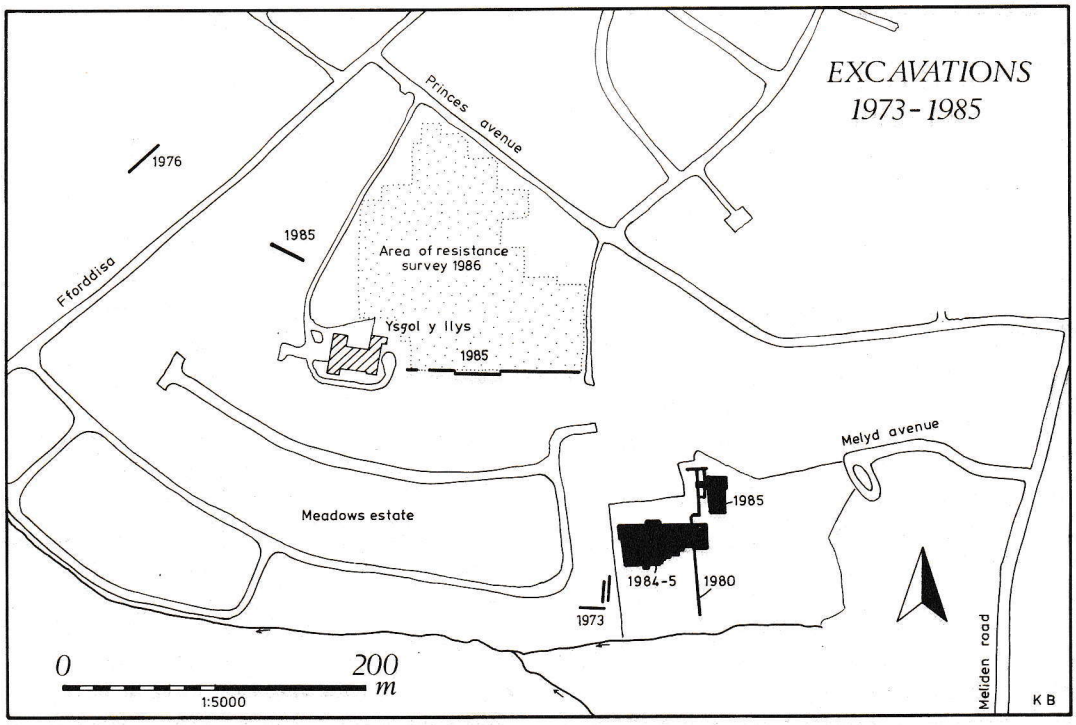


Fig 4 Location of excavations, 1973–1985 (scale 1:5000).

School, representing at least two small jars – probably produced at the Holt depot. The vessels are datable to the late first/mid-second century AD and are indicative of a grave group in a cremation cemetery (*Archaeol in Wales* 1981, 40–1; *Archaeol in Clwyd* 1981, 7). Dr Davies has argued that such cremations must, in a Welsh context, be military and has postulated that the site of a possible fort lies *c* 400 m north-east of the find-spot on raised ground now occupied by Ruthin School and its grounds.

One probable marching camp is known at Penrhos, west of Corwen. The north, east and west sides of the camp are recorded, measuring some 312 m by 440 m. No finds are known but it is likely that the camp was built in the Scapulan campaign of AD 48 (Carrington 1986, 8).

A number of sites have produced stamped tiles of the Twentieth Legion, who were based at Chester from *c* AD 88, and indicate military activity, but not necessarily the sites of auxiliary forts. Such tiles have been found at Corwen, Ffrith, Flint and Prestatyn, but only one of these sites (Corwen) is thought to be near the site of a fort.

Legionary Works Depot at Holt

The Legionary works depot at Holt (BOVIUM) was situated on the west bank of the river Dee. It was noted in the *Antonine Itinerary for Britain* under Iter II (Margary 1973, 528) ten Roman miles from Chester. At least one auxiliary unit, Cohors I Sunicorum, used the depot (Grimes 1930, 133).

Excavations conducted by the late Mr T A Acton between 1907 and 1915 revealed an area of workshops, drying sheds and kilns for the production of pottery and tile, and a group of domestic buildings largely situated inside a walled enclosure (ibid, 12–41). The depot was producing ceramic tiles and pottery between *c* AD 90 and *c* AD 125.

Roman Roads

Three roads are known in the county, one linking Chester with Caernarfon and mentioned in the *Antonine Itinerary for Britain* under Iter XI (Margary 1973, 532). The other roads link Chester with the fort at Caer Gai (Gwynedd), and the Holt depot with Watling street. A further postulated road is suggested along Halkyn Mountain to Holywell, where it probably joined the coast road, and may perhaps be seen as an early access road to the lead mines. These are considered in detail by Margary (1973, fig 13, 346–9) and need not be discussed in detail here.

