Archaeological Mapping in the North of Scotland

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Introduction

Archaeological records throughout the UK are underpinned by entries signed off with 'Visited by OS' followed by the initials of a Field Investigator and the date of visit. These entries were created by the Ordnance Survey (OS) Archaeology Division which, from its inception after the Second World War to its closure in 1983, was committed to compiling a comprehensive record to support the publication of archaeological and historical information on maps. This record was maintained on a card index ('OS495' cards), which came to incorporate sketches, measured surveys and photographs as well as a written description. Inevitably any such record will be variable in its quality, but in many areas the coverage and quality of the OS recording has rarely been matched, let alone surpassed. This is particularly true in the north of Scotland where the work of OS Archaeology Division Field Investigators and Office Recorders between about 1950 and the early 1980s saw the compilation of a record of remarkable consistency and coverage, a process in which Keith Blood, the 'N K B' of the record cards, was a key player during fifteen years between 1964 and 1983 (Fig. 4; see below). Although now mostly sixteen or more years old, this work remains at the core of the National Monuments Record of Scotland (NMRS) and for many aspects of the region's archaeology it is the major source (Cowley 1998 and this volume).

Archaeological work in the north has proceeded in fits and starts, and the compilation of the record is marked by a series of significant advances of which the OS contribution is one. The historical context in which the OS surveyors were working, drawing on earlier maps, personal correspondents and published sources such as the RCAHMS Inventories, is sketched out briefly below. This is followed by a summary of the OS work in the north which casts some light on the formation processes of this record and Keith's role in it.

Archaeological mapping by the Ordnance Survey

The accurate, detailed and systematic mapping of archaeological sites exemplified by Keith and his colleagues had its origins in the military survey undertaken by General William Roy in the aftermath of the Jacobite rising of 1745 (Seymour 1980, 13; Murray 1994, 28). Roy's interest in archaeology, and in particular Roman military antiquities, is clear in the emphasis of his mapping. The depiction of extensive areas of cultivation on his plans of monuments also demonstrates a concern with context and the landscape setting of sites which may have been natural to Roy as a military surveyor, but which remained precocious in an archaeological context into the 20th century. The high standard set by Roy can be seen in the overall quality of Ordnance Survey mapping from the 1st edition of the OS 6-inch map onwards.

