

The later Ordnance Survey half-inch maps; some points of detail

Richard Oliver



The Charles Close Society's latest map reissue is of half-inch (1:126,720) Second Series sheet 37, from a proof of 1960. Research for this, together with my long-standing desire for a suitable modern national series at 1:100,000 or 1:125,000, prompts consideration as to how effective the Second Series was in certain respects. The half-inch, the 1:125,000 and 1:100,000 together constitute a scale-family; it can be assumed that its main potential uses in Britain are for cycle-touring, medium-distance motoring away from 'main' roads, and general geographical reference. An additional 'green' justification is that it is more economical of paper and ink than is the 1:50,000 *Landranger*. In view of speed of movement and cover by larger scales, the half-inch family does not seem relevant to pedestrian or equestrian needs. In 2011 the only maps at 1:100,000 that can be considered as 'fit for purpose' for cycling are a few isolated unofficial sheets.¹

The half-inch story in brief

Between 1903 and 1910 the OS published a half-inch map of Great Britain, initially mainly for military use, and produced by rapid rather than refined techniques (*figure 1*). In 1935 a wholly recompiled and redrawn sheet, *Greater London*, was published (*figure 2*); an unpublished trial section of part of Devon followed in 1937, and in 1938 sheet lines for a new national series were devised. Work was halted by World War II, and revival in 1946 was followed by further redesign, including an unpublished trial section of Sheffield. A full sheet completed in 1949 – 51, *Canterbury* – was belatedly published as a 'Provisional Edition' in 1956 (*figure 3*), and five Second Series sheets, including 37, were taken to at least proof stage before the series was abandoned in 1961 for want of resources (*figure 4*).² Sheet 28, republished in 1966 as an independent tourist

¹ These are by Mike Harrison (of Herefordshire (1998, out of print; see Christopher Romyn, 'A cycling map', *Sheetlines* 54 (1999), 5-6), and of south-west England (2005; see Richard Oliver, in *Sheetlines* 74 (2005), 45), now being reissued; see www.croydecycle.co.uk, which has extracts), and Harvey Maps (*Yorkshire Dales for cyclists*, 2003; not reviewed in *Sheetlines*). News of others would be welcome. For cycle-mapping see Richard Oliver, 'Ordnance Survey maps for the cycle-tourist', *Sheetlines* 51 (1998), 14-31, and Richard Oliver, 'Mapping for cycle-touring in Britain; past, present, and a possible future', *Cartographic Journal* 38 (2001), 48-60. The latter is a better piece of work than the former; both explain, implicitly or explicitly, why other 1:100,000 mapping on sale in recent years is 'unfit for purpose'.

² Sheets published: 28 *Snowdon* (1961), 36 *Birmingham* (1958), 39 *Norwich* (1961), [43] *Greater London* (1962); sheet 37 proved in 1960. Sheets started: 25-32, 34, 35, 38, 42, 44, 50. Literature is at present scanty; see Bill Batchelor, 'The Ordnance Survey half inch map – Second Series 1956-1961', *Sheetlines* 16 (1986), 7-12, and Richard Oliver, 'The half-inch Second Series; further reflections and revelations', *Sheetlines* 17 (1986), 12-14. Policy and design files are in The National Archives (Public Record Office) [TNA PRO] OS 1/149, 351, 441, 503, 701, 702 and OS 11/3; the later 'job files' are in the CCS archive (boxes 76-78) in Cambridge University Library map room.

sheet, *Snowdonia National Park*, was withdrawn in 1990. An alternative to the OS was offered by Bartholomew; its half-inch was first published 1875-1903, reissued at 1:100,000 in 1975-8, and abandoned as a national series by 1987.³

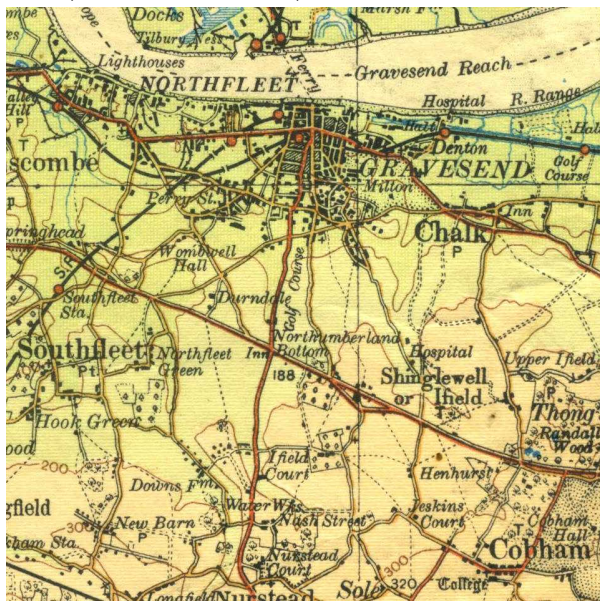


Figure 1. Half-inch sheet 34 (1926: reprint 5000/32), incorporating post-1914 revision, stamped text

