This edition of *Sheetlines* was published in 2012 and the articles may have been superseded by later research. Please check the index at [http://www.charlesclosesociety.org/sheetlinesindex](http://www.charlesclosesociety.org/sheetlinesindex) for the most up-to-date references.

*This article is provided for personal, non-commercial use only. Please contact the Society regarding any other use of this work.*

Published by
THE CHARLES CLOSE SOCIETY
for the Study of Ordnance Survey Maps

The Charles Close Society was founded in 1980 to bring together all those with an interest in the maps and history of the Ordnance Survey of Great Britain and its counterparts in the island of Ireland. The Society takes its name from Colonel Sir Charles Arden-Close, OS Director General from 1911 to 1922, and initiator of many of the maps now sought after by collectors.

The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the chairman</td>
<td>Gerry Zierler</td>
<td>1</td>
</tr>
<tr>
<td>Programme of visits and events</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Old Series, new information?</td>
<td>Roger Hellyer</td>
<td>2</td>
</tr>
<tr>
<td>Use of OS data by commercial publishers</td>
<td>Karen McGrath</td>
<td>3</td>
</tr>
<tr>
<td>Ordnance Survey national GPS network</td>
<td>Pete Bland</td>
<td>5</td>
</tr>
<tr>
<td>Save the map!</td>
<td>Tinho da Cruz</td>
<td>5</td>
</tr>
<tr>
<td>Representation of ha-has on OS six-inch mapping</td>
<td>Paul Bishop, Richard Oliver</td>
<td>6</td>
</tr>
<tr>
<td>London 2012: Why not walk it?</td>
<td>John Davies</td>
<td>16</td>
</tr>
<tr>
<td>Not the M1</td>
<td>James Mackay, David C Kimber, Rob Wheeler</td>
<td>18</td>
</tr>
<tr>
<td>Ordnance Survey ‘series’ held by the National Library of Scotland</td>
<td>Robert Harold</td>
<td>20</td>
</tr>
<tr>
<td>A lost map of Salisbury Plain?</td>
<td>Roger Hellyer</td>
<td>25</td>
</tr>
<tr>
<td>Men of 16 Survey company</td>
<td>Rose Mitchell</td>
<td>32</td>
</tr>
<tr>
<td>Jenaesturarium</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>A few notes on map lettering</td>
<td>Richard Oliver</td>
<td>33</td>
</tr>
<tr>
<td>Ley hunting with Watkins</td>
<td>Ken Hollamby</td>
<td>43</td>
</tr>
<tr>
<td>The finest index map in the world?</td>
<td>Rob Wheeler</td>
<td>46</td>
</tr>
<tr>
<td>Wirral’s stone circles – or were they?</td>
<td>Malcolm C McIvor</td>
<td>47</td>
</tr>
<tr>
<td>Rams and pumps</td>
<td>Ken Hollamby</td>
<td>51</td>
</tr>
<tr>
<td>Meeting and chatting</td>
<td>Anthony Francis-Jones, Pat McCarthy, John Harmer</td>
<td>52</td>
</tr>
<tr>
<td>Kerry musings</td>
<td>David Archer</td>
<td>55</td>
</tr>
<tr>
<td>Book review - Scotland: mapping the nation</td>
<td>Richard Oliver</td>
<td>58</td>
</tr>
<tr>
<td>Obituary and Member offers</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>
From the chairman:
In the few months since you appointed me chairman, we’ve taken stock of our successes and of the opportunities and suggestions by members at and after our 2011 AGM.

It’s clear that CCS members want more in the way of meetings and visits. I’m delighted to say that with the help of OS and several institutional members we’ve hit the ground running, and you can see from the details below that we already have a number of events lined up. These are in differing formats and in various parts of the country, so there should be something for everybody in the New Year.

I’d like to thank Ordnance Survey for their warm welcome when I visited Explorer House recently, wearing my new hat. As well as a splendid tour of their amazingly high-tech new HQ, I was able to meet a number of senior OS execs and hear first-hand about their achievements and future plans.

We found a number of ways in which OS and CCS can work closer together, and in February, CCS members will be able to see for themselves the new OS headquarters during our first visit to Explorer House. My thanks in particular to OS head of corporate affairs Phil Watts who made all this possible.

On page 60 you’ll find another special offer from OS: members can now enjoy a discount on their purchases of the most popular OS series – just in time for Christmas! – and our thanks go to OS head of sales, consumer, Paul Hassall for arranging this. OS will also become regular contributors to Sheetlines.

Following my visit to Southampton, I also represented CCS at the UKGeoforum, a gathering of commercial and learned societies involved in mapping and GIS, and enjoyed reporting that CCS is in fine health and growing in membership – not something that many other societies can claim at the moment.

We continue membership of the London Mapping Festival, and will be supporting the charity dinner and auction on 10 January at Canary Wharf, with donations of CCS publications and membership. This is in aid of MapAction, the charity which aims to alleviate suffering in humanitarian emergencies by deploying expert volunteers around the world to map survivors’ needs.

I hope you are able to enjoy at least some of the events lined up for CCS members in 2013. Please remember we need someone to coordinate future visits and meetings, so if you have some good ideas and a bit of time, do please contact me and let’s add even more to the programme.

My thanks to the committee for their work in 2012, and best wishes to everyone for Christmas and the New Year.

Gerry Zierler
Programme of CCS visits and events for spring 2013

Tuesday 12 February, 10.30 - 13.00
Visit to Ordnance Survey headquarters, Explorer House, Southampton
A tour of the high-tech new home of Ordnance Survey.

Saturday 23 March, 10.30 and afternoon
'Show & tell' meeting at Cambridge University Library, followed by visit to the map library
Bring your favourite map or item of interest, tell us about it, and then after lunch enjoy a special exhibition of CCS archives and other material in the map library (closed to the public on Saturday afternoons), courtesy of Anne Taylor.

Friday 31 May, 14.00
Joint visit to the Geological Society, Burlington House, London with HOGG
A chance to see (OS-based) maps in the collection in the Geological Society library, courtesy of John Henry and HOGG (the History of Geology Group).

Friday 5 July, all day
Walking tour of Liverpool, including the University’s map library and sites of OS interest
See Colby’s grave, sites of Liverpool’s old datum levels, possibly the new City Library and Record Office, and maps, courtesy of Tinho da Cruz.
For those with transport interests and wishing to stay overnight, Tinho has suggested some places of interest to visit at the weekend.

To book your place or to offer help in organising meetings or visits, please email info@CharlesCloseSociety.org or contact Gerry Zierler (details inside front cover).

Old Series, new information?

*Roger Hellyer writes:* It is, remarkably, already twenty years since the completion of Harry Margary’s *The Old Series Ordnance Survey maps of England and Wales*, eight volumes which contained the pioneering cartobibliography of the series. A new cartobibliography of the northern sheets, from 91 to 110, formed part of *One-inch engraved maps of the Ordnance Survey from 1847*, published by the Charles Close Society in 2009. 1847 was the date chosen because it conveniently separated the maps of Scotland, Ireland and the northern England sheets from the earlier ‘Old Series proper’ sheets further south.

Over 500 more states of the 204 coppers which constitute sheets 1 to 90 have been recorded in the intervening years, and we have decided to publish a new cartobibliography of the map reflecting the current state of research.

Though we have uncovered some 500 additional states, there must be many more still to be discovered, and we feel now is the time to invite private collectors of these maps to assist in this process. So we have placed on the CCS website a provisional listing,1 and we invite those of you who are collectors to dust off your copies and compare them against the details presented there, then to inform us of any corrections or additional information you can offer, and to confirm anything noted there as ‘presumed’ or governed by question marks. And in particular please notify us of any states you hold which are not recorded there. Please reply via *Sheetlines* editorial office.

---

Use of Ordnance Survey data by commercial publishers

Karen McGrath

Sheetlines 94 contained an interesting article comparing Ordnance Survey mapping published by Ordnance Survey to mapping published by some of our licensed partners. Both the author of the article and others have questioned why Ordnance Survey mapping is now appearing in retail outlets under the branding of other cartographic publishers.

This short note attempts to explain what has led to this situation.

As most of you will know, Ordnance Survey is a government department and Executive Agency, which operates as a Government Trading Fund. The legislation which set up the Trading Fund requires Ordnance Survey to cover all of its operating costs and funding investments in data quality and currency improvements. It also requires Ordnance Survey to meet its financial obligations to government from the revenue gained from licensing use of its data and from sales of paper maps.

Those members of the Charles Close Society who follow the wider political and regulatory environment in which Ordnance Survey operates will recall that in December 2006, the Office of Fair Trading (OFT) published a report into its review of the Commercial Use of Public Information (The CUPI Study). Among the criticisms directed at public sector information producers, and at Ordnance Survey in particular, were assertions that the pricing and licensing arrangements used by public bodies to disseminate their information for re-use by others were causing a hindrance and consequently, having a detrimental impact on the potential for economic benefit for such re-use.

The consequences of the CUPI report included complex dialogue between Ordnance Survey, OFT and Ordnance Survey’s licensed partners to better quantify the issues, and also in parallel, to work with government ministers to respond to the challenges raised.

As a consequence, in Spring 2009, the government published a new business strategy for Ordnance Survey. While the underlying aim was to sustain Ordnance Survey’s primary role of maintaining the National Geographical Database for England, Wales and Scotland; to market products and services based on this database, and to license the reproduction of these products and or data within government guidelines, a new focus was set. Ordnance Survey was tasked with improving the ease of access to geographic data and services for both commercial and non-commercial use.

The essence of the strategy was to balance the need to maintain the highest quality standards with the need to stimulate innovation in the geographic information market and make data more widely available and focused on five key areas:

Promoting innovation – with an enhanced free OS OpenSpace service to

---

1 The author is responsible for Ordnance Survey consumer marketing.
2 Richard Oliver, OS mapping from AA and AZ, Sheetlines 94, 10.
allow experimentation with digital information and a clear path from this service to greater commercialisation

**Reforming Ordnance Survey’s licensing framework** – so that it is much simpler to work with us and use Ordnance Survey data and services in other applications

**Reducing costs over time** – to ensure that Ordnance Survey continues to offer value-for-money in line with other government departments and agencies

**Supporting the sharing of information across the public sector** – to enable better public policy and services

**Creating an innovative trading entity** – to explore commercial opportunities around providing a better platform for consumers to access Ordnance Survey products aimed at the leisure market.

This strategy was further developed in November 2009 with the Prime Minister’s announcement that a portfolio of Ordnance Survey datasets would be made available for free re-use by all, including commercially. As a result, the culmination of work that began in April 2009 has resulted in two phased advances that have influenced and shaped pricing and licensing development.

Initially, the most notable impact was the launch on 1 April 2010 of the OS OpenData™ portfolio, to meet the Prime Minister’s ‘free data’ announcement, under an agreement funded by government. This was followed later in 2010 by the signing of the Public Sector Mapping Agreement (PSMA) for England and Wales which came into operation on 1 April 2011.

As a second phase, a new Ordnance Survey pricing and licensing model for our licensed partners was developed thus enabling greater access by them to Ordnance Survey products and geographic datasets under a simplified structure, culminating in a single contract to cover commercial printed product activities. These changes were introduced during the early part of 2011 to encourage the use of our material in new ways. In commercial markets, the new terms allow our partners to produce paper or electronic mapping from a range of our data products. There are no minimum or maximum print runs and no size restrictions on the printed products.

As a result, cartographic publishers may now licence, and republish Ordnance Survey mapping information published at scales of 1:25,000 and 1:50,000 as sheet map series. Following the introduction of these changes, some publishers acting as Ordnance Survey licensed partners, such as AA Publishing and Geographers’ A-Z, have published products using Ordnance Survey mapping at these scales. We would expect that consequently products made available into the market would increase in number and diversity, thus providing a greater choice. Such publishers will use their judgement to make commercial decisions on what to create and publish as they are not required to produce and maintain national coverage as Ordnance Survey is committed to do.

Ordnance Survey will supply to our Licensed Partners the latest datasets we have available, but of course it will be for each Partner to determine their own business decisions on what material they use in each product they produce and
on how they chose to present that content. I hope that these notes will help *Sheetlines* readers to understand what is happening in the paper map market these days.

---

**Ordnance Survey national GPS network**

Rodney Leary (*Sheetlines* 94, 22) raised a query about the ‘national GPS network’ plaques on trig points. *Pete Bland* has the answer.

The national GPS network is in effect a database of passive stations\(^1\) located on trig points and other fixed objects, with their precise coordinates. Rodney's example, the trig point on Marloes Beacon, is passive station ref. C1SM7808. The coordinates given for this station are Eastings 178501.820, Northings 208458.314, height 76.637m.

You can look up this trig point in the ‘legacy’ database\(^2\) where the older (non-GPS) coordinates are given as Eastings 178501.813, Northings 208458.313, Height 76.641m. That the differences are so small is a testament to the accuracy of traditional survey methods.

---

**Save the Map!**

In these days of straightened circumstances map collections are often in danger of being ditched. Perceived by their institutional owners as cumbersome and awkward; short-term savings are seen as being made by the dumping of collections, usually with very little notice. While some CCS members may gather round the skip in search of free goodies, it is hoped that most will share the anxiety of map librarians and archivists who see each collection closure with dismay and concern over what may be lost forever.

For some years the British and Irish Committee on Mapping Information and Cataloguing Systems (Bricmics) has sought to be alert to the demise of collections and prevent any wanton destruction. However, Bricmics is only two dozen people and thus is limited in what comes to its attention. If only an army of map enthusiasts could be found who would inform Bricmics when rumours of collection destruction were heard . . .

