



# CAIRT

Issue 35  
July 2019

*Newsletter of the Scottish Maps Forum*

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## 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 & 17<sup>th</sup> 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**  
**E-mail: [maps@nls.uk](mailto:maps@nls.uk)**  
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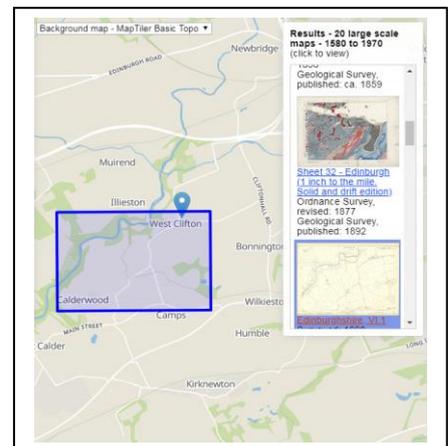
ISSN 1477-4186  
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Editor: C. Fleet Technical Editor: J. Parkerson

## Improved web search interfaces and viewers

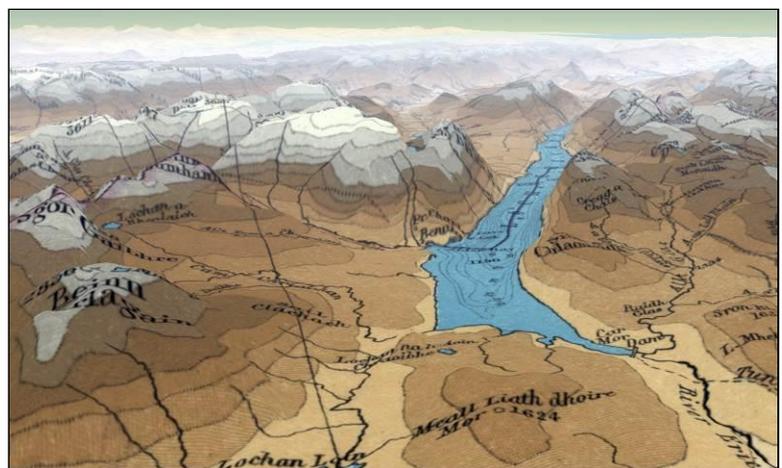
We are continually working on better ways to find our online maps, now numbering over 220,000 sheets. We have updated our **Find by Place - with Marker** application, allowing all our online maps to be searched with a marker pin. The bounding boxes of returned maps are now shown when you hover over the map thumbnail in the Results panel on the right.

A geolocation option has been added, so you can choose to display your current device location, and a wider range of current and historical base map layers can be selected.

Our **3D Map viewer** has also been improved, with a new ability to dynamically enhance the vertical exaggeration of relief. This allows more subtle variations in terrain and height to now be seen much more clearly. Historic maps showing estates, land-use, soils, woodland, and patterns of historic and present-day settlement can all be now seen more clearly with a third dimension.



- Find by Place with Marker: <https://maps.nls.uk/geo/find/marker/>
- 3D map viewer: <https://maps.nls.uk/geo/explore/3d/>



Loch Ericht, on Bartholomew's Half-Inch map (1940-47), seen through our 3D Map Viewer, with enhanced mountains.

