metacarpal	0	7	7
2nd metacarpal	0	3	3
3rd metacarpal	1	1	2
4th metacarpal	1	1	2
pelvis	3	33	36
femur	2	24	26
tibia	2	18	20
fibula	0	4	4
astragalus	1	8	9
calcaneum	1	19	20
metatarsal	1	0	1
2nd metapodial	0	5	5
metatarsal 3	0	2	2
metatarsal 4	0	2	2
metapodial	0	1	1
phalanx 1	0	3	3
phalanx 3	0	1	1
<b>Total</b>	<b>23</b>	<b>254</b>	<b>277</b>

Total fragment count of chicken skeletal elements from the hand-collected assemblage.

Element	Post-Roman	Roman	Total
sternum	0	2	2
furcula	0	3	3
coracoid	0	2	2
scapula	0	2	2
humerus	1	5	6
radius	0	4	4
ulna	0	7	7
carpometacarpus	1	0	1

Element	Post-Roman	Roman	Total
pelvis	0	4	4
synsacrum	0	1	1
femur	2	15	17
tibiotarsus	1	15	16
fibula	0	1	1
tarsometatarsus	1	8	9
<b>Total</b>	<b>6</b>	<b>69</b>	<b>75</b>

Total fragment count of cattle skeletal elements from the bulk-sieved assemblage.

Element	12024	12025	12027	Total
scapula	1	0	0	1
radius	2	0	3	5
ulna	1	0	1	2
pelvis	1	1	0	2
tibia	1	0	0	1
phalanx 2	1	1	0	2
phalanx 3	0	1	0	1
<b>Total</b>	<b>7</b>	<b>3</b>	<b>4</b>	<b>14</b>

Total fragment count of caprine skeletal elements from the bulk-sieved assemblage

Element	11038	12022	12024	12025	12027	12028	13019	Total
mandible	0	1	0	1	0	0	0	2
incisor	3	3	1	0	0	0	0	7
DP4	1	0	0	0	0	0	1	2
P2	1	0	1	0	1	0	0	3
M1	0	0	0	0	0	1	1	2
M3	0	0	0	0	0	1	0	1
scapula	0	0	1	1	1	1	0	4
humerus	0	0	1	0	2	1	1	5
radius	0	0	1	0	1	0	0	2
ulna	0	0	3	0	0	2	0	5
pelvis	0	0	4	1	2	0	0	7
femur	0	0	0	0	2	3	0	5
tibia	0	0	0	1	2	0	0	3
astragalus	0	0	1	1	1	0	0	3
calcaneum	0	1	1	3	1	1	0	7
phalanx 2	0	0	0	0	0	1	0	1
carpal	0	1	0	0	0	0	0	1
P3	0	1	0	0	0	0	0	1
P4	1	0	0	0	0	0	0	1
<b>Total</b>	<b>6</b>	<b>7</b>	<b>14</b>	<b>8</b>	<b>13</b>	<b>11</b>	<b>3</b>	<b>62</b>

Total fragment count of pig skeletal elements from the bulk-sieved assemblage.

Element	11038	12022	12024	12025	12027	12028	13019	Total
mandible	0	0	0	1	1	0	0	2
deciduous incisor	1	0	0	1	0	0	0	2
incisor	0	0	0	0	1	0	0	1
P2	0	0	1	0	0	0	0	1
scapula	0	1	0	1	1	1	0	4
humerus	0	0	1	0	6	0	0	7
radius	1	0	0	1	1	0	0	3
ulna	0	0	1	1	2	0	0	4
pelvis	0	0	4	1	3	0	0	8
femur	0	0	2	0	0	0	0	2
tibia	0	0	1	1	1	0	1	4
fibula	0	0	0	1	1	0	0	2
calcaneum	0	0	0	2	1	0	0	3
metatarsal 3	0	0	0	1	0	0	0	1
metatarsal 4	0	0	1	0	0	0	0	1
phalanx 1	0	0	0	1	3	0	1	5
2nd metapodial	1	0	2	1	0	0	0	4
deciduous up incisor	0	1	0	0	0	0	0	1
P3	0	0	0	1	0	0	0	1
P4	0	0	0	0	1	0	0	1
<b>Total</b>	<b>3</b>	<b>2</b>	<b>13</b>	<b>14</b>	<b>22</b>	<b>1</b>	<b>2</b>	<b>57</b>

Total fragment counts of small mammal skeletal elements from the bulk-sieved assemblage.