For the northern counties the survey of the 1st edition map in the second half of the 19th century saw the first systematic depiction of archaeological information, with the mapping of large areas of relict landscape, including both prehistoric sites and the ubiquitous remains of settlements cleared earlier in the 19th century. As early as 1855 the Society of Antiquaries of Scotland had asked the War Department to ensure that all archaeological remains were included on maps to draw attention to their presence and hopefully ensure their preservation (Davidson 1987). This point was taken on board, and although the treatment of monuments was not always satisfactory, active local antiquarians undoubtedly had an impact on the archaeological content of the 1st edition, and contemporary perspectives are clear, for example, in the labelling of the numerous groups of small (agricultural clearance) cairns as tumuli, in line with local traditions that often associated them with battle sites. There is considerable variation between map sheets in the depiction of monuments and the interests of individuals involved in the survey may also have influenced the contents of maps. For example, the depiction of archaeological information on the 1st edition map in Sutherland, concentrates into Lower Strathnaver, the Strath of Kildonan, the Rogart area and Loch Shin, mostly on map sheets surveyed under the direction of a Captain Coddington and in areas where antiquarians had already been active. At The Ord, near Lairg (Fig. 1) a relict landscape covering an area of about 1500m² has been mapped in relatively fine detail, including a large chambered cairn on the summit and small cairns, hut-circles and post-
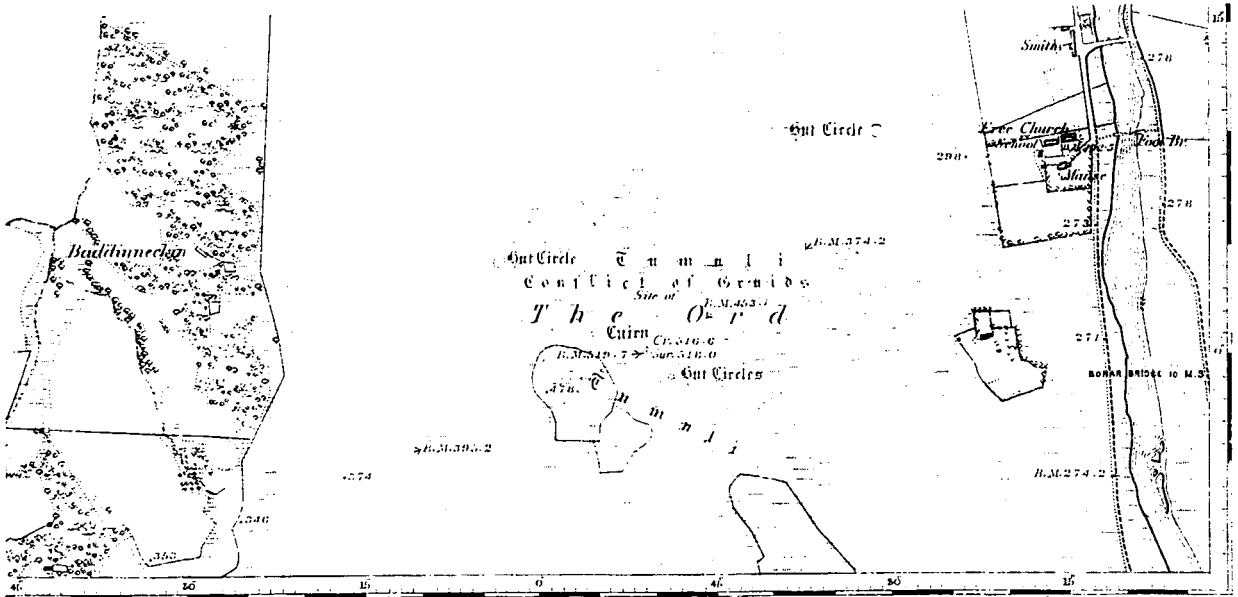
Fig. 1. Extract from the 1st edition of the OS 6-inch map for The Ord, near Lairg in Sutherland (Sutherland 1873, sheet XCIV).
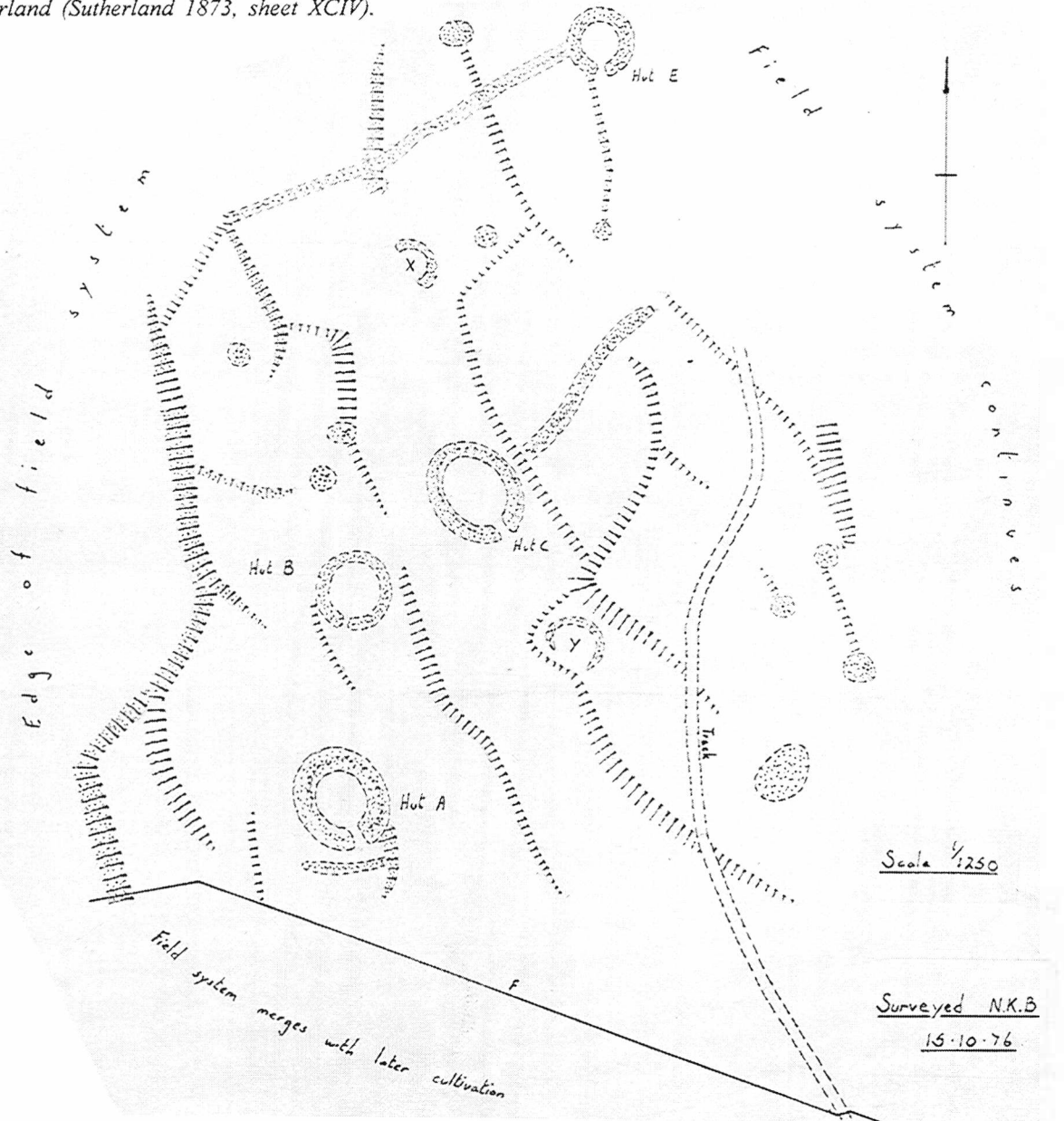