Perhaps we could ask you, the readers of *Sheetlines*, to come to our aid? If you hear of a public or commercial map collection that is under threat please let Bricmics know. Either email bricmics@bl.uk, or write to Bricmics Secretary, British Library, Map Library, 96 Euston Road, London NW1 2DB. Bricmics does not have resources to leap in and rescue collections, but may be able to help find appropriate new homes.

*Tinho da Cruz, Map Curator, Department of Geography, University of Liverpool*

---

\(^1\) [http://gps.ordnancesurvey.co.uk/passive.asp](http://gps.ordnancesurvey.co.uk/passive.asp)

**Representation of ha-ha s on OS six-inch mapping**

Paul Bishop¹ and Richard Oliver²

A ha-ha (also called a ha-ha fence or an aha! fence) is a sunken barrier to separate the viewer from a parkland setting in a naturalistic designed landscape, without having to use a substantial conventional (above-ground) fence that interrupts the view of the parkland landscape and grazing animals (figures 1 and 2).

![Figure 1. Left: Cross-section of a ha-ha from the display about Cally House in the Mill on the Fleet, Gatehouse of Fleet, Kirkcudbrightshire, Scotland. The low fence at upper right is not always present. Right: Cross-section of a ha-ha without a fence. In both cases, the ha-ha is designed for a view from right to left, from the sunken wall side of the ha-ha.](image)

The name ha-ha or aha! is presumed to derive from the fact that the barrier is

---

¹ Paul Bishop is a Professor in the School of Geographical & Earth Sciences, University of Glasgow. The initial aim of this work was to assess whether OS mapping would yield insight as to the timing of ha-ha construction on Dougalston Estate, Milngavie. That timing has yet to be established and is being investigated in ongoing collaboration with Professor Michael Moss (University of Glasgow), who is thanked for his insights.

² Richard Oliver holds an honorary research fellowship in the history of cartography at the University of Exeter.

essentially invisible until one is right on it (figure 3), and there is the likelihood of coming across the depression unexpectedly when walking or riding.

Figure 3. Left: view across a ha-ha on Dougalston Estate, Milngavie. The ha-ha (right) is at the foot of the large tree trunk in the left hand photo.

The ha-ha is a key element in the eighteenth century’s move to the more naturalistic designed landscape so closely associated with the famous landscape gardener Lancelot ‘Capability’ Brown who set up his practice in England in 1750. Horace Walpole credited Charles Bridgeman with inventing the ha-ha, apparently unaware that the idea dates back to Dezallier d’Argenville, and it was Brown and associates who exploited the ha-ha, often with considerable flamboyance. The idea of the ha-ha “was to unify the garden and the countryside, or, in Walpole’s words, to set the garden free ‘from its prim regularity, that it might assort with the wilder countryside without’.”

Figure 3 (left) provides an example of this effect.

One of us (PB) has been surveying and mapping ha-has on the former Dougalston Estate, near Milngavie, to the north of Glasgow. Dougalston was purchased in 1767 by John Glassford, one of the famous, fabulously wealthy Tobacco Lords of Glasgow. Glassford was responsible for the complete remodelling of the parklands around Dougalston House: “Streams were diverted to form an artificial lake, Dougalston Loch, some 300 acres in extent .... Walks, arbors, gardens, ponds, orchards and plantations were

---

5 H Walpole, On Modern Gardening, 1780.
7 Plate 1 of Brown, op. cit. shows a detail of Capability Brown’s plan for a new garden at Badminton, with D Brown drawing particular attention to what he calls ‘the rather Rococo ha-ha’, a wavy ha-ha separating surrounding fields from the plantings, which Capability Brown had made more irregular.
10 J Gourlay, A Glasgow Miscellany, Glasgow: privately printed, no date (but nineteenth century).
all meticulously landscaped and traces of these can still be seen although in a rather wild and disorderly state.”

Ha-has are part of these wild and disorderly remains and the implication that John Glassford was responsible for them and for the transformation of Dougalston to parkland garden has important ramifications for understanding garden history in Scotland and Britain more widely. At the simplest level, we want to understand if John Glassford, who died in 1785, was indeed responsible for converting Dougalston to a naturalistic parkland garden in the late 1760s and the 1770s. OS first and second editions six-inch mapping is being consulted as one part of this investigation into when the Dougalston ha-has might have been created.

**Mapping ha-has**

PB consulted RO on whether the OS has an accepted mapping symbol for ha-has. Our email exchanges led us to conclude that relatively few ha-has are mapped. PB then consulted David Steel from Gatehouse of Fleet where there are displays in the Mill on the Fleet highlighting ha-has at Gatehouse’s Cally House (figure 1). David identified extant ha-has in Cally Estate and these were then found on the relevant six-inch first edition map (figure 4).

![Figure 4. Ha-ba to the south of Cally House, Gatehouse of Fleet. The mapping symbol consists of a continuous line marking the wall along the vertical side of the ha-ba and pecked lines marking the slope. Note how the path (double dashed symbol) on the Cally House side of the ha-ba is on the wall side of the ha-ba, as is normal. The ha-ba can be seen passing laterally (to both the west and the east) into a fence, presumably once the views from the house were obscured and the ha-ba’s effect was no longer sought. (From six-inch first edition Kirkcudbrightshire sheet 43). Reproduced with the permission of the University Librarian, University of Glasgow](image)

---

The way in which the ha-ha passes laterally into conventional fences is noteworthy, and confirms that the ha-ha fulfils the role of a fence. This lateral passing from ha-ha to conventional fence can be seen on the ground in Dougalston (figure 5).

Figure 5. The lateral passing from a ha-ha (left) to a fence on Dougalston Estate, Milngavie; the first post of the fence is a metal post in centre picture, and the fence line, now hidden in the shrubs, extends downhill away from the camera. The view from the estate mansion house would not have reached this point and so a ha-ha was unnecessary.

A second ha-ha is mapped with the same symbol at Cally House (figure 6). David Steel has provided extracts from Cally House accounts that confirm its construction as a ha-ha:

‘1819 To cutting an aha! fence … measuring 5132 cubic yards @ 6d £128.6.-
To carting away from said fence the whole of the had earth 400 days of one horse and cart at 4/- £ 30.-.
To turfing the top of the stone wall built in said fence & top dressing the whole line, 117 roods at 5/- £ 29.5.-’

 Accounts in the entailed estate record for Cally in the Kirkcudbright Sheriff Court papers (National Archives of Scotland SC 16-64-5-00034). We do not understand how the 400 days at 4/- amounts to £30; perhaps it is a mistake for £80. We sincerely thank David Steel for providing us with the Cally Estate accounts.
Figure 6. The Whillan Hill ba-ha referred to in the Cally estate accounts above. Note that the ba-ba running eastwards from the western corner of Whillan East Wood has the wall on the northern side of the ba-ba and the slope on the southern, whereas the wall and slope have swapped sides in the ba-ba that appears to continue westwards from the western corner of Whillan East Wood. (From six-inch first edition Kirkcudbrightshire sheet 43).

Reproduced with the permission of the University Librarian, University of Glasgow

**Dougalston ba-bas**

It transpires that one ha-ha is mapped in Dougalston Estate (figure 7). Among the intriguing issues here are: (i) that the path seems to be on the wrong side of the ha-ha for the north-westwards view, across the ha-ha towards the dovecot, picturesquely sitting on a low rise (figure 8); and (ii) that the ha-ha is not mapped in the six-inch second edition (figure 9), despite the ha-ha being still clear on-the-ground (figure 10). The many hundreds of metres of other ha-has on Dougalston Estate are invisible on OS mapping.

Figure 7.
The Dovecot ba-ba on Dougalston Estate. (From six-inch first edition Stirlingshire sheet 32).
Reproduced with the permission of the University Librarian, University of Glasgow
Figure 8. The Dovecot (pigeon house; currently more usually ‘doocot’) on Dougalston Estate, viewed across the depression (foreground) marking the degraded ba-ba, which has been smoothed and somewhat infilled where it crosses a golf course fairway. Just to the left of this photograph, the ba-ba is intact (figure 10), with the wall on the side of the ba-ba closer to the camera confirming that the view was towards the doocot.

Figure 9. Second edition map of the same area as in figure 7, showing lack of mapping of the ba-ba, which is still present (figure 10). (From six-inch second edition Stirlingshire sheet 32.NW). Reproduced with the permission of the University Librarian, University of Glasgow.

Figure 10. Contemporary picture of the doocot ba-ba, Dougalston Estate. The doocot is to the right of this picture.
**Other hidden fences**

To ‘unify the garden and the countryside’, Cally Estate also uses a sunk dyke, which can be thought of as a double ha-ha, with sloping walls either side of a stone wall (*figure 11*). Cally Estate accounts record the location, date and construction of the sunk dyke, with the sloping walls on each side of the excavation confirming that the “aha fence” in this case is a sunk dyke:

‘1821 To excavating ... for an aha fence ... 6756 cubic yards @ 6d £163.18.-
To sloping & dressing the banks on each side of the cut & covering the same with good earth & preparing it for sowing out £85.-
To building the stone wall in bottom of the aha fence ... & turfing it on top, 65 roods at 50/- £162.6.-’

As before, the first edition and second edition (or more correctly, the New Series 1896) are at odds (*figure 12*). The first edition appears to map the sunk dyke as a double (or triple) line but the implied ‘meaning’ of the mapping symbol is unclear. The New Series maps it very clearly and comprehensibly as, in effect, a double ha-ha, with a fence down the centre, between the two opposing slopes. The six-inch edition of 1909 repeats the New Series 1896 mapping.

---

13 *Ibid.* Again, we cannot explain some of the arithmetic in these accounts, except as clerical errors.
Comparisons in England

The other of us (RO) investigated the depiction of some ha-has known to him in England. Five of these survive today, and their recent condition can be checked from photographs; a sixth has disappeared, but it first came to attention because of the way in which it was clearly depicted by the OS.

This vanished ha-ha was at Cheam Park in Surrey, which appears on the 1:2500 revised in 1910.\textsuperscript{14} The house with which it was associated was built at some time between 1820 and 1842, and was demolished by a flying bomb in 1944; the ha-ha was filled in at an unknown later date.\textsuperscript{15} It is mapped as a ditch with slopes on both sides, and with a solid line on the ‘house’ side (figure 13). At present we have no evidence of its depth.

\textsuperscript{14} RO encountered it in the course of perambulating the sheet whilst preparing notes for the reduced-scale reprint by Alan Godfrey.

\textsuperscript{15} Information board at Cheam Park, seen on 28 February 2012.
The five surviving ha-has are not mapped consistently. There are ha-has in front of the principal show-front of the house at Killerton Park (Devon), Attingham (Shropshire) and Hardwick (new) Hall (Derbyshire); all are omitted from both the original survey and subsequent revisions, on both 1:2500 and six-inch scales. All when seen were about four feet deep. The ha-ha that surrounds Wollaton Hall in Nottinghamshire on the north-east, east and south-east sides is also about four feet deep, and is mapped at both 1:2500 and six-inch, in both the original survey of 1879-83 and the revisions of 1899 and 1913. The fifth, and in some ways most remarkable, example is Brocklesby in Lincolnshire, where there is an extensive ha-ha system south of the house, and where ‘Capability’ Brown is known to have worked in the 1770s. This is shown on the first edition of the 1:2500 and six-inch, surveyed in 1886; it also appears on the second edition of the 1:2500, but is not shown on the six-inch mapping derived therefrom. Unlike the other four surviving English ha-has considered here, it appears on recent OS 1:25,000 mapping. The ditches do not now appear to be significantly deeper than those at Attingham, Hardwick or Wollaton.

Common to all five surviving ha-has is that the first edition six-inch mapping was prepared by direct photo-reduction of the linework and ‘ornament’ from the 1:2500, whereas the six-inch second editions are analogous to all the editions of the six-inch in Scotland, in that they were produced by re-drawing. It is therefore unsurprising that the six-inch first edition mimics whatever is included or excluded from the 1:2500, but inclusion or exclusion from the second edition implies a conscious cartographic editorial decision. Two inconsistencies emerge. First, assuming that the depth of each ha-ha has not changed significantly since the late nineteenth century, then there would seem to be inconsistency of treatment in the original survey between Attingham, Hardwick and Killerton on the one hand, and Wollaton and Brocklesby on the other. Second, whereas the Wollaton ha-ha continued to be shown on the six-inch, that at Brocklesby did not. The decision whether or not to map ha-has on revision of the 1:2500 might have been guided by their inclusion or exclusion from the previous edition, but this does not explain the apparent inconsistency in their treatment on the six-inch.

One possible explanation for ha-has sometimes being mapped in a way to suggest that they were fences without ditches, as at Attingham and Hardwick,  

16 Attingham was visited in September 1985 and Hardwick in October 1993: both were photographed, and this enables an approximate estimate of depth. Attingham was surveyed in 1881, Hardwick in 1875. Killerton was surveyed in 1886-7 and visited in August 2012.
17 Visited and photographed September 1997. The date 1879-83 appears on Nottinghamshire sheet 41.8; the area-book for the parish is dated 1883, so perhaps the ‘ground truth date’ is closer to 1883 than 1879.
19 Unlike Attingham, Hardwick and Killerton (National Trust) or Wollaton (municipally owned), Brocklesby is not readily accessible to the public, and RO is grateful to Ben Duncan for making the necessary arrangements with the Brocklesby estate office for a visit in October 1994.
might be that they were seen as analogous to such features as railway station platforms, which were (and are) similarly shown by firm lines, with no indication of a difference in level.

