## Lecture summaries

### Excavations at the Broch of Leckie, Stirlingshire

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The Iron Age fortified site at Leckie, Stirlingshire, is situated on the lower slopes of the Gargunnock Hills overlooking the valley of the River Forth to the N (NGR NS 693 940). It stands on a sandstone promontory formed by two streams which run down to the valley in small, steep-sided gorges and join to the N of the site. Excavations between 1970 and 1978 revealed the badly wrecked remains of a broch and uncovered a clear sequence of drystone structures and strata as well as an exceptionally large number of finds. It was thus possible to reconstruct the history of the site in some detail. An interim report has been published in *Glasgow Archaeol J*, 9 (1982), 60–72.

Phase 1, pre-broch hut. Postholes were found cut into the underlying rock which had been abandoned before the primary broch floor deposits started to accumulate. Some of them appeared to form an arc of a circle  $5\cdot 6$  m in diameter – presumably a small wooden hut. Roman finds of late 1st-century date were associated with this earliest occupation.

*Phase 2, broch construction.* A massive, round, drystone building with thick walls was then constructed on the end of the promontory. It is interpreted as a broch on the basis of its size and ground plan, and also because of the intra-mural stair, with guard cell at its foot. The broch had been almost completely destroyed, and a section of its wall, including the main entrance, from the NE round to the SE had vanished entirely. Roman finds of 1st century date were recovered on the underlying subsoil, well away from the earlier postholes, and presumably belong to phase 2.

*Phase 3A, broch occupation.* A thick layer of homogeneous, dark grey earth then accumulated over the whole floor area inside the broch, except in the centre where a rectangular paved and kerbed hearth had been built. Many finds, both native and Roman, were in this stratum.

Phase 3B, destruction of broch. Many signs of violent destruction were found on top of the primary broch floor, including burnt grain and fragments of fired clay daub, and many whole artefacts which had evidently been dropped at this time. Flavian Roman pottery and a few Antonine pieces were found.

*Phase 4, post-broch habitation.* The demolished broch was cleared out again, and the wall partly rebuilt with rough masonry. A new oval hearth was built on top of the earlier one, and a fresh occupation stratum, of light grey earth containing many stones, accumulated on top of the thin layer of stony debris which in places lay on the broch floor. The number of Roman and native finds attributable to this phase was much fewer; the former were nearly all Antonine in date.

Phase 5, the promontory fort. At the end of the secondary period of occupation the S side of the ruined broch was converted into a massive promontory wall, but this was not completed.

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It is possible that this was a response to the Severan campaigns early in the 3rd century. Thereafter the site was abandoned.

# Roman legionary fortresses as exemplified by Inchtuthil Lynn F Pitts\*

The legionary fortress of Inchtuthil and the associated enclosures lie on a plateau overlooking the River Tay. Excavated in 1901 and 1952–65, the site is of great importance, providing the only complete plan of a 1st-century timber fortress unaffected by later occupation so far excavated. A full report on the site will hopefully be available in the near future. The fortress was occupied for only a short period, AD 82–88 at the most. It was established perhaps in the sixth year of Agricola's campaigns and certainly before his recall. Although linked with the 'glenblocking' forts, Inchtuthil was probably in the first instance a base for further advance into the Highlands via the Dunkeld gorge. The orderly abandonment of Inchtuthil and other sites is more likely to have been the result of the transfer of large numbers of auxiliary troops to the Danube throughout the fifties than the withdrawal of Legion II Adiutrix alone. Frontier policy in Scotland is closely tied to the wider history of the provinces in Domitian's reign.

