EXCAVATIONS AT HARTING BEACON, WEST SUSSEX; SECOND SEASON 1977

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(With specialist reports by Sue Hamilton and Karen Petzoldt)

Two areas were excavated at Harting Beacon in 1977. First, the western entrance was re-excavated; it had previously been investigated, but no adequate report has been forthcoming. A pair of large entrance post holes was found, and the two ditch terminals excavated.

The second area (30 x 15 m) was inside the hill fort, adjacent to an area examined in 1976; only one pit and a post hole were found.

INTRODUCTION

Harting Beacon is a large, feebly-defended hill fort situated on the north edge of the South Downs. Its univallate earthwork encloses *c.* 10 hectares (24 acres). Most of the interior is ploughed every year; fieldwalking has shown a slight scatter of potsherds over the eastern half of the hill fort, with a faint concentration in the extreme south-east corner.

In 1976, about 1,300 m^2 were excavated in this corner (Fig. 1; Area I); three small pits, four four-post-hole structures and one six-post-hole structure were found (Bedwin 1977). A section was also cut through the southern defences of the hill fort (Fig. 1; Area II).

In 1977, it was decided to excavate another area within the south-east corner of the hill fort in order to trace the extent of the features found the previous year (Fig. 1; Area III). Secondly, the western entrance was re-excavated (Fig. 1; Area IV); this had already been the subject of excavation in the late 1940s, and it had been claimed that there was a Roman or late Iron Age re-cut in the ditch terminals, though no evidence was presented to justify this claim (Keef 1953). Since no sign of use or occupation of Harting Beacon during the late Iron Age or Roman period was forthcoming from the 1976 excavation, it was thought worthwhile to examine the western entrance once more.

Excavation was carried out for four weeks in September 1977. The archaeology of the area surrounding Harting Beacon, and previous finds from the hill fort are discussed in detail in the report on the first season's work (Bedwin 1977).

EXCAVATION

Area III (Plan; Fig. 2: Sections; Fig. 5)

The dimensions of this area were 30 by 15 m. Ploughsoil was removed by machine, and features cut into the chalk subsoil excavated. One shallow pit containing a few sherds of early Iron Age pottery, and a single small post hole were all that was found.

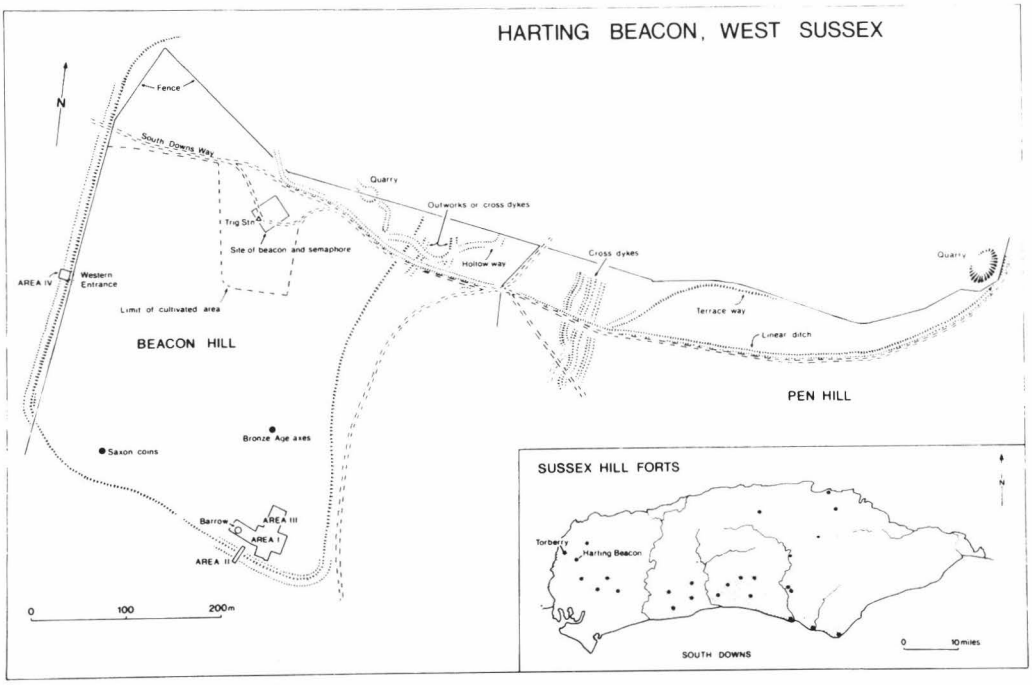

Fig. 1. Harting Beacon 1977. Site location. The plan of the hill fort is based on a survey by F. G. Aldsworth

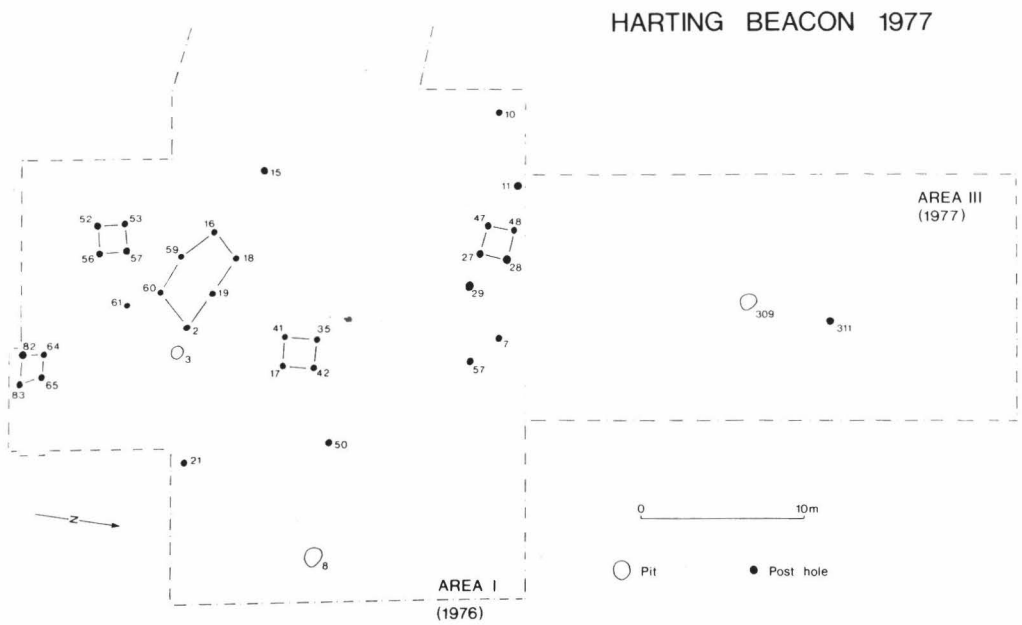

Fig. 2. Harting Beacon 1977. Plan of Areas I (1976) and III (1977)

Area IV (Plan; Fig. 3: Sections; Figs. 4 and 5)

This area, 12 by 10 m, was dug entirely by hand. Before excavation, it was covered by thick, coarse grass, with a few small gorse bushes, but the position of the entrance was nevertheless distinct as simple break in the rampart. A well-defined trackway runs diagonally up the steep hillside towards the entrance, terminating in a well-worn depression between the rampart terminals.

