In passing

John Cole

This article is a round-up of work on the National Grid 1:1250 and 1:2500 scale maps, summarising their content and providing selected updates and corrections.

Documented work on these two scales commenced with that of Richard Oliver on 1:1250 scale maps in *Sheetlines 24* and 1:2500 in *Sheetlines 29*. In addition to the background to the 1:1250 mapping, the *Sheetlines 24* article gave a list of virtually every location where such a survey took place, the number of maps involved and the dates of the survey. Richard conceded that the very complexity of the subject meant that the dates were open to correction, which the latest editions of his *Concise guide*[1] succeeds largely in so doing. There were also a number of blanks in map totals which this author undertook to supply in an updated list in *Sheetlines 56* (with further corrections in *57, 65* and *73* !)

The first twenty years of the 1:1250 National Grid mapping, with lists of the main survey method for most locations, appeared in *Sheetlines 67* and *81*. The 1:2500 was similarly dealt with in *50, 58, 64* and *80* with corrections and additions duly following, again by this author. The articles in *Sheetlines 50* and *58* dealt with a short-lived expedient of the mid-1950s whereby 1:2500 maps, mainly in rural Devon but in at least a dozen other counties, thought to have been little changed since previous revisions (of between 1900 and 1940) were published unrevised on National Grid sheet lines. The assumption of 'little change' was made on the basis of very rough reconnaissance and proved to be unwise in some counties, particularly Sussex.

A list of the maps involved was attempted in *Sheetlines 58*. It was compiled from 1:10560 'survey revision' diagrams, but due to the time lag before production of the smaller scale map, original revision dates were approximate for a quarter of the total. Unfortunately at that time it was not possible to be absolutely certain what the exact total was, but sight, earlier this year, of a Field Division Report from 1956-57 has established that 2230 of these 'by-passed' maps (on a 1 x 1km^2 format) were published. In addition a further 272 maps, forwarded to OS HQ for by-passing, were returned to the field to be properly revised. This detail explains, in all probability, why it was not possible to trace any such maps in Essex where rural revision had commenced at the same time as in Devon. A record exists that 57 Essex maps had been sent to HQ for by-passing in March 1954.

The number of by-passed maps county by county was originally provided in note 36 page 38 of the 2005 edition of the *Concise guide* – since these figures were originally supplied by this author there is justification for an updated figure now to be provided. The errors mainly arose from county boundary mistakes – Cheshire / Staffs, Cornwall / Devon and Stirling / West Lothian.

[continued on page 37]

[1] Richard Oliver, *Ordnance Survey maps, a concise guide for historians*, second edition, London, Charles Close Society, 2005

Supplement:
Ordnance Survey index diagrams, part 2

The new Charles Close Society website includes a comprehensive collection of index diagrams to the various editions of the Ordnance Survey one-inch and half-inch maps, and to the 1:25,000 First Series. Go to *www.charlesclosesociety.org/indexes* to download these pdf files, which are designed for printing as individual A4 sheets. (Although the diagrams are marked as 'Copyright', this is only intended to inhibit commercial re-publication without the Society's permission. Members, librarians and the general public are very welcome to make sufficient copies for their own use.)

Part 1 of this supplement was published in *Sheetlines 85* and contained a selection of A5 versions of essentially the same diagrams, covering the one-inch maps of England and Wales, together with the one-inch series of Great Britain as a whole. The following pages contain some additional diagrams:

One-inch maps of Scotland

- First, Second, Third and Fourth Editions
- Third Edition in colour
- Popular Edition

One-inch maps of Ireland

- First Edition
- Second and Third Editions
- Sheets issued in colour

Half-inch maps

- England and Wales, small sheet series
- England and Wales, Large Sheet Series
- Scotland
- Ireland
- Great Britain, Second Series

The diagrams are in many cases derived from those originally prepared for various CCS publications. They are largely based on the work of David Archer, Roger Hellyer and Richard Oliver, as well as the late Brian Adams and Tim Nicholson.[1] All the diagrams have been carefully checked, but I should be grateful to be alerted to any remaining errors, so that the website may be corrected. The website also includes S*heetfinder* to identify sheets covering any specified locality.