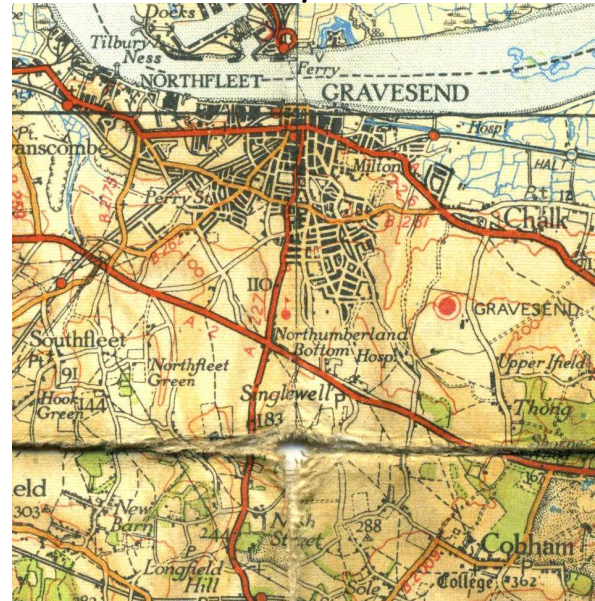


Figure 2. Half-inch Greater London sheet (1935: revised 1931-4) handwritten text

Figure 3. Half-inch 'Provisional Edition' sheet 51 (revised 1931-6; drawn 1949; published 1956), handwritten text

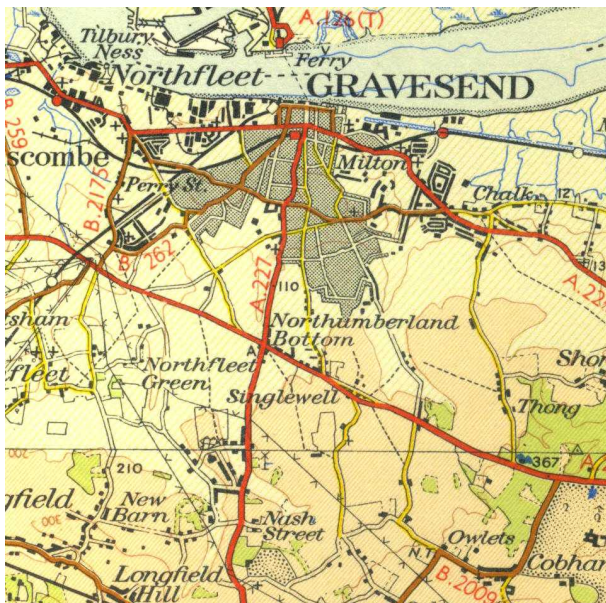
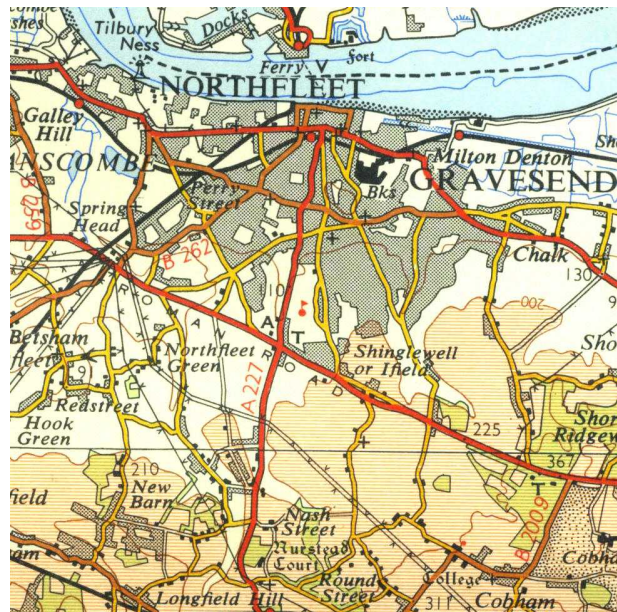


