
The Angus and South Aberdeenshire Field School of the Department of Archaeology, University of Edinburgh – research design

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Introduction

The University of Edinburgh, Department of Archaeology and Centre for Field Archaeology (CFA) have been running a field school in Angus and South Aberdeenshire for its first-year undergraduate students intending single and joint honours archaeology and environmental archaeology since 1996. These students are required both to learn a range of practical skills and to gain field experience during their vacations. In an environment where student numbers have increased massively over recent years, at the same time as the number of suitable fieldwork projects has declined, the introduction of a formal field school offered the best means of ensuring that all students obtained a good grounding in field practice on a research-led project.

The field school has set out to provide basic training for students in a more comprehensive range of skills than any normal field project would employ. This training allows students subsequently to gain places in other departmental field projects, or projects organised by other bodies. Some senior undergraduates return to the field school to learn supervision skills in later years.

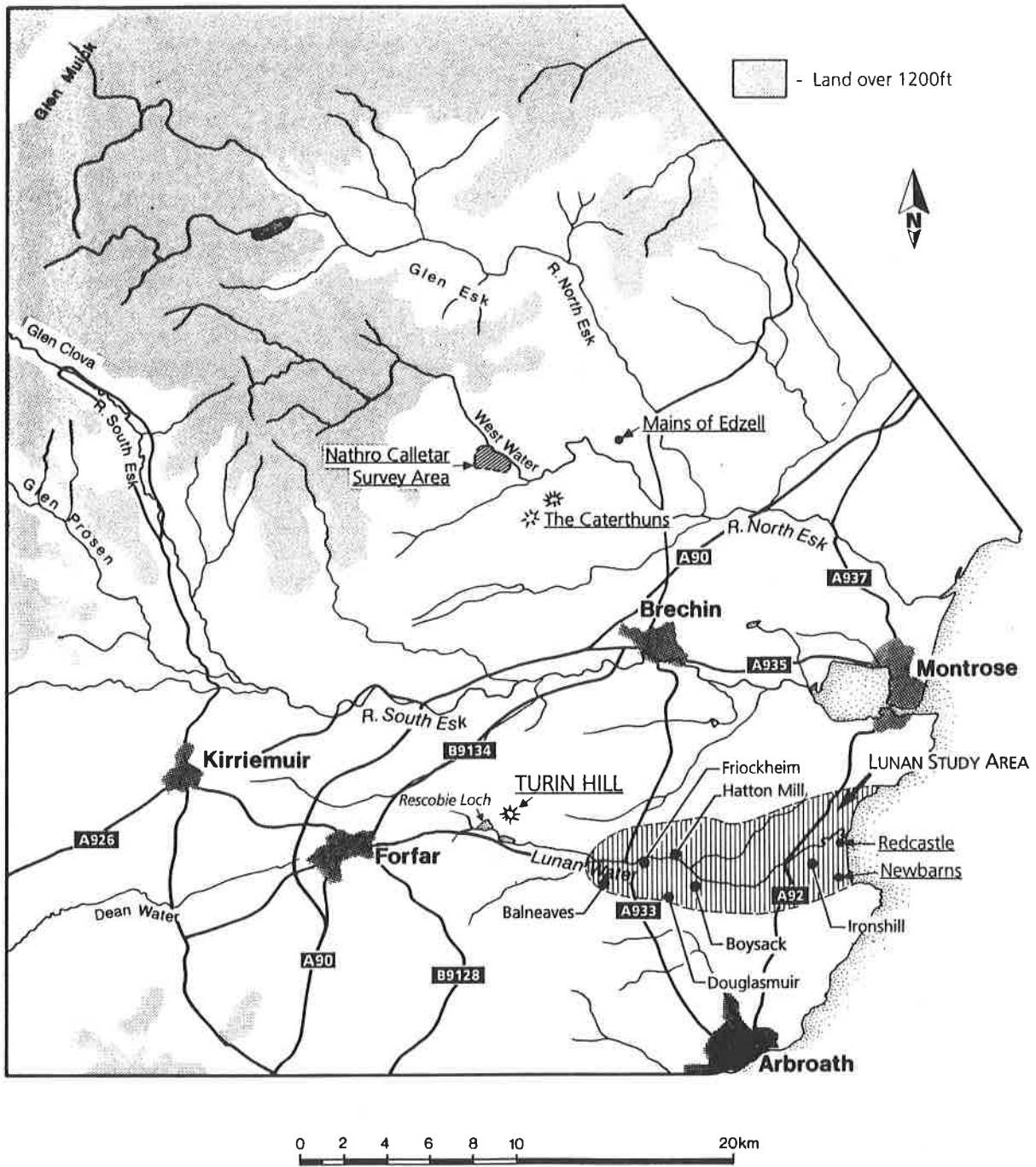
A fundamental aspect of the field school has been to ensure that all the work conducted contributes towards a set of research objectives. This strategy underpins the value of the methods and skills being taught and offers the students an opportunity to participate in the interplay between the recovery of information from the field and the modification and evolution of the research strategy. At the same time, the stress on research outcomes capitalises on the considerable manpower invested in the field school. This paper sets out these overall research objectives. The results of the different elements of the research, excavation and survey programmes will be published as a series of individual papers and reports, linked by the overall research strategy. This report does not attempt