Removal of the topsoil (and also a little of the front edge of both rampart terminals) revealed four features. These were a pair of large entrance post holes, features 404 and 405, and the two ditch terminals.

The entrance post holes were substantial, oval features; the northern one was cut 55 cm into the chalk subsoil, the southern one, 70 cm. Both were over 1 m wide at the top, but only 60 cm across at the base. Both post holes had a sizeable, stepped shelf well above the bottom, and this may indicate a re-cut. The fill of the post holes was uninformative in this respect, consisting largely of domestic debris in a fine chalky matrix. This debris included early Iron Age pottery, animal bones, charcoal and, particularly in feature 404, several large fragments of saddle quern. All this was presumably deposited after removal of the entrance posts.

A length of about 2.5 m of each ditch terminal was uncovered; their shapes differed considerably. The southern terminal was wide and square-ended, whereas the northern terminal had a narrow, sharply-rounded end. It is likely that the latter was shaped to accommodate the track running diagonally up the hill side to the entrance.

The extreme ends of both ditch terminals contained the backfill of the previous excavator (Keef 1953). The undisturbed fill in both terminals nevertheless showed clear evidence of a shallow, incomplete re-cut (Fig. 4). This was especially noticeable in the southern terminal, where the original silting was virtually sterile, but the re-cut contained considerable amounts of pottery, animal bone and antler, and also a human skull, lying on its left side.

The pottery from the original silting (layer 9 in Fig. 4), and also from the re-cut (layers 8 and 8A in Fig. 4), falls into Cunliffe's 'Kimmeridge-Caburn' category, dating to the sixth and fifth centuries B.C. (Cunliffe 1974). Pottery of no other date was found. Other finds from Area IV were a chalk loomweight (Fig. 7.16), a bronze horse ornament (Fig. 7.15), and a fragment of a small, baked clay spindle whorl (Fig. 7.14).

No post holes were found beneath the front edge of the rampart material (cf. the two post holes found below the front of the rampart in Area II in 1976). Given that the rampart material may have slumped considerably from its original position, this should not be taken as unequivocal evidence for the absence of post holes here.

DISCUSSION

Area IV

The results from this area confirm the findings of the 1976 excavation, dating the hill fort to the early Iron Age. This contradicts the claims of Miss P. A. M. Keef, who had previously identified the re-cut, but dated it to the late Iron Age or Roman period (Keef 1953). Since no pottery has been published in support of this claim, it is difficult to assess.

On our present understanding, pottery from both the re-cut and the original silts in the ditch terminals is assigned to the early Iron Age (sixth and fifth centuries B.C.) and suggests a fairly short life for the hill fort.

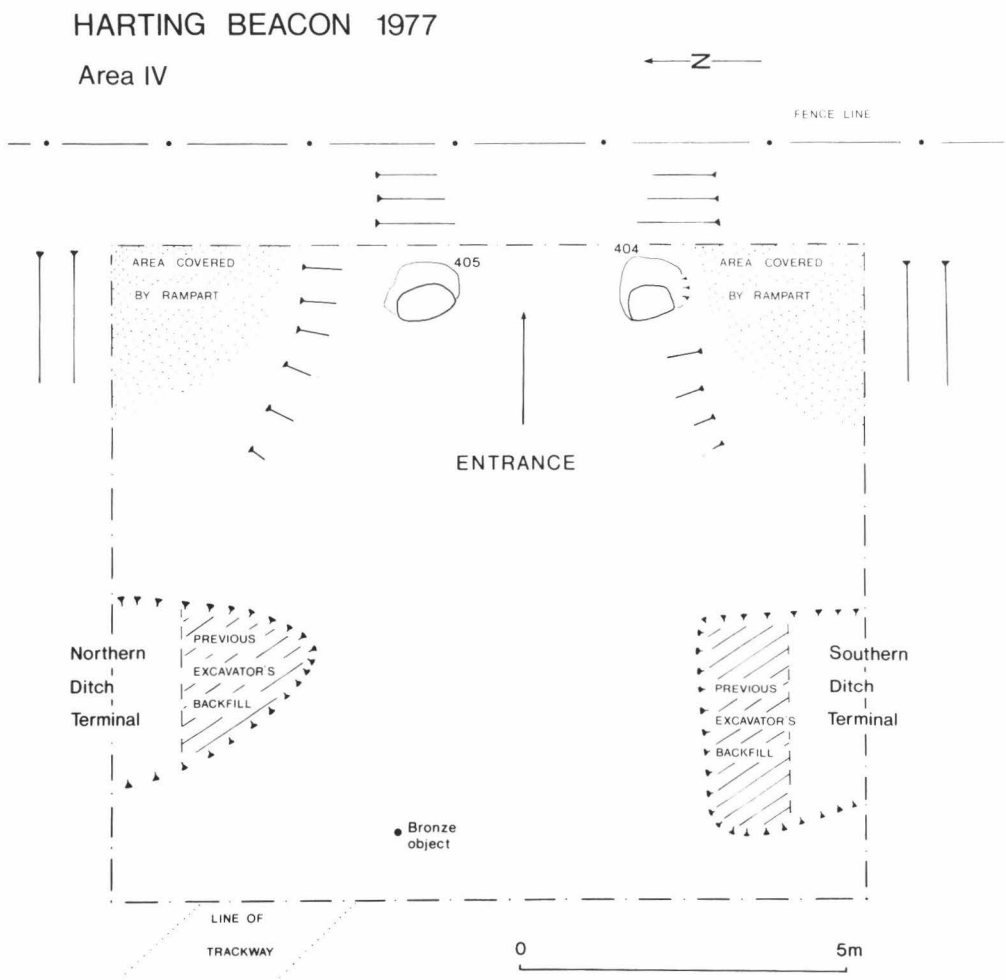

Fig. 3. Harting Beacon 1977. Plan of Area IV, the western entrance

During Miss Keef's excavations in the 1940s, two small penannular gold rings were found in the northern ditch terminal, though the exact context is not entirely clear (Keef 1953). It was originally suggested by Gordon Childe that these were of late Bronze Age date, though without excluding the possibility of an early Iron Age date. It now seems likely from the 1977 excavations that these gold rings were deposited with early Iron Age pottery. (Of course, there still remains the possibility that these gold rings may have been precious items, somewhat in the manner of family heirlooms, in which case the date of manufacture could have preceded deposition by a considerable margin.)