Fig. 2. Hut-circles and field-system, Caen Burn, Strath of Kildonan (ND 01 NW 10, ND 014 183). Recent excavation of similar settlement and landuse remains near Lairg (McCullagh and Tipping 1998) has demonstrated a potentially long-lived and complex sequence of exploitation at sites such as this.

medieval enclosures on the flanks of the hill. Alongside the survey, the names of features and places on the map were recorded in Object Name Books (ONB), often incorporating local traditions and lore alongside the information and sources that were the effective forerunner of recording by the OS Archaeology Division (Ritchie, this volume). The ONB entry for The Ord cites Rev. J M Joass as the authority for the name; he was the minister at Golspie and an active antiquarian who published extensively in the second half of the 19th century. The descriptive remarks that accompany the name record the location of The Ord and the attribution of the Battle of Gruids (sometime between 1519 and 1522) to the site. It is also noted that 'the slopes upon all sides are studded with tumuli amongst which are to be seen several Hut Circles. There is also a large cairn of stones on the hill supposed to mark the grave of some warrior'.

Further developments saw the inclusion of even more detailed information on some of the 2nd edition maps. Much of this stemmed from local informants such as John Nicolson, a farmer from Caithness, who was familiar with the local archaeology and assisted Sir Francis Tress Barry in his excavations (RCAHMS 1998) and A O Curle in the preparation of the Caithness Inventory (RCAHMS 1911b). The role of local informants in notifying the OS of monuments remained important, although inevitably the quality of such information could be patchy (Davidson 1987, 13).