Chris Higley

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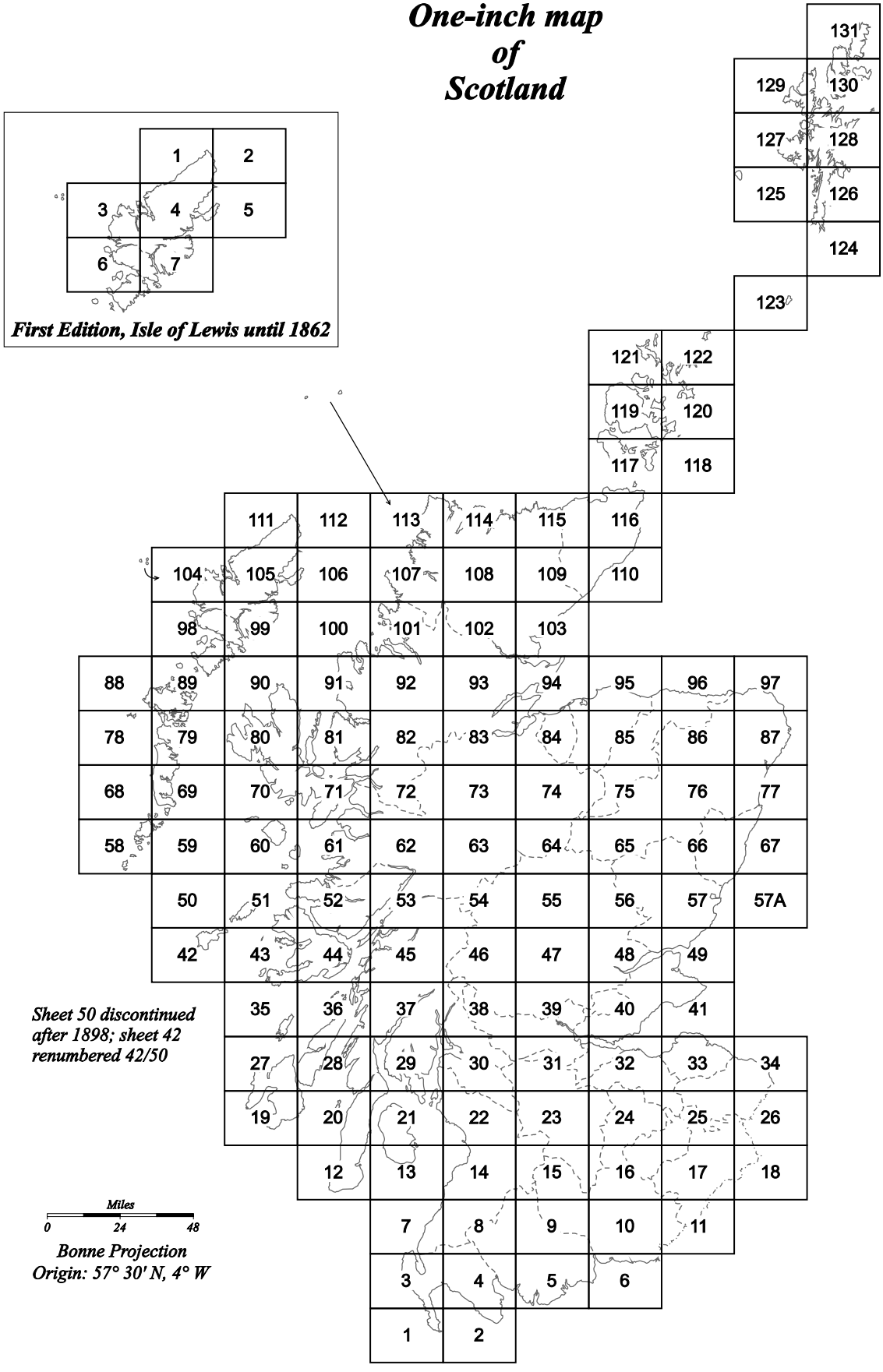
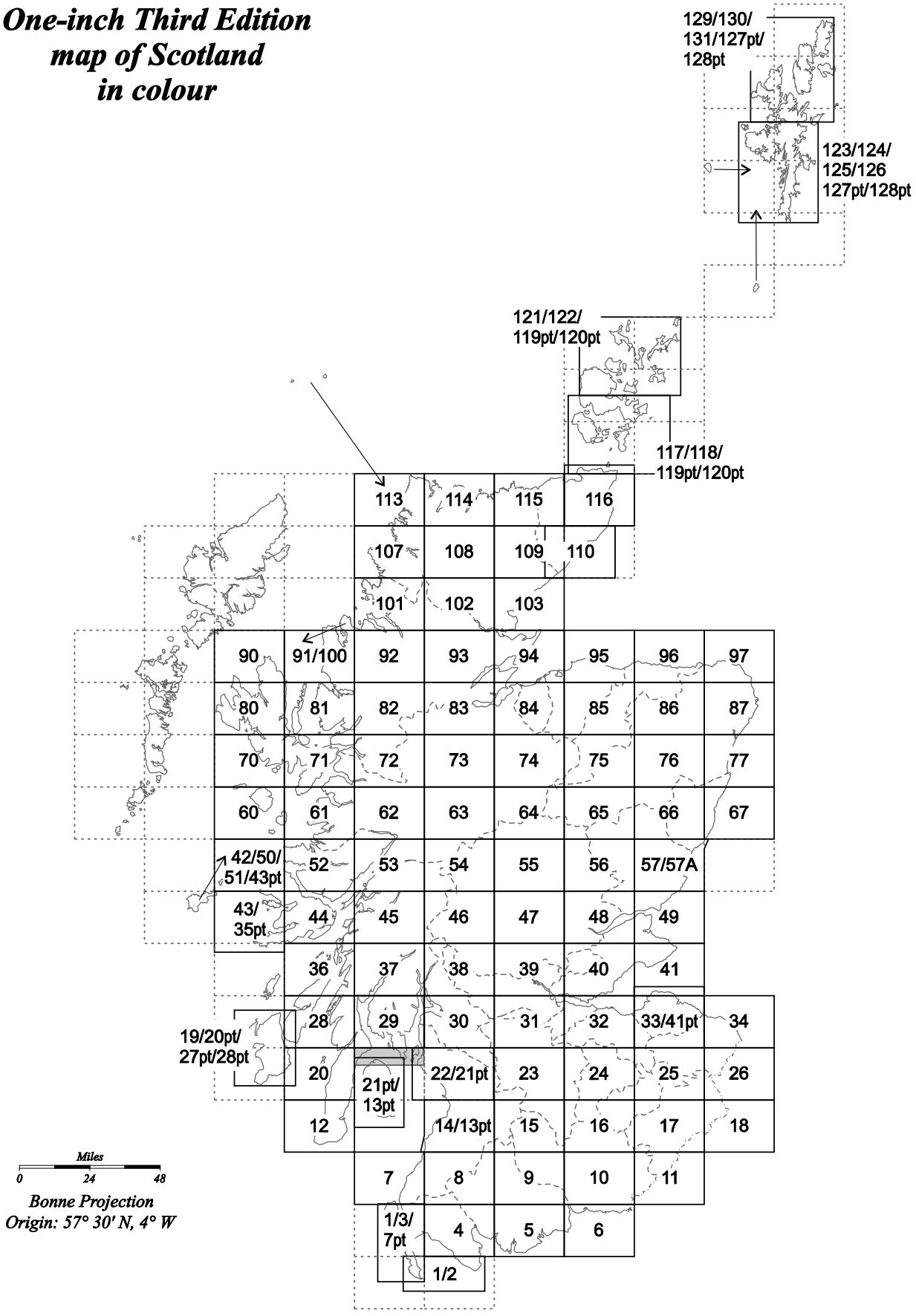
[1] Sheet line diagrams for other series, and more information about the various styles of sheet published, will be found in Roger Hellyer, *Ordnance Survey small-scale maps, indexes: 1801-1998*, Kerry: David Archer, 1999.