It is perhaps worth noting that an investigation of the 11,785 tithe maps of England and Wales yielded a total of five indications of ha-has. That at Deane in Hampshire is called ‘Ha! Ha!’ and shows a fence apparently running along the bottom of the ditch (as illustrated in figure 11), which suggests slopes on both sides rather than the pattern illustrated in figure 10.\textsuperscript{20}  

**Why did/does the OS not map ha-has and other hidden fences?**  

It seems strange that the OS did not map ha-has systematically. The Cally Estate accounts and the ha-ha’s function confirm that the ha-ha is undoubtedly a fence, and it is equally clear that the OS placed great store on mapping fences correctly: “Fences … are a most important detail. Proved neglect to insert a fence new since the last revision, or to cancel one that has been removed, is a grave offence, usually punished by reduction or loss of pay”.\textsuperscript{21} Perhaps in the case of Dougalston it was decided that the majority of the ha-has had ceased to function as fences and that the doocot ha-ha still fulfilled that function when the first edition was being surveyed, but had ceased to do so by the time of the second edition. Nonetheless, ha-has are substantial landscape features\textsuperscript{22}, and it seems odd that they would not be mapped, even if they had ceased to function as fences. Moreover, the cessation of a fence functioning as such does not deter the OS in other contexts. Indeed, the Whillan Hill ha-ha on Cally passes to its east into a fence line, as we have already noted, and this fence itself in turn passes to its east into a dashed line labelled as ‘Old Fence’ (with another ‘Old Fence’ paralleling it just a few metres to its northwest!) (figure 6). As a side point here: the six-inch first edition *Kirkcudbright* sheet 43, which includes Gatehouse of Fleet and is the source of the Cally House extracts used here, maps (somewhat idiosyncratically?) several ‘Old Fences’.

We would be pleased to hear from CCS members on whether they have spotted ha-has or sunk dykes on OS maps, or if they know of instructions or other documentation related to these features. As we have already noted, they are substantial features and we might expect that they would have been mapped more routinely and systematically.

*All photographs except figure 11 are by Paul Bishop*

---

\textsuperscript{20} These are (all references are to The National Archives (TNA)): Brampton, Cumberland (IR 30/7/28); Bywell, Northumberland (IR 30/25/91); Charlton Musgrove, Somerset (IR 30/30/99); Deane, Hampshire (IR 30/31/76); Wishaw, Warwickshire (IR 30/36/161).

\textsuperscript{21} Instructions to field revisers 1/2500 scale, 1932, s.32: copy at TNA OS 45/20.

\textsuperscript{22} Some of the Dougalston ha-has are about 5 feet deep on the wall face.
London 2012: Why not walk it?

London 2012 ‘a summer like no other’ proved an unexpected joy and delight not just for sports fans but also for map collectors. Throughout the city smiling volunteers in their dinky pink-and-purple games-maker uniforms were enthusiastically dishing out a cornucopia of free maps.

One, *London Summer 2012 map*, covers central London at a scale (not defined) of about 1:7272. The map is ungridded with streets uncased in white on pale grey background. Significant buildings and landmarks are in yellow, many with a realistic drawing of 3D aerial view. Also shown are a number of discovery trails, the national Olympic houses of various participating countries, Olympic venues and road event routes. The reverse has east London (roughly Whitechapel to Thames Barrier), at about 1:17,500 with the Olympic venues at Stratford, North Greenwich and ExCel highlighted in pink. Also on the back are a tube map (showing in addition National Rail lines to Stratford from St Pancras and Liverpool Street and to West Ham from Fenchurch Street) and diagram of key central London bus routes.

In similar style, but at a larger scale (approx 1:5500) is a set of eleven *Why not walk it?* maps, each based on a main-line terminus. They show concentric rings indicating 10, 15, 20 and 25 minute walking distances from that station and also mark all bus stops, coach stops and cycle hire docking stations (but oddly do not define on the legend what the symbols represent). The background is darker grey, more streets are named and more landmark buildings are shown than on the general *London 2012* map, but otherwise the information on the map is broadly the same. Each of these has on the reverse a diagram of the station layout and details of passenger flow restrictions at busy times. Also shown is a bus route ‘spider diagram’ and a *Rail & tube services in central London* map.

Two further similar maps are *Stratford & East London* and *Greenwich & Woolwich*. These are in the style of the *London 2012* map, but at a scale of about 1:6666 and showing cycle docking stations and Olympic venue entrance gates. Both of these include a smaller scale version of the other on the reverse.

The *Why not walk it?* maps and the two area maps all carry the statements ‘© Crown copyright Ordnance Survey’ and ‘© Copyright Transport for London’; on their cover they show the Network Rail (the *walk it* maps)¹ or National Rail (the area maps) and Transport for London (TfL) logos. *London 2012* has copyright statement ‘based on Ordnance Survey © Crown copyright’ without mentioning TfL. Its cover has the LOCOG Olympic and Paralympic logos and TfL logo.

Free large scale maps of the locality of each venue were also distributed. These are ‘© Crown copyright Ordnance Survey’ and published by LOCOG. The colouring is in broadly similar style to those above, but with much local detail. The *Stratford* and *Earls Court* maps have ‘print courtesy of Geographers’ A-Z Map Company, an official London 2012 licensee of printed maps’.

John Davies

¹ Except Marylebone, which, for some reason, has the National Rail logo.
London 2012: A summer like no other, a summer of free maps!

Left: some of the free map covers
Below: King’s Cross as shown on London 2012 (left) and Why not walk it?

Note the different depiction of the British Library

Note also the depiction of the wonderful new concourse roof at King’s Cross station

Left: Olympic Park Stratford from Stratford & East London (far left) and LOCOG Olympic Park map (oriented with north to the left)
Not the M1

Several readers have responded to Philippa J Corrie’s letter in Sheetlines 94 about an apparent error on the half-inch sheet 37 Leicester issued by the Society in our Maps from the Past series.

The label M1 that Philippa Corrie spotted on the dual carriageway across Dunsmore Heath on sheet 37 (above) is simply an error. It is beside a stretch of road that has never been a motorway, and remains now part of the A45.

The western end of the M45, which carried that number from its opening in 1958 and still does, joins the A45 at a roundabout west of Dunchurch, and east of the spurious ‘M1’. The whole length of the M10, the M1 between it and Watford Gap, and the whole length of the M45 from there formed the original motorway from London northwards, and opened in 1959.

The M1 was always planned to run to Yorkshire, and its continuation from the M45 turn-off is shown as pecked ‘under construction’ on sheet 37. It opened to Kegworth in 1964.

The ‘Midlands Links Motorways’, connecting the M1, M5 and M6 which had all originally stopped short of the heart of the West Midlands conurbation, were a slightly later part of the grand strategy. So the southern end of the M6 did not open from the M1 at Catthorpe westwards until 1971.

The M1 was always planned to go from London to Yorkshire. It was never intended to go to Birmingham. It would appear to be an error by Ordnance Survey and its cartographers.

On my versions of sheet 133, 1953 (reprinted with the addition of major roads 1961) and 1968 (fully revised 1967, major roads revised 1968), the M45 is clearly shown and labelled. The M45 has never been demoted. Once again, it appears to be an Ordnance Survey error.

On a version of sheet 132 (1967 version C fully revised 1966), the M45 and A45 are correctly shown. The M45/A45 was the route from the M1 to Birmingham until the M6 was constructed. The M45 could be demoted in status but at its
junction with M1 it only has south-facing slip-roads. The M1/M45 junction would have to be rebuilt and a new length of road constructed from M1/M45 junction to A428 at Crick.

David C Kimber

The OS regarded the half-inch as a derivative series which would not require any survey work beyond that which had been done for the one-inch maps. So in principle this map should not show anything one could not see by looking at the latest one-inch sheets.

In practice, because information on dual carriageways had been collected for one-inch survey but not shown hitherto, this is the first OS map to show the lengths of dual carriageway on the A46 Six Hills road. More critically, it was felt impossible to omit the new M1, opened in November 1959, but policy did not allow a surveyor to be sent out for the sake of a half-inch map. Consequently, the motorway appears to have been inserted on the basis of the contract specification.

Unfortunately, after the contract had been let in 1955, it was decided to extend the M1 another two miles, from its junction with the M45 to the present Crick junction with the A428. It can be seen from the extract below that the OS marks these two miles as still a ‘Motorway under construction’. Careful inspection shows the M45 to cross the A5 on the level rather than passing underneath it as it actually does: presumably that had been the point at which in 1955 it had been intended that traffic from the Leicester direction should join the new motorway.

So we have the odd situation that both Shell and BP could issue accurate strip-maps of the new motorway in time for its opening but the country’s official mapping agency was getting it wrong almost a year later. Perhaps that was one reason the map was never published.

Rob Wheeler
Researchers who access the National Library of Scotland collections through the NLS Main Catalogue on the website, are not necessarily aware of the variety of OS maps held at the Library, and until recently, many of the OS map series have only been listed in card indexes or paper catalogues. Over the last few months, we have completed a project to identify and catalogue the Library’s holdings of Ordnance Survey maps. The main aim was to create ‘series’ entries in the ‘NLS Main Catalogue’, as a further aid for researchers; especially for those readers who have access to the internet but cannot easily visit the Map Collections reading rooms in Edinburgh.

The OS catalogue entries that can be accessed through the NLS website http://www.nls.uk/catalogues reflect our interpretation of the OS series, and are not an attempt to reflect all the distinctions and relationships that such a complex map collection could possibly be divided into. Many scholars and researchers have already published detailed descriptions of the OS maps, and we have been indebted to Charles Close Society researchers, particularly Roger Hellyer, in guiding our work. They have demonstrated that the OS mapmakers, over two centuries, continuously changed and redesigned the cartographic language of scales, geographic referencing, and topographic detail, and have left a legacy that is not very easy to ‘chart’. The OS did not always describe map series with an ‘official’ series title, and so map users and researchers have sometimes had to invent their own titles. For example: some of the questions that cloud a cataloguer’s mind when deciding on a series title are: “is a new edition necessarily a new series?”; “how extensive do revisions need to be, to consider that a new OS series has been created?” and “is an Outline edition a distinct series, or part of a series?”

Bearing all this in mind, we have been guided by the titles that were sometimes printed on OS maps, and also by the ‘traditional’ names given to OS maps in debates and written articles. Some of the traditional names applied to OS series, such as: ‘Town’, ‘County’, ‘National Grid’, ‘One-Inch’, ‘Small Scale’, are still useful and very relevant for historic research, but where do you place the printed title ‘Provisional’, and where does ‘Popular’ fit in a series title scheme?

A glance at the following partial lists illustrates our interpretation and description of some of the OS series. Such lists are necessarily subjective, in the sense that they are ‘NLS series titles’ and may not always agree with other ‘OS series’ listings, but the NLS series titles are intended to place the OS maps held at NLS within the broader collections, in a consistent way. For example; it was decided to define ‘editions’ and ‘outline’ editions as distinct series, and retain OS

---

1 The author is Cataloguing Assistant - NLS Map Collections.
printed titles (‘Provisional’), but if no title was offered by the Ordnance Survey, then a ‘traditional’ title was employed (‘Coloured Parishes’).

<table>
<thead>
<tr>
<th>1:25,000 Series</th>
<th>Scotland</th>
<th>England &amp; Wales</th>
<th>Northern Ireland</th>
<th>Great Britain</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisional,</td>
<td>1937-1961</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outline,</td>
<td>1937-1961</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathfinder,</td>
<td>1963-1996</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathfinder Outline,</td>
<td>1965-1996</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explorer,</td>
<td>1997-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One-inch Series</th>
<th>Scotland</th>
<th>England &amp; Wales</th>
<th>Northern Ireland</th>
<th>Great Britain</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st edition</td>
<td>1875-1891</td>
<td>(Re. 1920)</td>
<td>D</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Coloured Parishes,</td>
<td>1898-1904</td>
<td>D</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd edition</td>
<td>1842-1900</td>
<td>D</td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd edition</td>
<td>1901-1912</td>
<td>(Re. 1979)</td>
<td>D</td>
<td>P</td>
<td></td>
</tr>
</tbody>
</table>

On the lists of titles in this article ‘D’ indicates a catalogue entry with a web-link to NLS digital copies, & ‘p’ is a NLS catalogue entry for the original paper copies. It can be seen from the spread of the D’s and p’s that the NLS map collection is extensive, but not complete.

The OS surveys of the British Isles, before the Second World War, were usually distinct for each of the nations and the NLS series titles reflect the reality of these national distinctions, by defining a series as ‘national survey’, ‘scale’, ‘edition’, in that order. So the NLS series title that is entered into the NLS Main Catalogue for the Scotland survey, One-inch, second edition would be Ordnance Survey Scotland One-inch Series: 2nd edition, and for the 1:25 000 Provisional maps covering England & Wales, the title would be Ordnance Survey England & Wales 1:25,000 Series: Provisional.

The OS catalogue project also involved attaching web-links from the NLS Main Catalogue entries to the OS maps that are available on-line as digital-copy formats and are a part of the NLS Digital Collection http://maps.nls.uk. This enables a researcher who is not using, or is not aware, of the NLS map images webpage, to directly access the OS historic map digital copies directly from the NLS catalogue, rather than having to note that a catalogue entry exists and then having to access the digital copy through another web-address. The partial lists illustrated show that the National Library of Scotland has concentrated on providing digital web-access copies of OS maps that are specifically related to Scotland and are out of copyright, but future projects should increase the number of OS map series that are digitally copied and available through the NLS map images website and the NLS catalogue.