Figure 4. Half-inch Second Series [sheet 43], Greater London (1962: revised 1950-56) (© Crown copyright), phototypeset text



In figs 1, 2 & 3 the fort at Tilbury is unnamed or omitted on security grounds

³ The experimental sections are in TNA PRO OS 1/351; that of 1937 (which includes a legend) at 55A, 58A, that of 1947 (without legend) at 72A-C, 75B-D. The only copy of sheet 51 in its original form that I know of in a public collection is in TNA PRO OS 1/441, at 11A.

Classification of lesser roads

The early half-inch maps used the same fourfold classification as the one-inch maps from which they were derived. From 1924 some of the sheets were republished with a simplified version of the classification used on the contemporary one-inch Popular Edition: 'good and fit for fast traffic', 'fit for ordinary traffic', 'indifferent or winding', and 'other roads'. There was no overt reference to the one-inch's distinction of roads with over and under fourteen feet of metalling. The 1935 *Greater London* distinguished Ministry of Transport 'A' and 'B' roads, which alone were infilled, and 'unclassified, wide' and 'narrow', and 'unmetalled'.⁴ By this time road tarring was well advanced, such 'sealed' surfaces might be expected to offer a smoother ride, higher speeds and less risk of punctures, and the distinction was duly made on newly-published one-inch sheets. The unpublished 1937 experiment, and probably also that of 1947, distinguished 'over 14 feet tarred' and 'other roads'; by 1949, when sheet 51 was completed, there was simply 'other roads', without infill, and not particularly easy to read in the 'noise' of rather dull layer-colouring and woods and orchards shown by black tree symbols. The main object of publishing this sheet belatedly in 1956 was to test public reaction to the colour scheme, and in this version 'other roads' over 14 feet in width were infilled yellow. A problem common to all the designs, from 1935 to 1956, was that it was unclear which of the lowest classed roads were tarred. The one-inch made the dual distinctions of width and surface, and it seems very strange that the half-inch did not, when surely the great majority of readers would have been road users. The definitive half-inch Second Series specification divided unclassified roads into 'metalled and tarred' and 'other roads'. In this it was similar to the 1:25,000 Provisional Edition; at least users were warned of possibly rough surfaces, though they were denied the route-planning facility of wider and narrower roads, and the result could sometimes tend to 'visual spaghetti'. As the 'other' roads were drawn to a narrower gauge than were the tarred ones, it is difficult to see why the one-inch's principle of distinction by a combination of gauge and infill could not have been used. In this respect the Second Series was better than its immediate predecessors, but could still have been improved.

Paths

Unlike the Bartholomew offering, the early OS half-inch did not show paths; they were added to those sheets that were revised and republished from 1924 onwards. Was the idea to poach some customers from Bartholomew? From 1884 to the late 1940s the OS distinguished foot and bridle paths on its six-inch and larger-scale mapping, but this information was not passed onto the one-inch, and indeed even today the 1:50,000 *Landranger* has only one physical category of 'path', and this is all that is shown in Scotland. Legal status apart, a fundamental distinction between foot and bridle paths is that the former may be obstructed for cyclists and equestrians by stiles and 'kissing gates'. The half-inch designs of

⁴ The MoT roads are sufficiently obvious for the scale that they need no further discussion.

1935-49 all included 'paths'; *figures 1 to 3* show that the depiction was certainly copious. Given the dubious relevance of the scale to pedestrians, omitting paths from the definitive Second Series specification certainly seemed more logical than their introduction in the 1920s. In 1960 the OS began to show public rights of way in England and Wales, but as legal status rather than ground features. When *Snowdonia National Park* was published in 1966 'principal paths' were added, perhaps as a species of tourist information; a strangely elongated 'point feature'.