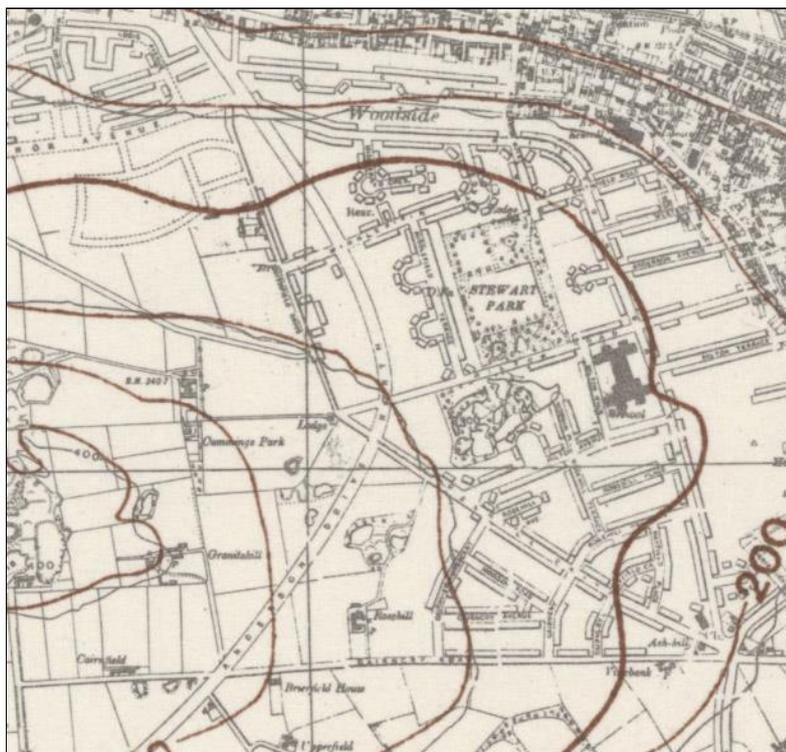
## Other new website resources

### OS 1:10,560 National Grid maps of England, Scotland and Wales, 1940s-1960s

All our out-of-copyright maps at this scale, published over 50 years ago, are now online (10,469 sheets). We have also created a georeferenced layer of 8,657 sheets. For the georeferenced layer, we have used Regular edition sheets where possible (based on larger-scale surveys or real landscape revision) rather than the Provisional sheets (largely based on pre-War County Series maps). This is the latest out-of-copyright OS mapping at the Six-Inch scale covering most of mainland Britain.

- OS National Grid maps home page: <https://maps.nls.uk/os/national-grid/index.html>
- Graphic index: <https://maps.nls.uk/openlayers/?id=61>
- Georeferenced layer: <https://maps.nls.uk/openlayers/?m=1&id=193>

### War Office 1:25,000, Scotland, GSGS 3906, 1940-43



**Above:** Detail of Rosehill, Aberdeen from GSGS 3906, Sheet 44/82 S.W. Printed 1941. <https://maps.nls.uk/view/189663424>

This military map series at 1:25,000 was rapidly completed in the early years of the Second World War. The underlying topographic detail was photographically reduced from the latest available OS Six-Inch to the mile maps, including the Special Emergency Edition (1938-9) maps made for Air Raid Precaution purposes. GSGS 3906 can therefore provide a useful surrogate to these elusive Special Emergency Edition sheets for Scotland, and a real update of selected landscape features for the historian. The topographic base was then usually overprinted them with thick brown contour lines, enlarged from OS One-Inch to the mile maps. This is all our holdings of this series, consisting of 829 sheets. Coverage of Scotland is complete, with a small number of sheets covering the Isle of Man and south-east England too.

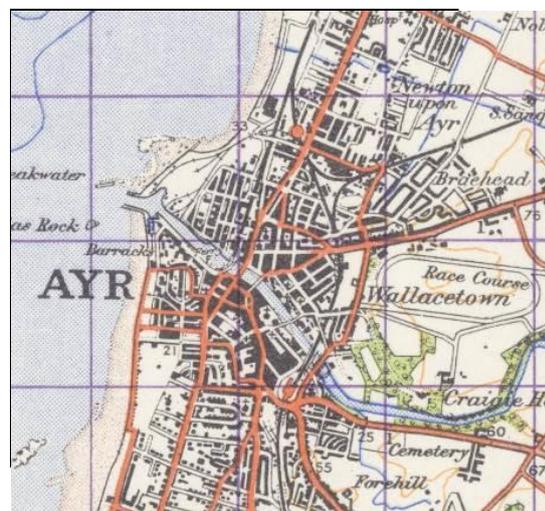
- GSGS 3906 home page: <https://maps.nls.uk/os/25k-gb-1940-43/>

### Ordnance Survey One-Inch Popular edition Scotland - derivative series, 1930s-1940s

The Popular edition of the 1920s had a long afterlife, re-used by the War Office, captured and reprinted by the German Army in the Second World War, and also issued in various outline or partly-coloured forms. Although some of these later series were essentially reprints of Popular edition sheets and may have less to offer for the landscape historian, the 'War Revision 1940' and later sheets often included Air Raid Precaution revisions from 1938-9. GSGS 3908 is also useful for giving an overprint of the War Office Cassini Grid.

- More info and links to all the series can be found at: <https://maps.nls.uk/additions.html>

**Right:** Detail from: GSGS 3908. War Revision, 1940, Sheet 78, printed 1942. <https://maps.nls.uk/view/193108944>, incorporating revisions from the late 1930s and with a War Office Cassini Grid overprint.



