



# CAIRT

Issue 40  
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## Newsletter of the Scottish Maps Forum

### In this issue:

- **New acquisition - Henry Otter's North Coast description**
- **Slater's Loup and Monument**
- **Recent publications**
- **James Hepburn and his mapping of Boddam**
- **Recent NLS website additions**

### Scottish Maps Forum

The Forum was initiated by the National Library of Scotland in 2002:

- To encourage multi-disciplinary map use, study and research, particularly relating to Scottish maps and mapmakers
- To disseminate information on Scottish maps and map collections
- To record information on maps and mapmaking, particularly in a Scottish context
- To liaise with other groups and individuals with map related interests
- To build on, and to continue, the work of Project Pont

### Cairt

The newsletter is issued twice a year. "Cairt" is Gaelic and 17th century Scots for map.

For further information, or to be added to the mailing list, please contact:

**Scottish Maps Forum**  
**National Library of Scotland**  
33 Salisbury Place  
Edinburgh  
EH9 1SL  
Tel: 0131 623 4660  
Email: [maps@nls.uk](mailto:maps@nls.uk)  
Twitter: @natlibsotmaps



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Editor: C. Fleet  
Technical Editor: J. Parkerson

### New acquisition - Henry Otter's 'Description of the North Coast of Scotland' 1844

The NLS has recently been delighted to acquire from an attic sale at Dunrobin Castle a detailed coastal survey volume of the north coast of Scotland by Captain Henry Otter RN, presented to the Duke of Sutherland in 1844.<sup>1</sup> This handsomely bound manuscript of 67 pages includes several full-page watercolours and a pull-out set of coastal views. It is accompanied by a shorter survey of the east coast of Sutherland completed by Otter in 1849 and four letters of advice on fishing and harbours.

Otter was in close contact with the Duke at this time, and arranged for copies of Admiralty charts to be made for him, which survive in the Library's Sutherland Estates collection.<sup>2</sup> This new acquisition links well with these, and also adds interesting background context to the extensive printed Admiralty charts of Scottish coasts published under Otter's direction that we already have online. Otter provides descriptions of the coastline, drawing on his own contemporary sailing instructions to identify harbours, anchorages and hazards, as well as geology, flora and fauna, to which he adds a mix of topography, local customs and history. Commerce and communications are discussed (with nine specimens of kelp on cards, slotted in) along with prospects for economic development. Overleaf David Walker discusses the wider significance of Otter's volume and explains how Otter came to head Admiralty surveying of the north coast at this time.



Henry Otter's 'Kyle of Durness looking up to Fionabhen and the Gualin' (1844).

<sup>1</sup> Acc.14226/1-2

<sup>2</sup> David L Walker, Admiralty Charts in the Sutherland Papers, 'Cairt' 34, January 2019.

## Slater's Loup and Monument - and his successor, Henry Otter

**David Walker looks into the untimely end of Commander Michael Slater, who headed the Admiralty's surveying work as far as the north of Scotland until 1842, and how Henry Otter was appointed to take over.**

Henry Otter's 'Description of the North Coast of Scotland' (1844), recently acquired by NLS, reflects the supportive relationship between the Admiralty hydrographic service and the Sutherland Estate during the survey of the coasts of Scotland. This came to the Dornoch Firth in 1837 and proceeded round the northern capes to reach Loch Inver in 1849. Unusually, Captain Francis Beaufort, the Admiralty Hydrographer, gave permission for the Duke of Sutherland's surveyor in 1842 to copy Commander Michael Slater's manuscript chart of Dornoch Firth and in 1848 to copy four of Otter's manuscripts charts extending from Rhu Stoir almost to Cape Wrath.<sup>1</sup> In return, the Duke presented Beaufort with a lithographed copy of the very impressive map of Sutherland completed by Burnett and Scott in 1833.<sup>2</sup>

Working northwards from Northumberland in 1829 to Caithness in 1841, Slater's approach to hydrography secured Beaufort's warmly expressed confidence.<sup>3</sup> Over most of these years Slater fostered the basis for the remarkable career of his Lieutenant, Henry Otter. Reminded by Beaufort of the need for coastal views, Slater produced the out-standing examples preserved on the NLS website (Fig.1).<sup>4</sup>

But his reports to Beaufort became increasingly troubled and, in January 1842, Slater wrote that, having attempted 'to starve out the gout', he had been 'very near to death's door' and still deplorably weak from nervous fever.