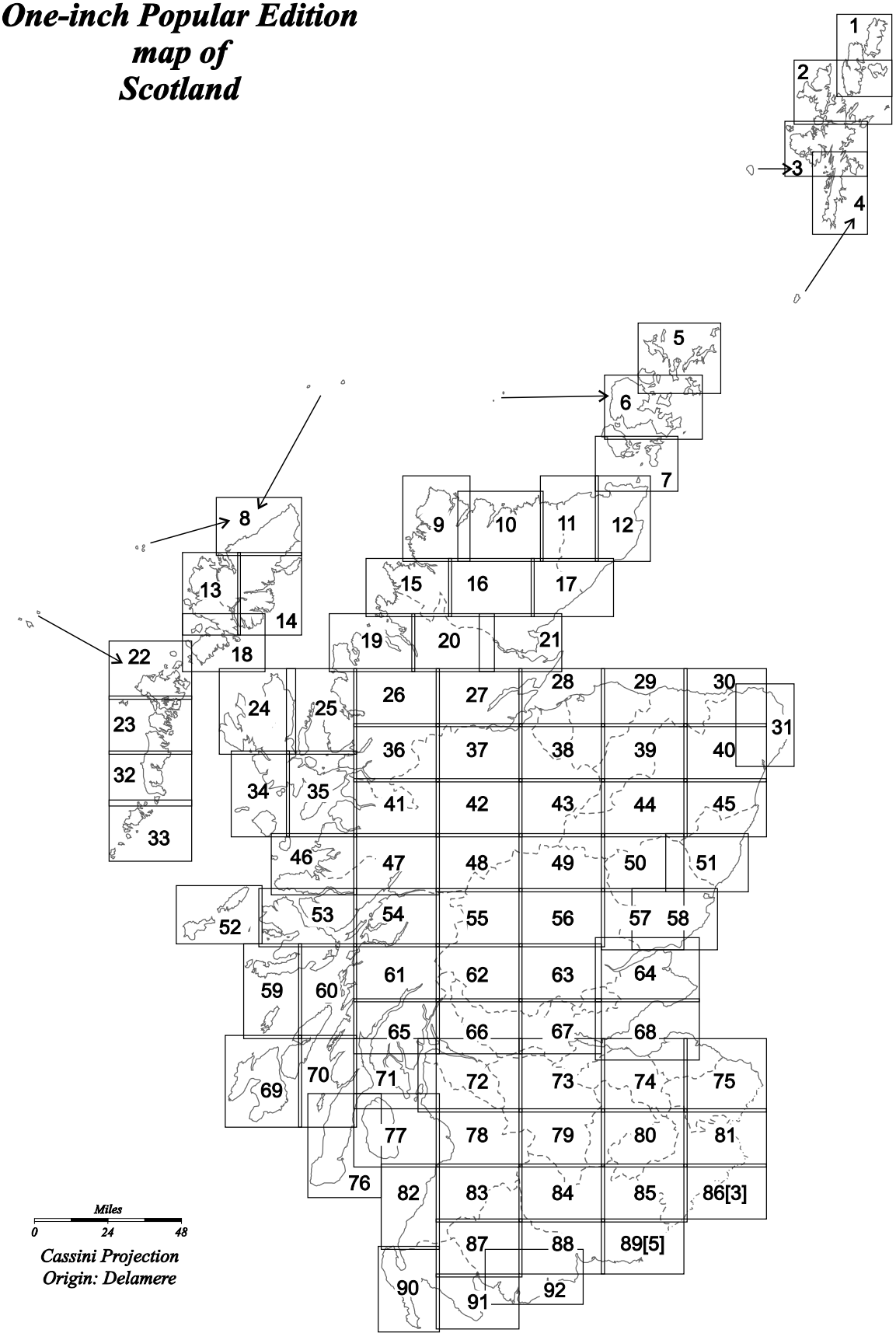
This layout was used for the First, Second, Third and Fourth Editions of the map, although sheet 123 was not published in the Second Edition and only sheet 26 (with the English portion blank) was published in the Fourth Edition.

One-inch Third Edition map of Scotland in colour



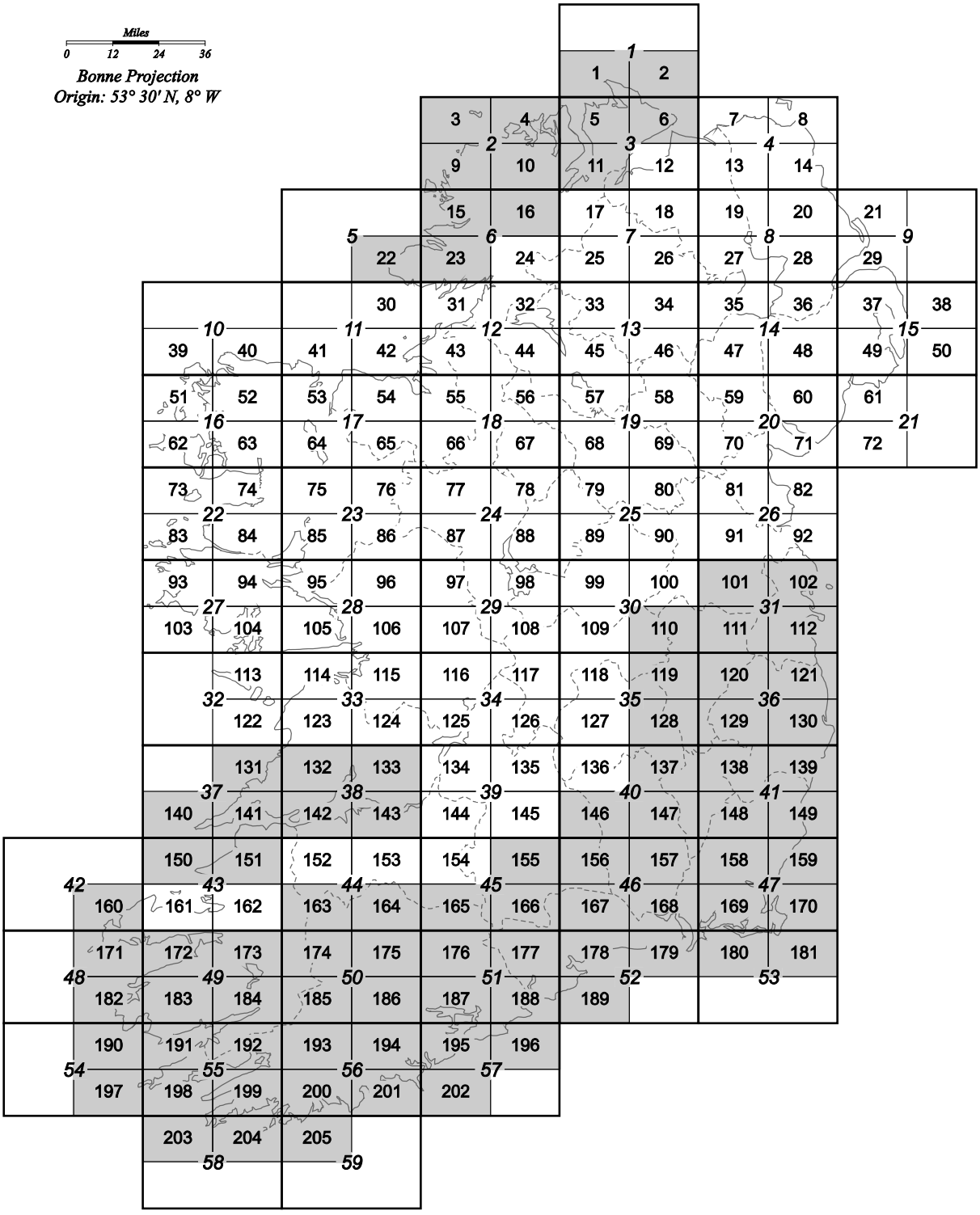
Sheet 29 was combined with the shaded portion of sheet 21 on reissue in 1908

