*Table 16:*

| | ***Random sampling a*** | ***Judgement samples b*** | ***Mapping samples*** | ***Total less mapp. samples*** | ***Total IA c*** | ***Unsieved IA bones*** | ***D. F200,203,206 a) wet/rand.*** | ***b) dry/judg.*** | ***Random sampling a) pits*** | ***b) ditches*** |
|---|---|---|---|---|---|---|---|---|---|---|
| *n (all bones)* | 752 | 1255 | 1018 | 989 | 2007 | 3727 | 156 | 643 | 423 | 307 |
| *% of mammalian bones identified* | 16 | 21 | 13 | 21 | 17 | 48 | 22 | 21 | 15 | 18 |
| *$X^2$ ident. And unident. frags* | 0.48 | | | | 525.19 | | | | | |
| *% of burnt bones* | 11 | 9 | 14 | 7 | 10 | 2 | 6 | 6 | 15 | 7 |
| *$X^2$ burnt and unburnt frags* | 1.37 | | | | 2 | | 0.01 | | 1.2 | |
| *Mean number of all frags/ bucket* | 5.6 | 4.6 | 7.9 | 3.5f | 4.9f | nc | 4.7 | 18 - 4 f | 8.3 | 3.8 |
| *Mean number of all burnt frags/ bucket* | 0.6 | 0.4 | 1.1 | 0.2f | 0.5f | nc | 0.3 | 0.1 - 0.2f | 1.3 | 0.2 |

*a) Randomly collected soil samples were obtained almost entirely by wet sieving*

*b) Judgement or non random samples were obtained by dry sieving. Most are fom Iron Age ditches, below.*

*c) Iron Age total of sieved bones is the summed results from wet and dry sieving.*

*d) Best comparison of wet and dry sieving methods is of bones collected from IA ditches F200, F203 and F206.*

*e) 2x2 contingency tables using fragment frequencies where a significant difference (p 0.05:ldf) is given by $X^2$ >/- 3.84 only selective testing of results*

*f) estimates*

*Table 17:*

| | ***Random sampling*** | ***Judgement samples*** | ***Mapping samples*** | ***Total, less mapp. Samples*** | ***IA totals*** | | ***Random sampling from…*** | | ***Ditches F200,203 and 206*** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ***a) sieved bones*** | ***b) unsieved*** | ***a) pits*** | ***b) ditches/ gullies*** | ***a) wet/ random*** | ***B)Dry/Judgement*** |
| *n* | 119 | 215 | 134 | 200 | 334 | 1763 | 63 | 54 | 35 | 138 |
| *%* | | | | | | | | | | |
| *Cattle* | 25 | 24 | 22 | 26 | 24 | 42 | 22 | 28 | 29 | 26 |
| *Sheep/Goat* | 59 | 57 | 60 | 56 | 58 | 42 | 68 | 48 | 54 | 53 |
| *Pig* | 13 | 13 | 16 | 12 | 13 | 8 | 10 | 19 | 14 | 13 |
| *Horse* | 2 | 6 | 1 | 6 | 4 | 7 | | 4 | 3 | 7 |
| *Dog* | 1 | 1 | 2 | 1 | 1 | 1 | | 2 | | 1 |
| *$X^2$ tests of fragment frequencies, usually of 4 major species and where significant difference (p . .05; 3df) is given by $X^2$ >/- 7.82 (siegel 1956, pp 104-107)* | | 2.95 | | 977 | | 50.23 | | 4.27 | | 0.9 |
| *Comparison of 3 species (p. 05; 2 df) where X 2 >/- 5.99. Test would be significant if n1 and n2 were about double those given.* | | 6.95 | | | | | | | | |

*Table 18: Comparison of species and often percentages of sieved bones according to feature type*

| | ***EIA b*** | ***EIA b*** | ***IA*** | | | | | ***RB*** | | | ***Saxon*** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***p (N)*** | ***p (S)*** | ***other pits*** | ***ditch 200/203*** | ***ditch 206*** | ***other ditches*** | ***waterholes*** | ***pits*** | ***ditches*** | ***waterholes*** | ***pits*** | ***waterholes*** |
| *n a* | 52 | 14 | 58 | 70 | 102 | 31 | 4 | 7 | 25 | 1 | 22 | 7 |
| *%* | | | | | | | | | | | | |
| *Cattle* | 17 | 43 | 16 | 29 | 25 | 35 | | 14 | 24 | | 45 | 29 |
| *Sheep* | 75 | 43 | 69 | 50 | 56 | 42 | 75 | 72 | 60 | 100 | 36 | 43 |
| *Pig* | 8 | 7 | 16 | 16 | 12 | 19 | 25 | 14 | 24 | | 9 | 29 |
| *Horse* | | 7 | | 6 | 7 | 3 | | | | | 9 | |
| *% identified in total sample* | 12 | 17 | 17 | 24 | 21 | 11 | 10 | 7 | 11 | 7 | 11 | 12 |
| *% burnt* | 17 | 6 | 11 | 3 | 7 | 12 | 2 | 21 | 12 | 20 | 8 | 12 |
| *Density of all fragments per bucketfull* | 9 | 7 | 10 | 5c | 7c | 8 | 4 | 7 | 4 | 5 | 17 | 5 |
| *Density of burnt fragments per bucketful* | 1.6 | 0.4 | 1.1 | 0.2c | 0.5c | 0.9 | 0.1 | 1.4 | 0.4 | 1 | 1.3 | 0.6 |