Otter's picture of the monument to his mentor marks Slater's fall from the cliffs near Holborn Head, west of Thurso, on 2 February 1842 (Fig.2).

Admiralty charts and Ordnance maps both show the monument to 'Captain' Slater but only the Ordnance maps name a nearby cliff as 'Slater's Loup' [or Leap]. In Admiralty documents, then and since, this was reported as an accidental fall from a nervous horse during a solo outing 'to examine the cliffs westward of Holborn Head'. In the newly acquired Description, Otter relates that '... near a frightful overhanging cliff 250 feet high is a small monument indicating the position from whence the late Captain Slater is supposed to have fallen. The horse's foot marks, and a riding whip found the next morning at the brink of the precipice, led to the conclusion that such had been his untimely end, for no traces of him were ever discovered. To this indefatigable officer we are indebted for the survey of the greater part of the East Coast of Scotland.' But the Ordnance Survey Name Book states from local witnesses that the place had been called Slater's Loup since 'the Officer in charge [of the Admiralty Survey] committed suicide by jumping from the summit of this cliff into the sea.'<sup>5</sup> Sadly, the evidence tends to support the Ordnance conclusion. After Slater's death, it became apparent that his financial affairs were distressed, not least from the earlier purchase of a cutter<sup>6</sup> to remedy his difficulty in hiring boats, and he left incomplete surveys on a dozen drawing boards.

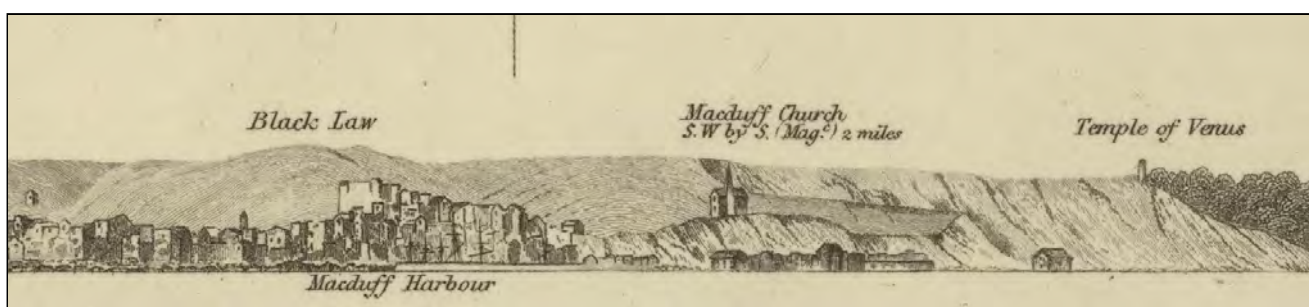


Fig.1. Hydrographic Office, 'Scotland East Coast - sheet 3 - Aberdeen to Banff.' Admiralty Chart 1409, revised to 1844. View online: <https://maps.nls.uk/view/101948285>.

<sup>1</sup> David L Walker, Admiralty Charts in the Sutherland Papers, 'Cairt' 34, January 2019.

<sup>2</sup> David L Walker, The Nineteenth Century Mapping of Sutherland, 'Scottish Local History', 101, Autumn 2018.

<sup>3</sup> Where not stated otherwise, this narrative is based on letter books archived at the UK Hydrographic Office.

<sup>4</sup> Admiralty charts 1408 and 1409 show coastal panoramas in the margin and chart 1439 of Fraserburgh Harbour is a gem.

<sup>5</sup> National Records of Scotland, Ordnance Survey Name Books, Caithness OS Name Books 1871-1873, OS1/7/11/36.

<sup>6</sup> Images of Slater's life on Peter Gordon's 'holeousia' website <https://holeousia.com/2020/02/13/captain-slater/>, include the sale of his effects and this mentions a Montrose cutter.



Fig.2. Henry Otter, 'Captain Slater's Monument' (1844).

