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Archaeology at the margins – RCAHMS emergency survey in the 1950s

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ABSTRACT

In the years following the Second World War, the British government made a number of changes aimed at improving our self-sufficiency, whether in foodstuffs, timber or energy. The combination of schemes of subsidy and improvements in technology brought with it an increasing threat to monuments that had survived by virtue of the fact that they were sited in marginal land. In response, the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) halted its national programme of County Inventories to undertake a rescue project that used newly available aerial photographs to identify threatened unrecorded prehistoric monuments, such as brochs, forts, palisaded settlements and earthworks. After eight years, the two archaeologists, with some help from other professionals and volunteers, had recorded more than 700 sites and prepared 190 measured surveys. While rescue was initially achieved though record, excavation and communication with the Ordnance Survey (OS), a small number are now protected by Scheduling. The results of the project went further, helping to underpin Stuart Piggott's development of a regional Iron Age synthesis in the 1960s. Now online for the first time, the information that was produced is the most detailed that exists for more than 90% of the sites, and, as with any documentary source, it is incumbent upon us to understand its strengths and weaknesses when we use it to understand, manage or protect the sites we care for and value.

INTRODUCTION

The period after the Second World War was crucial for the Royal Commission as it strove to regain the impetus of the preceding decades. The first professionally trained archaeologist, Dr Kenneth Steer (illus 1), had joined the staff in 1937, and technical innovation was beginning to have a profound effect on both the organisation and the whole discipline. The availability of high-quality vertical aerial photographs was of particular importance to the Royal Commission's work at this time; it didn't simply influence their survey of the county of Roxburgh begun in 1931, but required much of the county to be 'gone over again' (Graham 1950: 2).

In 1950, RCAHMS was a part of the small archaeological establishment, undertaking excavations and surveys and publishing the results in traditional County Inventories and journals such as these *Proceedings* when appropriate. Staff were involved in running the Council for British Archaeology (CBA) Scottish Regional Group (now Archaeology Scotland) and in editing *Discovery and Excavation in Scotland*. Furthermore, they undertook excavations to answer specific questions that arose from field survey: with the support of this Society, Steer excavated the settlement at West Plean, Stirling (Steer 1958; NS88NW 5), while all of the Commission's archaeologists took part in the rescue excavations undertaken in advance of the construction of the Inter Services

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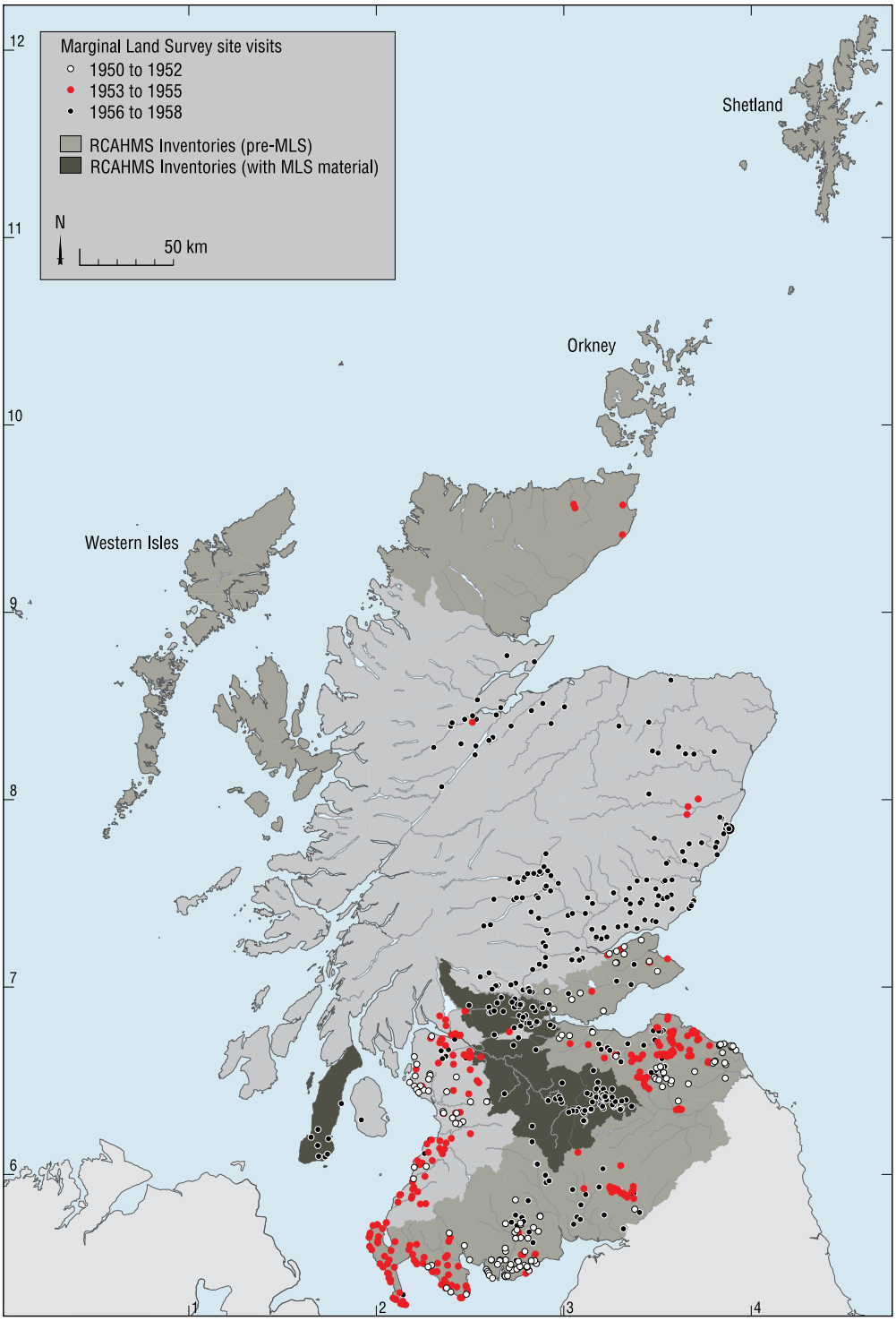
ILLUS 1 Dr Kenneth Steer, archaeologist and Secretary of the Royal Commission (1937–78), in 1964. SC1058563 © Crown Copyright RCAHMS

Guided Missile Range in the Western Isles in 1956 (MacLaren 1974; NF74SE 5; NF74SE 6; NF74SE 10). The small size of the Scottish archaeological profession at this time meant that the work of the Commissioners and their staff made up a significant proportion of the nation's total fieldwork. To take but one year of these *Proceedings*, Volume 83 (1948–9) has nine articles that describe excavations and surveys undertaken by Commissioners, the Secretary and staff; many, but not all, under the auspices of the Royal Commission's programme.

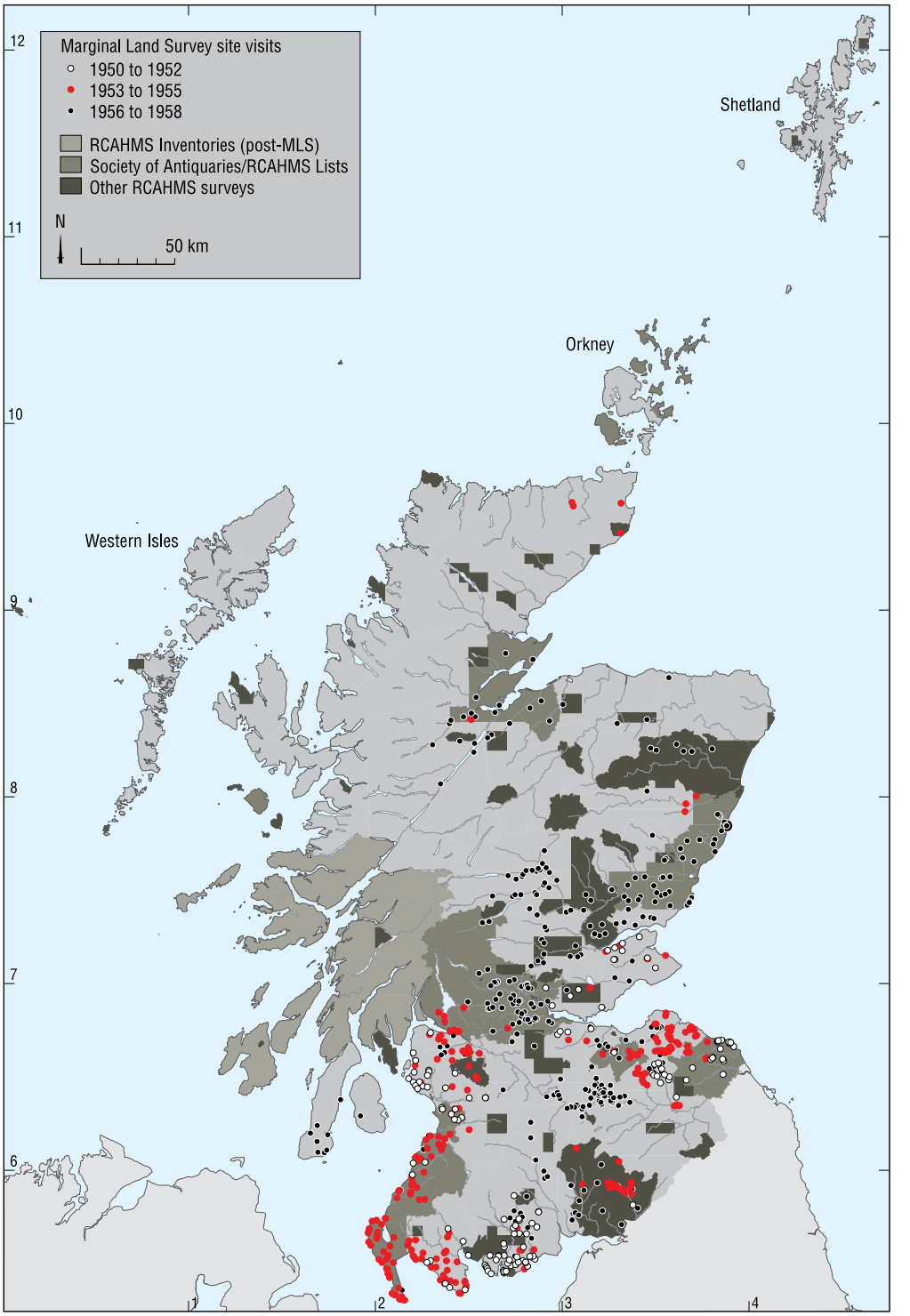
The purpose of this paper is to bring one large but largely unpublished rescue project into focus, and to explore, not only how it fits in with other elements of the Commission's work (illus 2 and 3), but how it contributes to the overall national record. Starting with a description of the Commission in 1950, which is crucial to an understanding of their work, the paper goes on to describe the Marginal Land Survey (MLS) in some detail, looking at the progress, the results, and the setbacks, which include recognisable challenges such as foot and mouth and terrible weather, not to mention a surprising degree of partnership working and voluntary contribution. While the analysis of aerial photographs was certainly innovative, the opportunity is also taken to look at the measured drawings produced during the survey (190 in total) and to briefly discuss some of the evolution of interpretation and depiction in archaeological plans at RCAHMS. A section on the dissemination of the results considers the unpublished material, academic and popular publications, as well as liaison with other government agencies; while the final part provides both a discussion and a critique of the project, the results of which still form an important part of the historic environment record. As mentioned, archaeology in Scotland was a very small world, and the business archive of the Royal Commission provides a unique and essentially untapped opportunity to study interconnections, reflected both in fieldwork and in interpretations. Projects like this formed the springboard from which meta-analyses were generated, and this too is explored to some extent, although there is not the scope here to write the fuller accounts that are needed.