From an early date the rich archaeological landscapes of northern Scotland were being examined and mapped, albeit in a very sporadic way, providing building blocks that were fundamental to the expeditious completion of Curle's surveys for the inventories of Sutherland and Caithness (RCAHMS 1911a, 1911b). Curle added considerably to what had already been recorded by antiquarians and on the 1st edition map, both in the level of detail that he observed and in the number of newly identified sites. He was, however, unable to map areas of relict landscape, understandable for someone working largely by himself with only occasional assistance, but this does not detract from his remarkable achievements, for example in surveying the whole of Sutherland in the summer and autumn of 1909 (Dunbar 1992, 20). Indeed the detailed mapping of extensive archaeological landscapes on the scale of those recorded on the 1st edition map has not been undertaken until recently, and in most cases using Electronic Distance Measurement equipment. Some appreciation of Curle's undertaking can be gained from the entries in his field notebook. The entry for 1st June 1909 records his progress in Strathnaver during a day where he walked at least 23 km (c.f. Henshall and Ritchie 1995, 9; Curle 1909, 68-73) while on the 20th September he recorded that the 'Treasury has allowed me to engage assistance at the rate of 25/s a week so I have procured a stout youth today. Trained to Kildonan with Serjeantson'. The days work involved recording sites that had been noted on the 1st edition map, including a long cairn, three brochs and seven hut-circles with juxtaposed small cairns, and spread out over a total distance of a mere 9 km. The assistant was obviously welcome and at the end of the day Curle observed that 'I have had a youth carrying my camera and other baggage all day and have felt much relief in consequence' (Curle 1909, 124-8).

The publication of the RCAHMS inventories marked a virtual cessation of activity in the northern mainland until the OS commenced archaeological survey about 1950 and Henshall undertook her survey of chambered cairns (1963). It was against an otherwise archaeologically relatively moribund background that, in 1964, Keith Blood started working in the north, as part of a team based in Inverness, and initially involved in clearing a backlog. Work progressed at a rapid rate that amounted to little more than skimming the surface of a vast pool of unrecorded sites. The revision of existing records was complemented by field checking of material notified or published in the intervening years. Most importantly, however, was the discovery of many new sites as experience increased. In many areas, these records have still to be added to and, although subsequent survey work has tended to be more intensive in its coverage, it has also been on a much more restricted scale.

Some crude statistics for rates of discovery on a 1:10,000 map sheet (NC 91 NE) in the Strath of Kildonan, Sutherland, illustrate both the broad patterns in the compilation of the record and the impact of specific campaigns of work. Curle recorded eighteen sites while preparing the Sutherland Inventory in 1909 (RCAHMS 1911a) of which ten had been recorded on the 1st edition map (Sutherland 1871, sheet LXXIX). The next survey work was fifty years later when OS work by J L Davidson and W D Johnston in 1960 added a further nineteen sites. The OS revision of Sutherland saw further work by John Macrae and Keith Blood in 1976 and 1977 adding a further thirty new sites. The record for this map sheet has not been updated since, in common with many other areas of the north, and while this is a relatively 'busy' sheet, the proportions of sites recovered during each campaign of work have a general applicability across the north. The period from the late 1950s to 1983, but in particular between 1976 and 1983, is of fundamental importance to the formation of the archaeological record in the northern counties and is outlined below. The scale of this work in Sutherland is highlighted by the OS Archaeology Branch entry in *Discovery and Excavation in Scotland (DES) 1980* as the county was nearing completion. The 550 monuments recorded for the first time by Curle (RCAHMS 1911a) are set against the equivalent numbers noted on the 1st edition maps and compared with the roughly 800 new sites recorded during OS basic scale mapping between 1959 and 1973, and the over 1000 new discoveries made during the county revision between 1974 and 1980 (*DES 1980*, 55). Many useful site plans were also produced during this period, considerably enhancing the written record (Figs. 2 and 3).