The ‘Town Plan’ and ‘County’ series maps have also been catalogued down to the level of the individual towns and counties for Scotland, and for England & Wales. The Scotland catalogue entries all have web-links to the digital map collection, but so far, the England & Wales series have not been scanned. The NLS main catalogue entries for these sub-series titles, follows the same format as the main series titles; Ordnance Survey Scotland Town Plans: Ayr &
Survey Scotland County of Ayrshire. The NLS catalogue makes use of various search techniques, so a researcher does not have to use the full NLS series title to locate the catalogue entries.

One last point to make about the OS cataloguing project is the way I decided to describe the varied and extensive OS series that defy easy description. It is always best to avoid a series title ‘Miscellaneous’ or ‘Special’, as such a title doesn’t say much, so the various OS series that were published for ‘specific purposes’ have been accumulated into ‘general titles’ that use the OS Office nomenclature. As can be seen the spread of the series is unspecific, (eg: the date ranges are not definite) but the titles do provide a useful tool for a researcher when beginning a search of the NLS Map collections.

Dates in the partial lists in this article only indicate the extent of the map collections held at National Library of Scotland and do not necessarily reflect the complete date range of map series published by OS. We would be grateful for comments on these titles and the new catalogue records, from CCS members.

---

<table>
<thead>
<tr>
<th>'Special' Series</th>
<th>Scotland</th>
<th>England &amp; Wales</th>
<th>Northern Ireland</th>
<th>Great Britain</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ten-mile Series (1:625,000)</td>
<td>1918-2007</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Administrative Areas Series</td>
<td>1938-1956</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Land Use Survey Series: 1st survey.</td>
<td>1910’s-1920’s</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Soil Survey Series</td>
<td>1940’s-1980’s</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>War Office Series</td>
<td>1900’s-2000’s</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
</tbody>
</table>

National Library of Scotland Map Collections, Causewayside, Edinburgh
The following is a quick guide to help access, directly from the NLS Main Catalogue, digital copies of OS maps stored on the NLS ‘Maps of Scotland’ webpage.

For example: if you wanted to go directly from the NLS on-line catalogue to the digital copy of the OS Scotland one-inch map covering ‘Ayr’, then:

- go to NLS website: http://www.nls.uk
- go to the ‘Catalogues’ bar at the top of the webpage and click on ‘Search the main catalogue’
- go to ‘Advanced search’ bar
- in ‘Search’ panel type in scotland one-inch series
- in ‘search type’ panel select as a phrase
- and then select Title (instead of ‘Keyword anywhere’)
- in ‘Collection’ panel select Map collections
- in ‘Type of material’ panel select Map (this just helps to limit the results)
- then click on the Search button at the bottom of the ‘Advanced search’ page
- the search will list the catalogue entries for ‘Ordnance Survey Scotland One-inch Series’
- select Ordnance Survey Scotland One-inch Series:1st edition by clicking onto the catalogue entry to open up the catalogue page and you should see this:

- click the PC pointer or cursor onto View image on NLS website at the top of the page after the line ‘Electronic resources(s)’.
- this will take you directly to the relevant page on the ‘Maps of Scotland’ website http://maps.nls.uk/os/oneinch_1st_list.html
- click the PC pointer or cursor onto Sheet 14 – Ayr to open the digital copy of the 1872 OS map
- the digital copy of the map OS One-inch to the mile maps of Scotland, 1st Edition, 1856-1891 - sheet 14 Ayr should show on your screen.
<table>
<thead>
<tr>
<th>National Library of Scotland Title for OS series</th>
<th>date range (holdings across all series)</th>
<th>Scotland</th>
<th>England &amp; Wales</th>
<th>Northern Ireland</th>
<th>Great Britain</th>
<th>Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Town Plan</strong></td>
<td>1841-1910 (H II 2008)</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td><strong>County</strong></td>
<td>1841-1895 (H II 2008)</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Parish edition 1:2500.</td>
<td>1855-1882</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Parish Combined Reprints 1:2500.</td>
<td>1855-1882</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>2nd &amp; later editions 1:2500.</td>
<td>1892-1949</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>1st edition 1:10,560.</td>
<td>1823-1882</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>2nd &amp; later editions 1:10,560.</td>
<td>1892-1960</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td><strong>National Grid</strong></td>
<td>1:1250</td>
<td>1943-1996</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>1:2500.</td>
<td>1948-1996</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Provisional 1:10,560.</td>
<td>1948-1965</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Regular 1:10,000.</td>
<td>1954-1996</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Air Photo Mosaics 1:10,560.</td>
<td>1944-1950</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td><strong>1:25,000</strong></td>
<td>1937-1961</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Provisional.</td>
<td>1937-1961</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Outline.</td>
<td>1937-1961</td>
<td>D</td>
<td>D</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Pathfinder.</td>
<td>1965-1996</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Pathfinder Outline.</td>
<td>1965-1996</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Explorer.</td>
<td>1997- &gt;</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td><strong>1:50,000</strong></td>
<td>1978-1985</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Discoverer.</td>
<td>1974- &gt;</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Landranger.</td>
<td>1987-1997</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Landranger Outline.</td>
<td></td>
<td></td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td><strong>One-inch</strong></td>
<td>1829-1891 (Ire. 1920)</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>1:63,360 &amp; 1:50,000</td>
<td>1898-1904</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>2nd edition.</td>
<td>1842-1900</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>3rd edition.</td>
<td>1901-1912 (Ire 1979)</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>3rd edition colour.</td>
<td>1903-1912</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Popular.</td>
<td>1990-1945 (Iire 1958)</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Popular Outline.</td>
<td>1990-1942 (Iire 1953)</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Popular with National Grid.</td>
<td>1945-1955</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Popular with National Grid, Outline.</td>
<td>1945-1955</td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>7th edition outline.</td>
<td></td>
<td>D</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Half-inch Series. (incl 1:100,000)</td>
<td>1930-1969</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Quarter-inch Series. (incl 1:250,000)</td>
<td>1977-1999</td>
<td>D</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Routemaster &amp; Travelmaster Series</td>
<td></td>
<td>D</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td><strong>Special</strong></td>
<td>1925-2007</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>Ten-mile Series. (incl 1:625,000)</td>
<td>1938-1996</td>
<td>P</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Administrative Areas Series.</td>
<td>1920's-1930's</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Soil Survey Series.</td>
<td>1850's-2000's</td>
<td>p</td>
<td>p</td>
<td></td>
<td></td>
<td>p</td>
</tr>
<tr>
<td>Geological Survey Series.</td>
<td>1900's-2000's</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>War Office Series.</td>
<td>1900's-2000's</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
</tbody>
</table>

[**D** digital link to NLS Maps website / **P** no digital links]
Early in the 1930s OGS Crawford, since 1920 the Archaeology Officer of the Ordnance Survey, won permission to publish a set of maps showing the extent of the Celtic earthworks to be found on Salisbury Plain. There was precedent in two maps, similar in nature, that he had already created which showed Celtic field boundaries, one at the 1:20,000 scale of the area north of Winchester, the other a county series six-inch sheet (Wiltshire 48 SW) of the Figheldean Down area.\(^1\) Whether consideration was given to the six-inch map for Crawford’s Salisbury Plain project is not recorded, but the 1:25,000 scale chosen was of course a much cheaper option.\(^2\) But the only such map available at the time was the military 1:25,000 map of Great Britain, GSGS 3906, itself a conversion initiated in 1931 of the earlier GSGS 2748 at the 1:20,000 scale, and still little over 100 sheets strong. GSGS 3906 was a three-colour map, with outline in black, water in blue and contours in brown. The overprint in purple of War Office Cassini Grid values, an essential feature of the military map, was not wanted. Six sheets were selected, north to south 44/16 NW and NE, 44/16 SW and SE, 44/14 NW and NE. Red was chosen as the overprint colour of the detail that Crawford wished to include.

Crawford had been quick to recognise the potential value to archaeology of air photography, something he discovered for himself as an observer in the Royal Flying Corps in the First World War. Over the years he gradually put together a reference library of air photographs, mostly of superseded RAF negatives. In preparing this map his method was first to locate sites on the six-inch, then to compile a draft map of the area by means of collation and interpretation of the air photographs in the office before going to Salisbury Plain (usually by bicycle) to check each site on the ground. He would be accompanied by his staff of two, William J Whitters, who joined him in 1930, and Roland E Curtis, in 1931. Neither of them were archaeologists, but draftsmen: Crawford however recorded that both men developed an excellent eye for recognizing earthworks in the field, and for distinguishing between ancient and modern features.\(^3\)

The first sheet to be prepared and published was 44/14 NE, the military sheet number replaced by a sheet name, Old Sarum. Curtis was the draftsman, and the services of the Ordnance Survey’s resident artist Ellis Martin were engaged to create a cover design that would serve the entire series, together with an index on the reverse incorporating the titles of the six intended sheets, Charlton, Everleigh, Yarnbury, Amesbury, Grovely and Old Sarum.\(^4\) The series title Celtic

---

1 These were published in OGS Crawford, *Ordnance Survey Professional Papers New Series No.7: Air survey and archaeology*, London: HMSO, 1924.
2 Crawford’s model for the map is on seventy six-inch sheets, admittedly covering a much wider area than that finally selected. They were bound into an atlas which is in National Monuments Record at Swindon.
4 The artwork of the cover design is illustrated on page 26, with, in the bottom right hand
Earthworks of Salisbury Plain was adopted, with the title of the specific sheet in larger lettering. Crawford himself wrote a short letterpress, and 500 copies of the Old Sarum map were published in 1933, with a reprint of a further thousand in 1937.

There is no record of whether field work on the series continued immediately, though there is plenty of evidence that Crawford was fully occupied with work on other projects. Certainly it was not until late in the 1930s that work began on drawing the second map of the series, Amesbury, the sheet to the north of Old Sarum. By this time two further draftsmen had been employed in the Archaeology Office, Reginald A Jerrard in 1936, who was busy working on the Monastic Britain maps, and Frederick J Stoneage in 1939: he was the man selected for the Amesbury sheet.\(^5\)

As with Old Sarum, the six-sheet index and a legend were added in the bottom margin, the legend including a symbol for village that had not been used on the Old Sarum sheet. An overprint plate was created,\(^6\) and proof copies of the map were printed – the date cannot be ascertained, but before the outbreak of war in September 1939. But it was impossible for Crawford’s superiors to permit the map to proceed to publication at the time, though clearly the project was not cancelled because some progress was made, deep into the war, when 300 copies of the accompanying letterpress were printed in April 1941.

What then of the subsequent history of Amesbury? The question may best be answered by endeavouring to piece together what is known of proof copies of the map. There is a rumour that copies of the map were cut up for internal Ordnance Survey use during the war. But though I have never encountered any such scrap, I have found traces of three, perhaps four copies. First and foremost was that held in the Archaeology corner in Martin’s own handwriting, a note of the sources he used for the corner roundels.\(^5\) His drawing on Whatman paper is in the National Monuments Record at Swindon.

Roger Hellyer, “The archaeological and historical maps of the Ordnance Survey”, *Cartographic Journal* 26 (1989), 111-133. An extract of the overprint together with the legend which includes the village symbol is illustrated on p.116.
Office, still in the file after the war. This came up for review in 1948 by C W Phillips, successor to Crawford as Archaeology Officer. He wrote to Crawford on 9 July that year:

‘With regard to the Celtic Field Maps I shall have to see what can be done, though I cannot give the matter much priority. The trouble is that everything has now to be done on a national grid basis and in relation to new sheet lines. This shoots the old Salisbury Plain scheme all to pieces and increases the number of sheets necessary to cover the area originally planned. I do not think that I have promised anything to anyone about the Amesbury sheet, but I do not want valuable stuff to go to waste.’

And the copy was clearly still on file eighteen months later, when for some reason Crawford, evidently still eager to hear of progress, appears to have sent another copy (presumably one he had retained for his own use) of the map to Phillips. Phillips wrote again to Crawford:

‘I return the pull of the Amesbury sheet at once because we have a copy already. It is a good idea to have the thing multiplied soon and distributed to some key individuals and I will see what can be done.....When we get the time we must con over the whole of the material belonging to the Salisbury Plain enterprise and see what can be done with it.’

After that the file copy disappeared, and with it any further hopes of publication, though not before a monochrome photograph of it was taken, which is now held by National Monuments Record (NMR) at Swindon. This reveals that post-war work was indeed done on the map, with National Grid values being added to it.

And so to the third copy. On 25 May 1940, Crawford, clearly mindful of what was to come, sent one as a security measure to a colleague, Professor EA Hooton, at the Peabody Museum at Harvard University. Crawford’s covering letter survives:

‘I am sending you under separate (sic) cover, in a roll, the following maps and would ask you to be so good as to keep them as records in case the originals and plates are destroyed.

1. Map of Monastic Britain, South Sheet, on a scale of 10 miles to the inch.

Crawford’s pre-war assistant, W F Grimes, in fact became the next Archaeology Officer in November 1945, but he resigned after a month to go to the London Museum. He retained responsibility for the department until Phillips’s appointment in January 1947.


It was probably this file copy that was used in OGS Crawford, *Archaeology in the field*, London: Dent, 1950, p.109, where the north-east section of the map appears as a monochrome illustration, though anything printed or handwritten beyond the neatline has been deleted.