THE ROYAL COMMISSION IN 1950

For much of its history, the Royal Commission was essentially a group of chosen experts reporting directly to the monarch with respect to its remit to 'provide an *Inventory* of monuments' pre-dating 1707 – thus the 16th report was addressed 'to the Queen's most excellent majesty' (RCAHMS 1963: xxi). In order to gather the requisite information for these reports, the Commission employed a Secretary,



ILLUS 2 A generalised map of RCAHMS fieldwork up to 1958. GV005411 © Crown Copyright RCAHMS



ILLUS 3 A generalised map of RCAHMS fieldwork after 1958. GV005412 © Crown Copyright RCAHMS

backed up by an executive staff. By 1949, the staff was back to its full pre-war complement of five and significant inroads were being made to catch up on the inevitable delays caused by the war (Dunbar 1992).

The chairman of the Commission at this time was Francis David Charteris, Earl of Wemyss and March, an experienced colonial administrator. Alexander Ormiston Curle was joined as a Commissioner by fellow archaeologists Stuart Piggott and Ian Richmond; architect Reginald Fairlie, who designed the National Library of Scotland; former Secretary William Mackay Mackenzie, historian, archaeologist and writer; William Douglas Simpson, architect and archaeologist; and Vivian Hunter Galbraith, historian. Particular Commissioners were key to the programme of archaeological survey. Curle, described by an obituarist as a 'pillar of the establishment' (Ritchie 2002) had undertaken the first fieldwork for the Commission from 1908 to 1913, before accepting the post as Director of the National Museum of Antiquities of Scotland. Professor Stuart Piggott was of course fundamental to the development of British archaeology, taking over from Vere Gordon Childe in 1947, both as Abercromby Chair at the University of Edinburgh, and as a Commissioner until 1976. Piggott's 1947 review of *Orkney and Shetland* gives us a valuable insight into his view of the Commission's work immediately before his appointment. While celebrating the 'clear diagrammatic' plans, he noted that the 'general intelligent public' was not well-served by the lack of synthesis. He went to on to say that: 'while their objective field-work and recording are beyond praise, the Commissioners, unfortunately, contrive to give the impression that the prehistoric antiquities of Orkney and Shetland have not been dealt with by prehistorians' (1947: 93). As one can imagine, his role was thus crucial in improving the syntheses in successive volumes. Indeed, he wrote substantial parts of the introductory text to the Roxburgh Inventory himself and helped improve the illustrations (Mercer 1998: 431). Perhaps as important, he and his wife undertook a major programme of excavations with the assistance of Commission staff (Piggott 1950; 1951; 1952), and these were promptly published in contrast to the work of some contemporaries (Piggott 1947: 93). Professor Richmond too, who is particularly well known in Scotland for his excavations at the Roman fort of Newstead (Richmond 1952), was a key member of the archaeological establishment. Although based with Hawkes and Galbraith at the University of Oxford, where he was Professor of the Archaeology of the Roman Empire, Richmond was a Commissioner from 1944 until his sudden death in 1965.

Piggott, Richmond and Childe, who was himself an active member of the Commission from 1942 to 1947, were all involved in the preparation of a document entitled 'A Survey and Policy of Field Research in the Archaeology of Great Britain', which was published by the Council for British Archaeology in 1948. The document was principally aimed at those 'pursuing archaeology in their spare time' (Hawkes & Piggott 1948: 11) and, in the main, provided a survey of current thinking and a call for the development of more refined chronologies. With reference to Wales, regional field-surveys were recommended, but the work of all three Commissions received scant attention and although the Commission's staff were clearly aware of it, the policy did not affect the approach to regional field survey – their policy and strategy coming mainly from within the organisations themselves. Having said that, it is important to recognise that both the 1948 policy and the Commission's work were driven by the thinking of certain individuals and were set within a culture-historical and diffusionist model, one that strove to identify a chronological and regional pattern of type-sites, and support it through excavation.

The Secretary of the Commission from 1935 until 1957 was Angus Graham, a

forester and author of fiction as well as an archaeologist, whose main strengths in relation to the Commission were described by his obituarist as both editing and 'his readiness to entertain new ideas' (Dunbar 1981: 2). Dunbar went further, explaining that 'the employment of air-photographs, the introduction of official four-wheel drive cars, and the creation of a photographic department' increased both the efficiency and the authority of the Commission's work. It is of particular note in relation to this paper that Graham successfully argued for an increase of more than double in the budget during the period described here, between 1950 and 1960 (105/5[1]). After demobilisation, the Commission had three 'Senior Investigating Officers', all staff that served for over 40 years: architects Pat Watson and Charles Calder, and archaeologist Kenneth Steer. Helen Mclaren also deserves a mention as a long-serving, and presumably long-suffering, secretary. To this team was added Richard (Dick) Feachem, as a junior archaeologist, in 1947 (illus 4).

Graham, writing in 1950, detailed the respective roles of the staff:

> To the Secretary, administration, editorial work and the putting of volumes through the press; to Mr Watson, charge and main conduct of the architectural part of the programme, including the historical research connected therewith; to Mr Calder, assistance with architectural work, plane-table planning, photography, drafting of plans and preparation of illustrations for volumes; to Dr Steer, charge and main conduct of the prehistoric and Roman surveys, with the research necessary thereto; to Mr Feachem, assistance with the foregoing; and to Miss Mclaren office-management, accounts, correspondence, and the typing of matter for publication (Graham 1950: 2).

By late 1949, the proposed programme of winter work included the finalisation of editorial work for the Edinburgh Inventory, the preparation of articles and introductory material for the Roxburgh Inventory and a specific request for staff to co-direct the excavation at Bonchester Hill (Piggott 1952; RCAHMS 1956). Intentions were that the survey of Selkirkshire would continue the following summer, as would Peeblesshire, much of the architectural work in these counties being already complete. 'As funds and petrol permit' opportunities were to be taken to visit important monuments under threat or to make 'exceptional enquiries', and a general review of forts was to be continued (102/3 i).

ILLUS 4 Richard Feachem, archaeologist at the Royal Commission (1947–65), and his wife Meghan in 1956. SC1360453 © Crown Copyright RCAHMS

THE SURVEY OF MARGINAL LANDS

In the introduction to the Edinburgh Inventory, the Commission explained the nature of their

work during the war years, the subject of a forthcoming publication by this writer:

> The war brought special risks to ancient monuments in all parts of Scotland, not only through enemy action but through the field training of troops, and we endeavoured to forestall such damage by preparing emergency records. Under this programme, some 2,300 photographs were taken of buildings situated in counties not yet covered by Inventories, and 636 monuments were visited and recorded in military training areas. We have to thank Professor Childe, who was then a member of the Commission, for having done the bulk of this latter work himself (RCAHMS 1951: xxvii).

It was in this context, and in the light of his own work with the Monuments, Fine Arts and Archives section in wartime Germany, that Kenneth Steer prepared a memorandum proposing an emergency survey of monuments threatened with destruction, and this was taken forward by the Secretary to a meeting of the Commission in November 1949 (Appendix 1). Steer emphasised the good preservation of monuments in marginal land and explained the great value of stereoscopic aerial photographs, which had helped the Commission's Roxburgh Inventory 'far outrun its predecessors' allowing it to be 'much more nearly complete than any other as yet produced' (RCAHMS 1956: xxvi). Steer's experience visiting Stobs training camp at Hawick had demonstrated that aerial photographs could assist the Ministry of Works with development control by allowing additional features to be identified. He argued that sudden changes in policy might result in the destruction and damage of numerous monuments without an adequate response. Finally, he suggested that although elements of this survey could be carried out by either the Inspectorate of Ancient Monuments or the OS, it was only the Commission's staff that were in a position to work holistically, undertaking photographic interpretation, ground-checking and field-survey.