Several years ago the course of a possible Roman road was noted in the Vale of Clwyd (Waddelove 1979), but this has still to be verified in detail. It is, however likely to be a sound

hypothesis, since such a route would have been needed to link the postulated forts near St Asaph, Ruthin and Corwen.

A Roman milestone was found at Gwaenysgor in 1956. It is 1.1 m long and 30 cm wide and may be dated to AD 231–5 (*J Roman Stud* 1957, 230). The stone is assumed to have come from the Roman road 6 km south of its find-spot.

Lead Mining and Processing

Halkyn Mountain was rich in veins and cross-courses of galena (lead ore) and these deposits were no doubt worked in Roman times. It is, however difficult to prove which of them were definite Roman workings because of later mining. Romano-British objects have been found in the Talar Goch mine in Meliden, Dyserth (Davies 1949, 243–4) and it is likely that a number of mines were situated along Halkyn Mountain.

Graham Webster has considered at length the subject of lead mining in North Wales (Webster 1952–3) and more recently Clement Whittick has reappraised the evidence (Whittick 1982).

The earliest lead pigs from Clwyd are dated AD 74 and it is highly unlikely that lead ore was being processed in Clwyd before the area was under military control around AD 60. Of the eight pigs noted by Webster, five were cast in the time of Vespasian, one under Domitian and two are undated (Webster 1952–3, 22–4, nos 19–26). One of the undated pigs, found at Carmel, bore the name C. Nipius Ascanius (C. NIPI. ASCANI) indicating a private lessee was working in the area. It is possible that the Carmel pig was produced in the mid 60s before imperial control of the mines was organised (Whittick 1982, 120–21).

Processing of the galena was certainly undertaken in the Pentre-Oakenholt area of Flint. Here several smelting furnaces have been excavated since 1840 (Davies 1949, 130–5; *Archaeol in Wales*, 1987, 15–16.

Parts of at least three masonry buildings lay adjacent to the furnaces, but they need not all have been industrial. One building in particular yielded fragments of painted wall-plaster and box-flue tiles. Pottery found on the excavations indicates that occupation was continuous from *c* AD 85/90 to the late second century. Limited occupation of the late third/early fourth century and late fourth century is indicated by the pottery.

An extensive building complex was excavated at Pentre Farm, Flint in 1976–7 and 1981 (O'Leary in O'Leary & Davey 1975–6, 138f, 146–51; Rankov 1982, 329; O'Leary & Blockley forthcoming). A sequence of timber structures, constructed around AD 120 was revealed comprising three ranges divided by alleys and verandahs. An ornamental pond lay in an enclosed courtyard in the heart of the complex. These buildings underwent a number of structural changes before being partly rebuilt in stone in the mid-second century to a different plan. A bath suite was added to the masonry complex which went out of use around AD 240.

The complex has been interpreted as the residence of an army officer responsible for the management and policing of the local lead industry (O'Leary & Davey 1975–6, 151). Stamped tiles of the Twentieth Legion certainly support a military connection, whilst the painted wall-plaster, a dressed stone bench leg, Holt fine wares and continental imports indicate an above average lifestyle for the complex. That at least one inhabitant was literate is proven by the presence of a seal box lid, inkwell lid and stylus. The evidence certainly suggests that the complex was the residence of an official and his attendants – not necessarily an army officer but perhaps an imperial official (? Procurator).

Settlement Sites

Two sites are known in a lowland setting which fall into this category (excluding the industrial sites noted above), one at Rhuddlan the other at Ffrith. To this may be added the Dinorben hillfort (where Romano-British occupation is attested) (Gardner & Savory 1964; *Archaeol in Wales* 1979, 14) and possibly some of the hillforts along the Clwydian range where chance finds have been made.

At Rhuddlan the Romano-British settlement has been traced in a number of excavations by Henrietta Quinnell in 1969–73 north of Twt Hill, and more recently by John Manley at Lon Hylas and 'Town Ditch'. The 1969–73 excavations revealed drainage gullies of a circular timber building (much rebuilt) and a possible rectangular timber building. Pottery from the sites indicates an initial period of occupation of late first/early second century date, but with most of the activity dating to the late third and fourth centuries (Day M R & Quinnell forthcoming). More recent work by John Manley on Town Ditch, (*Archaeol in Wales* 1981, 58) south of the site of the Dominican Friary, revealed a series of drainage gullies and an unstratified coin of AD 218–22. Rescue excavations at the junction of Lon Hylas and Castle Street uncovered a ditch 2 m wide and 75 cm deep (*Archaeol in Wales* 1983, 36) containing sherds of pottery datable to the late first/early second century.