to provide detail on those results; an example of one exercise is published elsewhere in this volume regarding work on Turin Hill.

Study area

The area chosen for the project comprises a large area of Angus and South Aberdeenshire (Illus 1). This encompasses the hydrological catchments of the Lunan, South Esk and North Esk river systems. These catchments form three contrasting zones running west to east across the region and terminating in the north-south trending coastal zone. There is no intention that the field school should examine all of this study area in the same detail. The study area provides a boundary within which various blocks and transects have been, or will be examined. These include:

- * The Lunan valley, an area rich in crop-marks although with some apparently surprising blanks in the archaeological records it contains. The archaeological resources of this valley are currently under pressure from both intensive agriculture and gravel extraction.
- * The South Esk valley, which includes a cross section of both upland areas with upstanding monuments and lowland areas, including a number of wetlands, the environmental potential of which is also being assessed. The overall intensity of present land use is somewhat less than that of the Lunan valley.
- * The North Esk valley, which includes a greater proportional extent of upland landscape within its catchment and in consequence is less intensively cropped than either the Lunan or South Esk valleys.
- * The coastal zone: all three valley systems have distinctive estuaries linked by a geomorphologically complex coastal zone composed of raised beaches and both active and fossil cliff



Illus 1. Location map showing study area, areas studied to 1998, and locations of previous excavations mentioned in the text.

lines and dune systems. This zone has a rich archaeological record including promontory forts with upstanding defences, as well as crop-mark sites and structures and land surfaces buried beneath blown sand. Archaeological and environmental survey will be of considerable value in establishing the sensitivity of this coastal zone to recent land use changes and in assessing the extent of the threat posed by the North Sea with regard to processes of coastal erosion. This study area was selected to address a series of research themes, and secondarily, for a range of

practical reasons. In practical terms, a study location not too far from Edinburgh was required in order to facilitate some of the project logistics. In addition, it was considered important to target an area of fertile lowland Scotland, in contrast to most recent university-based projects in Scotland, which have tended to focus on the more dramatic upstanding archaeology of Atlantic or northern Scotland (eg the Callanish Research Project, Lewis: Harding and Armit 1990, run by this university; or Bradford's long-term involvement in the Northern Isles). Moreover, when the project got underway, CFA staff were already undertaking a programme

of excavations at the Brown Caterthun hilltop enclosure site (NGR: NO 555 668; NMRS ref: NO56NE 1; Illus 1), funded by Historic Scotland, to assess the damage being caused to the site by rabbit burrowing.

Until access arrangements can be finalised each year, the exact locations of fieldwork cannot be defined. An extreme case of this occurred during the 1998 season, when the very wet summer meant that crops were not harvested at one site scheduled for excavation when planned. Alternative excavation locations where the relevant research questions could be addressed had to be arranged at very short notice and this was only possible thanks to the assistance of both the landowner and the Historic Scotland area inspector, Dr Armit.

Research themes

The main broad research themes being addressed by the Field School are: the management of crop-mark archaeology; settlement evidence and its patterning in the crop-mark record; environmental changes and their relationships to human activities.

The management of crop-mark archaeology

There are a number of cultural resource management issues which can be treated as distinct topics, although there are considerable areas of overlap amongst them.