The fill of the entrance post holes and of the re-cuts in the ditch terminals were very similar in appearance, texture, and content (i.e. with much domestic debris). One other finding links these features; the human skull found in the southern ditch terminal lacked six front teeth. Two human teeth were found in post hole 404, and one human tooth in post hole 405. These corresponded to three of the teeth missing from the skull, and would strongly suggest that the entrance post holes and the ditch re-cuts were filled at the same time. This would most logically represent one of the final acts in the occupation/use of the hill fort; i.e. dismantling the gate posts, and clearing the site, with rubbish being thrown into the now empty post holes and the ditch re-cuts. On this interpretation, the re-cutting of the ditch terminals has no defensive significance; it is more likely that the re-cuts are simply rubbish pits cut into a partially silted up ditch. (It should be remembered that no such re-cut was seen in a section through the southern defences in 1976 (Fig. 1; Area II).)

Area III

The findings from this area in 1977 imply that features such as the four-post-hole structures and the six-post-hole structure found in 1976 nucleate just inside the southern rampart, in the eastern corner of the hill fort.

Harting Beacon and the early Iron Age

The role of Harting Beacon is still not conclusively established; the most plausible function remains that of a stock enclosure. The evidence, largely circumstantial, in support of this is summarised as follows;

(i) Although the hill fort is a large one, features such as four-post-hole structures seem to be limited to a small area in the south-east corner. A considerable part of the interior may therefore be 'empty' of archaeological features.

(ii) No Celtic fields are known nearby, and the hill fort is located in the most marginal of Downland situations, namely on top of the scarp slope, where the topsoil is thin and the site extremely exposed.

(iii) Analysis of molluscs from the silts in the southern ditch terminal indicates that, during the period of its use or occupation, Harting Beacon (or at least the area around its entrance) was free of severe human disturbance (report below).

Some domestic activities undoubtedly were carried out at Harting; these are indicated by the finding of a loomweight, two spindle whorls, and some quernstone fragments during the two seasons' excavations. Given the extent of the excavated area, however, these reflect only a low level of activity, and do not suggest occupation of the site on any scale.

No contemporary settlement sites on the Downs near Harting Beacon are known; the nearest Iron Age settlement is a rather unusual group of 'hut shelters' terraced into the steep northern slope of Harting Hill, about two kilometres to the west (Keef 1950). The exact status of these hut shelters is difficult to evaluate, and certainly it seems an unlikely spot for permanent settlement. The pottery from the two excavated shelters is a little later than the Harting Beacon material, and is contemporary with the early part of the site at Torberry (Cunliffe 1976).

In the absence of known contemporary settlements on the Downs, it may be profitable to consider Harting Beacon, not just in the context of the Downland, but as a site which may be linked to the Weald. Harting Beacon lies on the very north edge of the Downs; as a stock enclosure, perhaps in only seasonal use, it could be used as a focus for upland grazing by communities living at the foot of the Downs, in particular exploiting the excellent arable land on the Upper Greensand

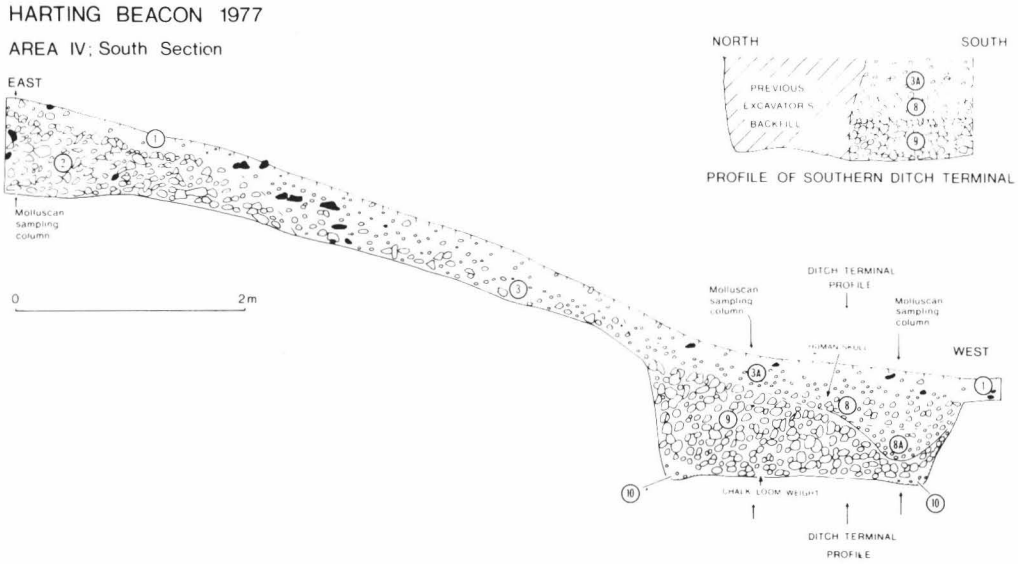

Fig. 4. Harting Beacon 1977. Southern section of Area IV. Find spots of the human skull and the loomweight are projected onto the ditch terminal section. Key to layers; 1. Dark rooty topsoil. 2, Large chalk rubble. 3. Loose chalk rubble in light brown soil matrix. 3a. Small chalk grit in dark brown soil matrix. 8. Large chalk lumps in sticky mid-brown fill. 8a. Small chalk lumps in soft mid-brown fill. 9. Clean large chalk rubble. 10. Fine chalk mud