a) Allowance made for inclusion of other species frequencies

b) 3 species comparison between pit X 2 >/- 3.84 not significant p = 0.5 (fragment frequencies not percentages were tested

c) Approximate figures for F200, F206 = may be overestimated

*Table 19: Chi square results of testing tallies of sheep and pig bones against cattle and horse for different feature types (Table 14) in 2 x 2 contingency tables at the 5 % level of significance*

| | | | | | | |
|---|---|---|---|---|---|---|
| *EIAp N* | | | | | | |
| *EIA p S* | 4.76 a | | | | | |
| *Other IA p* | 0.00 + | 5.89 | | | | |
| *dF200/203* | 3.54 | 2.00 | 4.90 | | | |
| *dF206* | 3.26 | 1.01 | 4.58 | 0.01 | | |
| *IA d* | 4.02 a | 0.09 | 5.25 | 0.60 | 0.31 | |
| | EIA p N | EIA p S | IA p | d 200 | d 206 | IA d |

*Table 20: Percentages of head, foot and body bones of sheep and cattle among sieved and unsieved debris*

| | ***Sheep*** | | | ***Cattle*** | | |
|---|---|---|---|---|---|---|
| ***Period*** | ***IA-RB*** | ***IA-RB*** | ***IA-RB*** | ***IA-RB*** | ***IA-RB*** | |
| ***Feature type*** | ***Pits*** | ***Ditches*** | ***Unsieved*** | ***Pits*** | ***Ditches*** | ***Unsieved*** |
| ***No.*** | ***89*** | ***121*** | *%* ***range n>50*** | ***25*** | ***62*** | *%* ***range n>50*** |
| *Head* | 46 | 45 | 17 to 30 | 28 | 34 | 6 to 39 |
| *Feet* | 21 | 18 | 13 to 25 | 32 | 15 | 13 to 25 |
| *Body* | 33 | 36 | 51 to 63 | 40 | 52 | 37 to 64 |
| *Loose teeth* | 29 | 31 | 2 to 11 | 16 | 15 | 0 to 12 |
| *Mandible* | 8 | 11 | 9 to 23 | 4 | 18 | nc |
| *Ventelova* | 11 | 10 | 0 to 10 | 16 | 13 | 7 to 21 |
| *Small bones* | 10 | 11 | 0 to 4 | 12 | 6 | 41 to 34 |
| *Radius and Tibia* | 13 | 13 | 19 to 47 | 4 | - | nc |
| *Degradation index* | 51 | 55 | 22 to 72 | nc | nc | nc |
| *$X^2$ testing of to ma ti and ra versus other fragments where $X^2$ >/- 3.84 (ldf and p >/- 0.05* | $X^2 = 0.32$ | | | | | |

*Table 21: Frequencies and percentages of four skeletal elements of Iron age and Roman sheep obtained by normal excavation and by sieving (explanation on actual sheet)*

| | ***Normal excavation*** | | ***All elements obtained by sieving*** | | ***Total*** |
|---|---|---|---|---|---|
| | *f* | *%* | *f* | *%* | *f* |
| *To.* | 51 | 13 | 62 | 57 | 113 |
| *Ma.* | 97 | 25 | 19 | 18 | 116 |
| *ra.* | 106 | 27 | 15 | 14 | 121 |
| *ti.* | 136 | 35 | 12 | 11 | 148 |
| ***Total*** | 390 | | 108 | | 498 |