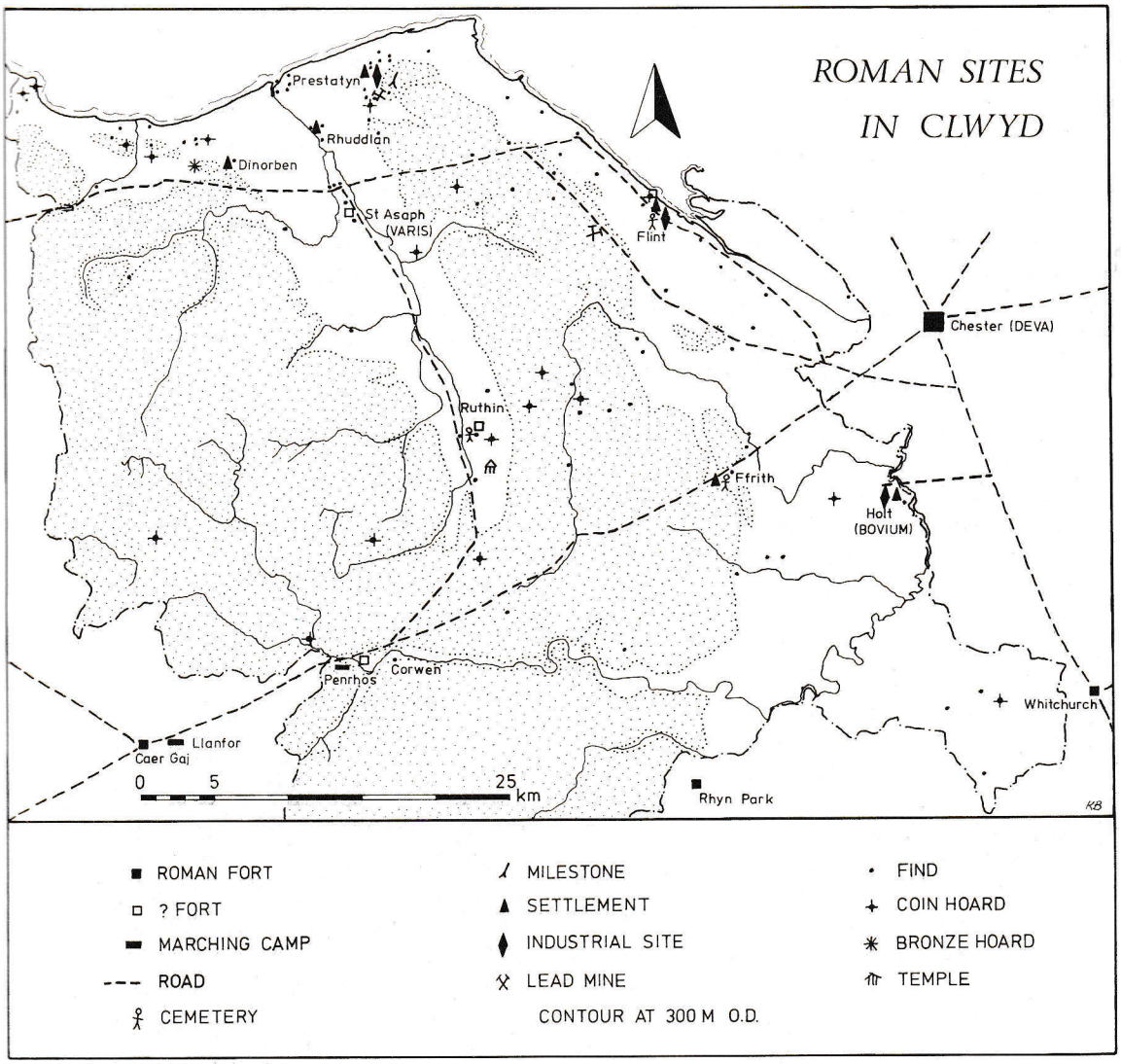


Fig 5 Roman sites in Clwyd.

In conclusion, the features excavated at Rhuddlan indicate at least one native farmstead with associated field systems. The ditch at Lon Hylas would not be out of place on a native farmstead and no military presence is proven at Rhuddlan by the findings to date.

At least two masonry buildings are now known at Ffrith. Excavations by the late Mr G Bevan have revealed an extensive masonry bath-house. Stamped tiles of the Twentieth Legion were found and this may well have been the same structure noted in Camden's *Britannia* (Camden 1586, 394–5). Finds from the 16th, 19th and 20th centuries are detailed by Mr Ellis Davies (1949, 226–38). Recent finds by the late Mr Bevan in the 1960s include three military fittings of second century type. Military fittings, stamped tiles and cremations suggest a military presence, perhaps as a posting station. The finds are of good quality and indicate that the site attracted a wide range of goods. That the settlement was situated on the Roman road from Chester to Caer Gai indicates that it may have served as a market centre for the area. (Blockley forthcoming). Coins of Theodosius (378–95) and Arcadius (383–408) suggest activity in the area in the late fourth/early fifth century.