Agricultural attrition of crop-mark sites

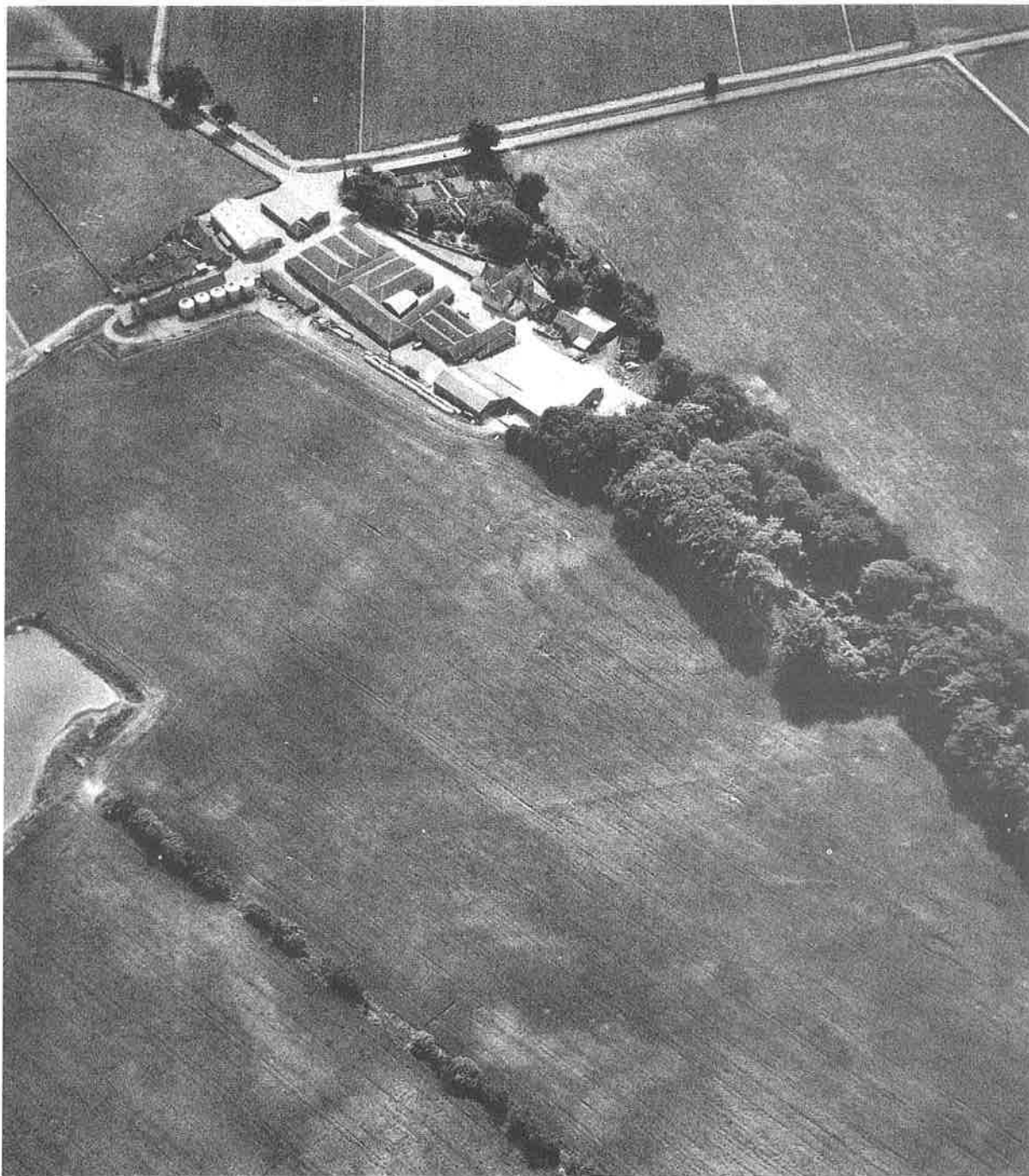
Many of the difficulties associated with the investigation and interpretation of the lowland archaeological record are the result of the intensity of human occupation and associated activity over extended timespans. Although it is arguable that such modern concepts as cores and peripheries in terms of productive land-use will not have been as pronounced during prehistory, there is no doubt that the rich mainland farmland areas will have had a central role in providing foodstuffs throughout much of Scotland's past. Thus, if we wish to develop Scotland's archaeology, we must increase our understanding of these core productive areas and then address some of the problems associated with the depleted archaeological record, which, in these areas, consists largely of monuments that have been reduced to crop-marks.