2. Map of Roman Britain (3rd Edition), Scotland, Sheet 3, The Forth, Clyde and Tay. (The overprint of this is in red, but on the published edition it will be in black; this red overprint was an experiment that obviously failed, but it appears to be the only available copy).

3. The black overprint of No. 2., without the base map.

4. The Amesbury Sheet of the map of Celtic fields on Salisbury Plain; first proof, scale 1:25,000. This is the second sheet in the series to be published.

These three maps were ready at the outbreak of war, but not unnaturally it has not been possible to carry them through the last stages; consequently although the plates and one or two pulls are available, the maps have never been printed. As it looks as if this might become a rather hot spot, I am doing what I can to put the irreplaceable stuff in a position of safety, and have the Director General's authorisation to send these to you, so that some copies at least may be available if everything else is destroyed.'

No direct reply to this has been traced, but a letter dated 4 September 1941 from Hooton to Crawford is relevant:12

'Your map arrived safely and has been put with the previous ones in the safe of the Peabody Museum, to be disposed of according to your directions.'

What this map (singular) was is not recorded, but it is likely that “the previous ones” included Amesbury. I wrote to the Peabody Museum in the late 1980s, hoping to discover whether any of these maps were still there. But they could find no trace: possible explanations may be that the maps were subsequently held by Hooton himself, or that Crawford asked for their return after the war. In which case this Peabody copy could have been the one he sent to Phillips in 1950. But any copy held by Crawford himself has never been traced.

There is one final copy to be accounted for, the only one I have seen for myself, when researching the history of the Ordnance Survey period maps written up in an article in Sheetlines.13 A copy of Amesbury was held in the late 1980s in the Royal Commission on the Historical Monuments of England (RCHME) office in Salisbury. This was a copy sent by Crawford to his colleague Harries Collins Bowen, sometime Director there. In the top right hand corner, Bowen had written “This pull is the second of two in existence: Crawford has the other”. There is no date, but does his comment mean that he knew that already the OS file copy had disappeared, or did he just not consider it? The staff at Salisbury kindly made a (monochrome) photocopy of the Bowen copy for me, which I still have in my possession. The map itself, however, has also since disappeared. Logically it should have been moved to NMR at Swindon as part of the process of transfer of

---

12 Bodleian Library, Oxford, OGS Crawford mss 5, f.27.
RCHME papers, but there is no record of its arrival or presence there. This was particularly disappointing to the members of the CCS committee, who had hoped that this map, with its complex overprint on a base map covering an area replete with military interest, would become the next in our series of facsimile maps.

All thus seemed lost, until I chanced upon a box of 35 mm slides that I had completely forgotten I owned, which had been made for a talk I gave on the OS period maps more than twenty years ago. And present among them is a copy, in colour, of the Amesbury sheet. But yet again we are to be disappointed. The quality of the image is not good enough to use as the source for a facsimile map, though we hope it may take its place in our collection of digital copies of rare maps in the CCS Archives at Cambridge. Thus yet another, and maybe the final, chance of turning this fine map into a printed publication is not to be. And yet perhaps not so? None of the three (or four) copies noted here can with certainty be said to have been destroyed, merely lost from knowledge: thus there remains a glimmer of hope that one of them, one day, will again be found.

left:
The index from the reverse of Old Sarum cover, showing titles of the six intended sheets.

below:
The archaeological features shown on the maps were depicted with red overprinting.

overleaf:
Monochrome extract of Amesbury covering the area east of Bulford Camp. Water is blue and contours brown on the original, with the overprint of archaeological features in red. The village symbol (not used on Old Sarum) may be found at the Belgic Village in the north east. (approx 20% enlargement)
**Men of 16 Survey company**

It may be of interest to *Sheetlines* readers that a record of marriages and children for some of the men of 16 Survey company has been newly indexed at The National Archives (TNA). The names and details for soldiers and their wives, and their children's births and baptisms, have been transcribed and placed online by the Friends of The National Archives military volunteers team, as part of a wider project.

The register of marriages of men serving in the company between 1901 and 1929, together with the birth dates of children, has the document reference OS 3/341. The register also records some earlier marriages, and some events in a soldier's life at later dates. It may record for instance, discharge from the service or death.

The register is in the record series of Ordnance Survey Miscellanea. The series contains a variety of materials, including some relating to William Roy including his commissions as an army officer; the Survey of Jerusalem, technical papers, and correspondence relating to the early Survey from men such as Yolland, Colby, Budgen and Robert Dawson.

You can look at the index by going to the new online TNA catalogue on its website, called Discovery at http://discovery.nationalarchives.gov.uk

The register is held by TNA with other records documenting the work of Ordnance Survey as a government body. An online research guide outlining the records held, ranging from records of levelling, to policy files on the introduction of a new type of map is at: http://www.nationalarchives.gov.uk/records/research-guides/ordnance-survey.htm

Rose Mitchell, Map archivist, The National Archives

---

First edition One-inch Scotland, sheets 3 and 4 have Latin names added below the local name for such features as Loch Ryan, Wigtown Bay and Luce Bay. Richard Oliver explains that their appearance on these sheets seems to be part of the design experiments c.1853 mentioned on pp 34-5 of Engraved maps.1

---

A few notes on map lettering

Richard Oliver

It has generally been held that serifed lettering is easier to read than sans-serif, and this prompts the question as to why sans-serif lettering has come to be so widely adopted for use on maps. The purposes of the present article is to give a very brief history of Ordnance Survey usages, which explains the gradual standardisation of sans-serif lettering, and to present some alternative treatments of two pieces of mapping.¹

The Ordnance Survey of the United Kingdom: 1801-1914

The earliest printed maps, from the late fifteenth century, used styles of writing that tended to bear a marked resemblance to contemporary pen-writing, although all printed maps up to the early nineteenth century were produced by engraving processes, which involved incising the image, usually into copper. By the time that the first Ordnance Survey mapping came to be engraved, in the late eighteenth century, a distinctive style of map-lettering had evolved, designed explicitly for copperplate engraving. It was characterised by a contrast of thick up-strokes and thin ‘hairlines’, and it was used on all one-inch (1:63,360) mapping up to the Popular Edition (figure 1). ‘Old English’ and similar styles were used from the early 1830s for ‘antiquities’.

Early Ordnance Survey mapping was all produced by engraving, but from the mid-1850s lithographic methods were adopted. These involved producing the published image by pen-drawing, but nonetheless the ‘engraved’ style of lettering continued to be used, characterised by hairlines. Both engraved and lithographic maps made limited use of sans-serif styles for certain special categories of name, for example ‘Egyptian’ (an admittedly strange name) for Roman ‘antiquities’. At first lithographic methods were confined to the largest scales, but from 1882 the six-inch map began to be produced by photo-lithographic methods. The lettering was produced by stamping, which by the 1890s had been adopted for all mapping not produced by engraving, and which had the advantage of uniformity

¹ Terminology for lettering styles has been taken from Ordnance Survey alphabets, Southampton: Ordnance Survey, n.d. [1934], and from three unpublished internal manuals: ‘Type specimens’ (January 1945), ‘Specimens of type’ (1947) and ‘Typefaces help in L.P. Printing’ (September 1975) (‘L.P.’: letterpress).
of result. To give a good effect, the stamping had to be even, calling for the
cultivation of a careful touch. A drawback of stamping was that it was really only
applicable to original drawings on paper: correction of names on printing plates
or photographic materials had to be carried out by hand. The balance of serif and
sans-serif continued much as before, presumably in order to give an element of
general stylistic continuity and homogeneity.

Whereas pressure of economics ensured that by 1900 all Ordnance Survey
mapping at larger than the one-inch scale was produced by photo-lithographic
methods, a substantial investment coupled with the need for a clear image
ensured that engraving still had its place. This applied also to commercial firms
such as Bartholomew, Johnston and Bacon, where, indeed, engraving had a
much higher profile than it did at the Ordnance Survey. The first departure from
this was the half-inch (1:126,720) map, started in 1902, the early sheets of which
were produced by photo-engraving. The original document was a pen-drawing
with stamped lettering, reminiscent of contemporary six-inch mapping in process
and appearance. This half-inch mapping was exceptional in that it was produced
in response to an urgent demand from the War Office and accordingly was
‘provisional’ in nature: the mapping of Great Britain in this style was completed in
1910. Later half-inch sheets of Britain were produced by the less involved process
of heliozincography. The half-inch mapping of Ireland was less urgent,
and this
was produced by conventional engraving: the replacement of the ‘provisional’
half-inch of Great Britain by a conventional engraved map was started by 1914,
but only one sheet is known to have been completed, and so far it has not been
published.

**The Ordnance Survey in Great Britain, 1914 onwards**

In 1910 or 1911 the Ordnance Survey began another ‘provisional’ series for the
War Office: a two-and-a-half-inch (1:25,344) map of eastern England, later
designated GSGS 3036. This was produced by combining the linework and
‘ornament’ of the six-inch with fresh lettering: scale apart, the general effect was
that of the six-inch, but some sans-serif lettering was used for supplementary
military information. A similar style was employed from the autumn of 1914
onwards for mapping of the Western Front, but during 1915 a new style was
adopted, characterised by the extensive use of stamped sans-serif ‘Egyptian’,
though with serifed ‘Roman’ lettering retained for some categories, such as
woodland names. Presumably this mix of styles was determined by the need to
balance lettering and linework. This style was in turn introduced to an extension
of GSGS 3036, and to two training map series, GSGS 2742 and 2748. From 1918
GSGS 2748 was developed as a 1:20,000 series, replaced from 1931 by a 1:25,000
series, GSGS 3906, produced initially by direct reduction from GSGS 2748. None
of these were placed on sale.

The Western Front was also covered by series at 1:100,000 (GSGS 2364) and
1:250,000 (GSGS 2738), started in the later 1900s. These were produced by pen-

---

2 For a summary of this see Richard Oliver, ‘Photo-zincography and helio-zincography’,
**Sheetlines** 90 (2011), 41-4.
drawing and photo-lithographic reproduction, but unlike the contemporary British half-inch the lettering was produced by penning rather than by stamping. The success of this method perhaps encouraged the Ordnance Survey to adopt it for a new version of its domestic quarter-inch (1:253,440) mapping (figure 2), which began to appear in 1919 as the Third Edition, and then for a new version of the ten-mile (1:633,600) mapping, published in 1925-6. A new one-inch of Scotland, the Popular Edition, of which publication began in 1924, used – at any rate on early sheets – a mixture of stamped and hand-lettering. This mapping was designed as a continuation of the Popular Edition of England and Wales, which was based on engraving, and although the lettering styles used on the new heliozincographed map of Scotland reflected the influence of engraving, they were unlikely to be mistaken for it. Commercial map-publishers were rather more venturesome in using sans-serif: Bartholomew used little else on its new quarter-inch maps, completed for Scotland in 1914 and for England and Wales in 1929.

![Figure 2](image)

*Figure 2.*

Extracts from quarter-inch Third Edition sheet 12

**upper:**

1922. This sheet was unique in this series in that the early issues were based on engraving

**lower:**

1925. Following redrawing in ‘engraved’ style, for reproduction by heliozincography

The hairlines in engraved styles were troublesome for photographic reproduction, as they entailed much touching-up, and in 1928 a completely different style, based on the lettering on Trajan’s Column in Rome, was designed by JG Withycombe and Ellis Martin. The main use of this lettering was on the one-inch Fifth Edition, publication of which began in 1931 (figure 3). From 1925 onwards different styles were adopted for new 1:2500 sheets: Egyptian reigned

---

for only a few months, but Roman and italic ‘old style No.5’ lasted longer, until replaced from 1932 by Caslon Old Style, which retained serifs, but in a much less pronounced form. ‘Caslon’ was not much used on small-scale mapping: its main use was on 1:500,000 aviation mapping (figure 4) (e.g. GSGS 4369), though it was also used on a one-inch traffic diagram of the London area of 1934.

Figure 3.
Extract from one-inch Fifth Edition sheet 95 (1935), showing hand-written Withycombe lettering

Figure 4.
Extract from 1:500,000 Aviation Map sheet NN 31 SW (1937). The lettering in black is in Caslon; that in red is in Egyptian. Both were probably applied by stamping

The Fifth Edition, first titled thus and then remodelled as a ‘New Popular Edition’, remained incomplete, and in 1947 a start was made on a completely restyled one-inch map, at first known as the ‘Seventh (Great Britain) Edition’, and familiarly as the Seventh Series. The first 38 sheets of this series, together with some contemporary half-inch mapping – not all published – and a small quarter-
inch experimental section were drawn in a style that closely resembled the Scotland Popular Edition, although with broader ‘thin’ strokes. This apparently retrograde step was taken because a study indicated that the lettering on the Scottish map stood out better than did the Withycombe style.4

Up to the late 1930s the only alternative to hand-lettering with a pen was stamping, by metal type in a holder, but around 1937 photo-typesetting became available: the first such equipment used by the Ordnance Survey was the Photonymograph. The basis of phototypesetting is the typing-in of the name on a keyboard, for outputting in the desired font for sticking down on the manuscript drawing. This had the advantage of obtaining an even effect without the need for controlled pressure necessary for good stamping. The adoption of phototypesetting by the Ordnance Survey has not been studied in detail: the writer’s impression is that it was fairly general by the late 1940s, although some stamping of ‘ornament’, such as vegetation symbols, may have continued for a little longer.