<i>Arvicola terrestris</i> (L.)	water vole			
Element	12022	12024	12025	Total
mandible	0	1	0	1
M3	3	0	0	3
humerus	0	1	0	1
femur	0	1	0	1
tibia	0	0	1	1
isolated teeth	0	3	1	4
maxilla	0	1	0	1
<b>Total</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>12</b>

<i>Microtis agrestis</i> L.	field vole						
Element	11038	12022	12024	12025	12027	12028	Total
mandible	1	14	13	3	1	1	33
incisor	1	0	2	0	0	0	3
M1	1	23	14	8	1	2	49
isolated teeth	2	20	36	5	0	0	63
maxilla	0	2	1	0	0	0	3
maxillary molars	0	2	0	0	0	0	2
upper incisor	0	0	0	1	0	0	1
<b>Total</b>	<b>5</b>	<b>61</b>	<b>66</b>	<b>17</b>	<b>2</b>	<b>3</b>	<b>154</b>

<i>Apodemus</i> spp.	wood/yellow necked mouse			
Element	12022	12024	12025	Total
mandible	3	1	0	4
incisor	3	3	0	6
M1	1	0	0	1
humerus	3	4	0	7
pelvis	4	0	0	4
femur	1	3	1	5
tibia	0	1	1	2
maxilla	6	0	0	6
upper incisor	7	1	1	9
<b>Total</b>	<b>28</b>	<b>13</b>	<b>3</b>	<b>44</b>

cf. <i>Apodemus sylvaticus</i> (L.)	?wood mouse		
Element	12022	12024	Total
mandible	1	1	2
maxilla + teeth	0	1	1
<b>Total</b>	<b>1</b>	<b>2</b>	<b>3</b>

<i>Micromys minutus</i> (Pallas)	harvest mouse		
Element	12024	12025	Total
femur	0	1	1
tibia	1	0	1
<b>Total</b>	<b>1</b>	<b>1</b>	<b>2</b>

cf. <i>Neomys fodiens</i> (Pennant)	?water shrew	
Element	12022	Total
scapula	1	1
humerus	1	1
<b>Total</b>	<b>2</b>	<b>2</b>

<i>Neomys fodiens</i> (Pennant)	water shrew			
Element	12022	12024	12025	Total
mandible	2	0	0	2
M3	1	0	0	1
humerus	0	1	0	1
femur	2	2	1	<b>5</b>
tibia	0	2	1	3
axis	1	0	0	1
<b>Total</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>13</b>

<i>Sorex araneus</i> L.	common shrew					
Element	11038	12022	12024	12025	12027	Total
mandible	1	4	9	1	0	15
humerus	0	11	4	3	1	19
pelvis	0	7	6	0	0	13
femur	0	12	6	1	0	19

<b><i>Sorex araneus</i> L.</b>	<b>common shrew</b>					
tibia	0	17	4	1	0	22
maxilla	0	1	0	0	0	1
maxilla + teeth	0	1	0	0	0	1
upper incisor	0	1	0	0	0	1
<b>Total</b>	<b>1</b>	<b>54</b>	<b>29</b>	<b>6</b>	<b>1</b>	<b>91</b>

<b><i>Sorex minutus</i> L.</b>	<b>pygmy shre</b>			
<b>Element</b>	<b>12022</b>	<b>12024</b>	<b>12025</b>	<b>Total</b>
mandible	2	2	1	5
humerus	0	0	1	1
pelvis	0	1	0	1
femur	1	3	0	4
tibia	0	3	0	3
<b>Total</b>	<b>3</b>	<b>9</b>	<b>2</b>	<b>14</b>

<b>Microtine</b>						
<b>Element</b>	<b>11038</b>	<b>12022</b>	<b>12024</b>	<b>12025</b>	<b>12027</b>	<b>Total</b>
incisor	0	1	14	0	0	15
humerus	1	13	10	0	1	25
pelvis	0	1	1	0	0	2
femur	0	11	10	3	0	24
tibia	0	12	7	1	1	21
upper incisor	0	10	16	0	0	26
<b>Total</b>	<b>1</b>	<b>48</b>	<b>58</b>	<b>4</b>	<b>2</b>	<b>113</b>