## Other new website resources

### Geological Survey of Scotland, One-Inch and Six-Inch to the Mile maps, 1850s-1940s

We have now scanned all our out-of-copyright holdings of geological maps of Scotland. These have OS base topography and a geological overprint. There are two main series: a detailed set of Six-Inch to the mile maps, focusing on areas with economically valuable geology, as well as less detailed One-Inch to the mile maps, covering most of Scotland.

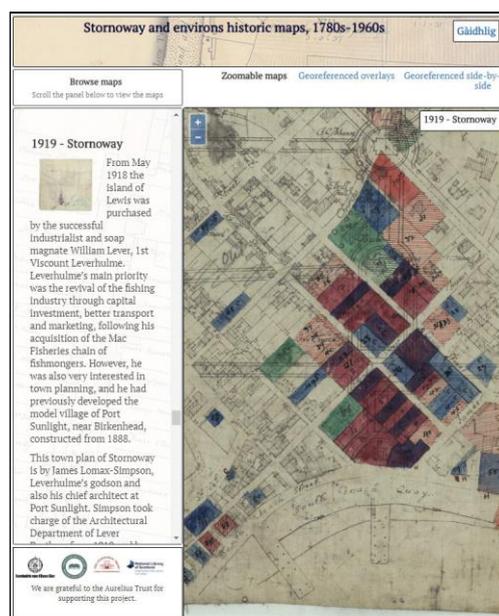
- Geological Six-Inch home page: <https://maps.nls.uk/geological/6inch/>
- Geological One-Inch home page: <https://maps.nls.uk/geological/one-inch/>

### Stornoway and environs historic maps, 1780s-1960s

This new website is the result of a collaborative project between the Western Isles Libraries and the National Library of Scotland in 2017-19 to conserve and put online seven uniquely important maps of Lewis and Stornoway, owned by Western Isles Libraries. The website allows you to explore a selection of historic maps of Stornoway and environs, dating between 1785-1964, read about them, and view them as georeferenced overlays. The maps provide many insights into the development of Stornoway over the last two centuries, including proposals (some not implemented) for its development. Also included are maps of the Lews Castle Estate (1850), proposals for the Pentland Railway (1890), and a pioneering vegetation survey of Lewis and Harris (1919).

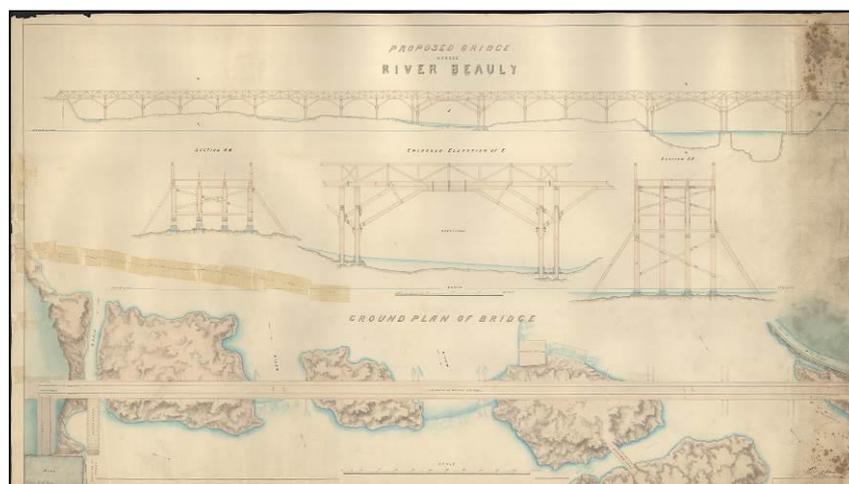
View the website at:

<https://geo.nls.uk/maps/stornoway/index-en.html>



### Lovat Highland Estates mapping, 1750s-1960s

As reported in the previous issue of *Cairt*, with thanks to [Lovat Highland Estates](#), and the [North of Scotland Archaeological Society](#), the initial maps put online last year by Peter May (1724/33-1795) and George Brown (1747-1816) have now been enhanced by a further 300 estate maps. These cover extensive areas west of Inverness, as far as Mallaig and Fort Augustus in the west and south. The maps depict all aspects of Highland estate management, including agricultural improvement, enclosure, drainage and embankments, the planning of settlements such as Beaully, the leasing of farms and grazings, the allocation of land for crofts, and land ownership disputes. The construction of new roads, railways, and bridges, and their development over time is also well-represented.