Slater's replacement by Otter illustrates the unusual nature of the hydrographic service within the Admiralty hierarchy. A year or so earlier, Otter had been posted to Portsmouth, and Slater's new Lieutenants, Kortright and Williams, were fully engaged in the survey. After Slater's death, Kortright immediately wrote to Beaufort to declare his readiness to take charge, but Beaufort responded that the Lords of the Admiralty had appointed Otter. In a separate letter he asked for an update on the work in hand, advised Kortright of a temporary increase in his survey pay, and urged him 'neither to let your spirits be cast down nor your zeal relaxed.'

However, Lieutenants Kortright and Williams were both senior to Lieutenant Otter. Kortright immediately, over four pages, repeated his claim and concluded that 'no pecuniary emolument [could] compensate for the loss of character [he felt], and that most deeply [had been] sustained by a junior officer being appointed - under which circumstance it unfortunately becomes impossible for me to serve.' Williams also wrote, finding 'impossible to sacrifice [his] character as a Surveyor and an Officer in His Majesty's Service by serving under a Junior 'who on active service must immediately become subservient to [his] orders.'

Beaufort responded promptly, thanking Kortright for the survey work he had submitted and assuring each of them individually that no dissatisfaction with their labours was implied, and that 'The post of Surveyor is altogether a civil office that has nothing to do with military rank ... Otter had been appointed by their Lordships and they would not rescind their decision.' So Beaufort asked each of them to consider the matter again calmly as it would really be a national loss if they were to leave the Scotch survey.<sup>7</sup> Over the following months, the correspondence between Thurso and Westminster calmed down, Otter took up his appointment, Kortright and Williams completed the work in hand and in due course Beaufort looked after their future.

Proprietors in Sutherland who were deemed to have benefited from Slater's work were invited to provide support for his widow. It is unclear who instigated Slater's monument and the sources of its funding also remain to be established. Perhaps Otter's gift to the Duke recognized such a contribution?

The monument was described as a white obelisk, but was it twelve feet or forty feet in height?

<sup>7</sup> Quotations are from UKHO, SL 6b, 23 and 24 Feb 1842 and UKHO, LB 10, pp 337-38, 28 Feb 1842.

Unfortunately it has completely collapsed, perhaps about fifty years ago, and the lack of information on its construction and its collapse still has to be remedied. The monument is clearly shown on Ordnance Survey maps (Fig.3) and Hydrographic Office charts until the early 1960s, and is even recorded in the Admiralty's 'North Coast of Scotland Pilot' of 1975, but there is no evidence of it on maps or charts after this time. A preliminary search of electronic newspaper databases, including the Times Digital Archive and the British Newspaper Archive has also drawn a blank. 'Cairt' readers who can provide any information or who are able to research this further and report back are encouraged to do so!



Fig.3. Slater's Loup and Monument, from OS 25 inch to the mile, 'Caithness V.2' (Thurso), surveyed 1871, published 1873.

View online: <https://maps.nls.uk/view/75113309>.

**David L. Walker**

Of related interest, Brian Tiplady has also recently been researching the biographies of Admiralty surveyors in Scottish waters, and has so far published on Wikipedia:

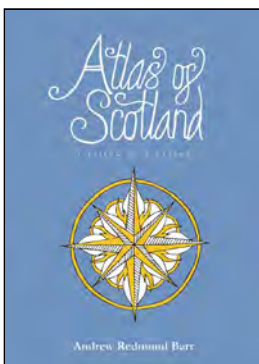
- Henry C. Otter (1807–1876) - [https://en.wikipedia.org/wiki/Henry\\_Charles\\_Otter](https://en.wikipedia.org/wiki/Henry_Charles_Otter)
- Captain Frederick W.L. Thomas (c.1812–1885) - [https://en.wikipedia.org/wiki/F.\\_W.\\_L.\\_Thomas](https://en.wikipedia.org/wiki/F._W._L._Thomas)
- George Thomas (1781–1850) - [https://en.wikipedia.org/wiki/George\\_Thomas\\_\(Master\\_R.N.\)](https://en.wikipedia.org/wiki/George_Thomas_(Master_R.N.))

## Recent articles on Scottish maps

Jim Mackay, 'David Aitken (c.1739–1809) Surveyor to the Highlands and Gardener to Newhall and Poyntzfield'. Online at: <https://kirkmichael.info/DavidAitkenSurveyorToTheHighlands.html>

P.D. Firth, 'The Auchtenparts Lands of Elgin'. Online at: <http://cushnieent.com/articles/auchtenparts%20of%20elgin.htm>. This explains the background to 'A Sketch of the Auchteen Parts of Grieshop Lands of Elgin', 1800, reproduced in W. Crammond, 'The Records of Elgin, 1234-1800' (Aberdeen: The Spalding Club, 1903).