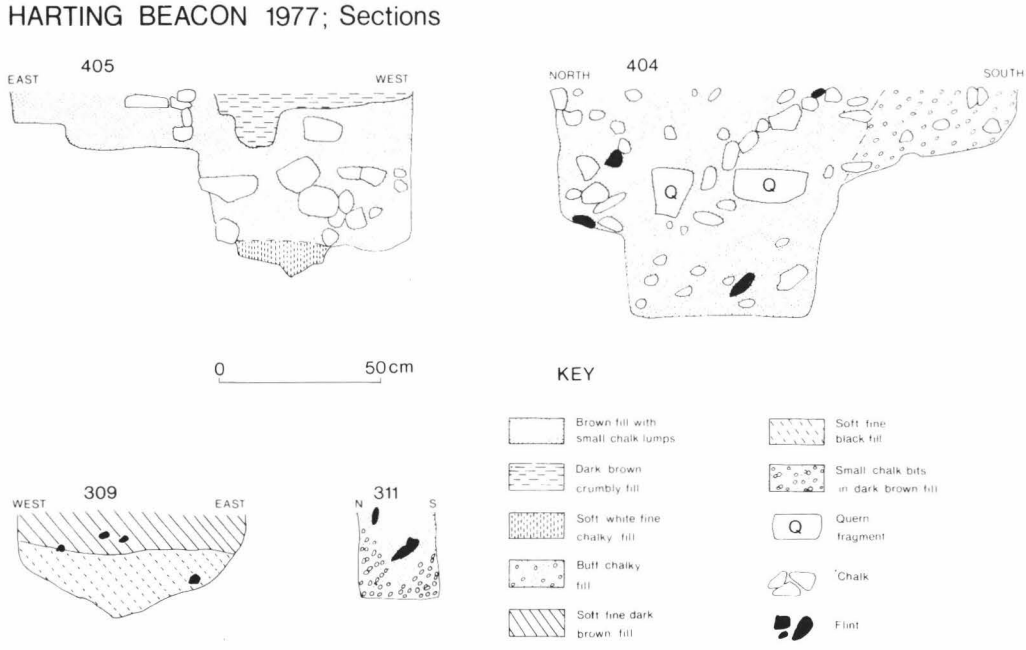

Fig. 5. Harting Beacon 1977. Sections

bench. Indeed, this idea could be extended to cover other hill forts on the northern edge of the Downs. The main drawback to this argument lies in the lack of known Iron Age sites at the foot of the Downs. However, any Iron Age site on the Upper Greensand would almost inevitably have been ploughed away over the years, and may now only be located with difficulty. Certainly, during the excavation of the Romano-British site at Elsted in 1975, a few sherds of Iron Age bead rim pottery were found, though there were no Iron Age features (M. Millett, pers. comm.).

SPECIALIST REPORTS

The Iron Age Pottery (Sue Hamilton; Institute of Archaeology, London)

Introduction

Two hundred and eighty five sherds were recovered during the 1977 excavation. These are similar and supplementary to the 1,092 recovered during excavation in 1976 (Morris 1977). Both can be assigned to the early Iron Age.

Fabric Analysis

With the exception of three grog-tempered sherds from the topsoil, the supplementary collection totally comprised calcined flint-gritted wares. These can be most closely related to those designated Fabric 1 by Morris (1977). The same method of fabric analysis was used as described for Chanctonbury Ring (Hamilton 1980). Segments on pie charts (Figs. 6 and 7) indicate visually the relative presence of inclusions for certain sampled vessels/sherds. The number of inclusions for each one gram sample is noted in the centre of each pie chart. Higher counts generally indicate smaller inclusions.

Sherds were grouped by fabric as follows:

Flint Gritted Wares (where flint represents over 60% of inclusions)

Coarser Wares:

Fabric 1 (4%)

Coarse-gritted: includes very coarse grits (4-6 mm).

Fabrics 2a and 2b (69 and 11%)

Medium coarse-gritted; includes medium (1-2 mm) and coarse (2-4 mm) grits, and is subdivided into 2a (frequent inclusions) and 2b (infrequent inclusions).

Finer Wares:

Fabrics 3a and 3b (6 and 9%)

Fine-gritted; having exclusively fine (0.5-1 mm) and very fine (0.2-0.5 mm) grits, and subdivided into 3a (frequent inclusions) and 3b (less frequent inclusions).

Other Wares:

Fabric 4 (1%)

Grog and flint ware (Morris 1977; Fabric 3). Major inclusions comprise grog (60%) and fine flint (20%).

The coarser flint wares are variable in size and abundance of gritting. The finer flint wares, however, indicate a conscious selective use of exclusively fine grits. Such a separation between coarse and fine is commonly noted with flint-tempered wares (e.g. Chanctonbury Ring; Hamilton 1980).

Forms and decoration

All wares are variable in their degree of oxidation. Bowl forms are more often oxidised and jars often reduced. Vessel 1 (Fig. 6) is totally black and is unique among the sherds in being burnished. The finer wares are notably thinner-walled, their sections averaging 5 mm.

Coarser ware forms comprise shouldered jars with concave necks (Figs. 6.3 and 10), a bag-shaped jar (Fig. 6.1), and bipartite bowls (Fig. 6.7, 8 and 9) and a small furrowed bowl (Fig. 6.11). Shoulders and rims are often decorated with oblique finger (Fig. 6.3 and 10) and fingernail (Fig. 6.7 and 8; Fig. 7.12) impressions.

In both fabric and style, sherds concur with the 1976 Harting assemblage. The affinities of the latter with other Sussex early Iron Age material (e.g. the Caburn, Stoke Clump, and Hollingbury) have been noted (Morris 1977). The assemblage is assigned to Cunliffe's early Iron Age 'Kimmeridge-Caburn' style group with a probable date range from sixth to fifth centuries B.C. (Cunliffe 1974; p. 33 and Fig. A3). The assemblage further stands comparison with that from Chanctonbury Ring (Hamilton 1980).

Tables

Tables 1 and 2 summarise fabrics and diagnostic sherds found in each feature.