**Above:** James Anernethy, *Proposed Bridge across River Beaully* (1848)  
<https://maps.nls.uk/view/190781872>

- View the maps in the *Estate maps* page: <https://maps.nls.uk/estates/>
- View the maps with a graphic index: <https://maps.nls.uk/openlayers/?id=28>

## The Gardens of Moray House

### Marilyn Brown finds new evidence supporting specific garden details shown on James Gordon's Edinburgh plan of 1647

The well-known plan of Edinburgh by James Gordon of Rothiemay, generally dated to 1647 and dedicated to the Provost and Baillies of Edinburgh, provides a detailed and attractive picture of the town in the mid-seventeenth century.<sup>1</sup> One feature often commented on is the depiction of the gardens, and particularly those of the Canongate, usually accompanied by such phrases as 'impossible that all of them should have followed so stereotyped a plan' or 'precise details of individual buildings and garden designs need to be treated with great caution'.<sup>2</sup> This distrust of Gordon's plan requires some revision.

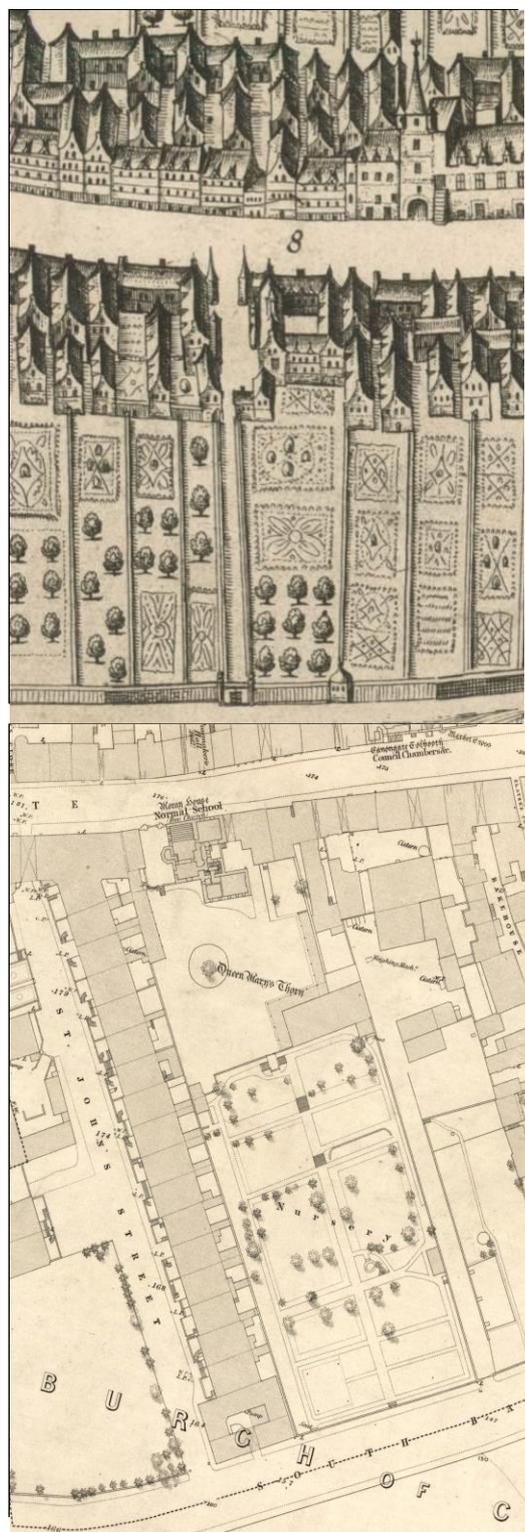
In the course of his research on inventories for his doctorate on locating roles of domestic furnishings in Scotland 1500–1650, Dr Michael Pearce consulted and transcribed inventories in the papers of the earls of Moray, including those of Mary Sutton, wife of the first earl of Home whom she married in 1605.<sup>3</sup> She continued to live at what is now known as Moray House after she was widowed: she died at her house in London in 1646, leaving her property to her two daughters who were married to the earls of Moray and Tweeddale.