There has been relatively little investigation of the threat posed by agriculture on the crop-mark record in Scotland, although it forms one of the most widespread threats to the cultural resource (cf Barclay 1992). In England the MARS project has documented cultivation as the biggest hazard facing monuments (MARS 1998, 8). The field

school is investigating a range of crop-mark sites through excavation to assess how damaged they are, ie to examine the *degree* of attrition they have suffered in particular as a result of recent farming practices. The project is also attempting to provide some chronological control on the *rate* of attrition by examining the aerial photographic record, cartographic and other documentary resources, as well as accessing the results of the Lunan Valley Project (Pollock 1985) and other previous excavations in the area (eg Balneaves; Russell-White 1988). It should be possible at least in some instances to determine which sites existed as upstanding features on earlier cartographic sources and which survived at least with low surface relief on 1940/50s stereo photographic images. It may also be possible to point to changes in the nature of the crop-marks that have been recorded over the years since such photography routinely began (in the mid-1970s). Any such changes may again correlate with intensifying agricultural activity, and more particularly with deeper ploughing. The results from individual investigations will be correlated to compare evidence for agricultural erosion with evidence for changes in agricultural equipment and methods employed, for example to assess the impacts of heavier tractors or the use of seeders with inbuilt subsoilers.

Excavations at a scheduled multiple-enclosure crop-mark site at Mains of Edzell (Illus 1) are being conducted specifically to test the effects of varying land-management practices on a single site. The Mains of Edzell site (NO 588 692; NO56NE 26) lies partially within an area of improved pasture and partially in woodland shelter belt. Both ploughing and tree growth/felling have negative effects on archaeological remains, and at Mains of Edzell the effects of the two types of damage can be compared.

Investigation of the scheduled souterrain and square-barrow cemetery at Redcastle (NO 687 508; NO65SE 18-19; Alexander and Rees 1997; Illus 1), located immediately above the raised beach at Lunan Bay, is also providing information pertinent to this theme. The subsoil consists of a fine sand which suffers from wind blow after ploughing. The visible extent of this crop-mark appears to have increased over the years, extending to the south, probably as a result of increased erosion. This site therefore presents the opportunity not only to examine a square-ditched barrow in soil conditions favourable to bone preservation, but also to determine the degree of attrition caused by continued ploughing and wind blow. Part of the fieldwork is designed to investigate if features extend to the south, but are hidden below deeper ploughsoil. Some of Pollock's sites showed that crop-marks were visible under colluvial deposits. In addition, this site offers the possibility of locat-



Illus 2. Aerial photograph of crop-marks at Mains of Edzell. (Copyright RCAHMS.)

ing early prehistoric sites by field walking and during excavation along the raised beach line.

Scheduling practice

The process of scheduling crop-mark sites almost invariably entails the initial selection of the clearest crop-mark images. It is naturally difficult to justify the inclusion of diffuse crop-marks, or those not readily assignable to a recognisable category of site, as being 'of national importance', the criterion demanded for scheduling. However, it is far from clear whether the clarity or complexity of crop-

mark imagery, which strongly influence suitability for scheduling, accurately reflect the condition and quality of buried remains. Factors such as crop and lighting conditions at the time of aerial photography, and a variety of pedological and geomorphological variations, affect the appearance and clarity of crop-mark images. A theoretical case could be mounted to suggest that those sites which produce clear crop-marks are precisely those where attrition is quite advanced, such that only major features survive to colour the crop-mark image. Moreover, certain types of archaeological remains, eg some varieties of unenclosed timber

structures, can often be difficult to locate on all but the clearest aerial photographs. Identified crop-mark sites reflect only a partial, and biased, record of the archaeological resource present within arable landscapes such as the lowlands of Angus: a principal aim of the project is to assess the degree of bias that may be represented.