The Ffrith settlement contrasts well with the Rhuddlan site which produced no fine-wares from Holt and no small finds of any quality.

Other possible sites, of unknown status, where finds have been made are Dyserth Castle and Basingwerk Abbey (Davies 1949, *passim*).

Religious sites

A probable religious site is known near Ruthin, in the Vale of Clwyd, where a square enclosure has been found by aerial photography. It may well

represent a temple precinct or sacred courtyard (*temenos*) enclosed by a broad ditch, the whole being surrounded by a double wall (*porticus*) with an internal colonnade. It is similar to the temple precinct at Gosbecks Farm, near Colchester (Hull 1958, 259–61, fig 113).

Other sites of a religious nature are known from the location of small finds. In 1979/80 a hoard of bronze objects was found at Llys Awel, Abergele, by a metal-detector user (*Archaeol in Clwyd* 1982, 6–7). 535 coins were recovered representing at least three hoards (one of Constantine, one of Magnentius and Constans and the third Valantinian) – a small number of earlier coins were found. The hoard also produced a remarkable collection of votive objects including two crudely made figurines of seated dogs, a flat running dog of greyhound type, two votive plaques (one a figurine standing, the other an engraved dog), and a figure of mercury. The finds suggest a shrine or sanctuary nearby.

Stray finds include a bronze figurine (Green 1978, 70) near Ruthin and a bronze horse at Gwaenysgor (Davies 1949, 171–2). These provide further evidence of a religious nature.

Cemeteries

The sites of two possible cremation cemeteries are known. At Ffrith in 1828, urns were found containing calcined bone associated with 26 coins, brooches, a mutilated altar and a lamp (Davies 1949, 231). More recently in 1981 at least two beakers were found near Ruthin Hospital which may have contained cremations (see above).

Inhumation burials are known from Pentre Farm, Flint, one sealed with a lead cover probably reused from a water tank. Other inhumations were found in Ship Field, Flint, in 1923 and 1924. The former are dated to the third century.

Late Roman Occupation

The majority of Romano-British sites excavated in Clwyd (Ffrith, Flint, Prestatyn, Rhuddlan and Dinorben) have yielded late Roman sherds of pottery. All but the Ffrith site have produced sherds of calcite-gritted jars dating to the late fourth century. At Ffrith the coin sequence ends with coins of Theodosius (378–95) and Arcadius (383–408). Coin hoards from various parts of Clwyd terminate in coins of Constantine, save Llys Awel which ends in a hoard of Valentinianic coins.

Other Finds

Many miscellaneous finds have been made throughout the county and are too numerous to note here. Full details may be obtained from Sites and Monuments Record housed at Clwyd County Council, Shire Hall, Mold.

General character of the sites

A variety of sites is now known in Clwyd, particularly settlement sites. In general the occupation is apparently prosperous in the late first to later second century, but later occupation is not totally absent. Mansonry structures such as those at Pentre Farm and Ffrith indicate a reasonable standard of living for some of the inhabitants. We are however, looking largely at sites associated with forming and industry and as such should not expect grand buildings, but those of a more utilitation nature.