One-inch Popular Edition map of Scotland



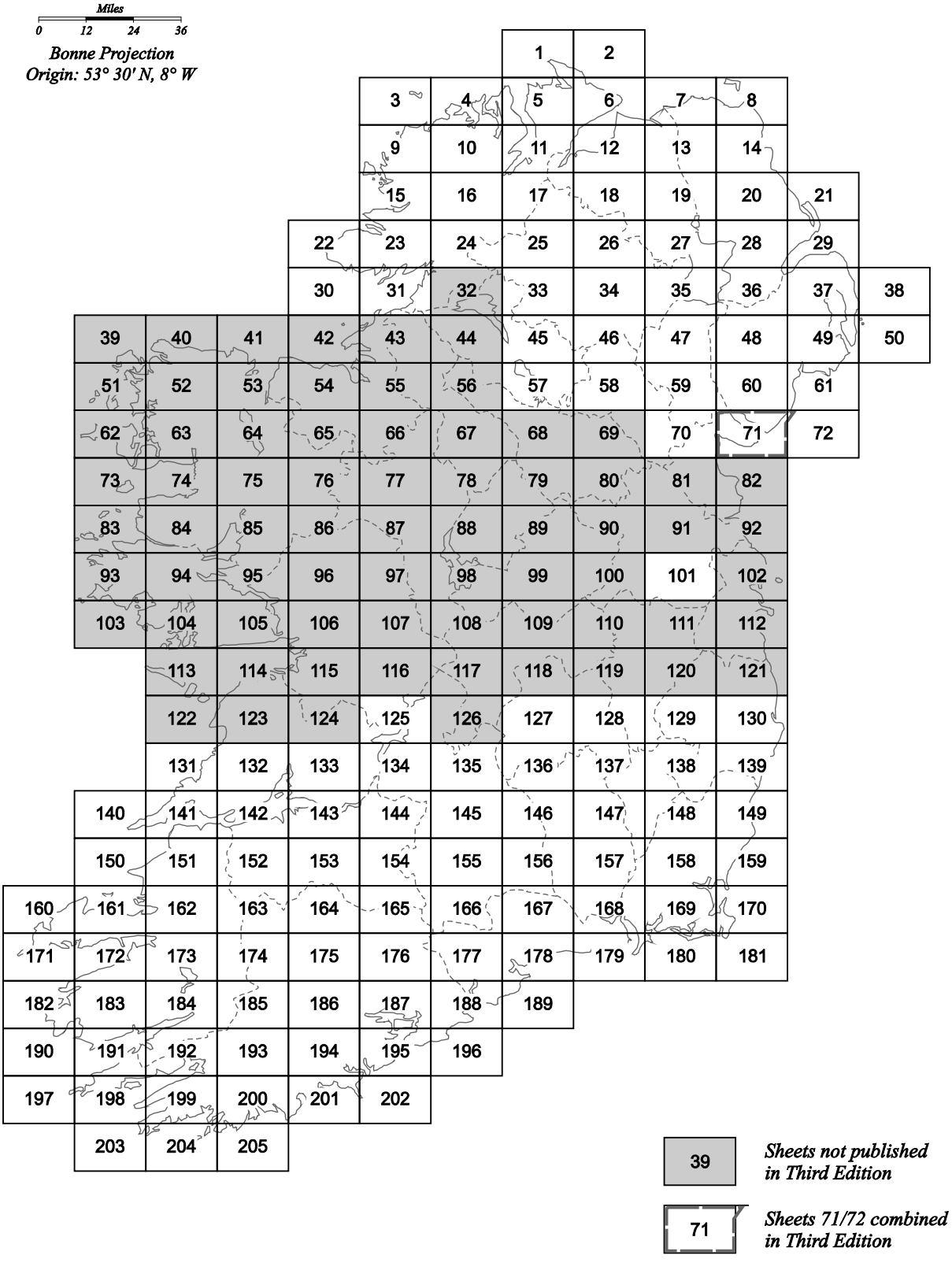
Adjacent sheets generally overlap by one mile, as is indicated by the double lines