Feature 309 is a shallow pit which contained three scraps of undiagnostic pottery. Features 404 and 405, large entrance post holes, shared pottery of the same fabric and included a few diagnostic sherds. The ditch silts contained pottery in the original silting of the north terminal (layer 9) and the southern re-cut (layer 8) only. Sherds in the northern

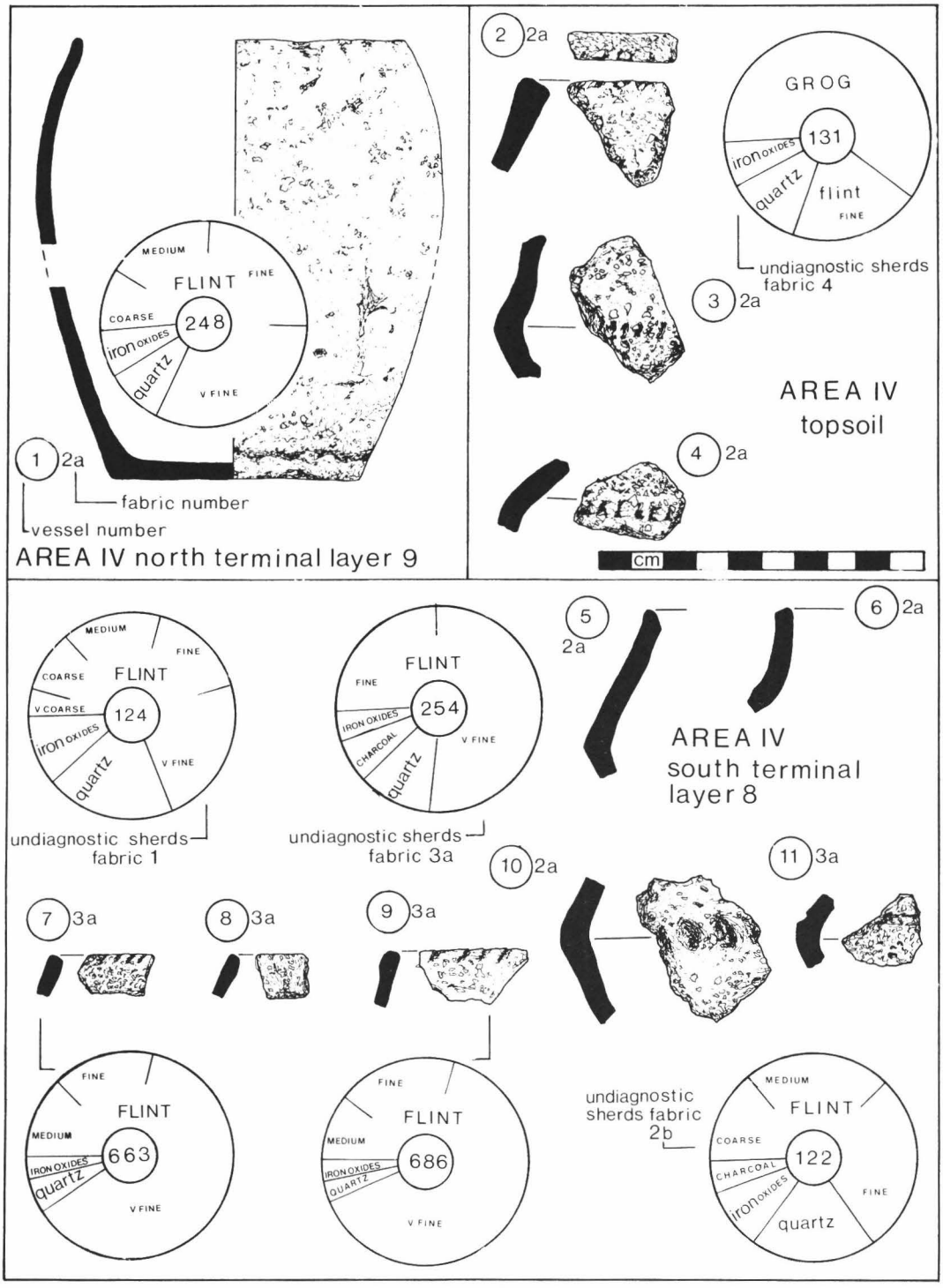

Fig. 6. Harting Beacon 1977. Iron Age pottery. Note reduction is to about half scale

terminal comprised a single three-quarter complete vessel (Fig. 6.1). Sherds in the southern re-cut were plentiful and included evidence of bipartite bowls and shouldered jars (Fig. 6.5-11). The pottery from this re-cut mirrors the rest of the assemblage and likewise dates to the early Iron Age.

The pottery analysed (from the 1977 excavation) contained common inclusions which could not alone indicate source. Harting Beacon shares a similar geological setting with Chanctonbury Ring, on the north side of the South Downs and having access to the Weald. Again, it would seem likely that the Gault and other Wealden clay-bearing strata were being exploited, rather than the thin and barely viable Clay-with-flints deposits of the surrounding Downland (see Chanctonbury Ring; Hamilton 1980, for further discussion). The wares analysed showed no clear indication of differentiation of source. Morris's Fabrics 4, 5 and 6 (a small number of sherds with sand inclusions; Morris 1977) indicate, however, that for the assemblage as a whole, there was a degree of variation in the strata exploited.

Small finds

(a) Conical bronze object with embossed ring at the top, and an iron spike at the base (Fig. 7.15). Length, including the spike, 4.7 cm; maximum width 1.3 cm. There were faint traces of gilding on the ring at the top. Found in the topsoil in Area IV (Fig. 3). It is probably a horse harness ornament of the early Iron Age.
(b) Chalk loomweight (Fig. 7.16). Diameter 9.0 cm. Circular, with central perforation, clearly made by boring in from opposite sides. The edges were rather battered. Found resting on the floor of the southern ditch terminal.

Foreign Stone (Identifications by Caroline Cartwright)

Eight large fragments of quernstone were found in feature 404; these were identified as a brownish-grey micaceous sandstone from a Wealden source. There was in addition a fragment of porphyritic granite, probably from Cornwall, in the topsoil in Area IV.

Charcoals (Identification by Caroline Cartwright)

Feature 309; *Crataegus sp.* (hawthorn)
Feature 404; *Quercus sp.* (oak)
Feature 405; *Ulex sp.* (gorse), *Corylus sp.* (hazel), *Crataegus sp.*
Southern ditch terminal, layer 8; *Quercus sp.* and *Crataegus sp.*

Human remains

One human skull, lying on its left side, was found in the upper fill of the southern ditch terminal in Area IV (Fig. 4, layer 8). The skull was complete, although part of the right side of the cranium was broken into several fragments which had collapsed into the skull cavity. The mandible was found about 8 cm away, a little lower in the same deposit. Age at death was 30-40 years. The robustness of the skull suggests that it was a male.