Conservative government policy at the time fundamentally aimed to improve the country's ability to be self-sustaining in foodstuffs, timber, and energy. Steer's memorandum was written during this period of expansion in agriculture, and in particular during at a time when the Marginal Agricultural Production (MAP) Scheme, instituted in Scotland from 1942, was helping farmers to bring in new land. In the House of Commons, marginal land was debated regularly in the late 1940s and 1950s, as a number of Agricultural Bills were introduced, providing incentives to small- and medium-sized farms to take in additional ground. While MAP provided additional help for producers in marginal areas, 'exposing the potentialities', the 1947 Agriculture Act established a system of guaranteed prices for key commodities, an annual review, and a series of new or strengthened research institutes (Symon 1959: 256; Bryden 1995). The incentive toward self-sufficiency also brought significant changes in Britain's forestry policy, leading to growth in the acreage of forestry by over 1000% during the period 1949–59 (Anderson 1967: 434, 506–11). Other industries mentioned by Steer included hydro-electric power which, during the 1950s, was expanding to take in very large areas of Highland Scotland in particular.

In April 1950, *The Times*, *The Scotsman* and *The Glasgow Herald* published letters from the Commission's Chairman explaining the importance of the project, and the rationale was also set out in detail in the introduction of the next report, published six years later:

> Earthworks and forts, apart from those situated on unprofitable hill-tops, are subject to constant attrition through ploughing, drainage and other forms of rural exploitation, and this process must be expected to extend as more land is made available for production of food or timber. Believing that rigorous measures should be taken at once to record and, where appropriate, to investigate monuments which must necessarily be destroyed during the next few years, we postponed, at the end of 1950, our normal

> programme of County Inventories in favour of an emergency survey of marginal lands in all parts of Scotland where an early expansion of agriculture or forestry might be expected. The requisite complement to this survey is a campaign of test excavations, but for this we have at present neither the funds nor the personnel (RCAHMS 1956: xxvi).

The aerial photographs referred to by Steer and used during the MLS included a collection flown by the Royal Air Force in 1930 at the request of the Commission's Secretary, J G Callander (eg RCAHMS 1933: Fig. 10; Collection Item F70), along with images from the Cambridge University collection built up by Dr J K St Joseph, who was in regular contact with RCAHMS during the 1950s (eg Feachem 1958b). St Joseph benefited from the secondment of RCAHMS archaeologist Alastair MacLaren to assist him in ground-checking in Scotland during that decade. The principal resource, however, was the RAF National Air Survey flown between 1944 and 1950 which was designed to produce national stereoscopic cover at a scale of 1:10,000 (illus 5). This became a crucial resource for prospective archaeological survey as soon as it was available, and Steer in particular was familiar with the material, having used it during the war while with an Air Photograph Interpretation Unit; indeed, soon after the war he published a paper advocating its use for the discovery of archaeological earthworks (Steer 1947; Dunbar & Maxwell 2007).

While the study of aerial photographs and ground-checking was well underway in Scotland by 1955, the English Commission, 'at the request of the Ancient Monuments Board of the Ministry

Illus 5 Examining 1940s air-photos through a more modern stereoscopic viewer. © Author

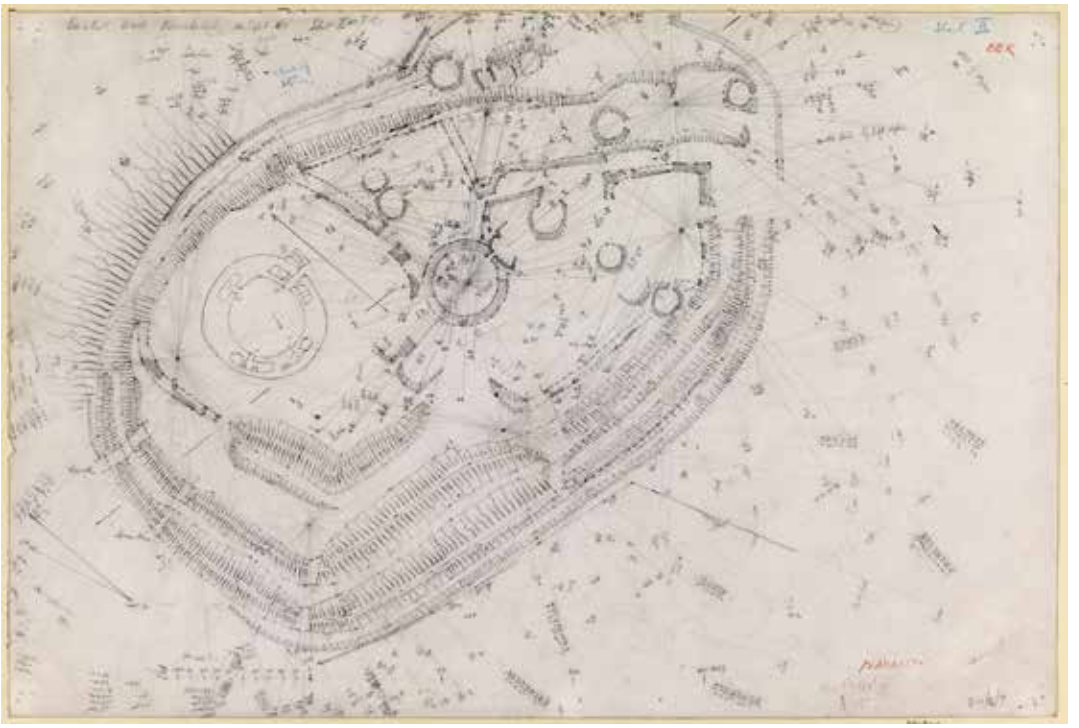
of Works and various other learned bodies … undertook to make emergency surveys of monuments of the prehistoric and early historic period threatened with destruction by recent developments in the techniques of agriculture, forestry, mining etc' (RCHME 1963: 1; Sargent 2001: 68). The staff of the English Commission visited in the order of 1,000 sites over the next two years, in response to notification from the Monuments Inspectorate of developments in mining, quarrying and gravel working. Their methodology differed in that they occasionally omitted ground-checking, but this is simply due to the larger area that they covered. However, the inclusion of six-digit grid references in the limited list was a welcome innovation.

PROGRAMME AND PROGRESS

We are fortunate in having the six-monthly reports of the Secretary on both the progress of the staff and the intended programme. This helps flesh out the detail of the workflow, while also providing the context for the survey which was undertaken between 1950 and 1958 (illus 2 and 3). The work began in earnest during the early months of 1950, when Steer identified 50 targets for ground-checking in Berwickshire, all missed by both the OS and RCAHMS more than 35 years before (RCAHMS 1909; 1915; 102/A i). Feachem too, while searching the aerial photographs for evidence of a Roman road, discovered the Roman fort at Broomholm, Dumfriesshire (NY38SE 7), which was subsequently planned in August 1950 (Feachem 1950; 1951). A group of 15 sites in Berwickshire were ground-checked that same month, while pottery was recovered at Marygoldhill Plantation (NT86SW 3) and 'ancient tracks' noted on the OS map were reinterpreted as the remains of a prehistoric field system – now classified as a pit alignment (NT86SW 72). The condition of many sites Steer encountered served to emphasise the rescue component of the project; the fort at Dalkslaw (NT86NW 4), planned by J H Craw for the Berwickshire *Inventory* (RCAHMS 1915: No 92), was found in 1950 to be 'completely ploughed out', while another at Marygoldhill (NT86SW 4) was obscured by tree-felling operations. Others, such as Battleknowes (NT85SE 5), were partly ploughed out. In certain instances, Steer reinterpreted the visible features, arguing that the remains of a palisade slot at Dabshead Hill (NT55SW 14) and a similar feature a Prestoncleugh (NT75NE 7) had been misinterpreted by Craw (1921: 234), and that the huts at Haerfaulds (NT55SE 14) were certainly later than the defences, a point that had been left unclear in the original Inventory description (RCAHMS 1915: No 218). One major survey was undertaken in September 1950, that of the broch, fort and settlement at Edin's Hall (NT76SE 6) (illus 6). Originally proposed in October 1948, it was re-surveyed to provide a comparison with Torwoodlee, Selkirkshire, and was intended as an appendix to that volume (102/3 i; 102/4 ii; Piggott 1953). Although not strictly part of the MLS, the Edin's Hall survey, discussed further below (p 378), is a good example from the period.

By April 1951, the aerial coverage had been examined for Fife, Peeblesshire, Dumfriesshire, Kirkcudbrightshire and Wigtownshire, and fieldwork had begun in the first two counties. During the winter, Steer completed the study of the Berwickshire photos, and, on Stuart Piggott's recommendation, R J C Atkinson of the University of Edinburgh was engaged to assist with the survey of the Lothians. Atkinson also surveyed and published a description of the henge at Balfarg, which had been discovered during the MLS in 1950 (Atkinson 1952; Mercer 1982: 64). This form of direct collaboration between the Royal Commission and the University of Edinburgh was not unusual at this period.

It was agreed in early 1951 that Feachem's study of the photographs of Peeblesshire would represent a 'material instalment' of the regular Peeblesshire survey, hence the discovery of new sites and monuments on aerial photographs was



ILLUS 6 The plane-table survey of Edin's Hall, undertaken in 1950. DP148104 © Crown Copyright RCAHMS

considered part of the MLS (RCAHMS 1963: xvi–xvii), but the descriptions and surveys were published in the main report (RCAHMS 1967; illus 2). Steer's fieldwork in Fife included both new and previously known sites and he occasionally made specific comment on scheduling, as considerations of what we might call significance and protection were at the forefront of his mind eg the earthwork at Cash Mill (NO21SW 14). In May, fieldwork was extended into Dumfries and, later in the year, to the counties of Wigtown and Lanark. Feachem's work in the latter county survives only in his notebooks and some plans, as the prehistoric monuments were all revisited after 1969, and the majority were resurveyed. His proposal that the Commission produce an Inventory on the prehistoric and Roman monuments of Lanarkshire was accepted by the Commission in November 1963 (102 ii), and it was surely derived in part from his experience during 1951. By November, the progress report recorded that a new broch, two new henge monuments and numerous native forts and settlements had been discovered, also noting a visit to the military camp at Stobo (NT40NE 56), which had been mentioned in Steer's original memorandum. In July, staff attended the conference in Dublin of the Prehistoric Society. During the winter, work continued on the examination of aerial photographs and on the preparation of site descriptions.