Excavations at Prestatyn Meadows 1973

By J B Stevenson, J C B Barrett and J B Kenworthy

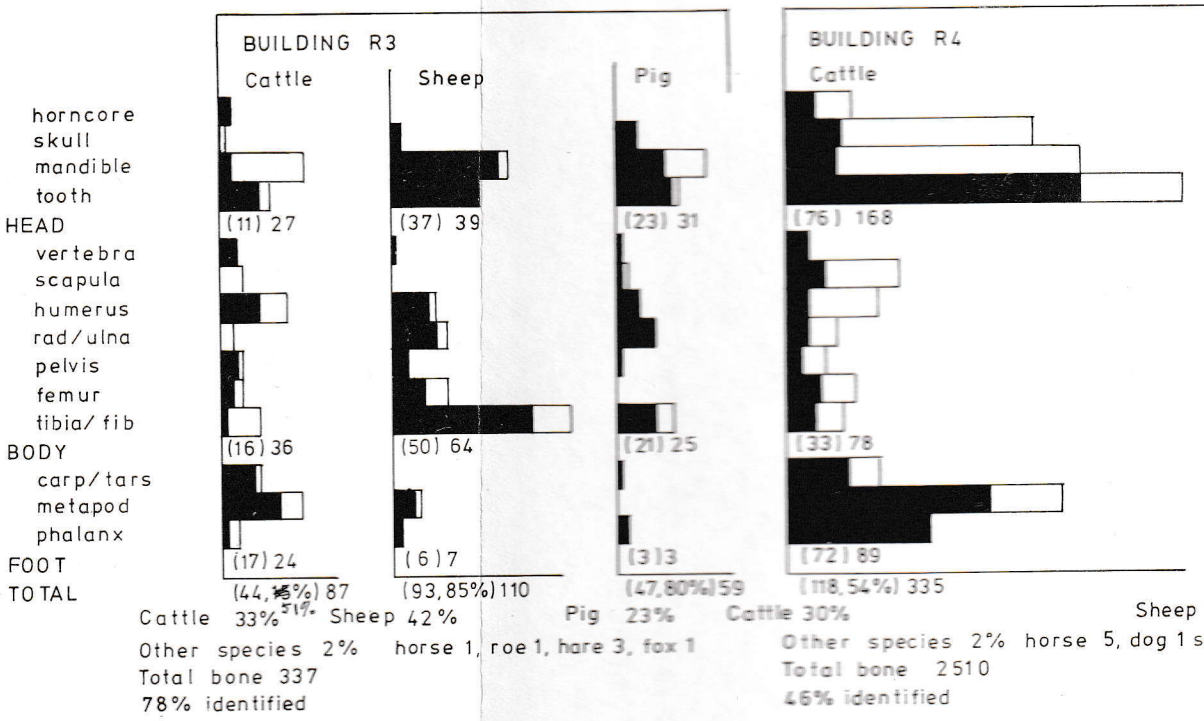
In the winter of 1972–3 a quantity of Roman material was discovered by Mr D Bell during the construction of a number of new houses at Prestatyn Meadows. Mr Bell informed the Inspectorate of Ancient Monuments, and the authors were invited by the Inspectorate to undertake a small excavation in June 1973, in order to determine the nature of the site. Mr Bell's finds included a column base and tiles stamped LEG XX VV, and it was thought that they might indicate an extension of the Roman site discovered and excavated earlier this century (Davies 1949; Newstead 1937 and 1938).

The Site

The excavation was located at NGR SJ 061817, immediately north of a small unnamed stream and west of the housing estate wall (Fig 3). To the north and west the land rises and it was on this slightly higher and better drained land that the other Roman structures had been found.

The Excavation

Mr Bell's original finds had been made in the foundation trenches of one of the new houses, but because of building regulations it was not possible to excavate in the immediate vicinity of the find-spots. An area, however, a little to the south was chosen, lying between the two new houses and the boundary with the adjoining property. Three