Six teeth were missing from the mandible and maxilla of this skull; these were four incisors and two canines. It is therefore interesting that in the post hole, feature 404, two human teeth were found (one incisor and one canine), and in the post hole, feature 405, one incisor was found. The appearance of each of these teeth was compatible with having come from the skull in the ditch terminal, and if they are all derived from the same individual, this would suggest that the re-cutting of the ditch terminals and the filling of the entrance post holes with domestic rubbish took place at the same time.

Animal remains

The fill of the re-cut in the southern ditch terminal and the two entrance post holes all contained some animal bone. Details are summarised below:

Southern ditch terminal, layer 8
The following remains were present (all the bones were fragmentary)
Ovis; 1 mandible, 2 tibiae, 3 radii, 1 humerus, 2 metatarsals, 1 scapula, 2 skull fragments, 8 teeth (1 deciduous). (Total; 20)
Bos; 1 tibiae, 2 femora, 2 humeri, 1 scapula, 1 pelvis, 1 skull fragment, 1 horn fragment, 1 tooth. (Total; 11)
Sus; 1 humerus, 1 astragalus, 2 scapulae, 4 mandibles, 1 maxilla, 4 teeth. (Total; 13)
Equus; 1 tibia, 1 fibula, 1 incisor. (Total; 3)
Cervus elaphus (red deer); 1 mandible, 1 metatarsal, 2 (large) antler fragments. (Total; 4)

Feature 404 (all bones were fragmentary)
Ovis; 1 radius, 1 skull fragment, 2 teeth. (Total; 4)
Bos; 1 tibia, 1 pelvis. (Total; 2)
Sus; 1 scapula.
Equus; 1 tooth.

Feature 405
Ovis; 1 first phalange, 5 teeth. (Total; 6)
Sus; 1 tusk (very large; probably from a wild boar).

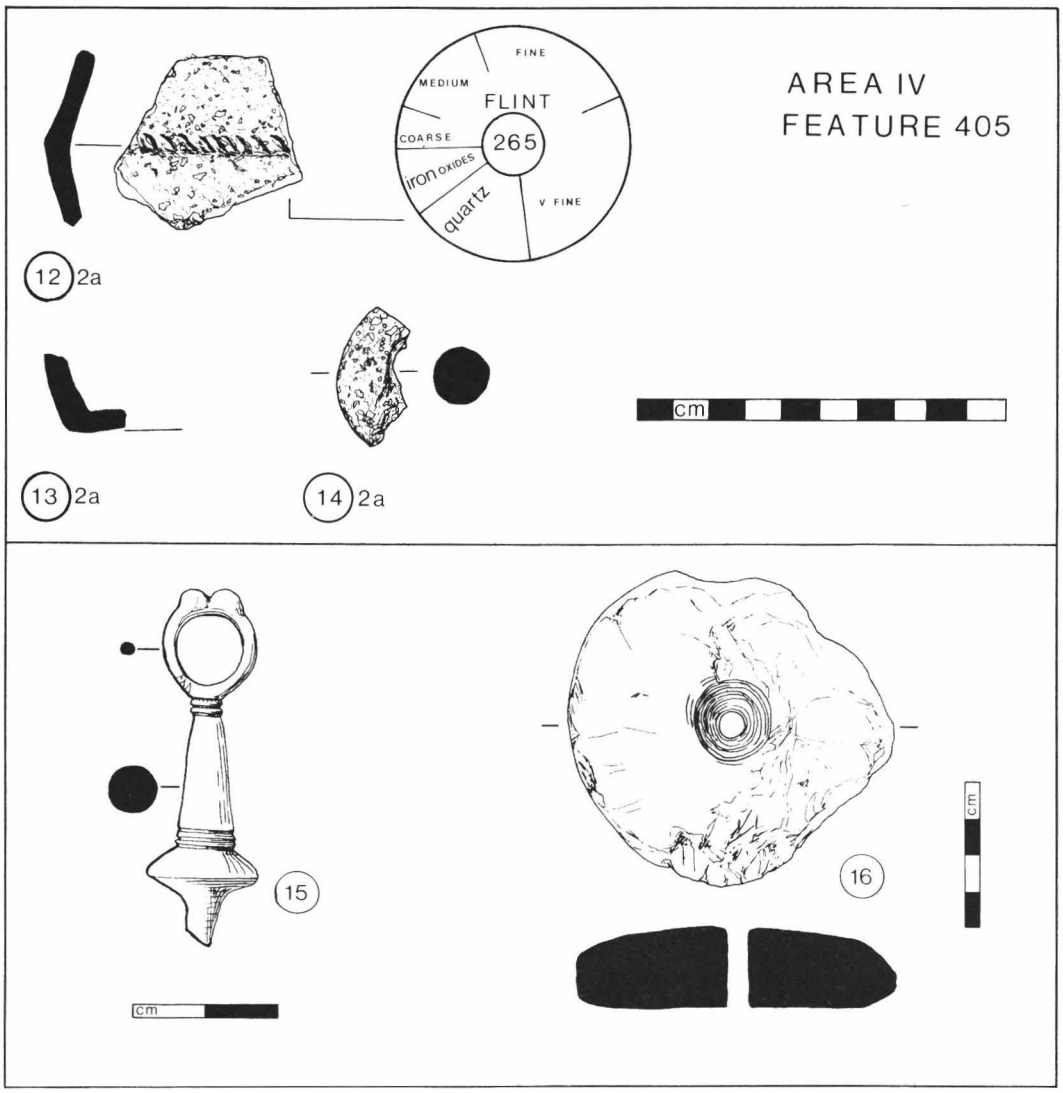

Fig. 7. Harting Beacon 1977. Iron Age pottery, bronze horse ornament and chalk loomweight. Note different scales

The common domesticated animals are all present, with the exception of *Canis*. The animal remains found in 1977, together with those from 1976 tell us, not unexpectedly, that the diet consisted of sheep, cattle and pig. In terms of numbers, sheep predominate, though because there is a greater weight of meat on a *Bos* carcase than on an *Ovis* carcase, it is likely that beef and mutton/lamb were of similar importance in the diet. The small number of red deer remains and the probable wild boar's tusk suggest that hunting was practised, but did not contribute greatly to the food supply.