The fieldwork in the summer of 1952 was hindered by an outbreak of foot and mouth disease and poor weather, but the Secretary felt able to say that the counties of Berwick and Fife were finished (102/4). Further evidence for the threat to monuments was found at Park Wood, Ayrshire (NS42NE 1), where an enclosure was being cleared of trees in advance

of cultivation (TS: 70[1]). The Commission's officers undertook a small rescue excavation, establishing that the site was domestic rather than defensive. This sense of exigency helps explain the short notes added to sites such as Carwinning Hill (NS25SE 6), which was later subject to a rescue excavation (Cowie 1977; 1978), as well as The Knock (NS26SW 2), an impressive vitrified fort in Ayrshire, where Steer wrote simply that 'a plan should eventually be made, but there is no urgency' (TS: 38). The new discovery of an Antonine fortlet at Lurg Moor (NS27SE 2) was confirmed in November 1952.

During the winter of 1952–3 the study of the aerial coverage was completed south of the Forth–Clyde isthmus, and both Stirlingshire and Fife had also been included. A proposal to employ two students to assist Steer and Feachem 'to permit them to operate as two separate parties' was accepted by the Commission, though it is clear that Feachem teamed up with his wife, and that her expenses were paid by the Commission. Calder, not perhaps involved in the fieldwork by this stage, had also begun the inking of the survey drawings and about 40 had been completed.

During the following summer, numerous monuments in Ayrshire were recorded, with targets taken from aerial photographs, OS maps and a wide range of other publications. Smith's *Prehistoric Man in Ayrshire* provided Steer with a list of forts to check, and he discounted nine (TS: 18). Fieldwork included the survey of a possible henge at Lindston (NS31NE 6), a supposed 'Roman camp' at Gormyre Hill (NS97SE 5) and the survey of the small fort at Craigie Hill (NS43SW 4), which was then being quarried away and is now completely destroyed. A mistake was made at Stevenston Loch (NS24SE 2) where the remains identified as an earthwork (TS: 55) were described in 1965 as a plantation enclosure. At Crammag Head (NX03SE 1), Steer noted that a 'lighthouse and its appurtenances have been built … in spite of the fact that the fort was included in the list of monuments deemed most worthy of preservation' (TS: 20).

By the end of 1953, it was possible to fully assess the project's impact and Steer prepared a detailed report for the Commission's November meeting (103/6). Original estimates of time were now considered 'totally inadequate', and it was felt that two to three years would be needed to complete the programme as originally envisaged, and that 'if the scheme is to be carried to its logical conclusion', a further three to four years must be allowed for 'investigation of the east coast plain from Fife to the Moray Firth' (102/4 i). Steer explained that progress had been affected by the fact that the comprehensive survey of Stirlingshire, ie a survey that combined the ground-truthing of sites identified from aerial photographs with the remainder, had not been foreseen, and that the team had used the same comprehensive approach in Peebleshire. Furthermore, they had chosen to review a high number of 'known' sites, either 'because the sites in question were rapidly deteriorating or were threatened with mutilation or destruction; or because existing plans were inaccurate or misleading; or, in a few instances, because the remains were of special interest and had not been surveyed in the past'. He went on to say that 'by a relatively small additional expenditure of time and effort it has been possible in this way to complete or bring up to date the existing corpus of plans of major earthworks in Ayr, Berwick, Fife and Kirkcudbright, and it is recommended that this policy should be continued in Renfrew'. Finally, bad weather and a lack of suitable student assistants were also cited as problems. Major discoveries listed included at least one henge, two brochs, three Roman forts, five palisaded settlements, several homestead moats and some mottes. An appendix to the report, by Atkinson, noted that he was unable to complete the survey of the Lothians due to other commitments (103/6). Steer recommended that any decision on policy with regard to the coastal belt north of Fife should be delayed until 1955. Altogether, the work completed by

1953 included the discovery of 248 new sites, of which 175 had been visited and 57 planned. In addition, 44 previously known sites had also been planned.

During the summer of 1954, Renfrewshire and the Lothians were nearing completion, though the tying up of loose ends extended into 1956, while survey continued in Lanarkshire, despite 'exceptionally bad weather'. Such weather caused even more problems than it would today, since the drawings were prepared on paper that could not withstand a serious wetting. Despite such drawbacks, major sites in the county of Kinross were completely re-described in 1954. Thus, at Benarty Hill (NT19NW 7), it was recognised that much more of the fort survived, while at Dummiefarlane (NT09NE 1), a record was written as a 'substitute' for that in the Inventory. The first foray was made into Inverness-shire, where a motte at Tomnacross was recorded (NH54SW 7).

A fort at Walls Hill, Renfrewshire (NS45NW 1), was also discovered in 1954, and this was investigated with a trench by Frank Newall in the following years (Newall 1960). Newall was a regular correspondent with the Commission through the 1950s, and a large numbers of letters between him and the archaeologists survive in MacLaren's uncatalogued archive material.[2] Another fort, at Barr Hill, Kilbarchan (NS46SW 2), was found to be completely quarried away. Other structures in Renfrewshire that were depicted on the 1st edition of the OS 6-inch map were investigated but rejected – eg Castlehead and Dykebar Hill – although in both cases later excavations revealed some confirmatory evidence (Talbot 1973; Lonie & Newall 1968). Work in the Lothians included the discovery of a new fort at Dechmont Law, West Lothian (NT06NW 6), and a re-analysis of the settlements at Watherston, Midlothian (NT44NW 8), and Park Burn, East Lothian (NT56NE 6). Despite the fact that it was felt that the vertical aerial photographs did not register crop marks with regularity, six of significance were discovered just in Midlothian (TS: 17). In an important reanalysis, the subtle remains of an earlier denuded fort were recovered from within Kidlaw, East Lothian (NT56SW 1) (illus 7), although it was the relationship with the later 'homesteads' that was emphasised. Steer saw these as 'of a familiar type, seen throughout SE Scotland and Northumbria between the 2nd and 7th centuries AD'. It followed then that 'not only the second fort at Kidlaw, but also the other circular, multivallate forts of this class, which are so widely distributed throughout Berwickshire and the Lothians, but which do not appear in the adjacent counties of Roxburgh and Selkirk, are to be assigned to the Early Iron Age' (TS: 28).

After another winter of research, writing up and aerial photograph interpretation, the survey of the fort at Duncarnock, Renfrewshire (NS55SW 3), was undertaken by Feachem in March 1955. This was followed by the investigation of Traprain Law, East Lothian (NT57SE 1), an ambitious survey involving four staff and a volunteer (see below; Feachem 1958a). Work continued in West Lothian, and in Wigtown, the latter including Ardwell Broch (NX04SE 1), where the staff undertook some clearance to expose the wall faces, and the Fell of Barhulion (NX34SE 15), where a chevauz de frise was discovered and planned (illus 8). Wigtown proved to be one of the main foci of the MLS; at Core Hill (NX13NW 6), the condition of the fort had seriously deteriorated, but further success came with the discovery of a third fort at Burrow Head (NX43SE 3) and others at Portobello Head (NW96NE 9) and Dove Cave (NX04NE 13). The earthworks at the Mull of Galloway (NX13SW 17) were surveyed, with Steer concluding that 'I very much doubt whether either of these so-called entrenchments is defensive or of any great antiquity', inconclusive comments that have not been completely resolved by more recent surveys (RCAHMS 1985; Strachan 2000). Fieldwork was also undertaken in Caithness and Dumfriesshire, and one of the most significant discoveries came during the re-survey of the palisaded settlement at Morton Mains Hill (NS80SE 7; TS: 23), which

identified the remains of two palisade trenches and an unfinished rampart, noting the 'striking similarities' with Hayhope Knowe – a crucial site in Roxburghshire that had been surveyed by the Commission in 1946, and excavated in 1947 and 1949 (NT81NE 18; Piggott 1951; RCAHMS 1956). In fact, Margaret Piggott's publication on Hayhope included an appendix by Kenneth Steer on the identification of palisaded enclosures from surface indications, intended to 'help fieldworkers elsewhere to recognise similar structures before they are destroyed by ploughing or afforestation' (Piggott 1951: 64).

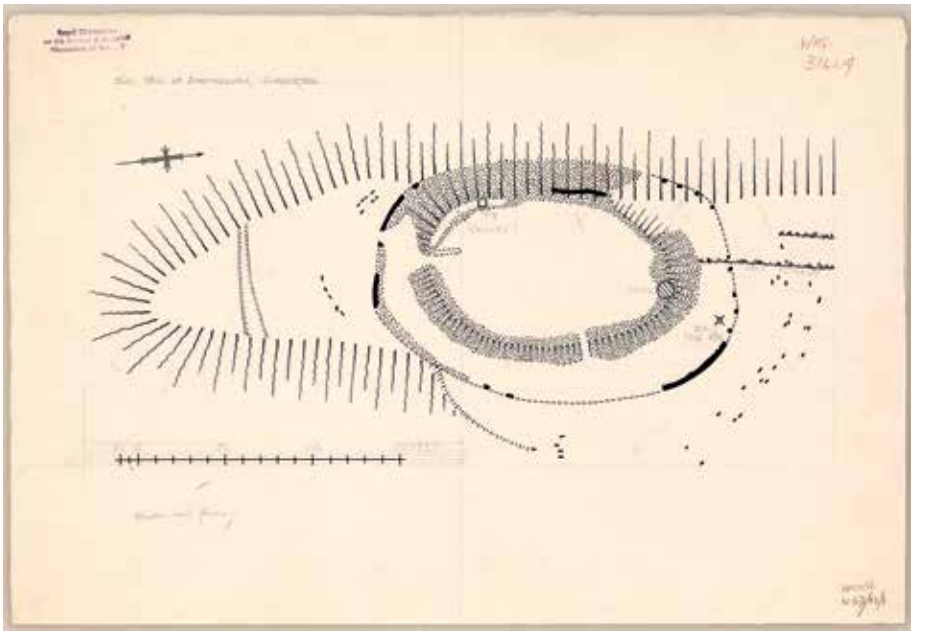
In 1956, Feachem moved farther north, preparing detailed descriptions of the sites at Little Conval (NJ23NE 1) and Durn Hill (NJ56SE 4), Banffshire, and others in Aberdeenshire and Inverness-shire. Durn Hill was described as unfinished because of the presence of both a large number of gaps in what he perceived to be marker trenches as well as sections of unfinished ditch. Some years later, he produced an analysis of unfinished hill-forts in Britain, including Durn Hill (Feachem 1971). Although the staff were regularly identifying both palisaded settlements and unfinished hill-forts during the 1950s, it is not always certain that they made the correct call. More recently, staff have reinterpreted Feachem's marker trenches as the evidence of a palisade not only at Durn Hill and Little Conval, but also at Hill of Christ's Kirk, Aberdeenshire (NJ62NW 21).