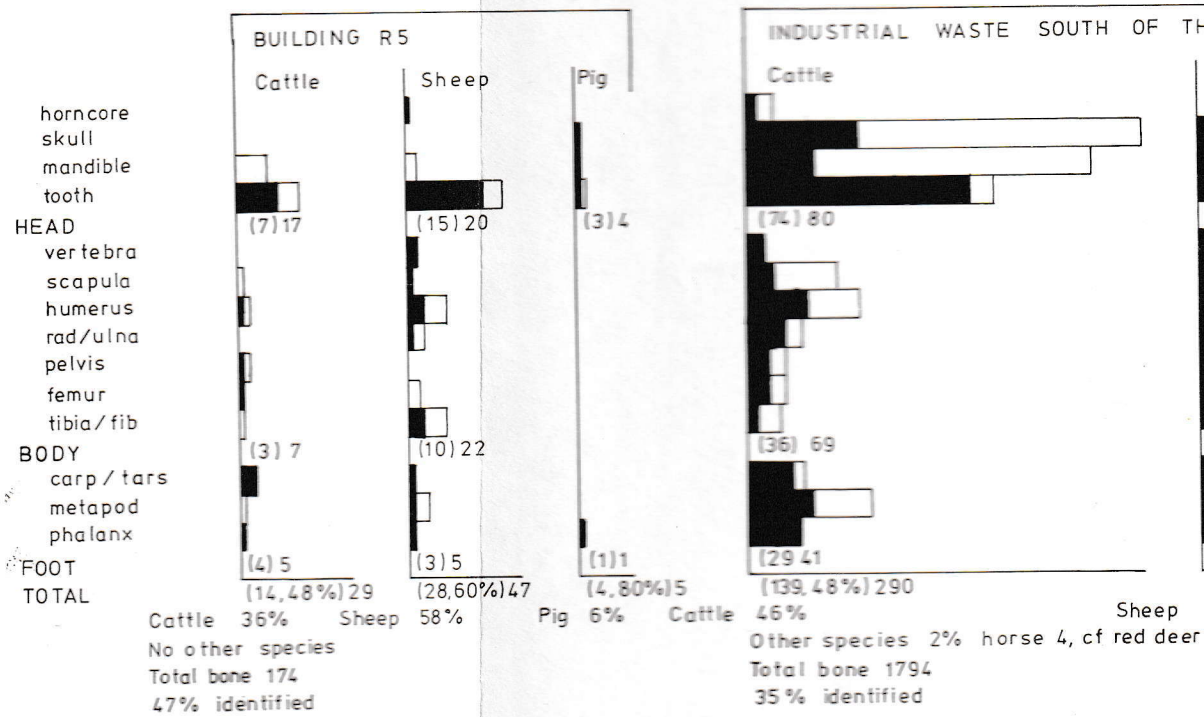
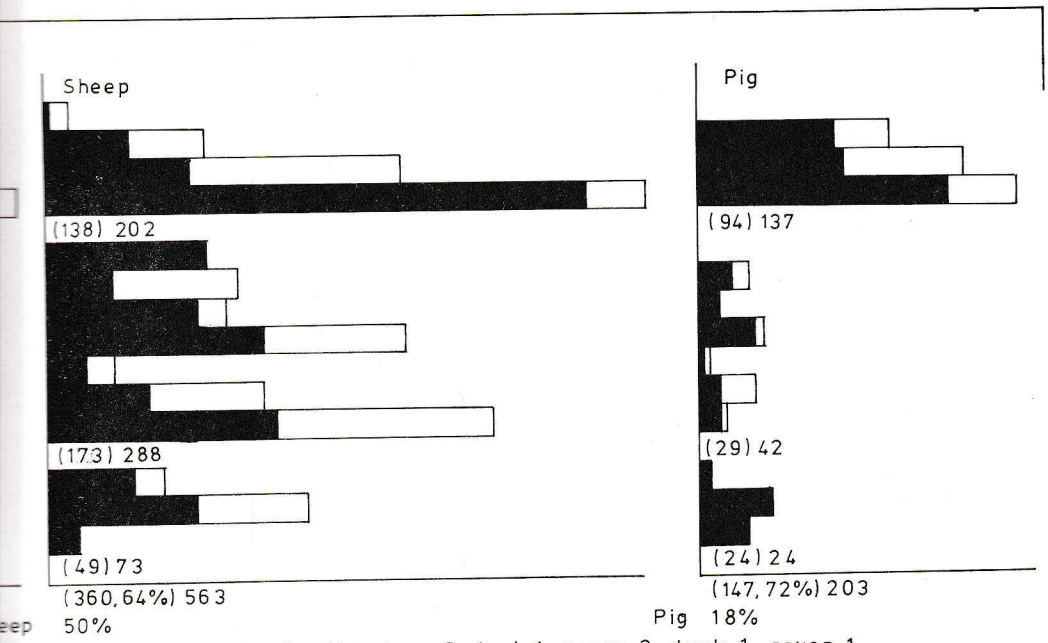
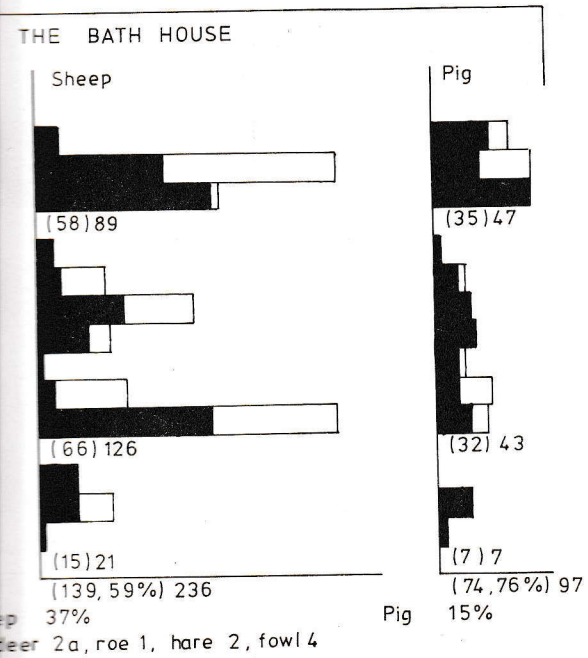


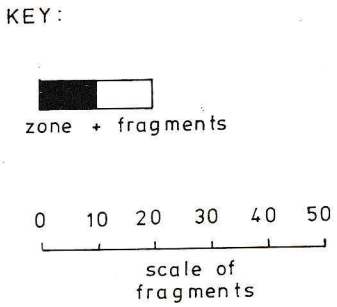
Fig 112 Sketched part diagramme for Buildings R3–R5 an



eep 50% Pig 18%

1 skeleton, cf red deer 2 antler, hare 3, fowl 1, goose 3, duck 1, raven 1





p 37% Pig 15%

eer 2a, roe 1, hare 2, fowl 4

5 and Industrial waste south of the Bath-house.

Cattle all

315 zone 741 total

ie 42% of 741 have at least one zone present > ½ complete.