Three aspects of this work are particularly worthy of comment. The first concerns the *raison d'être* of the OS: surveying accurately. The OS has, over the decades, taken what was often a textual archaeological record and placed it in a representation of the real world: a map. The map allows studies to be undertaken that text alone cannot provide and this is particularly relevant in the wide open spaces of Sutherland; an accurate map is fundamental if sites are to be located by others with relative ease. Take away the maps, and field archaeology recedes into a less immediate world of text, and thus loses a large part of its accessibility to the

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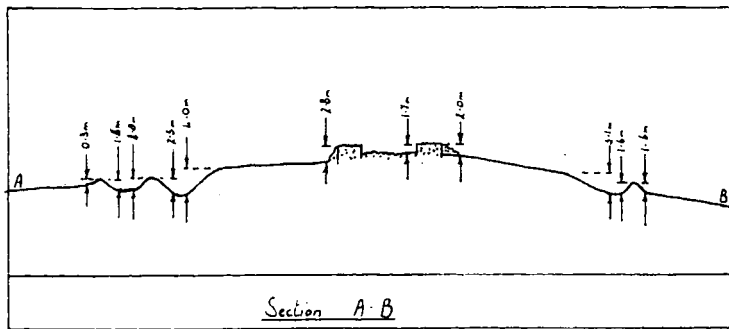
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Fig. 3. Broch, Kilphedir, Strath of Kildonan (NC 91 NE 27, NC 9943 1891). Plan and section of one of a number of brochs with outworks along the Strath of Kildonan. Drawn by Keith Blood, 6th October 1976.

Plate 1. The Inverness-based team at Cape Wrath lighthouse in November 1980; John Barneveld, Keith Blood and John Macrae; with Jimmy Davidson from the office in Edinburgh.

public.

The second contribution, entirely due to Keith, is the recognition of burnt mounds in large numbers in Sutherland, having become familiar with them during the early 1970s while working on Orkney. Before Keith's arrival the number of recorded burnt mounds in Sutherland and Caithness was five. Clearly etched in the memory of one of the authors (JB) is the day when, on a site of some particularly impressive hut-circles on the south side of the Strath of Kildonan, Keith noticed burnt stone exposed in a quite unprepossessing mound. That discovery led to the revisiting of a number of burnt mounds previously classified as corn-drying kilns in the south-east of the county and subsequently to the identification of 125 in Sutherland and 21 in Caithness, almost always juxtaposed with hut-circle settlements (Blood 1989, 138; Cowley forthcoming).

Thirdly, is the 'broad brush' mapping of the extent and character of prehistoric settlement (Blood 1989, Fig. 1). The coverage of the archaeological record in Sutherland, which was the only county to be fully revised, is such that while there are gaps in the distributions of monuments such as hut-circle groups, these are largely predictable and only significant in detailed analysis (Cowley 1998, 165-6). The straths of Sutherland are bursting with prehistoric and later archaeological remains and, although the OS remit limited the thoroughness of records of pre-clearance settlement remains, the consistently high quality of the record for the prehistoric material forms a research tool which can have few parallels.

NKB - From a Scottish perspective

From about 1960 an ever increasing area of work saw the OS Archaeology Division's tempo of recording and fieldwork increase. By 1963 the pace of the Ordnance Survey's map revision programme all over Scotland was proving to be stretching the efforts of the then five field investigators in the Archaeology Division's (AO/Scot) field survey team. So, in 1964, four OS surveyors were recruited to form a second section based in Inverness to cover the country north of Perthshire, one of whom was Keith Blood.