## A new hand-drawn Atlas of Scotland



Andrew Redmond Barr has recently published a hand-drawn 'Atlas of Scotland' including 37 maps, 80 mountains, 7 cities, 12 historic towns, and 5 international journeys. Historic maps were a key inspiration, and he writes 'Before starting on my own Atlas of Scotland, I was keen to explore how Scotland had been mapped in the past. The first detailed maps to be made within Scotland were created a kirk minister, Timothy Pont. Between the 1580s and 90s, Pont surveyed vast tracts of the Scottish kingdom in his distinctive inky sketches, showing detailed shapes of mountains and rivers, as well as individual depictions of settlements – fermtouns, kirktoouns, milltoouns – dotted with recognisable local landmarks such as merchant houses, castles, churches and abbeys.'

Today modern technology may have replaced traditional paper atlases, but there is still something valuable about being able to see a whole vision of a country, laid out and illuminated on paper. By returning to map-making in pen and ink, and by retelling the story of Scotland's history and culture, my new Atlas aims to demonstrate how Scotland came to be, and where Scotland now stands, in a way which is different to most modern cartography.'

Find out more about the 'Atlas of Scotland' at <https://andrewbarr.com/>

## John Hepburn's plan of Boddam, Aberdeenshire, 1855

Douglas Lockhart discusses a plan of the village when the estate was owned by George Hamilton-Gordon, 4th Earl of Aberdeen.



Fig.1. Plan of Boddam [sic], November 1855.  
AUL MS 3860/20258. Courtesy of Special Collections and Museums, University of Aberdeen.

John Hepburn (1810-74) was born at Overtown of Keithfield (Tarves Parish), a short distance west of Haddo House, seat of the Earls of Aberdeen. He took up the tenancy of the farm on the death of his father, James in 1847 and in the 1851 Census he is described as 'surveyor farming 150 acres'.<sup>1</sup> In his surveying business he was assisted by his brother Alexander (1814-66) and nephew Alexander Booth (1830-1909) and later by William Clark (1846-1903) who succeeded to the business after his death. Hepburn lived his entire life at Keithfield and his professional career focussed largely on the Haddo estates with more than ninety farm plans listed in the NRS RHP series. He also published 'A Map of the Ellon District, County of Aberdeen' (1848) which was advertised for sale the following year.<sup>2</sup> It covered parishes that stretched from Methlick to Cruden in Buchan and Udney to Foveran in Formartine, the amount of detail was not dissimilar to later Ordnance Survey one inch to the mile mapping. Like his contemporaries, such as Alexander Adam (see Cairt 39), Hepburn was

involved with many aspects of estate management and improvement particularly valuations, drainage and new farm buildings, details of which can be found in the Aberdeen and Banff newspapers accessed via the British Newspaper Archive site.

In 1855, in a rare departure from farm work, Hepburn surveyed the fishing village of Boddam about three miles south of Peterhead. The Boddam estate changed hands frequently during the nineteenth century with successive owners investing in harbour works and opening-up new streets. Development was begun by Robert Robertson (1761-1832), senior Bailie in Peterhead, in 1824 when an advertisement in the 'Aberdeen Journal' explained that a 'New Village is to be built ... immediately north of the present fishing town, and close to the Boat Harbour'.<sup>3</sup> A plan was drawn by William Whyte of Bridgend of Auchlee near Longside that shows three parallel streets with

<sup>1</sup> 1851 Census (Tarves) ED8 p.12.

<sup>2</sup> 'Aberdeen Journal', 2 May 1849 p.4 col.1; AUL MS 3860/3254.