*Table 22: Frequencies and percentages of other sieved elements of iron Age and Roman sheep obtained by normal excavation and sieving*

| | ***Unsieved bones*** | | ***Sieved bones*** | |
|---|---|---|---|---|
| | ***(Major feature groups)*** | | ***All elements collected*** | |
| | f | % | f | % |
| *hc* | 8 | 2 | 4 | 4 |
| *cr* | 31 | 8 | 8 | 8 |
| *mx* | 2 | 1 | 2 | 2 |
| *ve* | 27 | 8 | 21 | 22 |
| *sc* | 26 | 7 | 3 | 3 |
| *pe* | 29 | 8 | 1 | 1 |
| *hu* | 41 | 12 | 5 | 5 |
| *fe* | 30 | 8 | 8 | 8 |
| *ul* | 12 | 3 | 5 | 5 |
| *mc* | 56 | 16 | 4 | 4 |
| *mt* | 72 | 20 | 14 | 14 |
| *ca* | 6 | 2 | 4 | 4 |
| *ast* | 2 | 1 | 2 | 2 |
| *jt* | 1 | | 1 | 1 |
| *ph1* | 10 | 3 | 7 | 7 |
| *ph2* | | | 5 | 5 |
| *ph3* | | | 3 | 3 |
| *Total* | *353* | | *97* | |

*Table 23: Frequencies and percentages of elements of Iron Age and Roman sheep to indicate the overall difference in the recovery of small identifiable bones (explanation of method on sheet)*

| | ***Normal recovery*** | | ***Sieving*** | | ***Total*** |
|---|---|---|---|---|---|
| | *f* | *%* | *f* | *%* | *f* |
| *to, ve, carpal, torsal and phalangeal bones* | 97 | 13 | 105 | 51 | 148 |
| *Other elements recorded* | 646 | 87 | 100 | 49 | 746 |
| *Total* | *743* | | *205* | | *948* |

*Table 24: Frequencies and percentages of elements of Iron age and Roman sheep in order to compare the indices of degradation in groups of sieved and unsieved bones*

| | ***Normally collected*** | | ***Sieved*** | | ***Total f*** |
|---|---|---|---|---|---|
| | ***f*** | *%* | ***f*** | *%* | ***f*** |
| *to, ma, ra and ti and index of degradation %* | 390 | 52 | 108 | 53 | 498 |
| *Other skeletal elements* | 353 | 48 | 97 | 47 | 450 |
| *Total* | 743 | | 205 | | 948 |

*Table 25: Indices of bone degradation from sieved bones of sheep according to type of feature. Explanation on additional sheet*

| | ***Pits*** | | | | ***Ditches*** | | | |
|---|---|---|---|---|---|---|---|---|
| | ***EIA N*** | ***EIA S*** | ***Iap*** | ***Sax p*** | ***c/200/203*** | ***d 206*** | ***od*** | ***RB*** |
| *n* | 45 | 6 | 35 | 10 | 35 | 57 | 13 | 16 |
| *%* | | | | | | | | |
| *Loose teeth* | 24 | 17 | 40 | | 31 | 25 | 23 | 56 |
| *Degradation index from sieved bones* | 44 | 33 | 66 | 10 | 46 | 51 | 69 | 75 |
| *Degradation index from unsieved bones* | 34 | 43 | 43 | nc | 66 | 48 | 62 - 64 | 54 - 61 |

*Table 26: Percentages of head, foot and body bones of sheep in sieved debris collected by different methods*

| ***Period*** | ***All groups are comprised of Iron Age and Roman bone debris*** | | | | |
|---|---|---|---|---|---|
| ***Sampling*** | ***Random*** | | ***Judgement*** | | ***Random*** |
| ***Sieving*** | ***mostly wet*** | | ***dry*** | | ***wet*** |
| | ***pits*** | ***ditches*** | ***pits*** | ***d.F200, 203 and 206*** | ***d. 200, 203, 206*** |
| *n* | 38 | 38 | 51 | 78 | 13 |
| *%* | | | | | |
| *Head* | 50 | 58 | 43 | 41 | 46 |
| *Foot* | 18 | 11 | 24 | 22 | 15 |
| *Body* | 32 | 32 | 33 | 37 | 38 |
| *Teeth* | 37 | 42 | 24 | 26 | 38 |
| *Mandible* | 11 | 13 | 6 | 9 | |
| *Vertebra* | 11 | 5 | 12 | 12 | 15 |
| *Small bones* | 5 | 5 | 14 | 10 | |
| *Radius and Tibia* | 16 | 16 | 12 | 12 | 23 |
| *Degradation index (sieved b) %* | 63 | 71 | 41 | 46 | 62 |
| *$X^2$ testing at frequency of to, ma, ti, and ra versus other elements, where $X^2$ >/- 3.84 at p .05 and ldf.* | | 6.67 | | | |
| | | 5.42 | | | |
| | | 3.38 | | | |
| | | 2.32 | | | |
| | | | 2.24 | | |