ILLUS 7 An oblique aerial view of Kidlaw – the earlier defence can be seen crossing the interior. DP049756 © Crown Copyright RCAHMS

While examples of unfinished defences certainly exist, they may not occur in the numbers originally proposed, and they certainly cannot be readily ascribed to abandonment resulting from the Roman incursion (RCAHMS 1997: 140; RCAHMS 2007: 103).

Still in 1956, further work was undertaken in Midlothian and Kincardine, and the first fieldwork begun in Perthshire. At Barry Hill (NO25SE 23) it is surprising to see that the description (TS: 45) simply notes additions that should be made to Christison's plan (1900: Fig. 46). This had been prepared some 60 years earlier and additions are a tacit recognition of both the efficacy of Christison's work, and of the large resource necessary to re-survey the site, eventually undertaken over three days in 1988 (RCAHMS 1990: 27). The year of 1956 also witnessed a major phase of excavation in the Hebrides, in advance of the construction of the Guided Missile Range. As part of a large programme orchestrated by Roy Ritchie of the Ministry of Works, Steer, Feachem and MacLaren all excavated in South Uist that summer.

MacLaren had volunteered for the Commission from at least 1953 (Steer 1953: 15) and he had also supervised rescue excavation for the Ministry of Works in advance of the Dounreay Atomic Station in 1955 (Cruden 1955: 34). In 1956 he was employed as a junior archaeologist and in both 1956 and 1957 he was seconded to work with St Joseph in order to ground-truth his aerial discoveries – work that was closely aligned with the MLS (102/1). Following Steer's promotion to Secretary in 1958, it was mainly Feachem who undertook fieldwork that year, continuing to record a few sites in Ross and Cromarty – including a very detailed description of Cnoc an Duin (NH67NE 1), one of a few convincing examples of an unfinished fort. The 1958 survey in Perthshire,



Illus 8 The unpublished drawing of the Fell of Barhulion, based on the survey undertaken in 1955. DP151592 © Crown Copyright RCAHMS

following on from Steer's reconnaissance in 1957, included the recording of two duns at Aldclune (NN86SE 1) in May 1958, both of which were later excavated in advance of quarrying (Hingley et al 1997). Correspondence between Feachem and Margaret Stewart survives in MacLaren's archive, suggesting that they collaborated in advance of her publication of a study of Perthshire ring forts (Stewart 1969).[2]

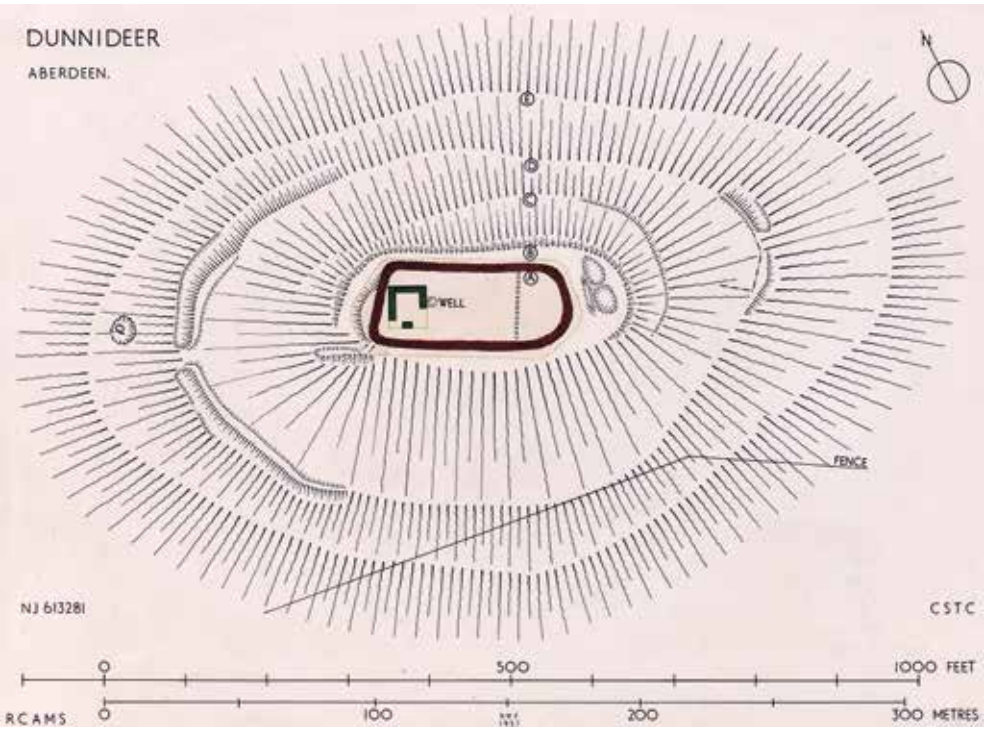
Between October 1957 and April 1958, the progress report notes how 'Mr Feachem discovered a Roman fort at Dupplin, Perthshire [NO01NW 4], and, together with Mr MacLaren, has planned a number of the monuments of that county which were discovered on air-photographs in the course of the Commission's survey of marginal land. Substantial progress has been made in typing the articles dealing with marginal land discoveries, but it has not yet been possible to draw out any of the numerous plans made during the course of the survey' (102 i).

The site at Dupplin was apparently 'sectioned by R W Feachem in 1957, though significant doubt has been cast over its true character in recent years' (Wooliscroft et al 2002).

References to the MLS in programme and progress reports come to an end in 1958 and only one later visit in 1959, to the fort at Kippenross (NS79NE 17), must be ascribed to the project. During the following winter of 1959 to 1960, Calder continued to work on the inking of plans, but the completion of this task was cut short by his retirement in April of 1960, by which time he had prepared 82. Fieldwork in 1959 and 1960 continued to include elements of survey in areas outwith the Inventory programme, but this was no longer driven by the study of aerial photographs. Fieldwork in Perthshire in 1960 was thus regarded as 'miscellaneous activities', while the results of other fieldtrips made in response to new discoveries or to threat have since been catalogued with the MLS material.

MEASURED SURVEYS

While Hogg felt able to say that 'a really careful and accurate survey can be almost as informative as an excavation' (Hogg 1975: 24), one could argue that in many cases it can actually exceed the value of small-scale excavation, with the key proviso that surveys cannot recover material for absolute dating. Survey and illustration was therefore a key part of the Commission's approach, both during the MLS, and in their work in general. Between 1914 and 1960, the great majority of the Commission's survey and illustration was undertaken by Charles Calder, an architect by training. Despite his focus on architecture and survey, Calder is best known for his excavations of Neolithic sites in Shetland, which were funded by this society and undertaken in time off granted by the Commission (Calder 1958: 379). For most of his tenure, field drawings were prepared as either measured sketches or plane-table surveys – the methodology and scale being chosen to suit the size and complexity of the monument. His plans can be identified in the Commission's publications between the 1920s (eg 1924: 9) and 1963, not only by the occasional use of his initials but also by his distinctive north arrow and hachure style. During each winter, ink drawings were traced from the originals using a light-box and a dip-pen. In advance of publication, these would be checked by colleagues who were responsible for the text, the Secretary and Commissioners. Commission volumes during the period of study were printed by Her Majesty's Stationery Office. Before 1975, they used the letterpress printing process onto high-quality paper, which produced a rich black in illustrations and photographs, but required the latter to be held separately at the rear of the book. After 1975, the volumes were printed using offset litho, which allowed photos to be intermixed with text but, some would argue, reduced the quality of the overall effect. For a drawing to reach publication in letterpress, it would have to be photographically



ILLUS 9 The publication drawing of Dunnideer, based on the survey undertaken in 1957. DP149857 © Crown Copyright RCAHMS