The inventories of Moray House are extremely detailed and, very unusually, include the contents of its garden in the second quarter of the seventeenth century. When considered in conjunction with Gordon's 1647 plan (**top right**), the Ordnance Survey Plan of Edinburgh of 1854 (**lower right**) and the present fall of the land, allied to what is known of contemporary gardens, it is possible to trace the form of the garden and its contents, following the path of the inventory writer, beginning at the gate from the Canongate and proceeding along the garden walls, returning to the house and then going down the centre of the garden.

The garden consisted of four terraces in line with the divisions marked on the 1647 plan. The uppermost of these, just behind the house, is depicted with two conjoined knots, each set out in four divisions with different designs. On the next terrace, according to the inventory was the mount, which allows the identification of the oval feature on Gordon's plan, divided into four with a tree in each section, as a garden mount.

The Ordnance Survey plan of 1854 shows a mount in this area with a thorn tree on the summit; by the nineteenth century it was known as Queen Mary's Thorn, an example of the tendency to associate Queen Mary with numerous tree plantings.

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<sup>1</sup> James Gordon, *Edinodunensis Tabulam* [1647?]. <https://maps.nls.uk/view/102190447>

<sup>2</sup> E.H.M. Cox, *A history of gardening in Scotland*. (London: Chatto & Windus, 1935); J. Lowrey 'The gardens of Queensberry House 1660–1808', Holyrood Archaeology Project Team *Scotland's Parliament Site and the Canongate*. (Edinburgh: Society of Antiquaries of Scotland, 2008), 209–23.

<sup>3</sup> Michael Pearce, *Vanished comforts: locating roles of domestic furnishings in Scotland, 1500–1650*. Doctoral thesis, University of Dundee, 2016.

Depictions of several similar features on Gordon of Rothiemay's plan may indicate the former presence of other mounts on both sides of the Canongate. The writer continues down to the next terrace, which is shown with a quatrefoil knot and, according to the inventory various fruit trees, including cherry, apricot and plum trees, some standards and some grown against the garden wall and against the walls supporting the terraces. The summer house (which still survives) was furnished with a marble table. The garden also contained a second summer house on the back wall which appears on Gordon of Rothiemay's plan. The garden also contained a bowling alley, a wilderness on the lowest terrace, a seat and a fountain and bee boles, probably set into the terrace walls.

This is a very brief summary of the contents of the garden. The inventory listed over two hundred trees. Gordon of Rothiemay's plan, which shows only nine, with four small decorative trees on the mount, is a considerable simplification of what was actually present, but given the scale of the plan, provides an image of an elaborate garden, with many features in common with the other gardens in the Canongate. The chance survival of the inventory owing to a dispute over inheritance (Lady Home wished her papers to be destroyed and this seems to have been carried out) provides what is, at present, a unique view of this garden of the earlier seventeenth century. The depiction of the garden of Moray House on the plan of Edinburgh of Gordon of Rothiemay reflects what is described in the inventory and suggests that more credence should be given to his attractive portrayal of the Canongate in 1647.

### Two copies of the *Scottish Maps Calendar 2020* to be won!

Get the Christmas stocking-fillers sorted early with the chance to win an attractive cartographic calendar for next year – another collaboration with Birlinn. Further details at: <https://www.birlinn.co.uk/Scottish-Maps-Calendar-2020.html>

To win a copy of *The Scottish Maps Calendar, 2020*, please provide details of the **map draughtsman/engraver** and **title** from which this map extract is taken.

Send or e-mail your answers, marked *Cairt Competition* to [maps@nls.uk](mailto:maps@nls.uk) or to the address on the front cover by 30 September 2019. The winners will be picked randomly from the correct entries and informed by 15 October 2019.

Congratulations to Dennis Gallagher and Andrea Massey who each won a copy of *Scotland: Defending the Nation* from last issue's competition, and thanks to all who took part. The detail shown was from Theodore Dury's *Plan of the Castle of Blackness* [ca. 1690].