There follows a brief review of features which have a wider significance in relation to other known fortresses and the literary/epigraphic record. The reconstructed plan published by Richmond and so often reproduced must be used with caution since, although correct in outline, many of the details are hypothetical rather than factual. Although spaces reserved for the *praetorium*, thermae etc indicate that the fortress was never completed, the full complement of barracks had been provided and was apparently in use. The defences included a stone wall; this is one of the earliest known in a fortress but is not surprising since Inchtuthil was constructed at the time of transition to stone. There was a notable lack of corner- and interval-towers. The small size of the principia reflects its temporary nature; the ground-level aerarium illustrates the transition from pits to vaulted stone chambers. The hospital, with its full complement of wards, and the *fabrica*, the location of the famous hoard of nails, provide useful plans. The variations in size and layout of the officers' houses are significant, indicating differences of status and function of the tribunes. The barracks in the right latus practorii have frequently been used as a prime example of the double first cohort of Hyginus but they are exceptional in the archaeological evidence. The cohort may have been made milliary by the Flavians, the extra men of special status later living outside the defences except on campaign. The defences of the temporary officers compound had three distinct phases; the internal buildings of the compound included an impressive residency and bathhouse (a possible parallel has recently been discovered at Carlisle). The residency must have housed a senior officer, the praefectus castrorum, legate or perhaps the governor himself.

It would be easy to over-emphasize the scale and importance of changes in Scottish agriculture during the 17th century. The developments which occurred represented a slow evolution within a framework which remained basically unchanged well into the 18th century. There was no 17th century 'Agricultural Revolution' in Scotland. Because changes were gradual they are often

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difficult to identify and evaluate; this may explain why they have been neglected. Despite the modified perspective and reappraisal of the condition and achievements of Scottish agriculture at this time many important questions still require answers. There is, however, no lack of documentary and other source material with which to attempt this task.

### Scottish agriculture in the 17th century: continuity and change

#### Ian D Whyte\*

Traditional interpretations of agricultural history in Scotland have stressed stagnation, even decline, during the 17th century, with only a slow acceleration of progress during the first half of the 18th century. The use of simple theoretical models for arable farming (infield-outfield), rural settlement (the ferm toun) and farm structure (the multiple-tenant farm) have also led to an implicit belief that there was little regional or local variation in agricultural practices within Scotland at this time. Recent research has, however, shown that these views require modification. A wealth of almost untapped sources exists which can shed light on many aspects of Scottish agriculture during this period. These sources, including rentals, accounts, leases, court books and testaments have received comparatively little systematic attention until recently.

Detailed case studies show, for instance, that infield-outfield farming was not always an inflexible and inefficient cropping system, but one which was capable of evolving into more complex and intensive forms under the stimulus of nearby urban, or more distant, markets. More generally, innovations such as liming improved cropping systems in many parts of the eastern Lowlands during the first half of the 17th century. After the Restoration many landowners began to experiment with enclosure on their policies and mains. Within their new parks they tried out more effective crop rotations, bred improved strains of livestock, and undertook the commercial management of planted woodland. These activities were encouraged by a programme of legislation passed by Parliament between 1661 and 1695. The scale of this enclosure activity was small, as was the amount of capital invested, but it represented the first deliberate efforts to improve Scottish agriculture along the lines of contemporary English husbandry.

Agriculture not only became more intensive in some parts of Scotland during this period, the area under cultivation also expanded. In some cases this was done by the division of commonties, rough grazings in joint ownership, allowing the conversion of pasture to arable. Planned drainage and reclamation schemes were undertaken in some areas and there was a more widespread, unobtrusive addition to the improved area by the removal of peat from the fringes of mosses and the reclamation of the previously buried soils.

The amount of variation in agriculture was probably greater than has been acknowledged in the past. Apart from the sheer physical diversity of Scotland, there were significant geographical variations in the structure of the farming community itself. There were important contrasts in the scale and character of infield-outfield farming between upland areas, where grain production was merely an adjunct to livestock rearing, and commercial grain producing areas such as East Lothian. Commissary Court testaments can provide much information on differences in cropping patterns and the numbers of livestock held by tenant farmers within a region, but such material has yet to be fully utilized.

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