<sup>3</sup> 'Aberdeen Journal', 26 May 1824 p.2 col.5.

a square as the centrepiece of the new village.<sup>4</sup> Another notice, seven years later described modest harbour improvements and invited fish-curers, coopers and other tradesmen to settle.<sup>5</sup> The estate was put up for sale shortly after Robertson's death and following a reduction in the asking price was purchased by the Earl of Aberdeen.<sup>6</sup> Hepburn's plan shows the layout of the irregularly built seatown close to the cliffs and the rocky inlets where boats could be drawn up out of the water in the era before harbours were built. In contrast, are the broad streets (Russell and Gordon Street) flanked by housing in the new town indicating that Whyte's scheme had been partly carried out. Some development had begun to encroach on the fisher's yards, plots used for storage and growing potatoes. The plan shows only a small pier on the eastern side of the old town. Hepburn chose not to extend his survey northwards to include another pier built in 1842 by the Earl of Aberdeen or the rocky site of the Buchan Ness Lighthouse to the east and was content to depict the bridge leading to it.

<sup>4</sup> NLS MS.5845, No.37. Online at: <https://maps.nls.uk/view/218516975>

<sup>5</sup> Ibid 9 March 1831 p.2 col.3.

<sup>6</sup> Ibid 12 December 1832 p.3 col.4; 25 September 1833 p.2 col.5.

The death of the 4th Earl in 1860 was followed by preparations for the sale of the estate including a plan drawn up by James Forbes Beattie (1804-77) in 1865 which indicates little had changed in the village during the previous ten years.<sup>7</sup> The estate was purchased by William Aiton (ca.1824-1893), a civil engineer, and his legacy was a new water supply and improvements to the north harbour (1878-80). These paved the way for the rapid growth in the number of locally-based drifters and an increase in population of 34 per cent between 1871 and 1881.<sup>8</sup> Building took place in New Street on the village yards and along arterial roads and these and other developments can be followed in the local press and in the first and second editions of the Ordnance Survey 25 inch to the mile maps.

**Douglas Lockhart**

<sup>7</sup> AUL MS 3860/20261; 'Aberdeen Journal', 28 June 1865 p.2 col.3.

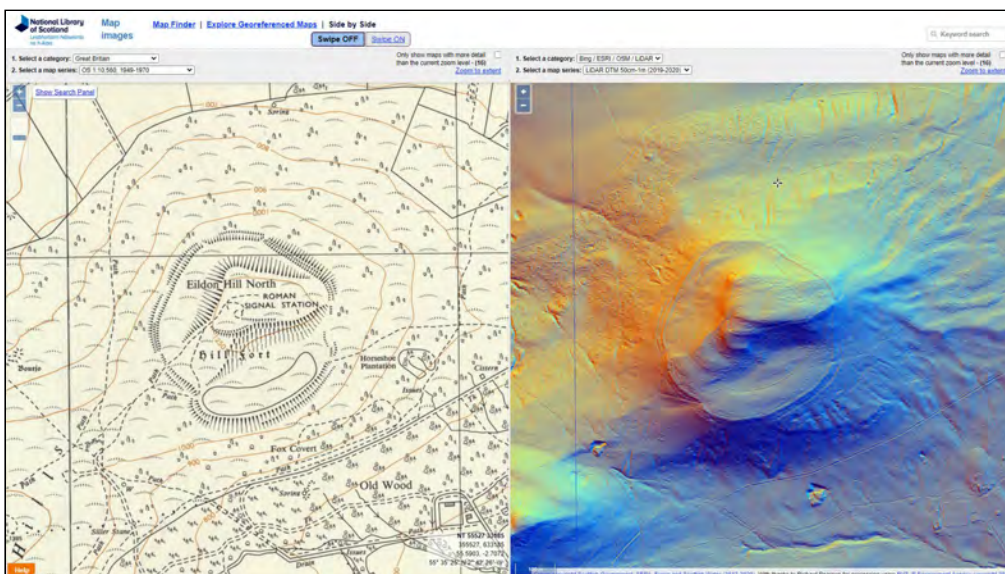
<sup>8</sup> 'Buchan Observer', 24 May 1878 p.2 col.6-7; 2 July 1880 p.3 col.4; 'Aberdeen Journal', 16 February 1893 p.5 col.3.