Some sectors of the Lunan valley are, by Scottish standards, extremely rich in crop-mark sites, both in terms of numbers and of the apparent diversity of site types represented. Historic Scotland has recently undertaken one of its largest crop-mark scheduling programmes in the area, using information from the photography assembled over the last twenty years. The field school aims to assess whether those areas along the Lunan currently scheduled are indeed the most archaeologically significant within their local context. To this end, a concentrated study programme is presently taking place along a corridor 3–4 km wide between Friockheim and the coast (Illus 1). It is notable that known crop-mark sites appear to cluster in this area. There is at present no obvious reason for this patterning in terms of superficial suitability for settlement and the clustering may therefore be a phenomenon derived from the prospection method used in relation to geomorphological or pedological conditions.

Work on this corridor has so far concentrated towards the coast. South of the Lunan Water, around Redcastle, Ironshill and Newbarns farms (Illus 1), low rainfall, geomorphological conditions and extensive cereal fields provide excellent conditions for the detection of detailed patterns of buried archaeological remains as crop-marks, and this has led to extensive scheduling taking place. By contrast, fewer crop-marks appear on the north side of the Lunan Water, leading to less scheduling having occurred here, although those crop-marks which have been detected include a similar range of site types. Work is being conducted to begin to assess whether such variations in crop-mark types and intensities reflect real patterning of past activities or simply biases in data collection. Geophysical survey, an assessment of geomorphological, soil and land-use capability maps, field walking, and trial excavations are being employed to assess both individual crop-mark sites and clusters of them, and 'blank' areas (including those with crop-marks not currently assessed as being of major archaeological importance) between clusters.

Adjacent scheduled and unscheduled elements of an extensive crop-mark complex are being examined north of Newbarns Farm (NO 683 493; NO64NE 49–50; Pollock 1985, 387; Illus 1). The complex includes enclosures, field-systems, pits, the site of a souterrain and rectilinear enclosures. The portion of the complex selected for scheduling was determined by the greater density of crop-mark images generally and certain types of site

more specifically (I Armit, pers comm). The excavations are evaluating whether this pattern of crop-marks reflects variations in the quality and condition of buried remains. Excavations of the scheduled souterrain and square barrow cemetery nearby at Redcastle (Illus 1) are also investigating the relationship of crop-mark imagery to the extent and quality of buried archaeological remains.

Public archaeology

When the field school was first established, Angus Council lacked local government curatorial archaeological advice. The project was perceived as a major opportunity to raise the profile of field archaeology in an area where the relative lack of upstanding monuments close to population centres has led to the richness of much of the region's archaeological resource being under-appreciated. The Pictish presence is widely acknowledged in Angus, notably by the wealth of its carved stones (at Aberlemno, St Vigean and elsewhere including the collection displayed at the Meffan Institute, Forfar) and the profile of first millennium AD archaeology should be further enhanced by the 'Pictavia' development near Brechin. Opportunities to promote the area's prehistoric remains – particularly those represented solely by crop-marks not accessible to the general public have by contrast been very restricted.

The field school aims to provide public information for the local population on prehistoric sites closer to population centres than some of Scotland's most famous examples, scattered in many cases in the upland margins and around the Atlantic zone. We intend to fulfil this opportunity by making all major sites open to the public during the course of work (where this is practical within the framework of the project and landowner consent), by close liaison with local museums and interested parties, and ultimately, if resources permit, by the establishment of a permanent field display. Open days held to date have been well attended, with up to 400 visitors viewing the Brown Caterthun excavations in the summer of 1996.

The decision by Angus Council to establish a system of archaeological advice through Aberdeenshire Council has already significantly altered opportunities to promote the archaeological heritage of the Angus landscape, and the field school looks forward to working with the Angus Council archaeological advisor in future seasons.

Rabbit erosion

CFA was commissioned in 1995 by Historic Scotland to conduct excavations at Brown Caterthun to assess the nature and extent of damage to this site

caused by rabbits (Dunwell and Strachan 1995, forthcoming). The extent of the damage identified was such that a programme of further excavations was commissioned, with a large rescue component balanced by wider research considerations. Part of this programme was undertaken as the first exercise of the field school (Dunwell and Strachan 1996, forthcoming). More limited excavations were carried out on the White Caterthun in 1997, where burrowing damage to the enclosing works is also evident (Strachan and Hamilton 1997; Dunwell and Strachan forthcoming). The extensive problems posed by rabbits to the archaeological resource of the upland and non-arable zones of the study area has led to rabbit damage being one of the items routinely recorded during field surveys.