*Table 27: Frequencies and percentages of four elements of Iron Age and Roman sheep obtained by different methods of sampling and sieving (additional information on separate sheet)*

| ***Sampling*** | ***Random*** | | ***Judgement*** | | ***Total*** |
|---|---|---|---|---|---|
| ***Sieving*** | ***mostly wet*** | | ***dry*** | | |
| | *f* | % | *f* | % | *f* |
| *to* | 30 | 59 | 32 | 56 | 62 |
| *ma* | 9 | 18 | 10 | 18 | 19 |
| *ra* | 7 | 14 | 8 | 14 | 15 |
| *ti* | 5 | 10 | 7 | 12 | 12 |
| ***Total f*** | ***51*** | | ***57*** | | ***108*** |

*Table 28: frequencies and percentages of other sieved elements of Iron Age and Roman sheep obtained by different methods of sampling and sieving*

| ***Sampling*** | ***Random*** | | ***Judgement*** | |
|---|---|---|---|---|
| ***Sieving*** | ***mostly wet*** | | ***dry*** | |
| | *f* | % | *f* | % |
| *hc* | 1 | 4 | 3 | 4 |
| *cr* | 1 | 4 | 7 | 10 |
| *mx* | | | 2 | 3 |
| *ve* | 6 | 24 | 15 | 21 |
| *sc* | 2 | 8 | 1 | 1 |
| *pe* | | | 1 | 1 |
| *hu* | 1 | 4 | 4 | 6 |
| *fe* | 2 | 8 | 6 | 8 |
| *ul* | 1 | 4 | 4 | 6 |
| *mc* | 2 | 8 | 2 | 3 |
| *mt* | 5 | 20 | 9 | 13 |
| *ca* | | | 4 | 6 |
| *ast* | | | 2 | 3 |
| *jt* | | | 1 | 1 |
| *ph1* | 2 | 8 | 5 | 7 |
| *ph2* | 1 | 4 | 4 | 6 |
| *ph3* | 1 | 4 | 2 | 3 |
| ***Total*** | ***25*** | | ***72*** | |

*Table 29:*

| | ***Pits*** | | | ***Ditches*** | | | | ***Waterholes*** | |
|---|---|---|---|---|---|---|---|---|---|
| | ***EIA P a*** | ***EIA p 2 a*** | ***MIA and unphase IA p a*** | ***LIA - RB*** | ***F200, 203 and 206*** | ***Other IA d*** | ***RB*** | ***IA*** | ***RB*** |
| *n (a)* | 178 | 66 | 86 | 42 | 228 | 150 | 246 | 51 | 63 |
| | 37 | 42 | 52 | 45 | 53 | 64 | 55 | 71 | 70 |
| *Index of degradation $X^2$ testing of frequencies of the degradation indices where $X^2 > 3.84$ at p 0.05: 1 df* | | | 5.33 | | 3.98 | | | | |

a) includes features which were extensively bulk sieved for bones.

*Table 30:*

| *Feature group* | *Bucketfuls of soil* | *Total weight of bone (g)* | *Mean weight (g) / bucketful* | *% of bones by weight (a) identified* | *% of bones by weight (b) burnt* | *% of species weight among identified bones* | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | *Cattle* | *Sheep* | *Pig* | *Horse* | *Dog* | *Rodent* | *Human* |
| ***Random sampling*** | | | | | | | | | | | | |
| *IA-R ditch* | 53 | 1508 | 28 | 73 | 3.9 | 86 | 8 | 4 | | | | 0.8 |
| *IA ditches and gullies* | 72 | 804 | 11 | 72 | 3.3 | 56 | 21 | 7 | 14 | 1 | | |
| *RB ditches and gullies* | 36 | 561 | 16 | 62 | 3.6 | 71 | 8 | 18 | | | | 2.9 |
| ***Judgement sampling*** | | | | | | | | | | | | |
| *IA - R pits* | 56 | 1990 | 36 | 72 | 5.3 | 39 | 16 | 14 | 30 b | | 0.2 | 0.1 |
| *IA ditches/gullies* | 120 - 210 | 4056 | 19 - 34 (c) | 78 | 2.2 | 61 | 11 | 6 | 21 | 1 | | 0.1 |
| ***Totals*** | | | | | | | | | | | | |
| *IA-R pits* | 109 | 3498 | 32 | 72 | 4.7 | 60 | 13 | 10 | 17 | | | 0.4 |
| *IA-R ditches* | 228 - 318 | 5531 | 17 - 24 (c) | 75 | 2.6 | 61 | 12 | 7 | 18 | 1 | 0.1 | 0.4 |
| ***Totals*** | 327 - 427 | 9029 | 21 - 27 (c) | 74 | 3.4 | 60.5 | 12.4 | 8.3 | 17.5 | 0.7 | | 0.4 |

a) Ditches F200, 203 and 206

b) Presence of one large horse bone

c) Probable figure