## Recent National Library of Scotland website additions

### New Scottish LiDAR Digital Terrain Model (DTM) layer

In August, we were very grateful to receive assistance from an external user, Richard Pearson, to add reprocessed Scottish Government LiDAR Digital Terrain Model (DTM) data to our website. Light Detection and Ranging (LiDAR) is an airborne mapping technique, which uses a scanning laser to allow highly detailed representations of relief or terrain models to be generated. Many archaeological sites such as hillforts, Roman camps, deserted villages, or cultivation terraces can be seen much more clearly than on satellite imagery or maps. LiDAR can help to bring out the effects of glaciation on local topography, or show the effects of geomorphology on soils. Modern features like quarries, embankments or railway cuttings, as well as historic features like limekilns or canals can be seen more clearly. Although coverage is partial and still expanding, this new Scottish LiDAR layer provides good coverage of southern Scotland, and 1 metre or higher resolution LiDAR is now available for most of England and Wales.

New guide - Using LiDAR layers for landscape research: <https://maps.nls.uk/guides/lidar/>



Comparing OS six-inch 1900s mapping (left) with new LiDAR DTM (right) for Eildon Hill North, near Melrose.

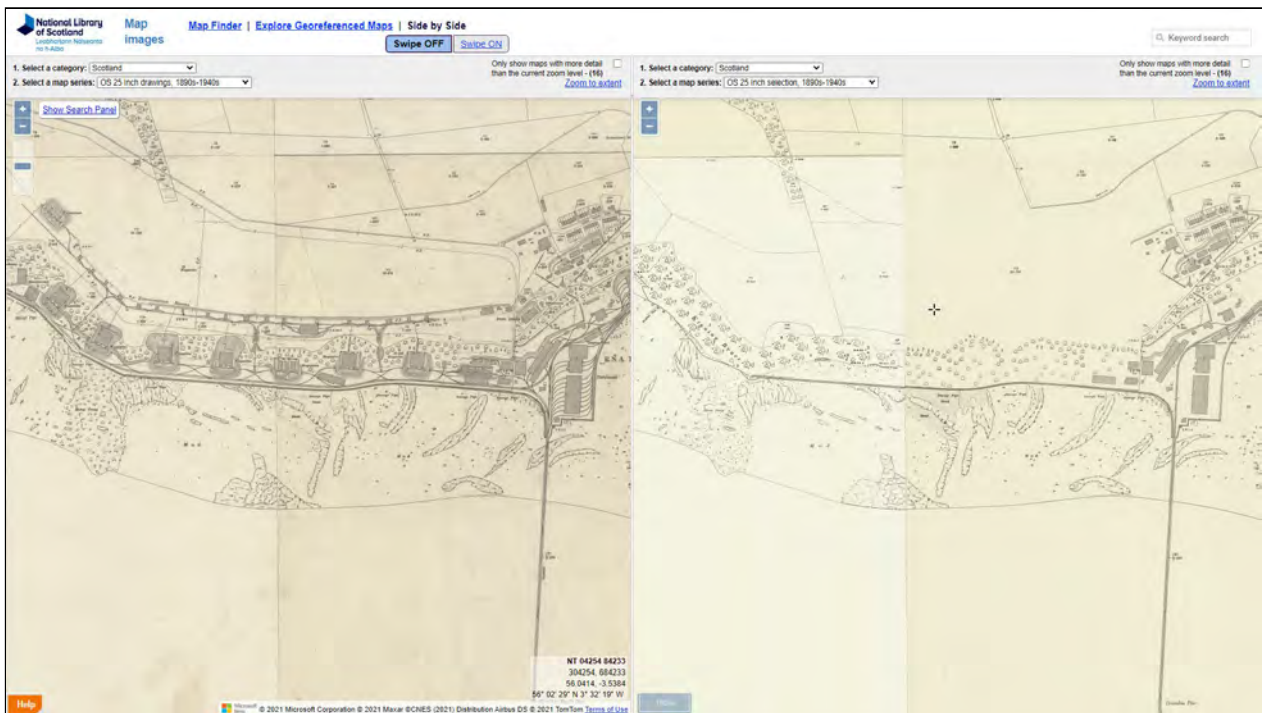
View online at: [https://maps.nls.uk/g eo/explore/side-by-side/#zoom=16&lat=55.58766&lon=-2.70778&layers=193 &right=LIDAR\\_DTM\\_1m](https://maps.nls.uk/g eo/explore/side-by-side/#zoom=16&lat=55.58766&lon=-2.70778&layers=193 &right=LIDAR_DTM_1m)

## More National Library of Scotland website additions

### OS 25 inch 'blue-and-black' drawings, Scotland, 1890s-1940s

In August, NLS added a set of 694 Ordnance Survey 'blue-and-black' drawings, which show revision for the 25 inch to the mile maps, between the 1890s and the 1940s. This revision process drew new edition information in black ink on a printing of the previous edition in light blue. When this was photographed, the blue would not reproduce, so details not required or no longer present on the ground appear in blue. Military and related sites were added in black, but some of these were subsequently erased from the final printed maps, so the blue-and-black drawings provide good coverage of these security deletions. We have scanned all sheets which include stamps by Ordnance Survey referring to deletions where these were required, as well as all sheets in the counties of Linlithgow and Nairn.