Rescue

In any long-term research project we believe that there should be scope for the integration of rescue archaeology, where the site selection process can be influenced by obvious threats to the archaeological resource of the study area. There are, for example, areas along the Lunan valley where sites are under more immediate threat, mainly from gravel extraction. During the course of the project, we intend to conduct excavations targeted to rescue sites in advance of their likely destruction, but only where this fits in with the other objectives of the project. In effect, there will be a presumption in favour of selecting sites for more detailed analysis where they appear more likely to be catastrophically destroyed in the near future. The field school excavations at Brown Caterthun and Redcastle have both been prompted by rescue considerations, respectively rabbit damage and a slow, but steady, process of soil erosion.

Settlement evidence and its patterning in the crop-mark record

This research theme comprises the following components:

- * A period-by-period overview of the archaeological remains and activity along the Lunan valley was conducted in order to identify gaps in the current data set which could be targeted for future research.
- * Evidence recovered from the lowland crop-mark record is to be compared with that revealed by upland survey. It is likely that investigation of the lowland zone will increase the range of types of sites that are known.
- * Areas of different drift geology and land use are to be examined to determine how such factors affect the crop-mark record and whether they influenced original settlement patterns.
- * A programme of non-invasive and invasive fieldwork is to be undertaken to further the

research themes outlined above and to examine previously unexcavated or rarely excavated crop-mark types in the area (eg enclosed settlements).

It is clear that these components overlap. A number of common objectives can be identified, and it is anticipated that a single programme of integrated fieldwork can achieve positive results.

A list of the archaeological sites and monuments of the Lunan and the Montrose basin was prepared by the Royal Commission on the Ancient and Historical Monuments of Scotland in 1978 (RCAHMS 1978). Most previous archaeological work on the prehistoric remains of the area has tended to focus on the area to the west of Inverkeilor at Friockheim (Carter 1991), Balneaves (Russell-White 1988), Hatton Mill (Neighbour 1992), Douglasmuir (Kendrick 1995) and Boysack (Murray and Ralston 1997). In contrast, towards the coast only the site at Ironshill (Pollock 1997) had been examined in any detail before this project got underway.

Previous work by the Lunan Valley Project (Pollock 1985) targeted areas of medieval rural settlement along the river. Through survey and limited trenching it identified late prehistoric or early medieval activity around the site of Red Castle and a pre-13th-century settlement at Corbie. The study concluded that some of the extant land divisions had remained unchanged since at least as early as the medieval period. In addition, it was clear that very few medieval settlement sites were recognisable in the crop-mark record. It was argued that this was because many had been directly overlain by subsequent farmsteads, although it is also possible that they may have included structural types which – lacking for example earthfast timbers – are less likely to appear in the crop-mark record.

The types of sites making up the archaeological landscapes in the upland area are not the same as those in the lowlands, and the differences are clearly not just the result of differential preservation. This appears at its most obvious with the hilltop enclosure sites such as the Caterthuns, where the incorporation of the summit was evidently significant to their builders, regardless of the functions of the enclosures themselves. However, even less certain is how these sites fit into their wider landscape context, ie their relationship to the rich lowland areas, to which their topographic setting makes them necessarily peripheral. The chronological and/or social relationships of these upland hillforts to the smaller enclosed settlements on lower ground, such as Mains of Edzell (Illus 2) also require examination. A programme of upland survey is thus being conducted in tandem with the investigation of lowland areas, to enhance our database of the range of structures present, to provide a more comprehensive comparison across

the identified range of crop-mark sites, and thus to establish which types of site are common to both major facets of the landscape and which seemingly represent unique lowland or upland examples. To date survey has concentrated in the upper reaches of the West Water, along the Burns of Nathro and Calletar, and has been accompanied by palaeo-environmental research to provide a context for the discoveries there (see below).

It has been stressed that the crop-mark record is at least in part an artefact of geomorphological and land-use patterns. Indeed, this theme is part of the scheduling management issue discussed above, and is of great academic interest, as our understanding of the topographic and landscape context of crop-mark sites is likely to be biased by the opportunities for the crop-mark record to form at any particular point. It remains uncertain how significant this bias may be. There are some areas where the crop-marks may represent a significant proportion of the sites once present, for example within intensively cropped areas of homogeneous geomorphology: these are relatively infrequent. The development of this research theme therefore requires the systematic assessment of a substantial range of topographic, geological and land-use situations.