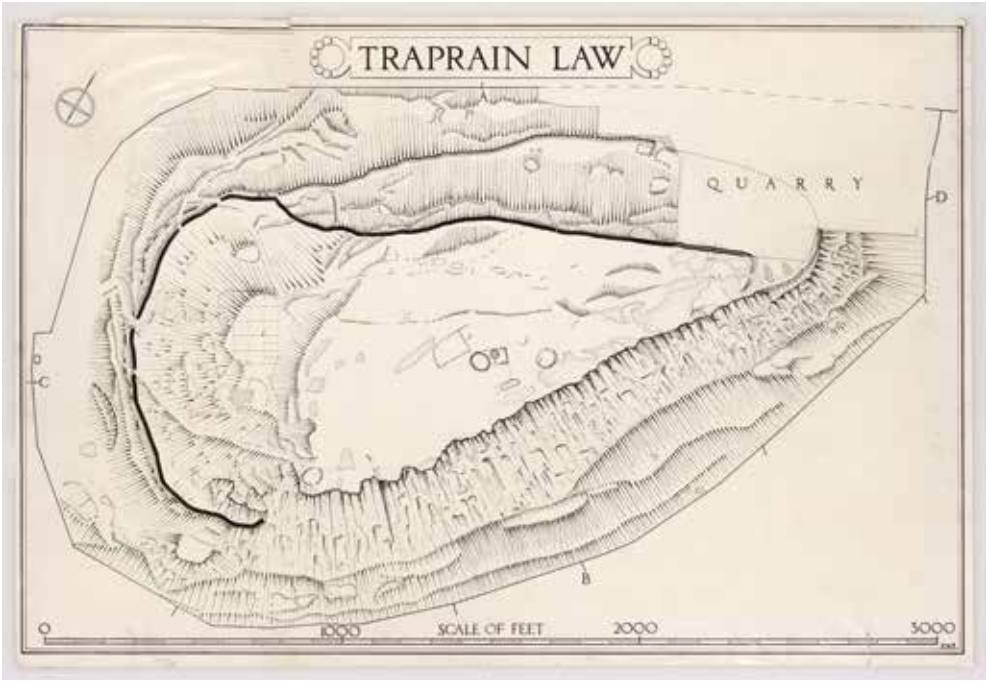
reduced, engraved onto a block and then set into a composition with the text, a very lengthy and skilled process. Neither the survey scale nor the reduction during printing was standardised, so that prior to *Peeblesshire* (1967), the published drawings were produced at a variety of scales. Hence, a single page might contain plans of comparable structures at different scales (eg RCAHMS 1956: 137).

As one might expect, both individual staff such as Calder and the organisation as a whole accumulated knowledge and experience over time, with the result that the staff of 1950 felt that 'many of the descriptions given in earlier Inventories are wide of the mark' (MS 1033/73, 95), a comment that clearly extended to some surveys as well. By this time, a partnership such as that enjoyed by Steer and Calder had about 40 years of shared experience, which must have helped them to interpret complex remains such as those at Edin's Hall broch and settlement. That survey included plans and sections of both the broch and the fort, all of which were prepared as drafts in ink (illus 6). As Dunwell (1999: 308) pointed out, it 'omits several features not considered at the time to be directly related to the occupation of the site', but it also noted others for the first time (Dunwell 1999: 312).

As the marginal land survey was a significant departure from the Inventory programme, with a focus on rapidity as opposed to the creation of an authoritative record, it might be expected that the methodology would have altered, but surveys appear to have been undertaken in essentially the same way. Although it is difficult to decipher the clues, the first MLS surveys were seemingly undertaken by the staff

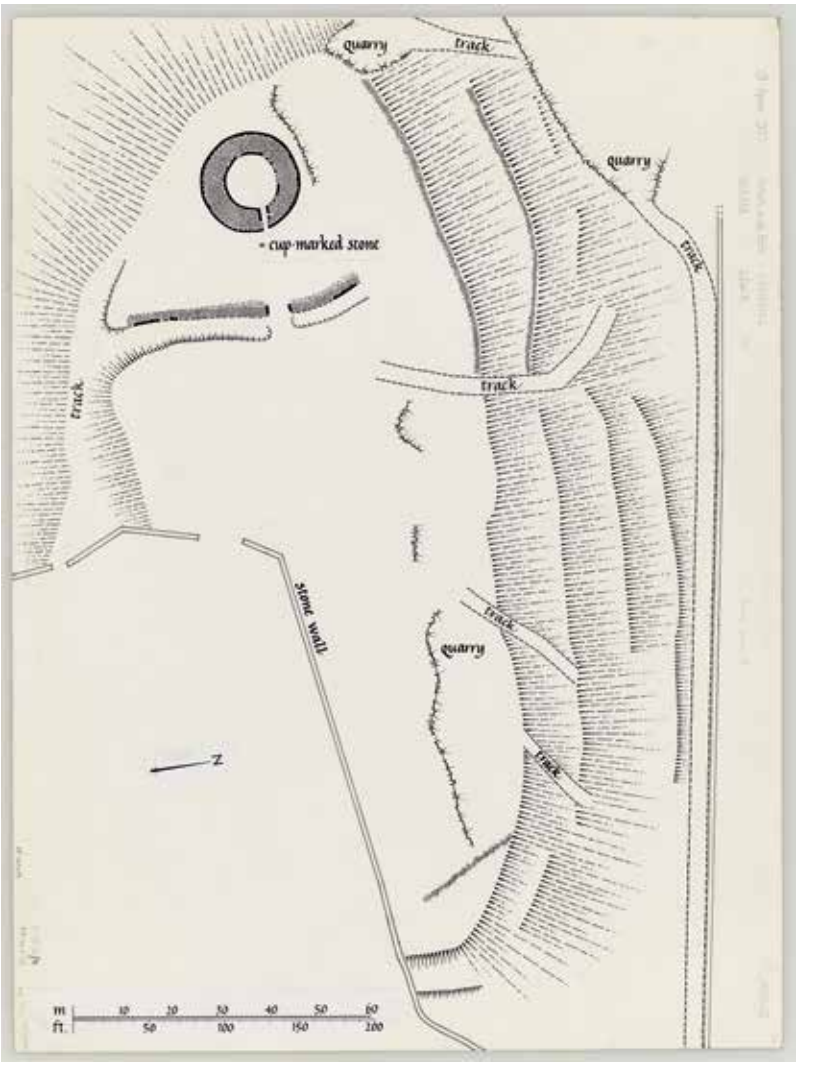
working in pairs, often the two archaeologists taking turns, or one working with Calder while the other undertook reconnaissance. Later, the voluntary contribution of MacLaren, and of Kathleen Meghan Feachem, Richard's wife, must have made a huge difference. Of the many surveys that the Feachem's undertook as part of this project, their 1957 plan of the fort at Dunnideer is a good example. The field drawing was surveyed at 1mm: 1ft, Feachem's usual working scale, and subsequently inked by Calder for publication at only 20% of its original size (1966: 69). The depiction relies on a combination of colour, symbology and annotation to convey information. Thus, the well, fence and quarry are annotated, the vitrified wall and medieval castle are coloured, while man-made slopes are distinguished from those that are interpreted as natural simply by the closer spacing of the hachures (illus 9). A considerably more difficult survey had been undertaken two years earlier, at the fort on Traprain Law, East Lothian. This required all three archaeologists and the help of both Commission architect Geoffrey Hay and Meghan Feachem. Using a network of 120 triangulated control points, 24 divorced surveys were undertaken at 1mm: 1ft (Feachem 1958a). The plan (illus 10) was published in 1958, 1966 and again in 1976 (Feachem 1966: 79; Jobey 1976). Incidentally, Feachem preferred the use of this standard scale, which is equivalent to about 1:300, in part because it is appropriate for many of the sites he encountered, but also because it could be achieved with a simple conversion from imperial tape to metric rule (Ian Scott pers comm).

Many more MLS surveys were inked by Charles Calder during the last of his 46 years with RCAHMS in 1959–60 (102/1), bringing the

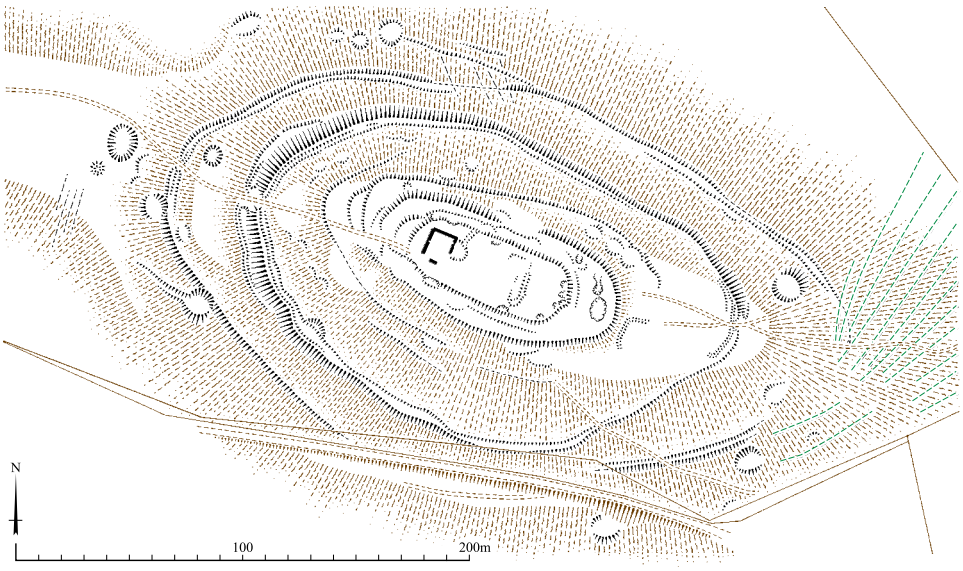


Illus 10 The publication drawing of Traprain Law, based on the survey undertaken in 1955. DP153238 © Crown Copyright RCAHMS

total he prepared to 82. New ink versions of 16 of the surveys were produced by Feachem after Calder retired, presumably with the intention of publication in a proposed but ultimately uncompleted Commission volume of hillforts (102/1), or in his 1963 *Guide to Prehistoric Scotland* (see below). Thus, a small number of sites have multiple versions based on a single original survey, eg Queen's Hill moated site, Kirkcudbright (NX65NE 11). Inked versions of a further 30 surveys were created some 15 years later, in 1974–5, either as part of the training of draughtsman such as John Stevenson, or for publication (eg RCAHMS 1978). For example, the plan of the broch at Craig Hill, Angus (NO43NW 22; illus 11), discovered and partially excavated by Commission staff in 1957 (Steer 1957), was inked in 1974 but understandably



Illus 11 The unpublished drawing of Craig Hill, based on the survey undertaken in 1957. DP147379 © Crown Copyright RCAHMS



ILLUS 12 The publication drawing of Dunnideer, based on the re-survey undertaken in 1996. Extract from GV000239 © Crown Copyright RCAHMS

missed in a recent review of the site (Mackie 2007: 1036). Other sites, particularly those visited or surveyed during forays into Kintyre in 1955 and 1956, were revisited or resurveyed in later years as ideas and expectations of both interpretation and depiction. One example is the fort at Ranachan Hill (NR62NE 12) which was visited by Steer in 1955 and subsequently surveyed in 1956. The final published account actually relies on surveys undertaken in 1965 and 1968 (RCAHMS 1971: 74–5).