Caslon and Egyptian were extensively used on military mapping during World War II, but around 1944 Times Roman was added to the repertoire, and this was adopted for the definitive form of the civil 1:25,000 map, of which publication began in 1945.5 It may be presumed that the use of Times Roman is an indicator of photo-typesetting. From 1948 redrawn mapping at 1:1250, 1:2500 and six-inch began to appear, all lettered using Times Roman and other ‘mechanical’ fonts, with serifs continuing to predominate.

In 1950 the substitution of photo-typesetting for hand-lettering on the new one-inch map was studied, and alternative versions of sheet 154 – already completed as a handwritten sheet – were produced, wholly in Times Roman and wholly in Gill Sans. Neither was satisfactory: on the Times Roman version the smaller names appeared disproportionately prominent, and the Gill Sans version appeared both stark and lacking in assertiveness. The solution was to use both styles, with most of the more prominent names in Times Roman, and the remainder in Gill Sans. A similar solution was adopted for other smaller-scale mapping put in hand in the 1950s. From about 1964 Gill Sans was used for the marginalia of 1:25,000 and smaller-scale mapping, though the lettering of the body of the maps was unchanged. Though the exclusive use of Times Roman had proved unsatisfactory on the one-inch, it was used very satisfactorily on the new 1:25,000 Second Series.

In 1969 a programme of metrciation was announced, leading to the substitution of 1:10,000 and 1:50,000 for six-inch and one-inch respectively, and at the same time Univers was adopted, both for newly published mapping and, for the 1:2500 and 1:1250, for replacement names on revised editions of published sheets. Serifs could be troublesome in reproduction as they were prone to wear.

4 Cheetham to Stevens, 3 February 1949: item 12A in The National Archives (Public Record Office) OS 1/785.
5 When work began, lettering was to be in Caslon, and then two blocks of sheets were drawn using Old Roman no.5: see essay by Richard Oliver in Roger Hellyer, A guide to the Ordnance Survey 1:25,000 First Series, London: Charles Close Society, 2003, 18-19.
and thus to need touching-up. The adoption of a style such as Univers therefore made for easier map maintenance. ‘Lutheran’ was used for ‘antiquities’: presumably the liability to touching-up could be accepted. The need for a distinct font for antiquities, rather than, say, a different colour, can be readily explained by the needs of monochrome map reproduction: the colour-printed smaller-scale series were all issued in alternative ‘outline’ editions. This basic ‘sans-serif’ style continued for as long as this mapping was produced by analogue means: it continues to be used on the 1:25,000 and 1:50,000 series, which are produced by raster means. In 1985 the 1:250,000 mapping first published in 1957-62 was relettered using Univers, and a similar style was retained when this mapping was digitised a few years later.

**The Ordnance Surveys of Ireland**

In 1922 separate Ordnance Surveys were created for the Free State and for Northern Ireland. The latter has generally tended to follow mainland British practice, but there have been three notable exceptions. A redrawn quarter-inch ‘Road Map’, prepared in 1939, used Caslon and other ‘mechanical fonts’. A new 1:250,000 map published in 1970, the first and only instalment in a projected all-Ireland series, used a mixture of Times Roman and sans-serif that was in principle similar to the Seventh Series in Britain, but quite different in final appearance. A similar mixture was used on what was understood to be the first instalment of an all-Ireland 1:50,000 map, published in 1978-85. Times Roman was particularly used for townlands, which make up a large part of the rural names on these maps. In 1999-2002 this mapping was replaced by a digital version, which retained serifed lettering for most of the purposes for which it had been used on the analogue predecessor.

In the Free State sans-serif lettering had been adopted by the late 1930s for revised and republished 1:2500 mapping, and by the late 1940s for revised six-inch mapping. A new 1:500,000 published in 1953 used a mixture of ‘mechanical’ serif and sans-serif fonts. In 1958-62 a new 1:250,000 used sans-serif lettering throughout, except for ‘antiquities’, and in this regard was more ‘modern’ than anything then being produced across the water in Britain. In the mid 1960s an ambitious modernisation policy was adopted for Irish mapping, to include a 1:50,000 series. A trial sheet was not published, but part of it seems to have been used to replace a section of the one-inch Dublin sheet: the sans-serif style used is consistent with that used earlier on the 1:250,000 and on the new larger-scale mapping.

This mapping was produced by analogue means. In 1988 the Ordnance Survey of Ireland began producing 1:50,000 mapping, by digital means and in a

---

6 I have not investigated Irish procedures as completely as I have those in Britain: the following account will be found indicative rather than exhaustive.

7 The writer confesses to particularly uncertain chronology here.

radically different style from anything hitherto associated with any ‘Ordinance Survey’. In the definitive style, introduced in 1993, almost all names are sans-serif, including ‘antiquities’, distinguished in reddish-brown, except for towns, which use Bookman. Both on this and on the North Irish mapping serifed styles are presumably used in order to provide adequate emphasis of ‘important’ names.

**Serif versus sans-serif**

As was said at the start, it has been widely believed that serifed fonts are more legible than sans-serif ones. A recent article in the *Cartographic Journal* investigating typography suggests otherwise, at any rate in the circumstances of the particular experiment reported there.\(^9\) Serifs certainly continue to be favoured for ‘running text’, despite the recent rise in popularity of some sans-serif fonts, notably Arial, and when the writer changed a newsletter from Arial to Garamond the response was favourable.\(^10\) Such investigations apart, there are three wholly practical reasons for employing a sans-serif style on topographic maps:

1. A name of given size is likely to be more compact in a sans-serif than a serif style, and thus can contribute to the avoidance of ‘clutter’, and reduce the conflict of names and detail in ‘busy’ areas.

2. In analogue photo-mechanical map production, serifed lettering is much more prone to need touching up to maintain the serifs. It is understood that this was the main reason for the wholesale adoption of Univers in the late 1960s.

3. It reduces problems of hierarchies and consistency across scales.

The last point needs enlargement. The usual practice in mapping using serifed lettering has been to mix ‘Roman’ (upright) with italic. It is therefore necessary to decide which categories of name are to appear in which style. The normal Ordnance Survey solution was to use upright lower-case Roman for ‘parish villages’, but this presents difficulties of balance where such villages are few. There is a similar ‘domination of inconspicuousness’ where italic is used for smaller villages on a strict size criterion, as on the new half-inch and 1:250,000 maps designed in the 1950s. In turn, these introduced a further problem of inconsistency between scales: parish villages in ‘upright’ on the one-inch often appeared in italic on the smaller scales. The consequent extensive use of italic tended to give the half-inch Second Series of Great Britain, in particular, a certain ‘monotonous’, uncertain, unpunctuated quality. On its otherwise rather similar half-inch Second Series, published in 1968-70, Ordnance Survey of Northern Ireland eschewed upright lower-case and used italic capitals for settlements of a certain size: in Britain this would be interpreted as ‘small town’, whereas the ‘correct’ meaning was often ‘larger village’. Aesthetically it was an undeniable improvement.

These points are demonstrated by the two groups of figures. Figure 5a is from the quarter-inch Fourth Edition, with ‘parish villages’ and hand-lettering imitating

---


\(^10\) *Exeter Quaker Newsletter*: not a widely circulated ‘serial’!
engraving. Figures 5b, 5c and 5d have had the lettering replaced. Figure 5b uses Bookman, which produces an effect similar to Caslon. Figures 5c and 5d use High Tower, which produces an effect generally similar to ‘Withycombe’: figure 5c retains ‘parish villages’, figure 5d uses italic for all villages.
Figure 5. Extract from quarter-inch Fourth Edition sheet 3 (outline version), 1940
Figure 5a as printed
Figure 5b relettered in Bookman (to mimic Caslon), following conventions in 5a
Figure 5c relettered in High Tower, following conventions in 5a
Figure 5d relettered in High Tower, with all lower-case names in italic
Figure 6a is from the Popular Edition, and exemplifies the basic style used on engraved mapping from the late eighteenth to the earlier twentieth centuries. Figure 6b has been relettered using High Tower, and retains ‘parish villages’; figure 6c uses Times Roman, italic throughout; figure 6d uses Arial, and with no hierarchy.11 Serifs may therefore be ‘characterful’, but they can lead to spatial, categorising, mechanical and aesthetic complications. A judiciously-chosen sans-serif font is not troubled by these considerations, and a move back to favouring serifs for cartographic work seems unlikely.

11 These extracts were prepared by scanning originals, which were then edited using ‘ZoomBrowser’, supplied by Canon with the writer’s digital camera. The ‘insert text’ function was used first to ‘white out’ the existing text (or, for names in rivers, cover them with blue), and to supply the replacement text: Arial, Bookman, High Tower and Times Roman are all available in Zoombrowser. It is not possible to supply curving names satisfactorily. Professional cartographers and more sophisticated software would no doubt make a much better job of it than in the examples here.
Ley hunting with Watkins
Ken Hollamby

When I was very much younger than I am today I remember spending many hours poring over my one-inch maps with a copy of Alfred Watkins, The old straight track. What was I doing? I was looking for ley lines and I almost convinced myself that they existed but the more I thought about it the more doubtful I became. Ley lines are straight lines on which a wide range of landscape and man-made features lie. In the preface to his book, published in 1925, Watkins says ‘What really matters in this book is whether it is a humanly designed fact, an accidental coincidence, or a “mares nest”, that mounds, moats, beacons, and mark stones fall into straight lines throughout Britain, with fragmentary evidence of trackways on the alignments.’

In Appendix A Watkins lists named points to look for on the map:
1. Ancient mounds, whether called tumulus, tump, barrow, cairn or other name
2. Ancient unworked stones-not those marked “boundary Stone”
3. Moats, and islands in ponds or lakelets
4. Traditional or holy wells
5. Beacon points
6. Cross-roads with place-names, and ancient wayside crosses
7. Churches of ancient foundation, and hermitages
8. Ancient castles, and old “castle” place-names

The old straight track is an expansion of a lecture given by Alfred Watkins to the Woolhope Naturalists’ Field Club at Hereford in September 1921. This was published in 1922 as Early British trackways, moats, mounds, camps, and sites. This is not the place to debate whether ley lines exist or not but, in archaeological circles at least, the theory is not taken seriously. On page 31 of the 1922 book Watkins gives these ‘hints to ley hunters’:

‘You must use Government ordnance maps. One mile to the inch is the working scale. Other maps of two or four miles to the inch are quite useless, save for checking long leys.

The (B) “Popular edition, mounted and folded in covers for the pocket,” is the most convenient for field work and is the cheapest, as it contains over double the area of the older (C) 18 x 12 edition; but I have found the latter (uncoloured, in flat sheets) necessary for transferring leys from one map to the next on drawing boards in the office.

1 The punctuation and syntax in this and the following quotations are exactly as Watkins' publications.
Maps cut in sections are useless for this exact work.

About four drawing boards, a light 24-inch straight edge, a T square for pinning down the maps accurately to line with the boards, a moveable head T square to adjust to the angle of the ley, so as to transfer to the next map, and a box of the glass headed pins used by photographers (in addition to the usual drawing pins) are the minimum essentials for real work. A sighting compass for field work used in conjunction with a special divided quadrant on the moveable head of square are aids I have found valuable.

Remember that the entire course of a ley can be found from two undoubted sighting points on it if marked on the map. Therefore stick a glass headed pin in these two points, apply the straight edge, and rule the line, pencil it at first, ink afterwards.

When you get a “good ley” on the map, go over it in the field, and fragments and traces of the trackways will be found, always in straight lines, once seen recognised with greater ease in future.

Where close detail is required, as in villages and towns, the 1” scale is far too small, and the 6” scale is necessary. The angle of the ley is transferred to it from the 1” map with the aid of the moveable head square. Maps must be pinned square on the board by the T square passing through identical degree marks on the edges, latitude for leys running E. and W., but longitude for leys N. and S. The edges of maps are not truly in line with the degree lines, and must not be the guide.’

Watkins concludes by saying ‘Ley hunting gives a new zest to field rambles, and the knowledge of the straight ley provides new eyes to an eager observer’. He had a ‘mental vision of a Scout Master of the future, out ley hunting with the older boys of his troop’.

Now I know where I was going wrong. We only learnt to follow footpaths when I was in the Scouts and clearly my equipment was inadequate when I later looked for ley lines on the map.
Ley lines in the vicinity of Credenhill, Herefordshire, as plotted by Watkins (enlarged extract from figure 83 of The old straight track)
The finest index map in the world?

Readers of the Ten-mile cartobibliography will be aware of the 1:1,250,000 index maps produced for the launch of the 1:50,000 series. Some may even recall seeing a copy pinned up in a map shop. I had always supposed this to be a very uninformative map – after all, one can see the arrangement of the 1:50,000 sheets on their back covers. However, when I came to look closely at a specimen of the index recently, I realised it was not so much an index as a specification.

Thus each sheet edge on the index is unobtrusively labelled with the kilometre figure of its grid coordinate. Since all sheet corners have whole-km grid references, this defines the extent of the sheet precisely – except for extrusions, and these are marked by an asterisk on the index.

A separate panel tells one the exact size of the conventional signs panel, the width of the margin, and the folding scheme. There is even a note ‘Grip at North edge’ which indicates the manner in which the sheets have gone through the printing press – though why the user might wish to know this, I cannot say.

I would never claim the OS 1:50,000 as the finest series in the world at that scale. But it may have had the most informative index sheet. Or does anyone know a fuller example?

Rob Wheeler

Wirral’s stone circles – or were they?