Detailed study is required in order to gain a greater understanding of issues such as chronology to allow the patterns of crop-marks within their setting to be understood as parts of a landscape. Greater information on dating is generally important for specific issues within the crop-mark complexes, such as for square barrows and souterrains.

Environmental changes and their relationships to human activities

The palaeoenvironmental aspects of the project, both on and off site, have been designed to integrate with the research themes outlined above.

The nature of the on-site studies, which provide direct information in regard to specific excavations, is obviously variable depending on local issues such as the type of excavation being conducted and the degree of preservation of environmental material. Off-site surveys are designed to provide the local and regional landscape contexts for the meso-scale archaeological studies. It became clear during the course of the survey work conducted in 1996 that wetlands, which would have provided an important source of data in the lowland areas, are a rapidly vanishing resource in these catchments. It has therefore become important to locate any surviving sites that can provide significant data to inform us of the human impact on the environment over the last 10,000 years, before they all either disappear or lose their information potential, as many have already done.

Data is being collected to attempt to establish the vegetation history of the poorly understood lowland sector of the study area and to examine the nature and timing of possible climatic changes in the upland and lowland zones. The interactions between human activities and environmental changes are of major importance to our approach. Areas of particular research interest include the impact of human groups on the vegetation of this area with particular reference to issues of 'fire ecology' and land management and cultivation practices during the Mesolithic and Neolithic as well as the nature of post-Neolithic landscape changes, an important theme given the seeming preponderance of the crop-mark record attributable to these periods. The impact of vegetation clearance on the development of the river systems, which involves recognising any correlation with patterns of erosion and deposition, is also of key importance, given the focus of the project on the three river catchments. This work is fundamental to our interpretation of site distribution patterns and our assessment of the crop-mark record. The responses of upland and lowland river systems to environmental variation, including changes triggered by human activities, may help to explain some of the patchiness of the air-photographic crop-mark record. In effect, the modern landscape surfaces that we can survey today will have varying relevance to the different archaeological periods detected.

For example, if substantial woodland clearance took place during the later Neolithic, this may have changed the pattern of river flow and terrace formation as the result of increased soil erosion. If this can be demonstrated in fact to have happened, we can assume that many areas potentially suitable for Mesolithic and earlier Neolithic sites may no longer be visible. In that case the site distribution patterns we can establish for these periods will be significantly distorted. Without understanding how parts of the landscape may have changed over the intervening millennia, we cannot hope to produce an intelligible interpretation of the distributions of the surviving remains. Environmental changes are very important in understanding why some areas may preserve crop-marks, while other apparently suitable locations do not.

In addition to the research on particular river catchments, we also intend to investigate the sequence of changes to the coastal edge during the late and early Postglacial with particular reference to the locations of hunter-gatherer sites as part of a related project. By developing our understanding of the coast we hope to be able to assess the coastal archaeological resource in a manner compatible with work we have conducted on behalf of Historic Scotland along the north shore of the Solway Firth and the inner Moray Firth.

Conclusions

This is not the place to discuss in detail the various field exercises that have been undertaken or are underway. Separate papers will be produced on all these exercises; and field school progress reports will be produced each year. However, a significant range of studies have now not only commenced, but been completed, including work on the Brown and White Caterthuns. Survey in the nearby hills to provide a local context for these sites continues. In the Lunan valley, substantial excavations are underway at Redcastle and trial trenching on a number of other sites is occurring. Student projects have been initiated, including palaeoenvironmental work at Rescobie Loch, and field walking for early prehistoric remains which is being conducted as part of a postgraduate study.

The exercise would not be possible without the generous sponsorship of Historic Scotland. In addition to this support, the field school receives substantial funding from Edinburgh University Vacation Grants and various other small grants. To date over 150 students have participated in the field school – an annual average of over 50. Mr Carnegie Arbuthnot of Balnamoon Estate, Mr Frank Geddes, Careston Estate, Dalhousie Estates, Gannochy Estate, Mr Jolly of West Mains of Turin and Mr Duncan of Newbarns Farm have all been extremely helpful in permitting access to their land.