OS 25 inch 'blue-and-black' drawings: <https://maps.nls.uk/os/25inch-2nd-and-later/drawings/>



Comparing the OS 'blue-and-black' drawing (left) with the standard published mapping (right) for Crombie Royal Naval Armaments Depot, near Rosyth, showing the security deletions on the standard published mapping.

View online at: <https://maps.nls.uk/geo/explore/side-by-side/#zoom=16&lat=56.04005&lon=3.53807&layers=241&right=242>

- **Scottish map miscellany, 20th century**

158 maps of Scotland, dating between 1907 and 1969, including town plans, and various special series maps. These include some of the very attractive Ordnance Survey One-Inch to the mile Tourist Series, special Administrative District Maps of Glasgow, as well as geological and soil maps.

View online at: <https://maps.nls.uk/additions.html#114>

- **OS Six-inch Scotland first edition - railway and other variant states (1840s-1880s)**

An earlier set of 1,824 OS six-inch maps, useful for showing the variant states of these maps, which often show railway additions, updates to towns, county boundary sheet changes, security deletions, and administrative boundary changes.

View online at: <https://maps.nls.uk/additions.html#119>

- **OS 1:500 Town Plans of England and Wales (1850s-1890s)**

10,419 sheets, covering over 400 towns with more than 4,000 people - the most detailed surveys of these towns ever undertaken by Ordnance Survey. View online at: <https://maps.nls.uk/additions.html#122>

Explore all our other online updates on our 'Recent Additions' page: <https://maps.nls.uk/additions.html>

## User Guides

We are expanding our set of guides to help people with particular interests get more out of our maps website:

### Maps for Researching House and Building History

This guide highlights some of the most relevant maps to use as information sources for researching houses and buildings over time. The maps are arranged roughly chronologically, covering rural and urban areas, with links to the maps and further information about them on our website. Also included is information on recent buildings and map copyright, as well as further relevant resources, both online and in print.

View online at:

<https://maps.nls.uk/guides/houses/>



### Maps for researching Scottish woodland history

This guide picks out the most useful maps for viewing and understanding trees and woodland, as well as changes in woodland cover over time. It looks at different definitions and types of woodland and how different map-makers represented woodland. The guide also includes links to downloadable datasets, details of resources that are not online, as well as references for further reading.

View online at: <https://maps.nls.uk/guides/woodland/>

### Re-using georeferenced maps

Do you want to re-use our georeferenced map layers inside other software? These new guides provide easy, step-by-step instructions for how to bring our georeferenced maps into QGIS and ArcGIS, as well as into geojson.io and OpenStreetMap.

View online at: <https://maps.nls.uk/guides/georeferencing/>

## Maps Reading Room

The National Library of Scotland's Maps Reading Room is open by appointment Monday to Thursday each week. Book your visit at <https://auth.nls.uk/maps-reading-room> and come and explore the 2 million plus maps in our collection, as well as modern digital map datasets. Or sign up for our online workshops <https://www.nls.uk/events/workshops-and-tours/>. If you are unable to visit our Reading Room in person, we hope to trial online consultations of collection items in coming months. We will install a visualiser to allow us to share detailed images of our maps and atlases. Keep an eye on the National Library website for updates.

## New map transcription projects

During 2022 we are looking for volunteers to help with a new set of collaborative projects to transcribe features and text from maps. We are hoping to gather all of the names from the Roy Military Survey maps of Scotland (1747-55), to trace footpaths from OS six-inch to the mile maps of Scotland (ca.1900s), as well as text from OS 25 inch to the mile mapping of Edinburgh.

For further details, and to register an interest, please go to:

[https://maps\\_transcription\\_nls.mailchimpsites.com/](https://maps_transcription_nls.mailchimpsites.com/)