### Recent map-related blog posts

- 3D map viewer with vertical exaggeration: <http://tiny.cc/2h8o8y>
- Conserving the James Chapman map of Stornoway, ca. 1800: <http://tiny.cc/vu2p8y>
- Digitising the Library's maps: <http://tiny.cc/mc2p8y>
- Geocoding the Stevenson maps and plans: <http://tiny.cc/excv8y>

### Maps website user survey

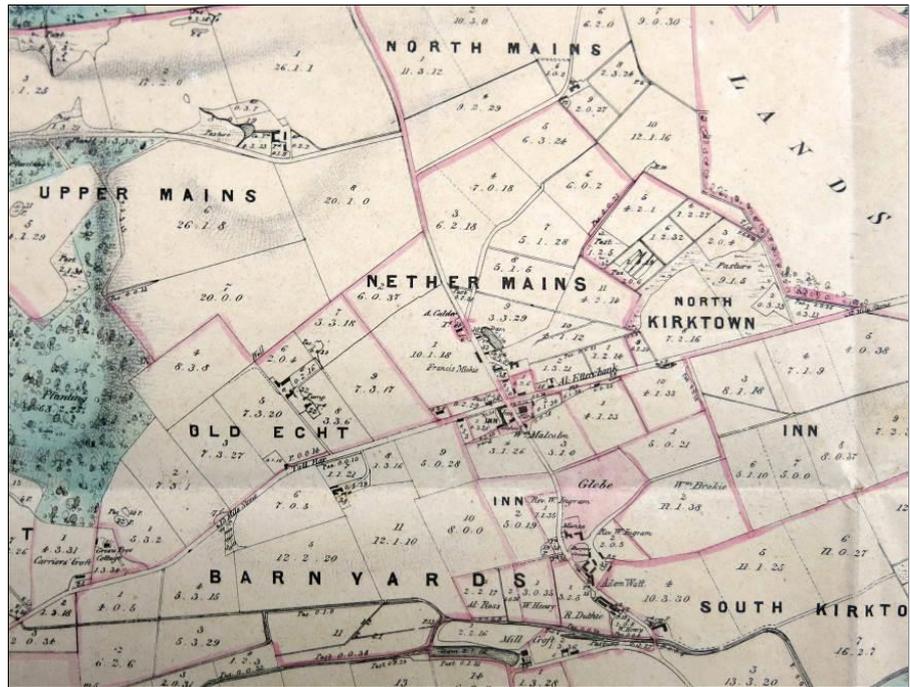
- We are very grateful to everyone who answered questionnaires and interviews for this, providing us with very useful feedback. Summary results can be read at: <http://tiny.cc/0qge4y>, and are being incorporated into a wider, long-term development strategy for our maps website.

**'A man of great ability': Alexander Smith (1811-84): land surveyor, civil engineer and historian**

**Douglas Lockhart discusses the career of a prolific Aberdeenshire surveyor.**

*Cairt* Issue 29 (July 2016) described the completion of the cataloguing of the FA MacDonald Collection plans [MS 3860] in the Special Collections Centre at the University of Aberdeen [AUL]. The plans in the collection largely focus on the North East counties, were produced by more than forty private land surveyors, and date from the late eighteenth to the early decades of the twentieth century. Researching the working lives of many of these surveyors has become feasible with the digitisation of newspapers, the expansion of family history web sites and more detailed online library and archive catalogues. This article summarises the life of Alexander Smith whose plans are prominent in the Macdonald Collection and in other estate papers held by AUL.

Smith was born on 12 January 1811 at Saplinbrae near Old Deer in Buchan. His father, also Alexander, was a gardener at Pitfour House, the centrepiece of one of the largest estates in the North East. He moved to Aberdeen and served his apprenticeship in the office of David Walker (1793-1844) and James Forbes Beattie (1804-77), the leading surveying partnership in the region during the 1820s and 1830s. After Beattie's temporary emigration to Australia in 1839, Smith became a partner in the business. Examples of their collaboration, such as plans and sections of turnpike roads near Kintore and Monymusk (Aberdeenshire) and near Milltown of Rothiemay (Banffshire) that were surveyed in 1841, are held by the National Records of Scotland. Estate plans by Walker and Smith including Delgaty and Echt (Aberdeenshire) are found in collections at AUL (Fig.1, above). After Walker's death in 1844, Smith was in partnership with David Walker's brother James, a farmer at Wester Fintray near Kintore. This arrangement was dissolved on 29 August 1846 and Smith, who is recorded in the *Bon Accord Directory* at 129 Union Street, worked on his own account.<sup>4</sup>