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Abstract

This paper provides an account of the objectives and research aims of the Angus and South Aberdeenshire Field School of the Department of Archaeology, University of Edinburgh. These include: the management of crop-mark archaeology, involving the investigation of the agricultural attrition of crop-mark sites, scheduling practice, public archaeology, rabbit erosion and rescue; the study of settlement evidence and its patterning in the crop-mark record; and environmental changes and their relationships to human activities. The importance of the project area is that it is representative of the archaeologically under-studied fertile sector of lowland Scotland.

Keywords: crop-mark archaeology, training, scheduling practice, agricultural attrition, environmental change

Survey work on Turin Hill, Angus

Derek Alexander with Ian Ralston

Introduction

Turin Hill is a ridge of Devonian Lower Old Red Sandstone (NO 514 535), aligned south-west to north-east, located approximately 6 km north-east of Forfar, overlooking Rescobie Loch in central Angus (Illus 1). It commands extensive views along Strathmore and has long been recognised to have the remains of a hillfort on its summit. It has surprisingly received little attention in comparison to other sizeable Angus hillforts, such as the Caterthuns and Finavon Hill. In March 1998 a survey of the hill was undertaken as part of the University of Edinburgh's Angus and South Aberdeenshire Field School. In addition to providing a training exercise for undergraduate participants, the primary aim was to produce a plan of the then observed archaeological features on Turin Hill and, extending a programme initiated elsewhere (Dunwell and Strachan forthcoming), to identify and assess the nature and extent of any threats affecting these remains. The work was grant aided by Historic Scotland.

Turin Hill stands out in its landscape, the upland block around Aberlemno, which also includes the well-known fort on Finavon Hill. Not only does it provide extensive views, but its craggy appearance is out of character with the more gently rolling landscape of the southern part of the interfluvium between the Lunan Water and the South Esk. The southern side of the hill is in large measure composed of three cliff lines (Turin Craigs) which step up, like terraces, from around the base at 175 m OD to the summit at 252 m OD; the uppermost free face is c 10 m high. The northern slope of the hill, by contrast, is much gentler and has no vertical rock faces. There are a number of bedrock outcrops on the summit and the subsoil across the rest of the hill is likely to consist of till and morainic drift. The present-day vegetation cover is a mixture of rough grass and heather used for grazing both cattle and sheep.

The Statistical Account (1791–99, vol XIII, 587), in the entry for Rescobie parish, describes the archaeological remains on Turin Hill as a 'stronghold, or place of defence, consisting of vari-

ous contiguous buildings, with a circular citadel about 40 yards in diameter. The situation has been well chosen, being secured by an impregnable rock in front, much like the face of Salisbury Craigs (Edinburgh), and of difficult access all around. It is now called Kemp or Camp Castle' In addition, this account also refers to the geology of the hill, which was being quarried at that time in 'workings astonishing to look at'. Subsequently, both Lewis (1846, 417) and Groome (1885, 249) also mention quarries on Turin Hill (Illus 2) for extracting grey paving stone and Old Red Sandstone conglomerate. It is also noted that the freestone from the quarries was valued for its colour and for taking a fine polish (Lewis 1846, 417).

Archaeological features on Turin Hill, more particularly the central circular homestead and oblong fort, are depicted on the first edition Ordnance Survey 6-inch map (Forfarshire 1865, sheet XXXIII) and are named 'Kemp's Castle'; extensive quarries are depicted east of the fort on the same map (Illus 2, top). Apart from an early sketch plan of the site by Christison (1900, 96–98, fig 48; reproduced here as Illus 3, top), along with a drawn elevation of some of the stone walling in the central circular homestead as it then survived (Christison 1900, fig 49), the only other published survey was undertaken by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) during the post-war marginal lands programme (Feachem 1955, 74–75, fig 3; here – Illus 3, bottom). Both surveys recorded the remains of smaller circular enclosures as well as the fort on the summit of the hill. These features have variously been termed 'oval works', or 'citadels' (Christison 1900), 'circular defensive enclosures' (Feachem 1955) and 'duns' (Feachem 1963, 106; RCAHMS 1978, 16, no 96). They are broadly comparable to a series of stone-built structures in Perthshire, described as 'circular forts' (Watson 1913; 1915) or 'ring forts' (Stewart, 1969), which Taylor (1990) has renamed circular homesteads and that term for these features is employed in this paper.