Internally, the tree-ring dates cannot provide great precision in separating the construction sequence of the building on the site, owing to the general absence of sapwood. The *terminus post quem* dates given in Table 20 give, however, the impression of intense activity on the site over a short period of time, since the time span covered by the rings of most timbers was quite consistent. The dates suggest felling of trees for use in all the contexts during the second half of the first century AD. There is a time lapse between the felling date of the timbers for Building R7, AD 85–100, and the date of Samian ware associated with the structure. Such a discrepancy has occured before between dendrochronological dating and pottery dating from Roman contexts (eg Miller *et al* 1986, 96–99); it could indicate stockpiling or reuse of timbers at a later date, or conversely the tree-ring dates represent the construction date and the pottery suggests a long period of use.

The Prestatyn chronology adds to the expanding network of Roman tree-ring data. This period until recently caused a serious gap in the long Irish chronology (Pilcher *et al* 1984; Brown *et al* 1986), only filled by a chronology from Carlisle. It also adds to the increasing evidence for assemblages of Roman wood which prove difficult to cross-date, particularly outside the London area, where material has been heavily concentrated and more easily dated (Sheldon & Tyers 1983). This extension to the series of Roman chronologies may enable other timbers from Wales and the north-west to be more readily dated.

Acknowledgements: this work was funded by Cadw and the British Archaeological Research Trust, using the Dendrochronology Laboratory at the University of Sheffield by arrangement with the Historic Buildings and Monuments Commission. I am grateful to Mike Baillie, Jennifer Hillam, Anne Crone and Gavin Simpson for unpublished data, and to Jennifer Hillam for commenting on this report.

Leather

Despite the waterlogged condition of much of the excavated area only one fragment of leather was recovered. One edge is cut into a rounded shape – the other edges torn. This fragment came from the fill of gully 120, Period III, where it cut through Building R3. SF 414.

The Animal Bones

By Gillian Jones

The animal bone studied is summarised on Table 26. The material comprised a small Iron Age sample, the main quantity from Period II, *c* AD 80–160, and a number of features from later Roman phases, which included some significant deposits from Period IV, probably of late third-fourth century date.

Method

A detailed record of the Period II bones from Buildings R3, R4, R5 and the area of industrial waste south of the bath-house was made. For a section of the Period II features, for Period I, III and the larger Period IV deposits, recording was confined to a simple bone count per species plus records of lower jaws (and loose teeth where the material was fragmented), measurable bones, butchery marks, bone pathology and so on. A further section of Period II bone was recorded only as species present plus the data on age and size, etc. Epiphyses – only counting was considered as a possible speedy assessment of species importance, but the assemblage was striking for its lack of epiphyses, with some layers containing many sheep long bones nearly all of which retained the shaft section with neither epiphysis.

For the detailed recording (see Buildings R3, R4, R5, Fig 112), the bones were recorded on two lists, separating the more complete bones from the fragments. On the 'zone' list were recorded:- substantial pieces of skull; jaw-bones with at least one tooth; plus the following bones or parts of bones when more than half complete: tooth, vertebra, distal scapula, and acetabulum of the pelvis, the proximal end, shaft and distal end of long bones, the calcaneum, astragalus and phalanx.

The overall occurrence of each species in the total of features, is shown on Table 27 (for discussion of method see O'Connor 1985). Comparison of the counted and scanned features shows similar results for cattle and sheep. The higher percentage of horse in the scanned than the counted part may reveal disposal of horse bones away from the main areas of occupation.

General Description of the Material

The bone was quite well preserved, particulary in comparison with most Welsh sites. It varied from a strong, dark-coloured condition in the Period

Period	*BN*	*Cattle*	*Sheep*	*Pig*	*Others:*	*Horse*	*Deer*	*Misc.*	*Bird*	*%ident*
I	193	88	70	28		6		dog 1		*57%*
Iron Age		*46%*	*36%*	*15%*	*4%*					
II	4493	1771	1989	674		16	red 3	dog 3+sk	fowl 6	*49%*
c AD 80–160		*39%*	*44%*	*15%*	*1.3%*		cf red 6a	hare 14	goose 3	
							roe 2	fox 3	duck 1	
III	153	84	53	16					raven 1	
3rd C										
IV	2236	988	874	344		9	red 3	dog 2	fowl 2	
late 3rd–4th C		*44%*	*39%*	*15%*	1.3%		cf red 10a	cat 1		
								fox 3		

BN number of identified bones
a antler
sk skeleton

Table 26 Summary of Bone.