<b>Microtine/murine</b>					
<b>Element</b>	<b>12022</b>	<b>12024</b>	<b>12025</b>	<b>12027</b>	<b>Total</b>
humerus	6	10	1	1	18
pelvis	5	8	3	1	17
femur	5	2	1	0	8
tibia	5	5	1	0	11
<b>Total</b>	<b>21</b>	<b>25</b>	<b>6</b>	<b>2</b>	<b>54</b>

<b><i>Talpa europaea</i> L.</b>	<b>mole</b>		
<b>Element</b>	<b>12022</b>	<b>12024</b>	<b>Total</b>
mandible	0	1	1
humerus	0	1	1
ulna	0	2	2
pelvis	0	1	1
tibia	1	2	3
carpals/tarsals	0	1	1
phalanx 3	0	1	1
<b>Total</b>	<b>1</b>	<b>9</b>	<b>10</b>

## Appendix 8

Fusion data for main domesticates.

### *Cattle epiphyseal fusion data.*

	No. fused	% fused	No. unfused	% unfused
Early	15	88%	2	12%
Intermediate	7	58%	5	42%
Late	9	60%	6	40%

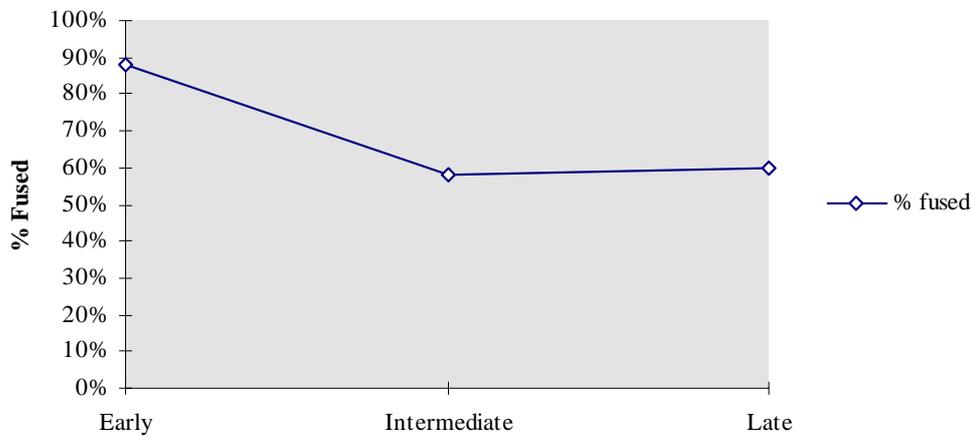
### *Caprine epiphyseal fusion data.*

	No. fused	% fused	No. unfused	% unfused
Early	57	100%	0	0%
Intermediate 2	41	72%	16	28%
Late	16	42%	22	58%

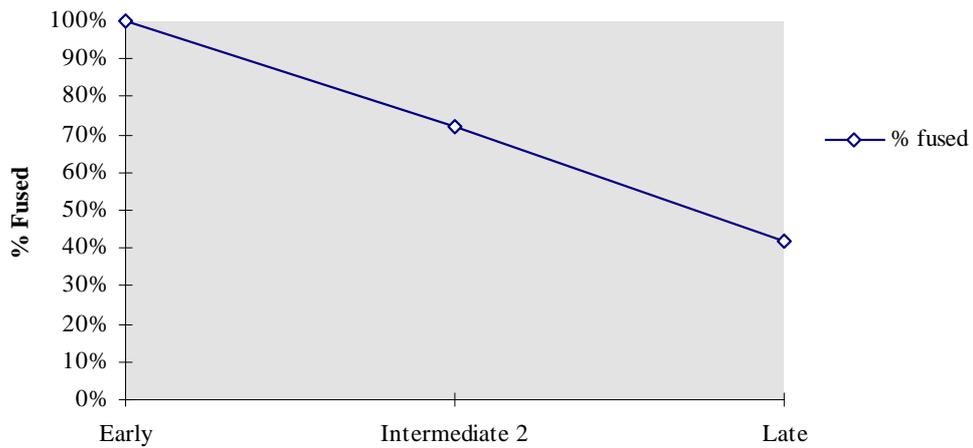
### *Pig epiphyseal fusion data.*

	No. fused	% fused	No. unfused	% unfused
Early	21	72%	8	28%
Intermediate 1	3	25%	9	75%
Intermediate 2	0	0%	18	100%
Late	1	2%	47	98%

### Cattle epiphyseal fusion data



### Sheep epiphyseal fusion



### Pig epiphyseal fusion