**Fig.1** Plan of the Lands and Barony of Echt 1844. Surveyed by David Walker and Alexander Smith.

During the mid-1840s, Smith briefly joined forces with Thomas Grainger (1794-1852) to make plans of the Aberdeen, Banff and Elgin Railway. Next was a partnership with William Black Ferguson (1824-81), civil engineer and eldest son of an Aberdeen advocate (Fig.2). This too was short-lived, lasting only from 1849 to 1853 when Ferguson was appointed Secretary and Manager of the Deeside Railway shortly before construction began.<sup>5</sup> Although Alexander Smith continued business on his own, it was said that while 'his abilities professionally ... were considerable' he had 'a certain wayward strong headedness which at times led him into disagreements that might have been avoided'.<sup>6</sup>

In the fifteen years after he split with Ferguson, if the surviving record of plans is representative of his output, Smith's surveys were scattered over a wide geographical area such as Cairness (1859) near Fraserburgh; Torterson near Peterhead (1867) and West Cults (1859) and Skene (1859) in west Aberdeenshire (Fig.3). With the exception of several contracts between 1848 and the mid-1850s on the Crathes Castle estate, he

**Continued on page 7**

<sup>4</sup> *Aberdeen Journal*, 2 September 1846 p.3 col.1.

<sup>5</sup> *Aberdeen Evening Express*, 5 September 1881 p.2 col.2.

<sup>6</sup> *Daily Free Press*, 12 July 1884 p.4 col.5.

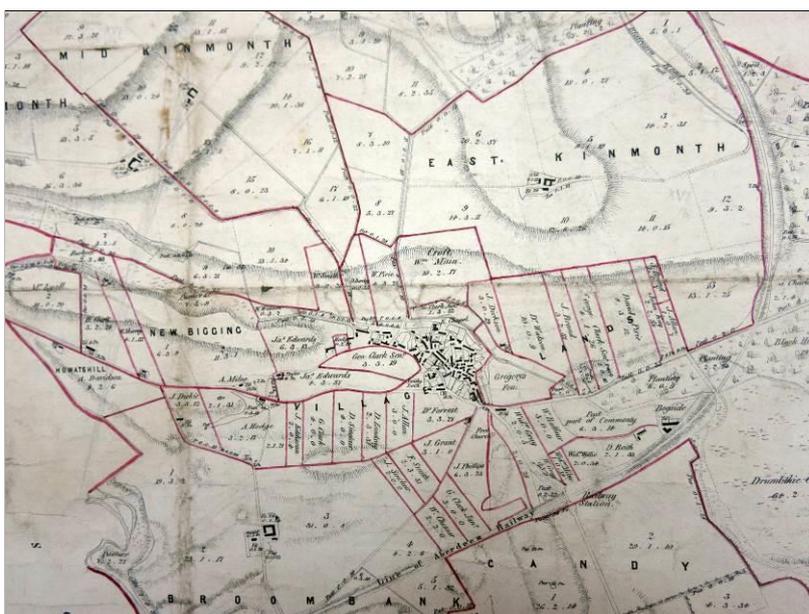
never enjoyed long-term employment from a major landowner, positions that were achieved, for example, by John Hepburn (1810-74), Haddo estate and Alexander Duncan (1814-83), Fife estates.

By 1868 Smith's financial situation was bleak and his last business entry in the *Aberdeen Post Office Directory* was in 1868-69, around the same time as he was removed from property at Banchory which he had owned since 1858. Notices inviting his creditors to lodge their claims with an Aberdeen advocate appeared in the *Aberdeen Journal* in 1869 and 1870.<sup>7</sup>