The Countryside Act of 1968 conferred a general right to cycle on bridleways, and thus introduced both a reason and an apparently ready-made distinction for showing them on mapping at a scale rather too small for pedestrian use. Just over a fifth of the 'off-road' rights-of-way network was potentially of use to cyclists, and increasing traffic on roads means that such ways are potentially useful for both short- and long-distance cyclists.⁵ However, there are two complications. One is that some bridleways would seem to be totally impracticable to cycle on; horses can be ridden where no cycle can go. (The bridleway at the top of Ingleborough, illustrated in *figure 5*, is perhaps an extreme case.) The other is that some cycles are better able to tackle unsealed surfaces than others; it has been suggested to me that there are three basic categories of cycle, being 'racing' types with narrow tyres, which are practically confined to a sealed surface, 'ordinary' cycles with more robust tyres (typically 1 3/8-inch), which can be ridden on some unsealed surfaces, and 'mountain bikes', with heavy-duty tyres, which can be ridden on much rougher surfaces.⁶ Thus a half-inch-type map that included all bridleways would include a number that

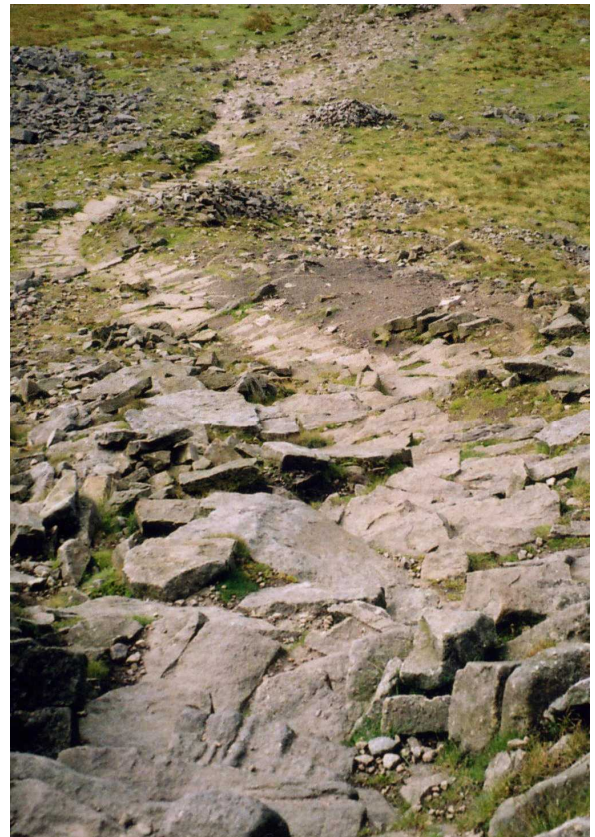


Figure 5. Looking down along bridle path at Ingleborough (SD 740745), 23 August 2005. (Photograph by Richard Oliver)

⁵ Countryside Act, 1968 (c.41), s.30. The British Horse Society gives a figure of 188,700 km of rights of way in England, being footpaths 146,600, bridleways 32,400, byways 3700 and restricted byways 6000; www.bhs.org.uk/Riding/Riding-Off-Road/Fight-for-your-Bridleways/Campaign/Forestry-Sell-off.aspx (accessed 7 October 2011); although this figure is given in a campaigning context, my snap impression from inspecting OS maps of various parts of the country would suggest an over-estimate – so no doubt it is correct.

⁶ Chris Juden of the Cyclists Touring Club suggested the three-fold distinction to me in conversation, some years ago; 'mountain bike tyres' can include both 'on-road' and 'off-road' types, implying even a four-fold distinction. I am indebted to Bridget Oliver for on-the-ground assessment of the suitability of certain bridle ways for horses.

would be quite impracticable for any bicycle, and more that are only practicable for specialised cycles and, given the changeability of ‘unsealed surfaces’, regular surveys on the ground would be necessary.⁷

In omitting ‘paths’ the half-inch Second Series was being sensible in view of the legal situation and practical considerations in the 1950s and earlier 1960s; for any successor, depiction would be a more complicated matter.

Churches

All the OS half-inch maps used a single symbol for ‘church or chapel’; more of these were shown in rural than in built-up areas, but generally all with steeples were included, except in very close areas such as central London. The depiction of churches on OS mapping merits a detailed study; it may be assumed that their inclusion on the original OS half-inch was a combination of contemporary conventional religious attitudes, practical way-finding, and some tourist interest.⁸ In way-finding churches can provide punctuation marks in the landscape or townscape, and can be valuable for identifying road junctions. Diversification of both faiths and buildings have led OS to consider alternatives on at least two occasions, but the indignation that greeted an experiment conducted in 2002-3, of substituting symbols for buildings with towers or spires, makes a substantial change of policy unlikely.⁹

The half-inch Second Series ‘performed adequately’ in depicting churches.