The biggest changes to the Commission's survey and illustration came at the end of Calder's career, but perhaps more as a response to some criticism of the publications, particularly in relation to synthesis (as noted above p 367) and photography – reviews of the Edinburgh *Inventory* published in the *Times Literary Supplement* (McLaren 1952) and the journal of the *Royal Institute of British Architects* (in April 1952) single out the latter (103/5). The situation was markedly improved with the employment of a professional photographer, Geoffrey Quick, and two highly skilled illustrators: Ian Scott and architect Geoffrey Hay. Scott, whose focus was on the illustration of archaeological material, dramatically improved the quality of recording of carved stones and archaeological sites by introducing skills learnt, in part, at the Edinburgh College of Art. These innovations included the creation of a more refined symbology, common scales (see RCAHMS 1967: xxxv), and a consistent reduction to 40% for publication – a process that leads to a 'tightening' of the depiction.

Nowadays, our staff have access to both modern and traditional survey equipment and tend to use a combination of sources and techniques to produce the desired results (English Heritage 2002; RCAHMS 2011). Dunnideer is among many sites that have been resurveyed by the Royal Commission during subsequent projects. It was re-planned at the smaller scale of 1:500 as part of the Strathdon project (RCAHMS 2007: Fig. 6.25) and the survey, reproduced here, is a significant improvement both in terms of interpretation and depiction (illus 9 and 12).

DISSEMINATION AND PUBLICATION

Surviving archival material from the MLS comprises the field notebooks of Steer and Feachem, the survey and ink drawings, the unpublished descriptions, and the administrative material. The descriptions are very varied; some are just notes on condition, a fuller description awaiting an Inventory survey, while others, in areas already covered or where an earlier description was incomplete, were treated in great detail in a recognisable Inventory style known in the office as 'Commissionese'. None, however, have gone through the strict process of editing that applies to the Commission's publications; they instead reflect the original notes of individual staff.

The surveys and manuscripts were shared quickly with colleagues in the OS Archaeology Division, and their office recorders often referenced the material in their summary descriptions that are now available on Canmore (eg NX19SE 2). In keeping with the Royal Warrant's instruction that the Commission must 'specify those monuments that seem most worthy of preservation' (eg RCAHMS 1963: xix), their staff were also in regular contact with the Ministry of Works. Though a recommendation for scheduling was supplied through correspondence in unusual cases (eg Caisteal Grugaig in 1949), Commissioners included a list of sites recommended for scheduling in each County Inventory until 1992.

Following a meeting on 4 November 1955, the Commissioners therefore decided to publish a list at the start of the Selkirkshire and Stirlingshire Inventories, noting discoveries in 1951–5 and 1956–8 respectively (RCAHMS 1957: xiv–xviii; 1963: xxv). Altogether, the lists noted 304 new monuments, including 100 recorded from cropmarks, and 93 were recommended for protection through the Schedule. It is a measure of the success of the project that over 50% of those sites listed as worthy of preservation have been scheduled. This cannot have been as a direct consequence, however, since it took up to 20 years in some instances, and the remaining 50% were recommended but never accepted.

More detailed results from the project were published at the time, including a regional report (Feachem 1956), a detailed description of Traprain Law (1958a), and wider analysis of Scottish hill-forts (Feachem 1966; 1971), while elements of the Stirling and Peebles Inventories were derived directly from the analysis of aerial photographs (RCAHMS 1963; 1967). In addition, Wainwright's *The Problem of the Picts* (1955) included a chapter by Feachem on fortifications potentially of Pictish date, which though presented as 'conjectural', put forward notable examples of ring-forts, citadel forts (such as Moncrieffe Hill, Perthshire, NO11NW 23), duns and 'long duns' (such as Denork Craig, Fife, NO41SE 5), many of which were surveyed in 1952–3 as part of the marginal land project. The closing paragraph is interesting in the context of the eventual scope of the survey north of the Forth–Clyde;

> It will be clear from the foregoing that until a wide survey of all monuments which remain between the Moray Firth and the Firth of Forth has been completed, no attempt to prepare a basis for identifying and studying such structures as may represent the fortifications of the Picts can claim to be more than exploratory. When such a survey has been completed, it will be possible to select sites for a programme of excavation, and so at last to bring about the conditions in which some positive knowledge may be obtained (Feachem 1955: 86).

Feachem's popular *Guide to Prehistoric Scotland* was published in 1963. It was inspired by the English equivalent (Thomas 1960), and much of the content was drawn from material gathered for the Commission with the help of Meghan, to whom it was dedicated. Feachem seems not to have discussed the book with his colleagues; and MacLaren recalled his surprise when he produced a new copy at breakfast in Gigha, during fieldwork for the Kintyre

Inventory (Stratford Halliday pers comm). The roots of this secrecy, perhaps borne of frustration, might lie a few years earlier when Feachem's suggestion that the Commission produce a 'special volume, devoted exclusively to Scottish hill-forts … embodying all the work done … in the course of the marginal land survey' was accepted by Commissioners, but never completed (102/1). In 1965 he moved to the OS, and was replaced by Graham Ritchie (102/1 i). The Commission further discussed the possibility of publishing the results of the emergency surveys, 'and it was agreed that a periodic report should be issued along the lines of the monograph *Monuments Threatened and Destroyed* produced by the English Commission in 1963' (102 ii). However, nothing seems to have come of this.

A few years before, in October 1961, Feachem had presented a national analysis of Iron Age sites at the Council for British Archaeology's Conference on *Problems of the Iron Age in Northern Britain* held in Edinburgh. This analysis drew on his experience to present a geographical analysis of monument types that was vitally important to Stuart Piggott's paper in the same volume, which proposed a new scheme for Scotland's Iron Age:

> … in the north we have to place our reliance to a far greater extent on the field monuments of earth and stone, unsupported by collateral ceramic evidence. It follows from this that one of the most significant contributions to our knowledge of the Scottish Iron Age, especially for the Lowlands, has been that of Royal Commission on Ancient Monuments over the past fifteen years. The new approach to field monuments involving air-photography on the one hand, and on the other the structural analysis of complex monuments on the ground, disentangling their chronological components by a process analogous to the investigation of the architectural phases of an ancient building, has revolutionised our knowledge and understanding of that area of Scotland where contacts with the rest of Britain are most likely to exist. And on the basis of this fieldwork, the prosecution of selective excavations on significant sites has taken the matter a further stage' (Piggott 1966: 2–3).

Though clearly referring in practice to Roxburgh, here Piggott highlights both the importance of field survey and the increase in knowledge gained from the use of innovative techniques. This is not the place to review or critique the link between the fieldwork of the Commission and the regional analyses of Piggott, an analysis described in a recent synthesis of the Iron Age as 'remarkably resilient' (Harding 2004: 6), but the passage provides an indication of the importance that Piggott laid on the Commission's fieldwork programme.

DISCUSSION AND CONCLUDING REMARKS

Defined here as a programme of analysis of aerial photographs, followed by ground-checking, the MLS was completed in 1958, by which time well over 670 monuments had been recorded and over 190 plans surveyed. This large body of work, the product of the efforts of archaeologists Steer and Feachem, was comparable in its scale to many of the Inventory programmes of the time and can be considered as significant a contribution to the record of field archaeology in Scotland. The completion of a recent project to catalogue and digitise material from the MLS, driven simply by a wish to raise awareness and to improve access, has provided an opportunity to further our understanding of the Commission's working practices in the 1950s. This understanding is crucial both to help place the work of Scotland's principal archaeological survey in context and to understand and critique the data available to those of us that practice today and use heritage records. Canmore, and the RCAHMS collection underpinning it, are uniquely significant national assets, but these can only be used to

their full potential if it is understood how, why and when the material was created.

In terms of innovation, the use of aerial photography for the identification of earthworks and cropmarks was pioneering and, while they were in regular communication with St Joseph, Steer and the Commission were keen to employ it for their national survey as soon as practicable. The willingness of the Commissioners to delay the Inventory programme in preference to what was essentially a rescue project resulting from Government policy, is a reflection of their status as independent advisors.

While the Inventory programme at its best produced text that was accurate and concise, illustrations that were informative and aesthetically pleasing, and photographs that were clear and beautiful (Rivet 1967), the survey of marginal land was undertaken with a quite different remit. It was informed by a need for brevity and by a clear understanding on Steer's part that the remainder of the country would be covered by the Inventory programme in due course. Some of the material was thus not completed to an Inventory standard and what we have now varies from the briefest of notes to detailed and thorough topographic descriptions of complex monuments.

The project provided an opportunity for the staff to gain wider experience of monuments throughout much of Scotland, a broadening of knowledge that helped them to contextualise the surveys of the individual counties. Furthermore, it laid the foundations for the programmes that followed. Thus, the decision to produce *Lanarkshire* reflects both the fieldwork undertaken for this survey in 1956, as well as a search for unenclosed platform settlements (Feachem 1963b), while the decision to undertake the survey of Argyllshire, made in 1968 after a lengthy discussion which considered both Inverness-shire and Aberdeenshire, was certainly informed by fieldwork in Kintyre in 1956 and further forays in the early 1960s and preceded by the unpublished Emergency Survey of 1942.