For the next seven years Keith worked in every county in the north, including most of the islands of the Outer Hebrides, Orkney and Shetland. He gained considerable experience of nominally Iron Age monuments in a re-assessment programme for a proposed publication of an 'Iron Age Map of Northern Britain' in 1969-71. The publication was abandoned as it was deemed premature to pursue such a period map in view of the rapid changes in the state of archaeological knowledge about what constituted the Iron Age. From this and intensive investigation in the northern counties he became expert in identifying new monuments and in assessing existing and perhaps erroneously classified sites. The revision of Antiquity Models (AM) and the survey of newly found sites on Orkney during 1970 was a particularly large task as nearly every km² carried at least one mappable antiquity. This was a time consuming exercise that made considerable

use of the long, light summer evenings of Orkney. The scale of the revision also challenged the team's draughtsmanship. At that time, all AMs, the map record, were on paper. Following survey, the existing features on the AM had to be carefully erased, ensuring that the paper's surface was not damaged. Damaged paper would lead to fat, overblown and unsightly hachures rather than the desired sharp and 'crinkle cut' look. If the paper did become damaged, it had to be meticulously 'boned' with a small hard object - the end of a drawing pen for instance - to restore the surface.

In 1971 Keith was transferred on promotion to take charge of the English South East field archaeology section (see Linge, this volume). 1975 saw Alan Ayre, the AO/Scot/ N (as the section was designated) leader, depart for southern Scotland, and Keith was appointed to take charge of the northern section in Inverness. At the same time the OS Field Survey Directorate had taken over responsibility for running all archaeological fieldwork. This event was to see the decline of the role of the Archaeology Division, but thanks to Keith and his colleagues north and south of the Border enthusiasm and expertise were maintained. The Field Survey Directorate decided to allow the section, now composed of Keith, John Barneveld and John Macrae (Plate 1), to return to areas where revisiting sites and localities would enhance the record. The revision of Sutherland was instituted as a Division project several months before Keith's return to the north, and apart from breaks to lend assistance to both archaeological and mapping programmes further south, the county was revised in a roughly anti-clockwise fashion until completion in 1981.

Though given a freer rein than their predecessors in the 1960s, the Field Investigators did not have *carte blanche* to quarter the ground systematically. There was an allowance to stray from routes to known sites if something interesting was spotted, and this was exploited to the full. Fortunately, the wide open and, to a large extent tree-free straths, lend themselves well to a thorough combing with binoculars from a vantage point. Having spotted something interesting, the Field Investigator could move from the vantage point to the interesting point; whilst there, a vantage point could be found and the process repeated. This procedure remained within the remit of only travelling to known sites, but allowed the team to make significant new discoveries that were reported in summary form in an entry in *Discovery and Excavation in Scotland (DES 1975-83).* These entries illustrated the large numbers of new finds, but were too brief to show the full archaeological significance of the wealth of discoveries.