One-inch First Edition map of Ireland

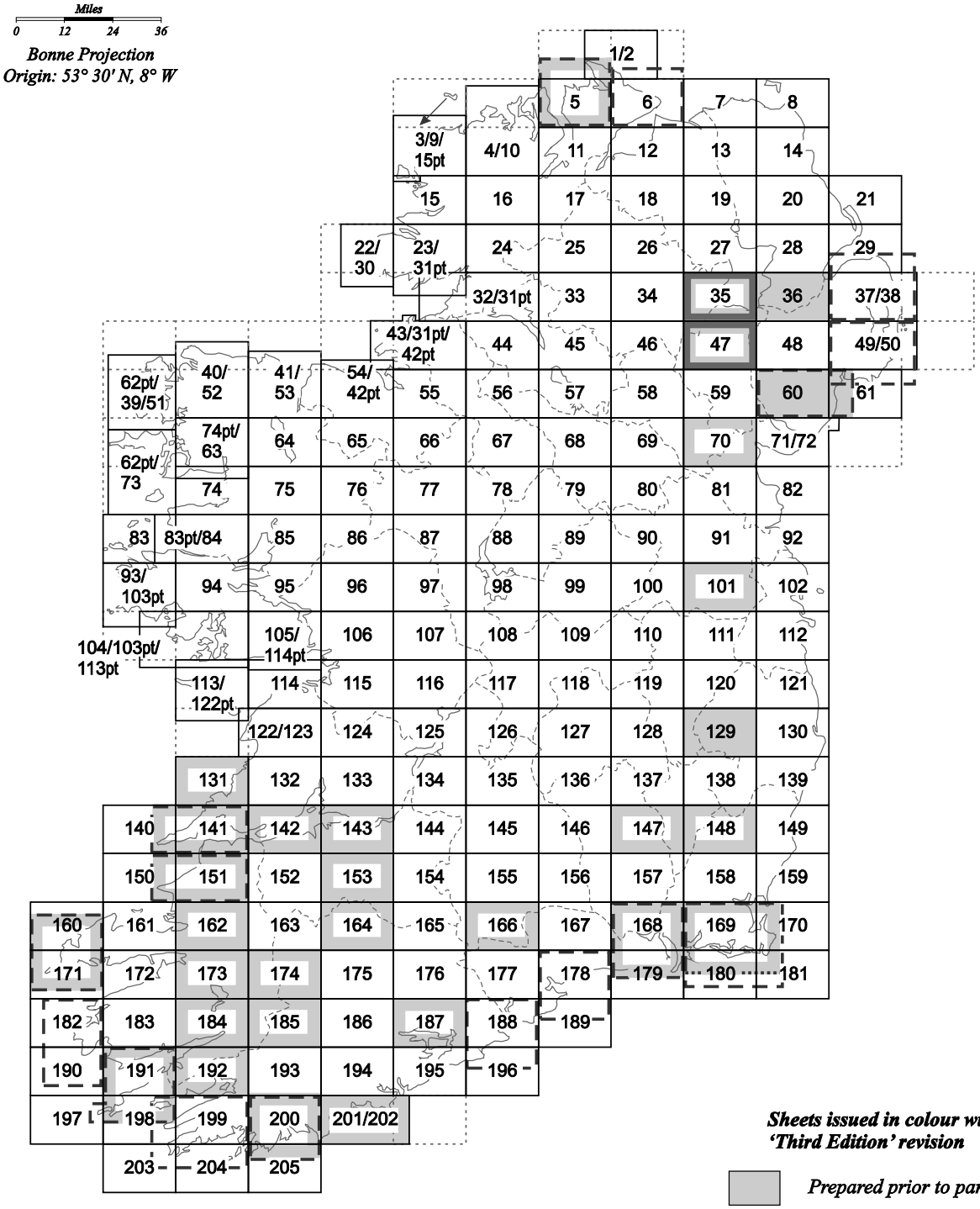


The heavy lines and italic figures show the original full sheet layout. The quarter sheets issued as such are shaded. In 1858, each quarter sheet was renumbered as an individual small sheet, all 205 of which were published.

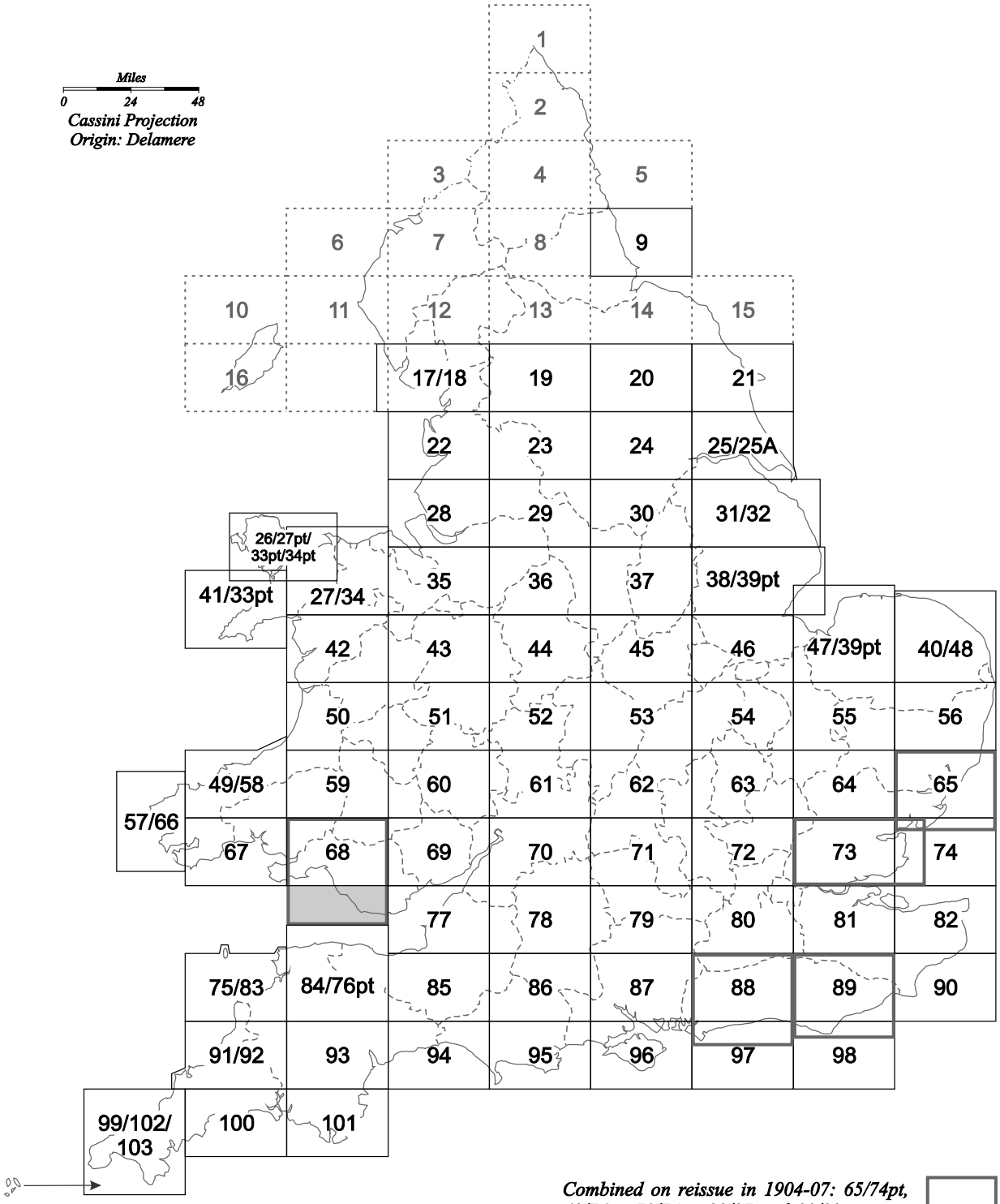
One-inch Second Edition and Third Edition maps of Ireland