Antiquities

A selection of these appeared on the original half-inch; the criteria for inclusion are uncertain although, as with churches, it may be a mixture of conventional assumptions, way-finding, and tourism. In 1947 the draft specification for the new half-inch proposed that ‘only those of first importance to be shown, e.g. Stonehenge, Figsbury Ring, etc.’¹⁰ By the time sheet 51 was completed in 1949 this had been modified to complete omission, and the mapping was published in this form in 1956; it might perhaps be explained, if not excused, by a generally ‘minimalist’ approach to text on this sheet. Within the area of sheet 51 contemporary quarter-inch (1:253,440) mapping showed ten Roman and 34 other remains or sites, including the Battle of Hastings and castles at Bodiam and Leeds. Antiquities were restored to the definitive Second Series; their omission from sheet 51 was one of those interesting experiments that seem remarkable on a published map.

⁷ I have no statistics to offer, but Mike Harrison’s 1:100,000 maps of Devon and Cornwall, which are aimed at cyclists, only show bridle ways very selectively, presumably on the basis of inspection.

⁸ For a preliminary study – again, not a perfect piece of work – see Richard Oliver, ‘Steeples and spires; the use of church symbols on Ordnance Survey one-inch maps’, *Sheetlines* 28 (1990), 24-31.

⁹ Verbal information from OS staff at CCS meetings, London, June 1986, and Exeter, September 2002; see ‘Hundreds of churches to be wiped off the map’, and Simon Jenkins, ‘A cross marks the spot’, *The Times*, 9 May 2003, pp 1, 24.

¹⁰ Draft specification, n.d. [August-September 1947]; item 81A in TNA PRO OS 1/351.

Names

As with antiquities, successive designs of half-inch map varied in their treatment. Whilst larger settlements, like classified roads, are unproblematic, the question of which lesser ones should be named is complicated by varying settlement patterns and local signing policies, and avoiding ‘clutter’ on the finished mapping. A solution that is cartographically satisfactory in one part of the country can result in crowding or sparseness elsewhere. It may be suggested that a reasonable test is the extent to which the map includes those settlements that appear on official direction signs.

Perhaps following Bartholomew, the original OS half-inch showed a considerable number of farm and similar minor names. This was generally continued on the 1935 *Greater London* sheet, though in practice a number of ‘hamlet’ names were omitted.¹¹ Perhaps as a reaction to this, sheet 51 of 1949 took a minimalist approach; individual building names were mainly confined to certain country houses and similarly large buildings, though coastguard stations and some isolated inns also appear. As with *Greater London*, there were apparent inconsistencies, and some ‘hamlet’ names that gave their names to railway stations were omitted, for example Sharnal Street (TQ 785745). Deficiencies in *Greater London* and sheet 51 were addressed in the definitive Second Series; the Second Series *Greater London* perhaps over-compensated by including numerous railway station names, and some minor names of questionable interest, though *figure 4* shows that it omitted some which had appeared on the overlapping part of sheet 51.¹²

Public telephones

The final feature to be discussed is hardly the least remarkable. Like the one-inch, the original OS half-inch showed post and telegraph facilities; from 1914 telephones at post offices were added, and in the late 1920s telephone kiosks began to be recorded in those places where there were no post offices. All these were added to the half-inch and were part of the designs of 1935-47, but then it was decided to omit the post offices, and distinguish public and motoring organisation kiosks. This practice was followed on the definitive Second Series, and on the 1:250,000 from 1961. The practical result is that whereas there is comprehensive coverage of the motoring organisation kiosks, that of ‘ordinary’ public ones is extremely fragmentary, and strict logic, without the benefit of the parent one-inch or 1:50,000 or OS internal instructions, would suggest a very eccentric distribution.¹³ In this respect the half-inch Second Series cannot be judged satisfactory.

¹¹ Erratic treatment, as compared with one-inch Fifth Edition sheet 95, can be seen east of Luton: Tea Green (1,124,000-1,353,000) is omitted but Chiltern Hall (1,123,500-1,350,500) is included. A more sensitive approach to ‘antiquities’ would suggest the inclusion of Someries (1,122,200-1,350,200).

¹² See, for example, around TQ 3756 *Nore Hill*, *Chelsham Court*, *Chelsham Place* and *Winders Hill*; the practical effect is to diminish the importance of the name *Chelsham*.

¹³ I counted 11 on sheet 36, *Birmingham*.