Malcolm C McIvor

William Williams Mortimer said of Upton, Wirral, Cheshire, in his 1847 account of the history of the Hundred of Wirral\(^1\) that “.. it was the metropolis of Wirral”. There had certainly been a manor house, Upton Hall, there since the 1600s and in the mid 1800s it was rented by William Inman, a shipping magnate, whilst he oversaw the building of his new home, Harefield House, close by. This house was later to become Upton Manor and it had a ‘viewing tower’ from which he was able to look out over the Mersey Estuary to see when one of his ships was returning to the port of Liverpool. This highlights the fact that buildings on this elevated site in north Wirral commanded a clear view out to the Irish Sea.

Just across present day Moreton Road from Upton Manor is the site of one of Cheshire’s oldest churches, that of Overchurch, and these buildings share the promontory that is shown on the earliest maps of the Ordnance Survey as Overchurch Hill. The name Overchurch, according to W Fergusson Irvine,\(^2\) means the church on the shore from the Anglo-Saxon ofer meaning a shore and cirice, a church, which implies that at one time either the sea flooded over the marshy ground between what is today’s Leasowe Castle and Great Meols and possibly some way up the river Fender, or that a lagoon or salt marsh existed there.

That the church on Overchurch Hill was of Anglo-Saxon origin is well documented, in particular by Edward W Cox’s article on Overchurch and its Runic Stone.\(^3\) This stone was discovered when the ‘old’ church was being dismantled in 1887 and rebuilt on a site elsewhere in Upton. This unique artefact was dedicated to one Æthelmund and dated sometime between 700 and 900 AD. This find suggested that the early 1813 church was built on the site of a much earlier place of worship which was confirmed by D O’Hanlon and K Pealin in their survey of the site of Overchurch, Upton, Wirral.\(^4\) They refer particularly to the circular form of the enclosure around the old graveyard at Overchurch as having possible links with a time prior to the early Christian period. They further refer to the ‘enclosure’ also having a ‘depression’ which could possibly have been an internal ditch, a feature that would correspond to the usual structure of a henge.

This very thorough 1986 survey refers briefly to the plotting and recording of ridge and furrow, standing stones and pits and ponds by triangulation and makes brief reference to the 1898 OS map which shows a path leading to the churchyard from Upton Village.

What the report does not mention is that there were a number of other


'stones' indicated on that OS map that described a circle with a diameter of approximately 350 yards. Only one of these stones remains today but sadly it is no longer standing upright (figure 1).

Figure 1 (below). The remaining stone at Overchurch Hill

Figure 2 (right). 'Stone' at SJ 264 888 on Overchurch Hill

One can only assume that all the others have fallen victim to urban development over the last two centuries. Seeing this stone marked on the modern OS mapping (figure 2) on the Cheshire County Council's tithe map website is what started me on this particular study.

An extract of the 1899 OS six-inch map is shown in figure 3 (left). Five of the six stones shown form a circle centred on the wooded hollow just east of ‘Overchurch’.

An observation that may add further credence to there having been a ‘chamber’ on the site at Overchurch Hill is the name of the field to the immediate south-west of the old church. Field number 19 was called Great Pit Hey according to the 1837 tithe map shown in figure 4. The one remaining stone is the one to the south-west of the ‘19’ in this field.

5 http://maps.cheshire.gov.uk/tithemaps/TwinMaps.aspx
The old church yard, 20, is close to the centre of the circle of stones shown as + in figure 4. Field 21 was Far Church Hey, 12 was Near Church Hey and 13 was Little Church Hey. The significance of field 19 being called Great Pit Hey is that the actual centre of the circle of stones in figure 4 is near the north-east boundary of the field near to the small plantation of trees shown here in grey.

If this had been a pit or a deep depression at the time these fields were named then the name may indeed have been derived from a henge containing some sort of burial chamber.

So, was the ‘stone circle’ on Overchurch Hill in existence at the time the first Christian church was built there in the seventh or eighth century AD and did the ‘Great Pit’ that gave its name to the field in which this church was constructed once contain an early burial chamber? I guess we will never know, but the legacy left to us by those early surveyors of the Ordnance Survey is a very real one, even if today the stones that they included in their survey have all disappeared, except for one. Sadly, the field books in which the early surveyors kept all their notes have been destroyed.

To add further credence to this suggestion, I have studied all the large-scale Ordnance Survey maps of Wirral for the period between 1875 to 1899 to see if other ‘stones’ had been included in their cartography. I can report that there were a total of 57 stones identified, including the six at Overchurch. This also included...
three rows of ‘stones’ located in a field to the east of Fenderlane Farm and south of Fender Lane which contained a total of 37. These are a curiosity of a different nature worthy of further research, but twelve of the remaining stones were located not much more than a mile away from Overchurch Hill, as the crow flies, in the area of Arrowe Park. The curious thing about this collection of twelve ‘stones’ is that they fall closely into two concentric circles as shown in figure 5 (page 49). Two of these stones are still to be found in Arrowe Park and are shown below.

From their appearance, these stones are undoubtedly of considerable age and they have most certainly seen use or misuse over many years. But there is no mistaking the fact that, at least at the end of the nineteenth century, they were part of a collection of similar artefacts that can be shown to have been part of two rather larger than normal, circles of stone. They are not part of any eighteenth or nineteenth century enclosure system either. One can easily draw a circle through two or three stones and imagine that they were part of some early Neolithic design, but when a series of two concentric circles can be drawn through a complex array of twelve stones, I would suggest that they represent something more significant than just serendipity.

Recent excavations and thinking around the various circles at Stonehenge now suggests that this monument was dedicated to the dead of the ‘society’ that lived there, and that a much bigger henge, ‘Wood Henge’, about a mile away and closer to the River Avon, would likely have been the henge where the community lived, especially with fresh water on hand. The same theory could also be applied to the Arrowe Park and Overchurch ‘circles of stone’, with fresh water being available from Arrowe Brook which flows through the middle of the Arrowe Park circles. What do you think?
In September 2010 the Industrial archaeology team of the Society for Lincolnshire History and Archaeology were invited to survey the water supply system at Grange Farm, Langton-by-Spilsby in Lincolnshire (TF 389 712). The system, which was in place by 1906 when the OS 1:10,560 map was published, was operated by a waterwheel driven pump which itself was powered by the adjacent Langton Beck. The potable water came from a nearby spring. The pump was housed in a partially buried chamber and lifted the water some 65m to The Grange on the hill above.

Rob Wheeler described\(^1\) the evidence for pumps and wells in his home parish of Harmston near Lincoln and how the OS surveyors interpreted their instructions. Although Rob Wheeler notes the OS instruction *care is to be taken* it doesn’t seem to have been the case at Langton-by-Spilsby. The site of the water wheel is recorded on the map as a *Hydraulic Ram*. We could give the surveyor the benefit of the doubt as there is a hydraulic ram on the same estate to the south-east of Langton Hall. The remains of the ram also survive in a partially buried chamber but as Rob Wheeler noted, in an e-mail following publication of the Note on the Langton-by-Spilsby pump\(^2\), the surveyor should have known the difference.

---

Ken Hollamby

---


Meeting and chatting

David Archer’s piece *It would be nice to meet and chat about maps* in *Sheeelines* 94 triggered some heartfelt responses:

*From Anthony Francis-Jones:* These are interesting questions which seem to be echoed by lots of societies that have existed for some time and, with respect, may have an aging membership.

It is interesting to note that whilst some collect and study OS maps many more are ‘users’ who have a passion for maps too and these potential members should not be forgotten. It is easy to think that it is the walker that is the primary user of OS maps and how true is the cliché view of the male strutting out ten paces ahead of his female partner, map in hand ‘guiding’ the way. I have seen it many times; if only he handed the map over and gave her a chance he might be pleasantly surprised by the result!

The Society has much to offer other ‘forgotten’ users of maps. Let us look at these in a little more detail...

Whilst ‘completing a collection’ or ‘holding the paper’ is important for some, others look at maps and pick out interesting features that they may wish to explore on the ground (Mike Parker of *Map Addict* fame explains the fascination of looking at maps as a boy and dreaming of what a cartographically-depicted feature might actually look like). Rather than research of maps, many choose to research using maps. A number of female friends I know are quite expert at researching their family history and maps play a large role in this area for them. I was recently asked about pre-twentieth century mapping of the Telford area so that a friend could find the address of one of her distant family members. Maps (not necessarily OS ones) prove invaluable here, as whole groups of houses and roads have been bulldozed into oblivion to make way for new developments. An old tithe or enclosure map will ooze history and one can spend hours looking at a single sheet.

Researching lost ways and updating the Definitive map involves many, like myself, in hours of research and maps of all ages prove invaluable, as the evidence gained may well have to withstand the rigors of a public enquiry by the Planning Inspectorate. (I intend to write an future article on this process).

The more aeronautically-minded can pore over charts and I especially enjoy looking out of the window (a good idea when a piloting a light aircraft!) and spotting features on the ground which are new to me and later, at home, overlaying the GPS trace on the flying chart and the OS map to see what the features were – they may well deserve a visit on foot at a later date. Training Duke of Edinburgh groups is a real pleasure too and maps are vital to the success of their expeditions. Girls and boys alike become expert navigators and it is hard to miss those that leap forward to grab the map off you as they enjoy everything that maps have to offer – including the feeling of being ‘in control’ and adventure! Orienteering also can have all the thrill of a treasure hunt and a map plays a vital role in this too.
People love maps for so many reasons and perhaps the Society would do well to branch out and engage those whose interests mean that they do not confine themselves to OS maps alone or those in the paper form. A society does not need young blood in the same way that it does not need to exist but if it wishes to then perhaps this is the only way forward?

Meetings are a great chance to make new friends and share interests and there is no need for it to be part of a more formal meeting agenda. The idea of visits, trips, and talks is excellent and again it does not have to be directly related to OS maps. A visit to a map or chart maker to explain the process of printing or making maps, a visit to an interesting feature on a map to compare the view on the ground, a chance to experience surveying and mapping a small area either using modern or older techniques (something orienteering groups are good at) or a talk from a collector, a visit to an archive, a talk from a Rights of Way officer to explain how changes due to planning/upgrades and extinguishments end in a change to an OS map, or even a competition, for example ‘Using all the maps available what can you find out about the historical land use of grid square X?’ (I used to give the kids Heathrow to do!). Other slightly more unusual map-based hobbies exist – I am currently working on visiting a feature in every one of the 365 grid squares of the Dartmoor National Park map, a kind of map-feature munro bagging (see Dartmoor 365 by John Hayward). Evenings can be most pleasantly spent head into OL28 dreaming of the pleasures the next grid square may have to offer and contemplating how to get there!

CCS is a great organization and does excellent work. Sheetlines is an outstanding publication and, yes, convenient in the paper form. It does not have to be ‘turned off for takeoff and landing’ and it survives the rigors of rucksack travel! Much to think about but the Society might now like to look more closely (no pun intended) at those of us out there who feel ‘naked without a map’ whatever brand it is!

From Pat McCarthy: David Archer struck a chord. As an octogenarian member who has undoubtedly got more from CCS than put in I may not be the most appropriate commentator. My interest in maps has been as a walking, cycling, driving railwayman, therefore largely recreational. Being a member of several other organisations whose members use maps and in which debates along similar lines to the points raised by David have taken place I believe it right to stir our collective minds.

Things can be done (by whom?)

1. Short articles, suitably targetted, offered to the magazines/journals of bodies having a clear map-using interest.
2. Seek to recruit a cadre of members who would be prepared (happy?) to be introduced to prospective or recently joined people with the objective of stimulating their cartographic interests.
3. Certainly pursue the Twitter/Facebook line, appreciating that these media may well be obsolete in short order, nevertheless vital in the present.
4. Encourage members to go out to talk about maps at a relatively low level to
54

secondary schools and young peoples’ organisations.

5. Use the CCS logo more widely, lapel badge, car badge, stationery (even Sheetlines arrives in a plain brown envelope!).

From John Harmer: I wholeheartedly agree with David Archer. If we just want information about maps, we can get this from books and websites. However, if we have a real enthusiasm for maps, surely we should have a desire to meet and talk with other members. The fact that the only forthcoming meeting shown on the Society’s website is next year’s AGM, indicates the lack of opportunities for this. David sums up succinctly in his final paragraph, and this begs the question: ‘What are we going to do about it?’.

We need meetings in various parts of the country, so that members do not have to spend half-a-day travelling each way, thus leaving little time for meeting. The only other member I have knowingly met was the one who told me about the Society before I joined!

Also, I agree with David’s suggestion in the final footnote. With the increase in subscriptions, this would be the ideal time to implement it. When I joined earlier last year, I was not expecting to receive a map reproduction, so it was a pleasant surprise. If I was wavering over whether or not to renew, the promise of a map reproduction would be a great incentive.

The Society does have a tradition of holding meetings and visits. David Andrews came across this photograph when moving house recently. It is of CCS party visiting Ordnance Survey Bristol regional office in May 1991. Charlie Beattie, (on the far right), was Region marketing executive. David says: Just peeking out to the right of the sign is me, unusually wearing a suit and with hair considerably darker than it is now. As Digital Field Update Manager at that time I was usually in my ‘black hole’ surrounded by technical equipment and wearing neither tie nor jacket. I was evidently under orders from Charlie to smarten up for the benefit of our distinguished visitors.
Kerry musings  
David Archer

The sky is blue, the sun is shining and the birds are singing. You return home to your own little Blandings, humming a ditty and feeling quite pleased with your newest purchase, a map that will fill a gap in your modest collection. After a nice cup of tea and a study of the newbie, you go to put it away, only to find an identical copy sitting where there should be a space. Disappointment, annoyance and puzzlement. And so another map collector faces up to the reality that they really do need to carry a list of some sort. True, the odd duplicate will not break the bank, but one would prefer not to have the disappointment. If you are going to collect maps, do it properly, and properly does not mean buying everything you see in the hope that some will be needed. There is also the irritation of the duplicates, just seeing them reminds you that you made a mistake, and you begrudge the space they occupy. In some instances, a close examination of the two examples reveals small differences, and the collection heads in a different direction. Or, it might be decided to have a mini-stall at the society’s AGM map market, sharing three feet of table space with a couple of other members. A stallette, as Kenny would have said.