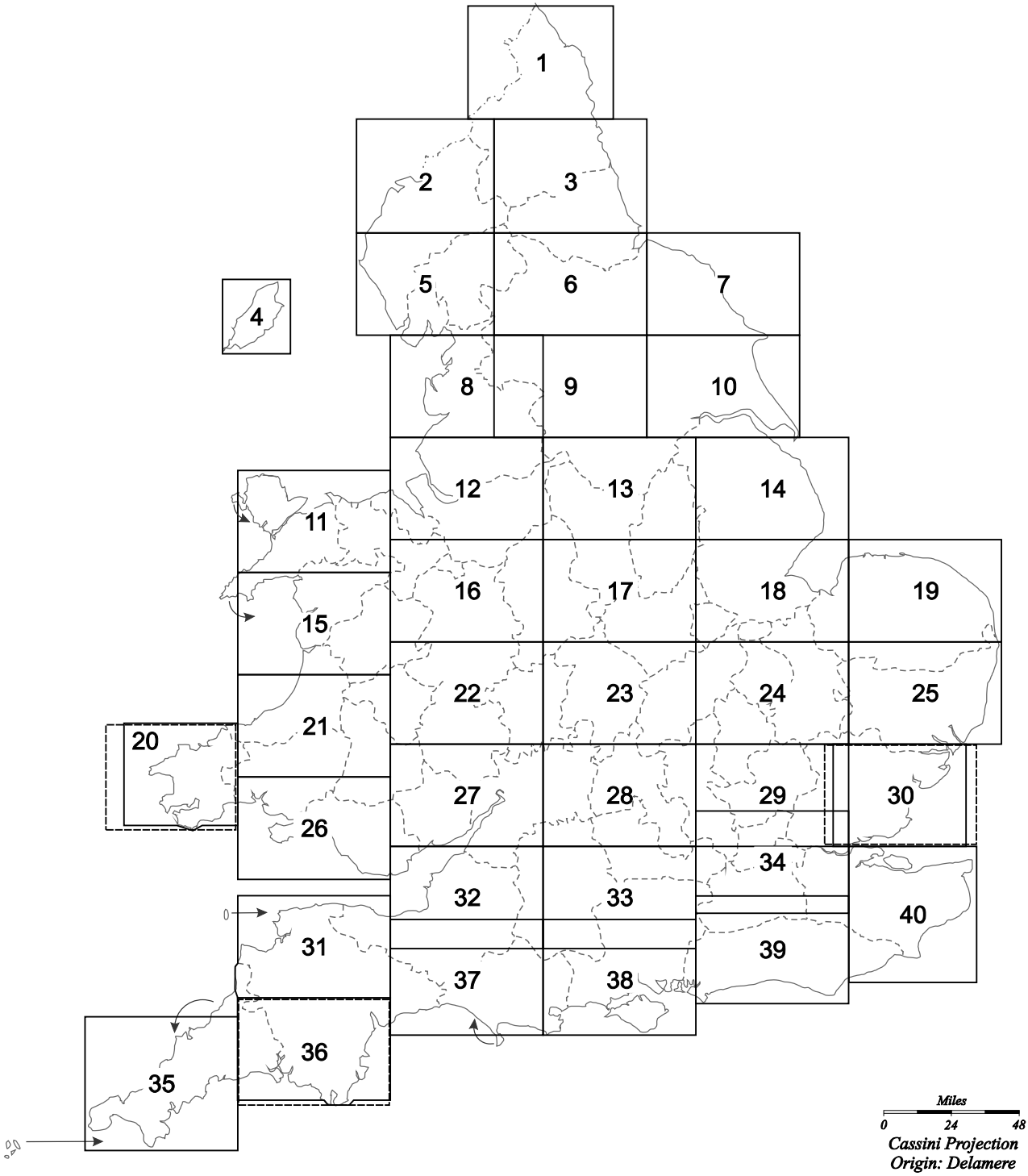
One-inch map of Ireland in colour

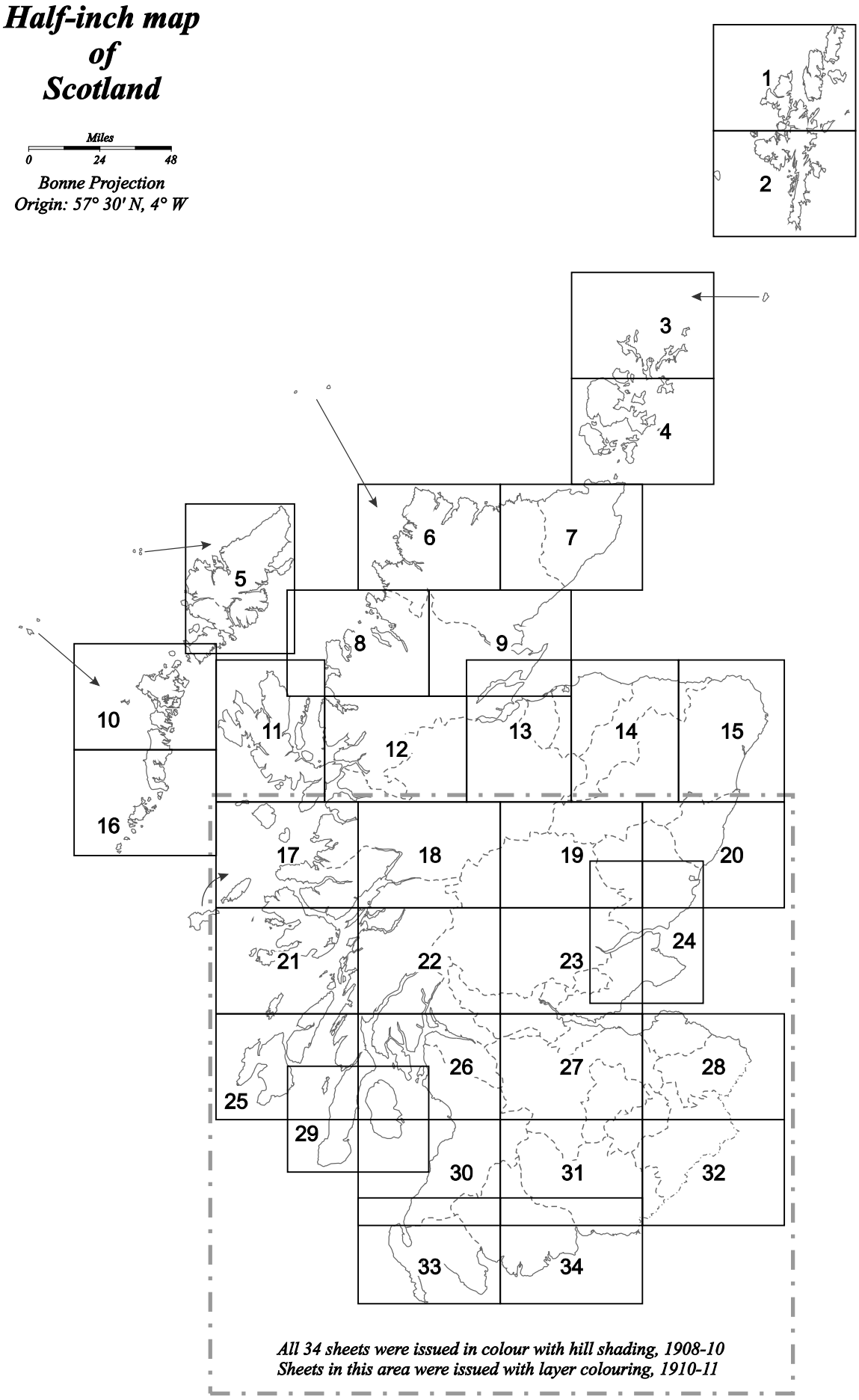


Half-inch map of England and Wales small sheet series