Molluscan analysis (Karen Petzoldt)

Method

A series of samples was taken from the fill of the southern ditch terminal at *c.* 10 cm intervals in a column from the base of the ditch upwards. Spot samples were also taken from the primary silts in each corner of the ditch. A series of samples, in a column, was taken from the body of the rampart (Fig. 4 shows the position of these sampling columns).

Results

These are presented in Tables 3-5. The presence of non-apical fragments of species not otherwise represented in the samples is indicated by a plus sign. Non-apical fragments are not included in the percentage calculations.

Interpretation

The rampart The samples from the rampart material contained an unusually rich assemblage of snails apparently mixed in composition. The marked predominance of *Vitrea* species, *Discus rotundatus* and *Oxychilus* species suggest the presence of a rock rubble element in the assemblage. The rampart could have remained bare of vegetation and its constituent chalk rubble loosely packed for long enough to permit colonisation by rock rubble species. Alternatively, it is possible that the entire assemblage was derived from the rampart surface and incorporated into the rampart rubble by down-washing and/or earthworm activity. Taken as a whole, the snail assemblage is indicative of moist, rich, grassy vegetation, and local conditions free from intensive grazing or cultivation.

The ditch The snail fauna from the primary silt of the ditch (layer 10) is a specialised one and contained only two species in marked abundance. This unique sub-fossil fauna resembles faunas from modern 'transitory' grassland habitats. (Such faunas have been recognised and defined by Cameron and Morgan-Huws (1976). They have studied a series of modern grassland sites in the vicinity of Beacon Hill which represent early stages in the succession of grazed grassland to scrub. Faunas from the wetter, more vegetated sites are characterised by a predominance of *Aegopinella pura, Vitrea contracta,* and *Carychium tridentatum.)* The fauna from the primary silts at Harting Beacon resembles these modern faunas in being dominated by *Vitrea* species and *Carychium* species (Table 5). The fauna is indicative of moist, overgrown grassland, free from severe human disturbance.

The secondary fill of the ditch (layer 9) contains a rich snail assemblage dominated by shade-loving species, reflecting the favourable local conditions in the ditch. Together with the presence of what seem to be 'anthropophobic' species *(Helicodonta obvoluta* and *Acicula fusca)* this suggests that the local environment around the ditch was not affected by severe human disturbance.

The re-cut (layers 8 and 8A) was dug into the original secondary fill. The lower layer of the re-cut (layer 8A) contains a rich, sub-fossil snail assemblage very similar to that of the original secondary fill from which it must have derived. The upper layer of the re-cut (layer 8) contains very few shells, which is consistent with it being a rubbish deposit. The original secondary fill (layer 9) contains a number of open country species not recognised in the same layer in the middle of the ditch. These snails probably fell into the deposits from the lip of the ditch, and suggest that the local environment immediately surrounding the ditch was one of open grassland, but not of dry short-turfed grassland, for reasons already given.

Summary

The local Iron Age environment of the hill fort defences possibly supported moist, overgrown, grassy vegetation interrupted by patches of bare ground which could have been created by trampling. There is no indication that intensive grazing or cultivation was being practised in the vicinity of the defences.

Radiocarbon dates

Two carbon-14 dates for material from Harting Beacon have been provided by A.E.R.E., Harwell. Details are as follows;

HAR-2411; The human skull from the southern ditch terminal. 270 ± 80 b.c. This is very similar to one of the early Iron Age radiocarbon dates from Bishopstone (Bell 1977).

HAR-2207; Bones from the disturbed skeleton found in the burial beneath the barrow at SU 8067 1804 during the 1976 excavation. a.d. 800 ± 70. This indicates, as expected, that the barrow, just inside the southern edge of the hill fort, is a Saxon one.

ACKNOWLEDGEMENTS

I should like to thank the landowners, the West Dean Estate and the Uppark Estate, and the tenant farmer, Mr. A. Shaxson, for permission to excavate.

Thanks are also due to those who helped on site; Janice Cook, Maurice Smith, Ian Bell, Anne Jackson, James Richardson, Susan Schreiber, Alex Holmes, and Peter Pritchard. I am also grateful to F. G. Aldsworth for surveying the hill fort, to Lys Drewett for Figs. 6 and 7, and to Sue Hamilton and Karen Petzoldt for specialist reports.

The finds are in Chichester Museum.

TABLE 1. Sherd weights and counts for each stratum/feature and fabric

Area	Stratum/ Feature	Fabrics 1	2a	2b	3a	3b	4	Total
III	309	—	3	—	—	—	—	3
IV	Topsoil	7	41	11	—	—	3	62
IV	405	—	18	—	5	—	—	23
IV	405	—	11	—	1	—	—	12
IV	Layer 8	5	96	20	19	17	—	157
IV	Layer 9	—	28	—	—	—	—	28
Total no.		12	197	31	25	17	3	285
Total weight (gm)		214	1,063	131	80	57	5	1,550
% no.		4.22	69.12	10.88	8.77	5.96	1.05	100
% wt. (gm)		13.81	68.58	8.45	5.16	3.68	0.32	100

TABLE 2. Incidence of diagnostic sherds for each stratum/feature

Area	Stratum/ Feature	Bag shaped vessel	Decorated shoulder, jar	Rim, shouldered vessel	Flat base	Plain bipartite bowl	Deco'd shoulder, bipartite bowl	Deco'd rim, bipartite bowl	Plain rim, bipartite bowl	Shoulder, furrowed bowl
IV	Topsoil	—	2	1	1	1	8	—	—	—
IV	404	—	—	—	3	—	—	—	—	—
IV	405	—	—	—	—	—	1	—	—	—
IV	Layer 8	—	1	1	3	3	5	2	1	1
IV	Layer 9	1	—	—	—	—	—	—	—	—
Fabric		2a	2a	2a	2a	2a	2a	3a	3a	3a
Illustrated examples		1	3 10	2	13	5 6	4 12	7 9	8	11