It is difficult to be completely clear about the number of sites that were visited and recorded during the project because:

1 an unknown number of sites that were targeted from aerial photographs presumably proved to be natural or modern in origin;
2 the analysis of the aerial photographs of Peeblesshire and Stirling-shire was absorbed in those inventories;
3 the material from Argyllshire and Lanarkshire was absorbed into subsequent projects;
4 of the continuation of special surveys in response to risk or discovery, often catalogued along with the project material.

Having said that, the unpublished typescript volumes contain only 615 descriptions and it seems likely that the total number of sites visited was well above this. Of that total, 304 monuments were reported as new discoveries and while the majority of these were new, some were claimed by St Joseph during the same period, others still had been noted by different authorities, whether in unpublished reports, or in publications that were outwith the scope of the literature review.

The great majority of the sites were visited in later years by the OS Archaeology Division, and the small scale surveys and reference data they created (whether desk-based assessments or field visits) form the backbone of the Scottish historic environment records, including Canmore. Many sites were also revisited during the Society of Antiquaries of Scotland Field Survey (often referred to as the 'Lists'), undertaken in partnership with the Royal Commission (Proudfoot 1983; illus 3), or during large-area projects in later years (eg RCAHMS 1990; 1994; 1997; 2007). Since the OS programme and the Lists were designed to be rapid and succinct, it is only the syntheses and investigation undertaken in more recent

projects that has exceeded the details provided in the 1950s for a significant number of sites (eg RCAHMS 1997; 2007). Indeed, it is testament to the individuals involved that the 1950s record is still, in the great majority of cases, the most detailed and authoritative available. Less than 5% of a sample of 220 sites has been subject to further and more detailed investigations. Where this has taken place, it has inevitably led to a greater understanding of the chronology and development of a site, particularly when it has involved large-scale or long-term excavation, such as Auldhill, Portencross (Caldwell et al 1998), or Aldclune (Hingley et al 1997).

Nevertheless, it is a measure of the success of the project that so many sites survive. While it is undoubtedly true that the Commission included some that were not under threat, for the reasons outlined in Steer's 1953 summary, they also regularly encountered sites that had been recently destroyed or were genuinely under direct threat, such as Traprain Law, and continued to include these in their work. Indeed, Edwina Proudfoot's 1961 photograph of Scott and MacLaren at the Dunion actually captures the smoke from blasting in the quarry as a background (illus 13)! Speedy communication with both the Ordnance Survey and the Ministry of Works does seem to have often provided a catalyst for protection, whether through Scheduling or simply raised awareness, although the links here are not necessarily well documented.

While partnerships were common between the Commission and this Society, the CBA and the University of Edinburgh, not to mention individuals like Newall and Stewart, integrated work programmes with fellow government agencies were not – although the Hebrides Rocket Range project of 1956–7 provides a notable exception. There was regular communication, but the letters and minutes can occasionally seem almost competitive

ILLUS 13 Ian Scott (*left*) and Alastair MacLaren surveying at the Dunion in 1961. SC1098663© Crown Copyright RCAHMS

in nature, as there was apparently a lack of clarity with regard to roles and responsibilities between the OS, the Ministry of Works and the Royal Commission. It is also apparent that the objectives of a small Royal Commission were considered peripheral to the major programmes of agricultural expansion and afforestation.

While the opportunity to use the material to illustrate Feachem's *Guide to Prehistoric Scotland* was perhaps inevitably missed, this failure is far outweighed by the many smaller publications produced by Steer and Feachem, both of whom made a significant contribution to Scottish archaeology (Dunbar & Maxwell 2007; Ritchie 2005). It is also mitigated by the effect that the body of material had on Piggott's national synthesis. Even placed in a modern context, the marginal land survey is a useful, thorough and detailed body of work prepared by increasingly experienced staff to consistent standards. The information, now readily available through web services more than half a century after it was created, continues to support the work of colleagues interested in Scotland's landscapes – whether for the purposes of protection, planning, research, or community engagement. It is vital that we read the texts and drawings carefully, so that we can build upon the work of the past, and recognise both the mistakes and the successes.

APPENDIX 1

STEER'S MEMORANDUM TO COMMISSIONERS, NOVEMBER 1949

1. Owing to the fact that the land has always been predominantly pastoral, the prehistoric and early historic monuments of Scotland are preserved to a greater degree than in almost any other European country. At the present time 11 million acres, out of a total of 21 million acres, are rough pasture (compared with 5 million for England and Wales combined); and enshrined in this rough pasture are thousands of monuments whose remains, though frequently defaced by former cultivation, are still visible on the surface.
2. The Commission's use of stereoscopic air-photographs to quarter the ground in Roxburghshire and Selkirkshire has shown that less than two-thirds of the visible monuments in these counties have been previously recorded on the OS maps or in archaeological literature, and that the hitherto undiscovered sites include many of outstanding importance (eg a completely new class of palisade-structures; the impressive and complex Iron Age fortification on Shaw Craigs; one Roman fort and two marching camps; a Romano-British settlement with its associated field system; and a variety of homesteads of primitive type). It is reasonable to assume that this proportion of unrecorded to recorded monuments holds good for the other Scottish counties including those already surveyed by the Commission. For technical reasons the stereoscopic photos do not normally register crop- or soil-markings but important exceptions have been noted (eg a new Roman fort in Renfrewshire, and half-a-dozen miscellaneous earthworks in Roxburgh and Selkirk).
3. Today the amount of rough grazing land is being progressively reduced by afforestation, hydro-electric and other development schemes, increased Service requirements, and conversion to arable. In terms of acres, the current annual loss through these agencies is insignificant; but influential Agricultural Scientists are pressing for large-scale conversion of marginal land to arable and should the Government accept their views the position will change overnight. It must also be borne in mind that, with the powerful agricultural tools now available, the small and superficial remains which

form the bulk of the unrecorded material will not be merely levelled by cultivation but will be totally eradicated.

4. This threat can be met only by the immediate employment of stereoscopic photographs to identify all unrecorded monuments: (a) in areas scheduled for afforestation, development, or Service use; and (b) in marginal areas throughout Scotland. A topographic description should be made of each monument, accompanied wherever possible by a plan, while those considered worthy of preservation should be scheduled by the Ancient Monuments Inspectorate. It would seem to be axiomatic that responsibility for carrying out (a) should rest with the Inspectorate as the authority appointed to vet development schemes in so far as they are likely to affect ancient monuments. The Inspectorate, however, relies mainly on the archaeological information supplied by the OS maps and does not use stereoscopic photographs. (The consequences of this were noted by the Commission's officers on WD [War Department] land at Stobs, near Hawick, where one native fort, not marked on the map but plainly visible on the photographs, has been mutilated by tanks, while the unrecorded annexe to a known fort has been turned into a mine-field.) The larger problem (b) is being dealt with by the Archaeological Branch of the Ordnance Survey which now employs two officers exclusively on air-photo interpretation. On the other hand to obtain full value from the photographs it is essential that the interpreter should not only have a first-hand acquaintance with the various types of monuments to be found in different regions, but also that he should rigorously ground-check each suspected new discovery. The proportion of these 'suspects' to obvious discoveries, not requiring confirmation on the ground, may be as high as 50%; and it is safe to say that no interpreter, working purely from photographs, would have identified the Roxburgh palisade-structures. The need for planning each discovery has already been referred to. It is obvious that without the assistance the Ordnance Survey interpreters cannot fulfil these requirements as urgently as the situation demands.

5. The Commission's archaeological staff are likely to complete the surveys of prehistoric monuments of Roxburghshire and Selkirkshire in the summer of 1950, while the descriptions should be written up by January 1951. It is for consideration whether this staff, instead of beginning the survey of Peeblesshire, should not then engage on a comprehensive air-photo study of all marginal land and development schemes in Scotland, coupled with field-surveys of newly discovered sites in these areas. On the basis of a pilot survey of 400 square miles in Aberdeenshire it is estimated that the examination of the photos could be completed in six months. The time required for ground-checking and field-surveying cannot be closely estimated until all the photos have been examined, but it is probable that it would amount to three seasons of six months each. A tentative programme may therefore be drawn up as follows:

January – March 1951
Study of photographs

April – September 1951
Field-work

October – December 1951
Complete study of photos

January – March 1952
Write up previous summer's notes

April – September 1952
Field-work

October 1952 – March 1953
Write up previous summer's notes

April – September 1953
Field-work

October 1953 – March 1954
Complete notes

ACKNOWLEDGEMENTS

This contribution has benefited greatly from the comments of Stratford Halliday in particular, but a debt is also due to Graeme Cavers, Candy Hatherley, Lesley Ferguson, Tessa Poller, John Sherriff, Robin Turner, Adam Welfare and an anonymous referee. Ian Scott kindly shone a light on his early experience at RCAHMS from 1958. Ian Parker prepared the modern illustration of Dunnideer, and Georgina Brown the two maps. Derek Smart, Tahra Duncan and Zoe Gibson photographed the original drawings, and Alexander Crawford volunteered to assist with the cataloguing.

ENDNOTES

1 Unpublished material from the RCAHMS archive is referred to either by its manuscript number (eg MS 1033), by the county typescript page, when referring to material from this project (eg TS: 13), or, in the case of material in the business archive, by its unique file number (eg 105/5).
2 The Commission holds a number of boxes of material from the late Alastair MacLaren, the locations of which are detailed below. These include notebooks, letters, manuscript and typescript material from the 1950s.

DOCUMENTARY SOURCES

Royal Commission on the Ancient and Historical Monuments of Scotland Business Papers

RCAHMS 102/1: Commission meetings, minutes and agendas, papers circulated before meetings.

RCAHMS 102/3: Commission meetings, programme of work.

RCAHMS 102/4: Progress Reports presented by the Secretary to the Commissioners.

RCAHMS 103/6: Marginal Lands/Forestry Emergency Clearance/Agricultural Drainage.

RCAHMS 105/5: Commission Estimates 1945 to 1969.

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