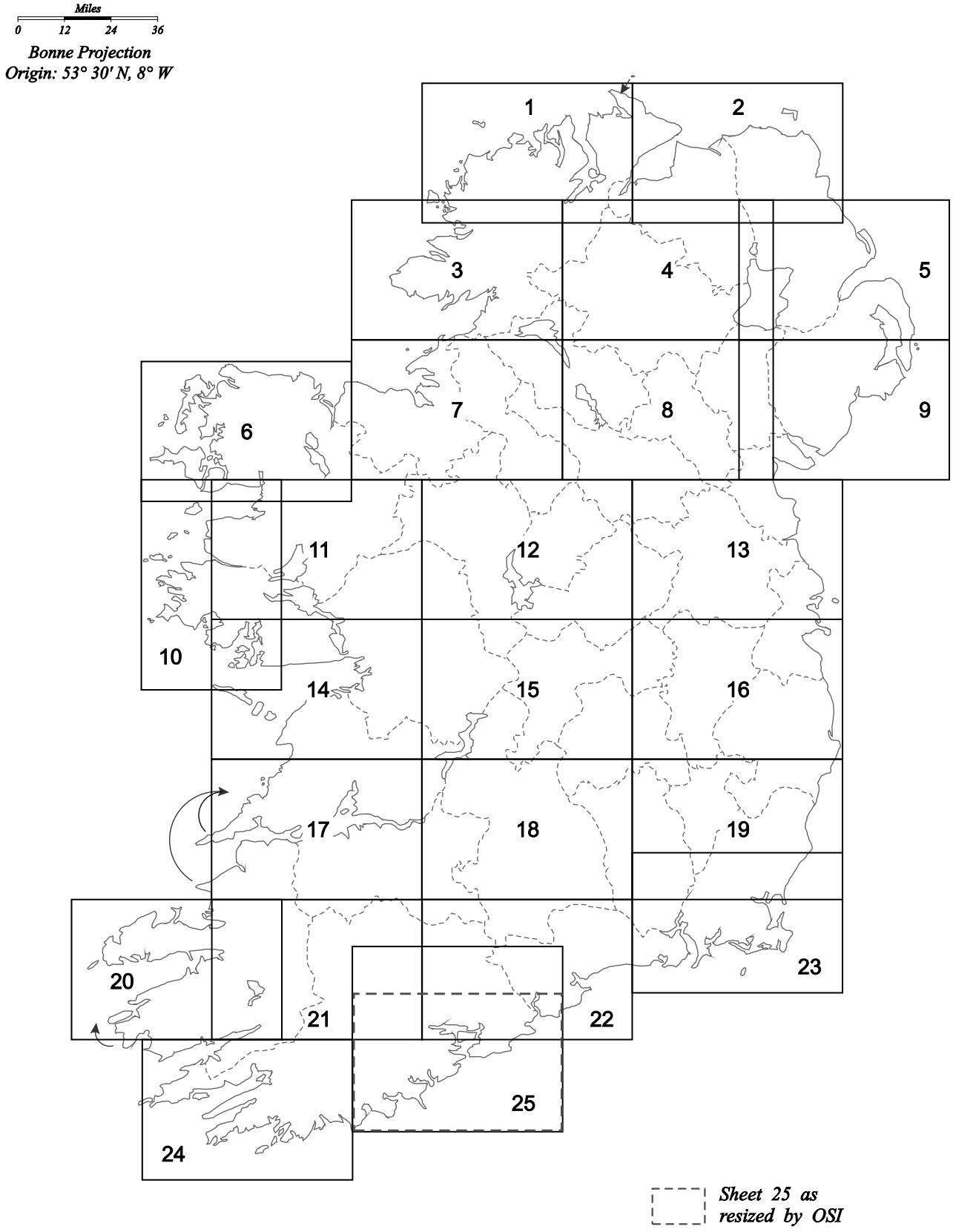


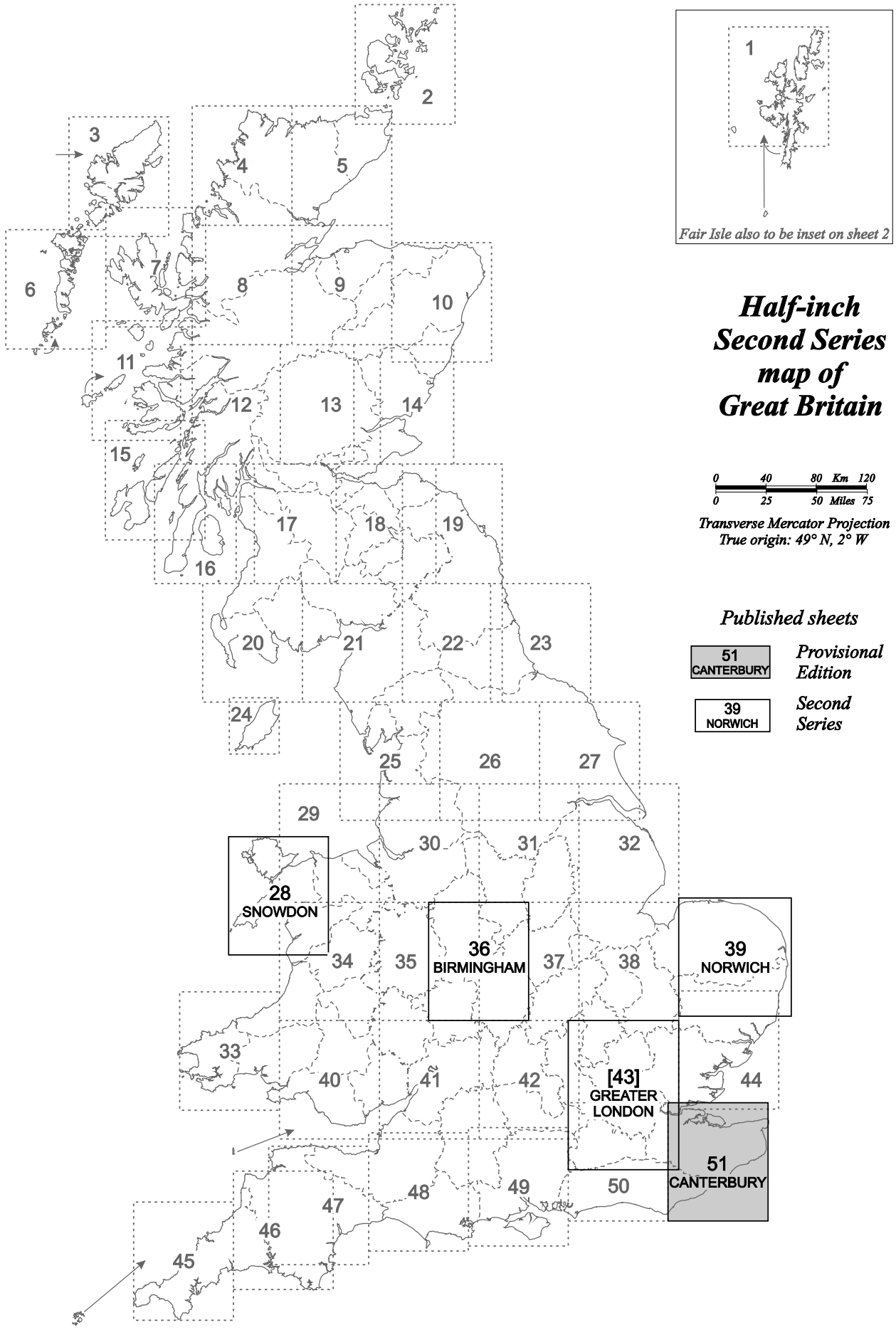
Half-inch map of England and Wales Large Sheet Series