TABLE 3. The Mollusca from Harting Beacon Rampart

	Samples-depth from modern land surface (cm)		
	5-15	25-35	50-60
Dry weight of sample (kg)	1.93	2.66	1.56
Pomatias elegans (Müller)	2	13	7
Acicula fusca (Montagu)	—	1	1
Carychium spp.	—	16	24
Cochlicopa spp.	3	1	3
Vertigo pygmaea (Draparnaud)	1	1	2
Pupilla muscorum (Linnaeus)	6	12	23
Vallonia costata (Müller)	6	—	—
Vallonia cf. pulchella (Müller)	—	—	2
Vallonia excentrica (Sterki)	—	3	5
Vallonia spp.	—	2	5
Discus rotundatus (Müller)	13	64	67
Vitrina pellucida (Müller)	2	2	7
Vitrea spp.	3	80	70
Nesovitrea hammonis (Ström)	1	—	2
Aegopinella pura (Alder)	—	6	2
Aegopinella nitidula (Draparnaud)	—	2	
Oxychilus spp.	1	41	34
Deroceras spp.	1	3	1
Cecilioides acicula (Müller)	—	1	—
Macrogastra rolphii (Turton)	—	1	—
Clausilia bidentata (Ström)	1	—	—
Balea perversa (Linnaeus)	—	—	1
Trichia striolata (C. Pfeiffer)	1	12	4
Trichia hispida (Linnaeus)	3	28	3
Cepaea spp.	+	4	4
Helix aspersa (Müller)	—	—	3
Cochlodina laminata (Montagu)	—	—	1
Unidentified individuals	6	17	22
TOTALS*	50	309	293
Snails/kg of deposit*	26	116	188
Per cent shade-loving species	44	73	73
Per cent catholic species	18	16	6
Per cent open-country species	26	6	14

*Excluding *Cecilioides acicula*

TABLE 4. The Mollusca from Harting Beacon Ditch

	Samples-depth below modern land surface (cm)				
	5-15	20-30	40-50	50-60	70-80
Dry weight of sample (kg)	1.89	1.63	1.96	1.80	1.95
Pomatius elegans (Müller)	1	2	7	2	3
Acicula fusca (Montagu)	—	—	5	3	17
Carychium spp.	—	2	35	81	116
Cochlicopa spp.	9	1	12	9	3
Vertigo pygmaea (Draparnaud)	5	3	—	—	—
Pupilla muscorum (Linnaeus)	10	5	5	1	—
Vallonia costata (Müller)	23	—	—	—	—
Vallonia cf. pulchella (Müller)	1	1	2	—	—
Vallonia excentrica (Sterki)	1	—	—	—	—
Acanthinula aculeata (Müller)	—	—	1	—	3
Ena obscura (Müller)	—	1	1	—	—
Punctum pygmaeum (Draparnaud)	—	—	—	—	1
Discus rotundatus (Müller)	1	6	63	27	45
Vitrina pellucida (Müller)	1	1	15	2	4
Vitrea spp.	3	—	37	39	58
Nesovitrea hammonis (Ström)	1	—	—	—	—
Aegopinella pura (Alder)	—	1	69	49	33
Aegopinella nitidula (Draparnaud)	—	—	42	27	7
Oxychilus spp.	—	—	14	8	4
Deroceras spp.	2	—	—	—	—
Cecilioides acicula (Müller)	3	—	—	—	—
Cochlodina laminata (Montagu)	—	3	3	4	2
Macrogastra rolphii (Turton)	1	1	2	1	—
Clausilia bidentata (Ström)	—	1	4	1	2
Balea Perversa (Linnaeus)	—	1	1	—	—
Trichia striolata (C. Pfeiffer)	5	4	5	3	2
Trichia hispida (Linnaeus)	1	1	28	12	21
Helicodonta obvoluta (Müller)	—	—	4	2	2
Arianta arbustorum (Linnaeus)	—	—	+	—	—
Cepaea spp.	+	3	3	+	+
Helix aspersa (Müller)	1	—	1	—	—
Unidentified individuals	5	2	12	3	22
TOTALS*	71	38	371	274	345
Snails/kg of deposit*	38	23	189	152	177
Per cent shade-loving species	17	55	81	90	86
Per cent catholic species	18	16	13	8	8
Per cent open-country species	56	24	2	0.4	—

*Excluding *Cecilioides acicula*

TABLE 5. The Mollusca from Harting Beacon Ditch: Re-cut and Primary Silts

	Samples-depth below modern land surface				
	Recut area of ditch (cm)			Primary silts	
	23-33	44-54	59-69	55-65	83-103
Dry weight of sample (kg)	2.12	1.79	1.69	2.39	2.12
Pomatius elegans (Müller)	5	12	10	3	0
Acicula fusca (Montagu)	—	7	10	1	—
Carychium spp.	8	98	180	67	2
Cochlicopa spp.	2	7	10	2	1
Vertigo pygmaea (Draparnaud)	—	2	9	1	—
Pupilla muscorum (Linnaeus)	2	3	8	2	—
Vallonia costata (Müller)	—	—	—	1	1
Vallonia cf. pulchella (Müller)	—	—	—	2	—
Vallonia excentrica (Sterki)	—	—	1	—	2
Vallonia spp.	—	2	1	1	—
Acanthinula aculeata (Müller)	—	2	1	—	—
Ena obscura (Müller)	5	—	—	—	—
Punctum pygmaeum (Draparnaud)	—	—	1	—	—
Discus rotundatus (Müller)	22	47	29	6	—
Vitrina pellucida (Müller)	3	23	14	1	1
Vitrea spp.	3	39	65	32	5
Nesovitrea hammonis (Ström)	—	5	2	—	—
Aegopinella pura (Alder)	4	47	42	6	—
Aegopinella nitidula (Draparnaud)	6	30	10	1	1
Oxychilus spp.	2	16	10	4	2
Deroceras spp.	1	1	1	—	—
Cecilioides acicula (Müller)	1	—	—	—	—
Cochlodina laminata (Montagu)	2	3	1	—	—
Macrogastra rolphii (Turton)	4	1	2	—	—
Cochlicella acuta (Müller)	—	—	1	—	—
Trichia striolata (C. Pfeiffer)	3	13	6	—	2
Trichia hispida (Linnaeus)	3	19	49	2	1
Helicodonta obvoluta (Müller)	1	3	—	—	—
Cepaea spp.	8	4	2	—	2
Unidentified individuals	4	32	20	7	—
TOTALS*	90	418	488	140	20
Snails/kg of deposit*	42	234	287	59	9
Per cent shade-loving species	72	81	77	84	65
Per cent catholic species	21	10	15	5	20
Per cent open-country species	2	2	4	5	15

*Excluding *Cecilioides acicula*

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