Some people have very straightforward needs, only lacking certain sheets in a series, and are happy with any state of the missing sheets, in any format and any cover. A small folded piece of paper with the numbers 21, 54, 56 and 60 is a sufficient reminder and easy to carry around. But, you might ask, why should anyone need to carry a written list of four numbers? Surely they can remember what they need? With at least twenty per cent of those who read this not being able to remember their car registration, seen every day, why should others be expected to remember four numbers which they seldom have need to refer to? Like me, some members just cannot remember numbers. Or, they might be fussy about condition, and if they see a map and reject it, the next time one comes up, they cannot remember whether they bought the one they saw last month or left it. Having held it, it looks so familiar, so maybe they do have a copy? A prompt would be useful.

Yes, a list of some sort would help, not only to indicate what you are looking for, but to tell you what not to buy. Call any list a ‘wants list’ and most people will know what you mean, but the term is misleading, and in fact covers a range of lists. The basic form is a list of maps that the compiler wishes to own, and they should not buy anything not on the list, unless they are certain they do not have a copy, which is where we started. Others carry details of their whole collection, whilst some have notes of which maps they think might be of interest, and need to see a copy of a particular map state in order to make a decision.

At least one person uses a copy of Roger Hellyer’s *Ordnance survey small-scale maps: indexes 1801-1998* with the index diagrams marked to show holdings, and another person carries pages 122 to 144 of *Map cover art*, suitably annotated. The only map list I carried until recently, was of Scottish Populars that on no account should I buy more copies of. So, later that evening, you sit down,
lick your pencil, jot a few numbers on a piece of paper and slip it behind a credit card in your wallet or purse.

An initial list will frequently be limited to a few maps needed to complete a block, not necessarily to complete sets. Once the gap filling nears completion, the boundaries of sought maps expand outwards and northwards. Never southwards from Scotland or ‘the north’. Lists are organic, developing according to the requirements of the owner, and after a while, anything can happen. Some people decide to go back in time to earlier series, or want more detail and investigate large scale maps. Simple stuff to record, unlike the decision to have a set in the same format and condition; Seventh Series, paper maps in the long red and cream covers in above average condition. Here, a list can be a challenge. One has to record what is lacking, what is held in the desired format, and what is held and needs changing, and which in the desired format need to be in better condition. For many, when well on the way to having a complete set of a series, they become bored with fewer maps appearing and are tempted to start on variations. The slippery slope. Maybe a set of first printings would be nice, or a set in uniform format, or the dreaded aim of one of every printing. Serious stuff this. Especially when, for some series, they discover that the same print code can be found with different prices. Without a prompt nobody can remember whether they need a Sheet 96, code 9.11 with 2/6 price along with 47 similar needs. Yes, boredom, resulting from nothing new coming up, is a real problem for the collector.

In the final stage of searching, whether for series maps or district maps, there is a great similarity to the lists. All only need the scarce items. But any ‘end game list’ will always have at least one scarce map not listed, showing that most people are lucky at least once in a map collecting lifetime.

For some collectors, there comes the point where a wants list is meaningless. They want everything issued by the Ordnance Survey. Well, certainly issued in covers. Such collectors might well have sets of the main series, plus most of the tourist and district maps, all the odds and ends and a lot that most of us do not know about. They have been through Sheetlines and other publications noting all the really obscure items mentioned over the years. I call these dream lists. Their list should just say ‘Anything I do not have’, and they have so much. Or more to the point, they have so many versions of so many maps that they cannot remember what they do have.

Long ago, every such person found a map that they were unhappy with. It was not on their list of wants, they certainly had a copy, but somehow this copy felt different. Some did not buy the map and have regretted it since. Others bought the map and found it to be significantly different from the copy at home. Anyone who has been in this situation realises the need to compare maps found against holdings. But it is impossible to carry a collection around. So, they jettison their wants list, buy a small pocket book and attempt to catalogue their collection. A holdings list is born. There are two major snags with such a list. The first being that even a small book is far too large to carry around all day long. So, one must anticipate when one might stumble across some maps and must remember to slip
the book into a pocket. Yes, I know, one finds maps in the most unlikely of places. And even if you know maps are to be examined, one can so easily forget to take the book. I will not upset a good friend by dwelling on this point. The second snag again involves the word anticipate. One must anticipate what differences one might come across, and usually has to wait for the first occurrence. I have a small collection of the modern Ordnance Survey town plans, some of which have different covers, as if this matters. The A//" printing of Inverness has a yellow splodge stating ‘with updated road information’, as has the A/* printing of Falkirk. Having seen one splodge, one knows to record and look for it. Easy. But Lancaster and Morecambe has two photographs on the front. On the 1987 first printing, one is a swimming pool, whilst on the 1990 reprint it has changed to yachts on the sea. Can one reasonably be expected to anticipate such a change? With the Ordnance Survey, yes one should anticipate a change of some sort, but few would like to predict what sort of a change. These days, the solution would be to have a collection catalogued on a computer, with images of the map and covers. If this were always on-line, when out and about, it could be accessed via a mobile device to compare holdings and maps found.

Is it defeatist or good tactics to have a list? If you cannot remember you need it, is it important? Of course nobody would have the really scarce items listed as anyone would know whether they own them or not. And if you cannot remember having such items, perhaps you don’t deserve them. Such items are not to be found, bought, ticked and put away. They need to be cherished and appreciated. I suppose that a list is really an aide memoir, a little reminder when things get confusing. You see a map, but do you have the version with or without the sticker? Or you need to know the sheet numbers needed for a seldom looked at series that you are collecting for some obscure reason. Which begs the question of why do people collect series that they are not really interested in? Usually because they came across a good chunk of the series at a bargain price, could not refuse them and now feel the need for completeness.

But of course the really scarce items will be on a wants list, as the list complements the collection at home. List plus collection equals totality. No gaps. Rather than being a negative thing, items not owned, a wants list for someone in the final stages of collecting (if there were such a person) can be seen as a trophy list. Bag a really good map and there is tremendous satisfaction in crossing it off after all these years of searching. Also, if shown to another knowledgeable collector, the few remaining items on the list, by implication tells of just how wonderful the collection is. These are the only ones I need, so I must have the rest, yes, even that, that and that map. Here, a wants list is not ‘I am missing these’, but ‘Look at what I do not need, see what I have already’.

Although no-one can complain of a shortage of writing on the history of cartography in these islands over the past forty years, nonetheless much of the activity has been in detailed studies rather than more general syntheses. For Ireland, there is JH Andrews’s Shapes of Ireland (1997), which concentrates on the topographical mapping on the country; and Jacinta Prunty’s Maps and map-making in local history, which goes beyond what might be implied by its title. Catherine Delano Smith and Roger Kain’s English maps: a history (1999) treats the mapping of England and Wales, thematically rather than chronologically, and now we have something along the same lines for Scotland.¹

There are thirteen chapters, mostly self-explanatory: Putting Scotland on the map (which introduces some general principles); Maps of Scotland before c.1595; A kingdom and a nation depicted, c.1583-1700; Scotland occupied and defended; Towns and urban life; The changing countryside; Islands and island life; Seas and waters; Travel and communications; Mapping science (including geology and land-use); Open spaces – recreation and leisure; Popular culture; Maps at work – working with maps (a conclusion); and a Guide to further reading.

The general approach is very much that developed by J Brian Harley: maps as instruments of power, maps as social documents, and so on. It is thus more aligned with Delano-Smith and Kain than it is with Andrews. Whilst there is some merit in the theoretical approach, and there is no lack of social context – the highland clearances are merely the most notorious – it can lead to fragmenting of some stories. This is not a volume for anyone wanting a coherent account of the development of the Ordnance Survey in Scotland, and indeed discussing its nineteenth-century urban mapping before discussing that of the countryside, and that in turn before discussing the geological impulse, is reversing not only the cart but a team of horses. Nor does it really cover the development of such firms as Johnston and Bartholomew, which were Scottish enterprises with a far wider reach, similar to, say, Clyde shipbuilding. Whilst the ‘great man’ is an unfashionable concept in history, institutions can help to provide a framework and reference points for discussing certain types of mapping.

A paradoxical effect of concentrating on Scotland is that the nation’s contribution to wider cartographic developments goes largely unremarked. It is true that Scotland is considered to be one of the best-mapped countries in the world in the later seventeenth century, but we are not given the proper, British, context of Roderick Murchison’s condemnation of its topographic mapping in 1834. Similarly lacking is acknowledgement that the greatest contribution that Scotland made to the development of the Ordnance Survey was not the Military

Map of 1747-55, but in the early 1850s, with the extraordinary convulsions that led to the adoption of the 1:2500 scale. Likewise, there is something extraordinary about John Wood’s urban mapping from 1818 onwards: Scottish towns were depicted with a uniformity unique between John Speed in the 1600s and the Ordnance Survey nearly 250 years later. A number of illustrations draw on the Bartholomew Archive at the National Library of Scotland, but the light of this unique survival does not shine here as it might.

*Scotland: mapping the nation* is extremely well illustrated, in colour throughout – acid papers and all – and the book may well be worth its price just for the illustrations. Many are of whole maps, or of large extracts, and whereas in the past this has often been the cue for a prodigious waste of effort for a very murky result, here the fine resolution enables remarkable detail to be read even with a low-power magnifier. Many of the maps illustrated are now available on the National Library of Scotland’s website, but there are many of us who still prefer to study paper rather than a screen. The printing – undertaken in China – is excellent, and that only serves to emphasise the one blemish, and one which I have previously complained of from this and other publishers: yes, detail of double-page spreads is lost in the gutters. Do publishers ever look at the printed stock? The authors, the maps and Scotland all deserve better.

Most of the illustrations have extended captions, which can be read practically as a narrative in their own right. There are examples of both ‘standard’ and non-standard mapping, and some which is plain quirky. For example, why are lighthouses emphasised on a naturalists’ map of 1893 (p.246)? Whilst this may seem to emphasise the exceptional at the expense of the normal, no-one ought to complain at the inclusion of, for example, various types of geological and land-use mapping. One illustration is of a cover of 1820 for one of the parts of John Thomson’s atlas of Scotland, which includes at the end of a list of counties in progress: ‘Ayrshire and Wigtosnshire are waiting until the outline of the Government Survey is procured: if this is not published soon, the Maps of those Counties will be published from the best materials to be had…’ It was to be ‘the best materials’.

In summary then: anyone wanting an outline guide to the development of mapping in Scotland will find this a useful starting-point, well supported by illustrations. What we still lack is a comprehensive combined history of the mapping of, and by, the whole of Britain and Ireland. Such a history needs to take account both of chronology and of recent theoretical and procedural developments, and of the claims of both national and regional and more ‘imperial’ approaches. I write this in no entrenched unionist spirit – better friendly neighbours than discontented housemates – but because, whether one likes it or not, a union of crowns has been largely reflected by a union of cartographies. Meanwhile, here is one of the influences for such an overarching work to take account of.

*Richard Oliver*
Terry Keegan 1931 – 2012

Terry was CCS member 1095 and a founder member of the Milestone Society. I found out very soon after joining ‘his’ group, that they were a very active bunch of people, who under his leadership have done much to restore the Worcestershire collection of milestones. He had that quiet gentle manner that if he wished for something done, he seemed to know just who to select and he had that way of asking that was difficult to refuse.

One could say so much more about this great man who will be much missed, especially here in Worcestershire. His last project, a single milestone to replace a missing item, was completed a couple of weeks before his passing. Despite not being the best of health, he was there for the installation, on the A449 just north of Claines (SO 847 596) and then again over the Jubilee weekend to see the stone unveiled at a little ceremony held at the side of this busy road. It was fitting that he did see his last wish completed. Sadly, it seems these days OS no longer entertain ‘putting back’ replaced milestones on their maps. It would have been a fitting tribute to a truly great man, who did so much for the local area.  

Peter Willis

Member offers

OS is offering CCS members a discount code which will be valid for 12 months at the Ordnance Survey online mapshop: http://www.shop.ordnancesurveyleisure.co.uk/

Entering the code CC2PMGAMCM in the discount section within the basket will provide members with 30% off the following OS products:

- 12-month OS getamap
- Ordnance Survey paper maps:
  - OS Landranger
  - OS Landranger Active
  - OS Landranger Custom Made
  - OS Explorer
  - OS Explorer Active
  - OS Explorer Custom Made
  - OS Travel Map - Tour

Cassini is able to offer CCS members complete England-and-Wales sets of its Landranger-matching historical maps (Old Series, Revised New Series in Colour and Popular Edition) at eye-watering discounts. If you already have some and want to complete your collection, similar deals can be done. Cassini also welcomes enquiries from any school, university, shop, library or dealer you might be associated with.

To discuss your requirements and claim your CCS discount, contact Brian Quinn on 01488 648 110 or brian.quinn@cassinimaps.com