Half-inch map
of
Scotland
Miles
0
24
48
Bonne Projection
Origin: 57° 30' N, 4° W
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
All 34 sheets were issued in colour with hill shading, 1908-10
Sheets in this area were issued with layer colouring, 1910-11

Half-inch map of Ireland




1
Fair Isle also to be inset on sheet 2
Half-inch Second Series map of Great Britain
0 40 80 Km 120
0 25 50 Miles 75
Transverse Mercator Projection
True origin: 49° N, 2° W
Published sheets
51 CANTERBURY
Provisional Edition
39 NORWICH
Second Series
28 SNOWDON
36 BIRMINGHAM
39 NORWICH
[43] GREATER LONDON
51 CANTERBURY

[John Cole, continued from page 24]

Latest figures (which remain provisional, even though the total is now correct) are given below:

Cheshire	2	Kent	22	Stirling	1
Cornwall	137[2]	Lanark	1	Sussex	104
Devon	1537[2]	Leicester	19	Warwicks.	86
Dorset	260	Northumberland	3	W.Lothian	40
Hants	5	Staffs	4	Wilts	9

These figures originally came from the Ordnance Survey, but were in survey/revision blocks which straddled boundaries. By way of example Hampshire which straddled part of Dorset and Wilts was given as 69 and East Dorset as 191.

There are also a few corrections regarding methods to be noted. The Field Report referred to above also established that the 1:1250 survey method for Reading was indeed air graphic as was originally stated. And an earlier report regarding Bath indicated that the air survey would only be taken as far south as the 64 North Grid line, suggesting that the Odd Down and Combe Down localities were chain survey. In *Sheetlines 67*, ST7563NE in Lyncombe Vale was singled out for its high (68) constituent of revision points (RP) for an air surveyed plan. The average for the nine other 1:1250 maps north of the 64 line was 23 which was still on the high side but assumed to be so due to the experimental nature of the method in the late 1940s. It was also mentioned that SX9163NE surveyed at Torquay in April 1951 had at least 106 revision points to control the chain survey of the very difficult town centre area adjacent to the harbour. It was noted that there may possibly have been an additional half dozen or so points, as the map viewed was a 1968 version when a number of RPs would have been absent through destruction. Subsequently, the original was seen and found to have a total of 122, which is thought to be a 'record' (for England, Scotland and Wales).

It has been possible to check (roughly) the linear and National Grid accuracy of some twenty out of the fifty seven towns and urban areas revised at 1:2500 in 1960-70 and subsequently re-surveyed at 1:1250 in mainly 1986-89. Slightly more than two thirds of the total were thought to have been contracted out by Ordnance Survey, the remainder being surveyed 'in-house'. Except in two cases, only the old town centres were involved, but the perceived accuracy of the 1:2500 came as something of a surprise (to the author at least!). Factors which may have had a bearing are (a) that a trigonometrical point is to be found in most town centres, and (b) for all but four of the localities examined, the original 1:2500 map was a reduction of a 1:500 survey of the late nineteenth century. Incidentally, in three cases in the so-called re-plotted counties, the 1:500 had itself been a replot from the 1:1056 survey.

Distance measurement ranging from about fifty to two hundred metres and readable on a 1:2500 scale to about half a metre, was surprisingly good – in some places excellent. This is especially so in view of the fact that measurements impossible to undertake on the ground were taken on the map. Most differences rarely exceeded one and a half metres (usually ten per location or map being an average) with similar results regarding National Grid intersections. Internal property divisions, rarely straightforward in old town centres, were predictably not so good, even allowing for possible alterations over the intervening years.

[2] An alteration to the Devon/Cornwall boundary in the 1960s was originally overlooked.

Unfortunately, the 1:2500 revision method was known in only a few instances but could be reasonably surmised in several others according to the year the revision was undertaken.

Towns where a National Grid 1:2500 – 1:1250 comparison was undertaken were: Elgin, St Andrews, Skipton, Beverley, Stamford, Rugeley, Lichfield, Stratford-upon-Avon, Huntingdon / Godmanchester, St Neots, Thetford, Newmarket, Hailsham, Sandown / Shanklin, Truro and Penzance / Newlyn.

The 1969 1:2500 revision of Sandown / Shanklin on the Isle of Wight appeared to be remarkably accurate regarding National Grid position and point to point measurement, compared with the 1:1250 resurvey of 1986. It was surprising that Lichfield (1964) which effectively was a machine plotted resurvey from air photography at 1:2500 scale, and experimentally tied to the surrounding overhaul appeared little better than any other revision method. Indeed Truro, which was revised at about the same time by purely ground revision of the existing 1:2500 re-established on the National Grid (and which had a poor reputation locally), compared no worse, at least in the city centre. The three re-plotted county locations (St Andrews, Beverley and Skipton) revised 1964-6 were not any better or worse than the remainder.

It was possible at one location to compare the low water tideline where it was known for certain that different methods had been used. Infra-red photography plotted at six inches to the mile was probably used for 1:2500 (and enlarged to that scale.). Contours plotted from air photographs at the predicted height of mean low water for the 1:1250 were produced some twenty five years later. Five sections of the 1:1250 map were looked at including: (a) the harbour area and two other sections close to the built up area; (b) a section of virtually inaccessible coastline comprising steep cliffs, rocks and boulders and (c) three hundred metres of sand and shingle with an average of forty metres between high and low tide at the foot of steep cliffs and with no ‘firm line’ detail. Whilst the ‘contour’ tide lines (high water also being supplied by this method) were much more intricate, the amount of general agreement was staggering – especially on the inaccessible section. There was also exact National Grid agreement as well – probably due to the town being a revision point re-survey of the 1950s.

To conclude, a future article will describe how a sample 1:2500 by-passed map from each of the counties involved has altered in the intervening years.

Top 5 / Bottom 5

Mike Parker, in *Map addict* (see review on page 49 of this issue), nominates his five best and worst *Landranger* sheets. His favourites are: 123 Lleyn Peninsula, 131 Boston & Spalding, 104 Leeds & Bradford, 196 Solent and 34 Fort Augustus, Gen Roy & Glen Moriston.

Consigned to the dustbin of ignominy are 11 Thurso & Dunbeath, 176/177 West London / East London, 148 Presteigne & Hay-on-Wye, 110/111 Sheffield & Huddersfield / Sheffield & Doncaster and 46 Coll & Tiree. To read his reasons, you’ll have to buy the book, but we would like *Sheetlines* readers to nominate their personal love / hate list, with reasons. A selection of your choices will appear in the next issue.