The 'Serpell Report' of 1979 announced the eventual demise of the Archaeology Branch (it had been downgraded from a Division in 1977, and its functions were transferred to the three Royal Commissions in 1983) and, although the Field Directorate allowed the Inverness-based team to keep working, provided that new sites were being added to maps and they kept their heads down, Keith had to produce monthly performance figures. In supplying figures on sites examined, new sites and re-assessed sites, he became adept at the modification of data to accommodate what he saw as arbitrary targets. There can have been no problem in reaching targets for new sites; over 1,500 hut-circles and allied
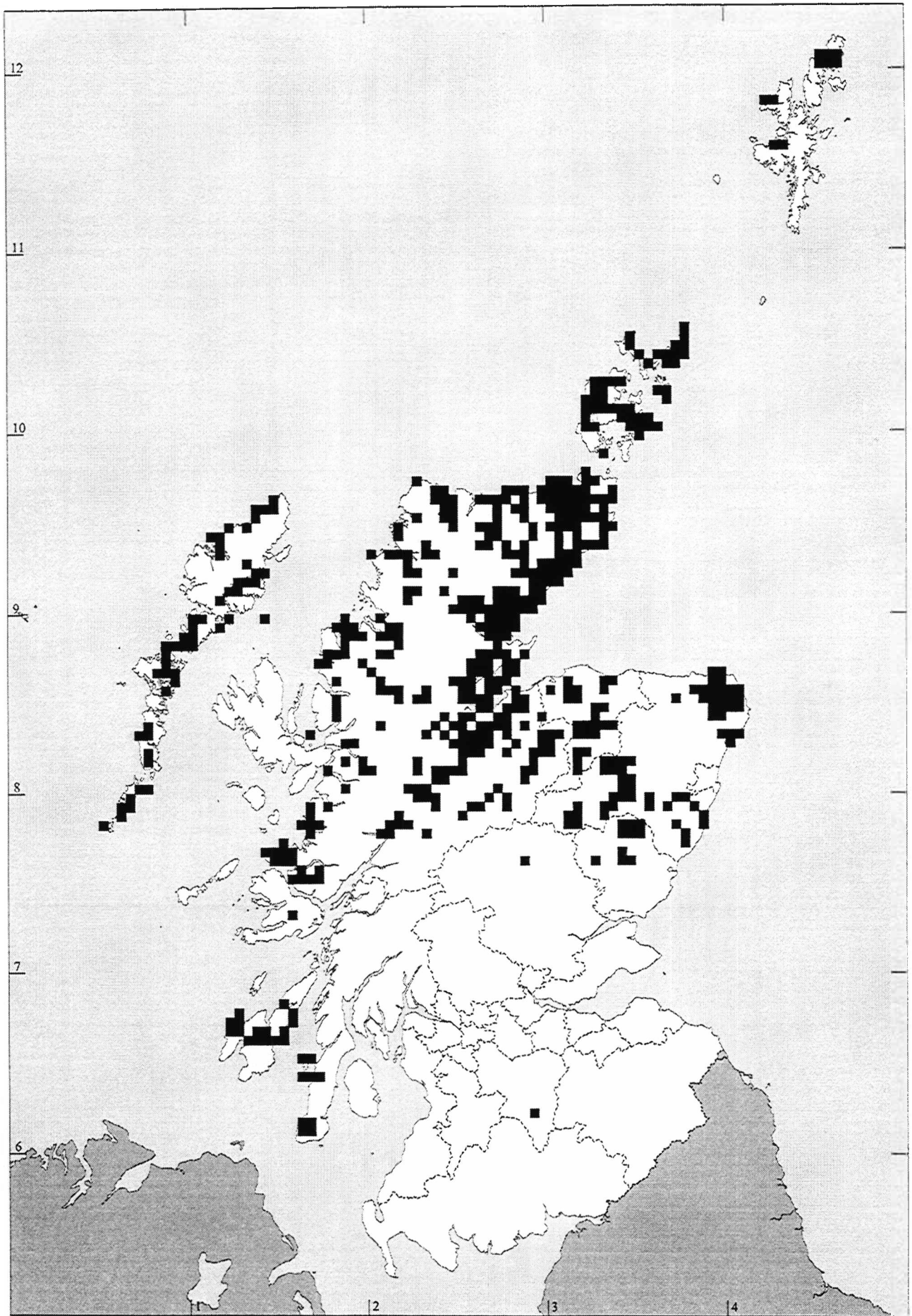
Fig. 4. Generalised distribution of entries in the NMRS by Keith Blood, shown by 1:10,000 map sheet and derived from a free-text search of the NMRS Oracle database on (N K B) and variants. The vagaries of free-text searching and some variation in the form of words necessitated some additional manual searches. For these reasons this distribution should also only be treated as indicative rather than comprehensive.

features and about 125 burnt mounds were discovered in Sutherland alone (Blood 1989). Morale had begun to decline as the deadline for the disbandment of the Archaeology Branch got closer and an increasing proportion of time was taken up by non-archaeological tasks, but Keith's belief in the legacy he had helped to create never faltered. The adjacent county of Caithness had been started in 1981 and was not completed by 1983 when, on 1st April, Keith transferred to RCHME to start a new career in the north of England to which he would instil his knowledge and dedication to the job.

Acknowledgements

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