		PERCENTAGE OCCURRENCE									
Period	*N*	*Cattle*	*Sheep*	*Pig*	*Horse*	*Deer*	*Dog*	*Hare*	*Other mammal*	*Fowl*	*Other bird*
I	30	*67*	*63*	*50*	*20*		*3*				
Iron Age											
II	235	*63*	*74*	*51*	*9*	*5*	*2*	*5*	*2*	*2*	*1*
c AD 80–160											
c AD 80–160											
Building R3,R4,R5	84	*52*	*70*	*43*	*6*	*4*	*1*	*7*	*1*	*1*	*4*
Counted	160	*62*	*76*	*54*	*6*	*6*	*1*	*7*	*3*	*3*	*2*
Scanned	70	*65*	*71*	*44*	*15*	*1*	*4*		*1*		
III–IV	24	*92*	*75*	*75*	*17*	*17*	*13*		*21*	*8*	
later Roman											

Eg. cattle was present in 63% of the 235 Period II contexts studied

Table 27 Frequency by context.

IV deposits to a more fragmented and eroded condition in much of Period II. Some bones from the area of industrial waste bore small areas of erosion 5–10 mm across probably indicating local acid erosion.

The number of Iron Age bones is too small to be very significant, but it is noted that cattle bones were more numerous that sheep, that the only domestic animals found were cattle, sheep, pig, horse and dog and that no bones from wild species were found.

By the late first/early second century, the bone sample reflects Romano-British influences, with the presence of a few – doubtless rare and prized – fowl; raven, which is a common find on Romano-British sites; and some large dogs. Deer remains are present but pieces of antler are, characteristically, more common than bones.

In the early, Period II, group sheep bones were somewhat more numerous than cattle. The later third-fourth century, Period IV, sample suggests a relative increase in the importance of cattle, which is a typical trend (eg King 1978). The increase indicated in the bone count is also shown in the frequency of occurence of the two species (Table 27): sheep were found in more contexts than cattle in Period II, the reverse applying in Periods III to V.

The Period IV sample included bone from hill-wash deposits which appeared to show less post-burial erosion than the earlier material. Several immature long bones and vertebrae, for example, survived with their epiphyses, and the surface of the bones was hard and well preserved. Even given this good preservation, the bones were much broken, particularly the cattle bones, and it is concluded that the breakage is part of the original methods of butchery and other, eg fat extraction, uses of the bone.

Buildings R3, R4, R5 and industrial waste south of the bath-house

For Buildings R3, R4, R5 and the area of industrial waste south of the bath-house, the species found and a skeleton analysis of the cattle, sheep and pig bones is shown on Fig 112, the solid areas showing the less fragmentary bone.

In general it can be seen that all parts of the skeleton were to be found in any of the areas. If, say, a sheep carcase was cooked in stew fashion, presumably the pot would contain broken bone from most parts of the skeleton. There is no certainty about the method of cooking but something of this variety would follow from the difficulty of preserving meat, the presumed larger social unit than today and the much smaller amount of meat on a primitive sheep.

There were no highly specialised bone deposits comparable with, for example, those at the fortress baths at Caerleon (O'Connor 1986).

The larger quantities of bone were from Building R4 and the area of industrial waste. All the buildings showed a higher proportion of sheep to cattle than the site as a whole. Building R4 included the greatest range of species, including hare and four bird species. In and adjacent to Building R4 were found partial skeletons of a sheep and a very large dog (see below) and remains of two human infants. Cattle bones in Building R4 were more fragmented that those of sheep or pig; mandibles were notably fragmented and few of the many loose teeth appeared to belong to the mandible pieces found.

Bone from Building R3 was rather less fragmentary, with a higher proportion on the more complete bone list and a much higher percentage identified. The 110 sheep bones included nineteen mandibles with at least one tooth, the remains of at least thirteen individuals. Although less fragmented than the Building R4 and industrial waste area bone, the fragmentation of sheep tibiae was typical. Twenty-five of thirty-two bones were on the more complete list, but of these no proximal ends and only seven distal ends were present (with the central or lower third of the shaft of the bone more than half-complete in twenty-three cases), (minimum number of individuals sixteen). The example of the sheep tibia demonstrates the degree of variation in bone destruction and loss, and is interesting in that all four areas studied show the same effect on sheep, though not cattle or pig, tibiae.

The bone from Building R5 was small in quantity and was in an eroded and weathered condition. The very low quantity of pig bone may be partly an effect of survival: it is noted that pig remains were relatively more numerous where the bone was better preserved. However, the low number of pig applies also to maxillae, mandibles and loose teeth (compare the numbers of bones from the head found for the three species in Buildings R3 and R5) and it is suggested that the lack of pig bones is a real depositional difference.

The bone from the area of industrial waste south of the baths contrasts with the Buildings in that there was more bone from cattle than sheep. The bone was less well preserved, with more of the identified bone classed as fragments and a lower percentage identified. In all the four groups a significant amount of bone, especially the unidentified bone, was burnt. 5% or less of the