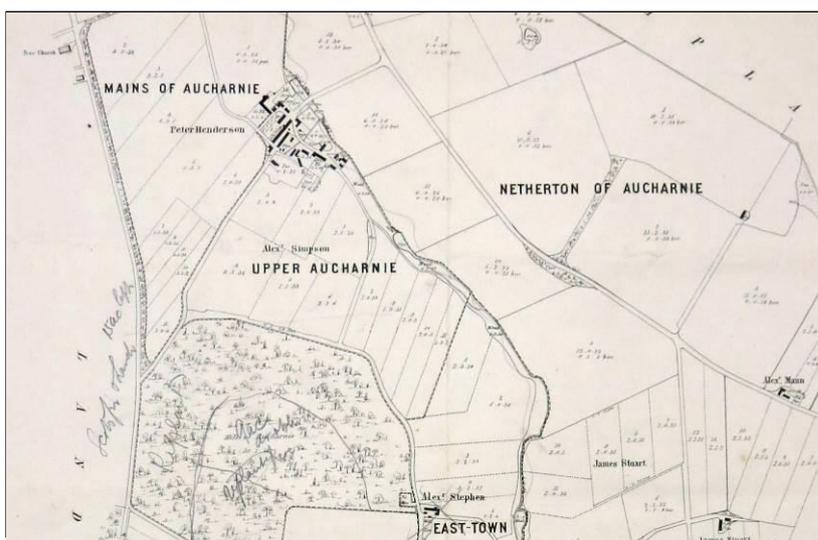
Smith now turned to researching and writing local history. He completed and published *A New History of Aberdeenshire* in two volumes in 1875. Following the introductory chapters are separate sections for each parish and in effect this book is a 'third statistical account' of Aberdeenshire. Sadly, and to some extent unfairly, Smith's research was questioned in his obituary in the *Daily Free Press*: 'a rather bulky work ... the value of which was marred by inaccuracies, occasioned by a too ready use of second-hand or partially antiquated authorities ...'.<sup>8</sup> Smith continued to do local historical research and in his later years lived in lodgings in Aberdeen supported by some old friends. He died in Aberdeen Infirmary on 10 July 1884 and the *Aberdeen Journal* fittingly noted that he was 'A man of great ability as a land surveyor'.<sup>9</sup> The obituary went on to pay tribute to his literary and scientific interests.

## References

Plans are from the Macdonald Collection [MS 3860] and excerpts are reproduced *Courtesy of Special Libraries and Museums, University of Aberdeen.*



**Fig.2** Plan of the Lands and Barony of Drumlithie ... County of Kincardine 1850. Surveyed by Smith and Ferguson.



**Fig.3** Plan of the Lands of Aucharnie ... Forgue ... County of Aberdeen 1859. Surveyed by Alexander Smith; Lithographed by Keith & Gibb, Aberdeen.

### Recent publications on Scottish maps and mapping

Douglas G. Lockhart, 'Rosehearty: Mapping an Aberdeenshire Burgh, 1825-1897', *Scottish Local History* 103 (Summer 2019), 3-9.

Karen Rann & Robin .S. Johnson, 'Chasing the line: Hutton's contribution to the invention of contours' *Journal of Maps*. Online at: <https://doi.org/10.1080/17445647.2019.1582439>

Charles W. J. Withers, 'On Trial—Social Relations of Map Production in Mid-Nineteenth-Century Britain', *Imago Mundi*, 71:2 (2019), 173-95.

<sup>7</sup> *Aberdeen Journal*, 10 March 1869 p.4 col.1; 30 March 1870 p.4 col.1.

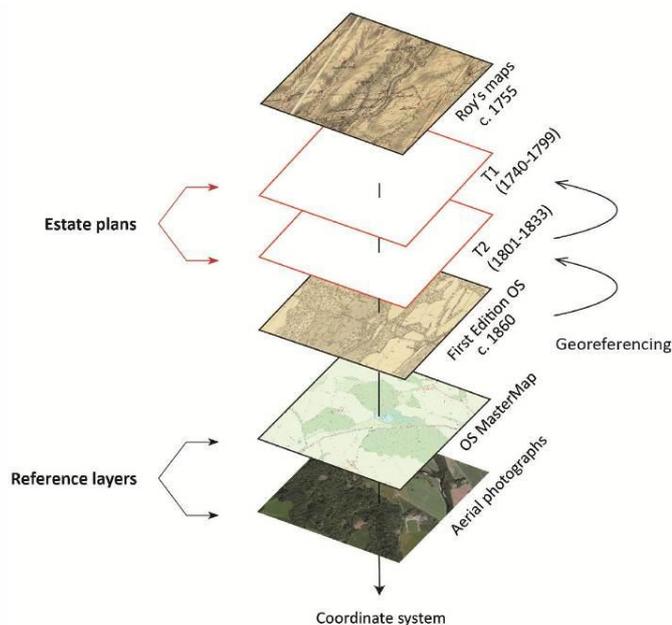
<sup>8</sup> *Daily Free Press* op cit.

<sup>9</sup> *Aberdeen Journal*, 12 July 1884 p.7 col.7.

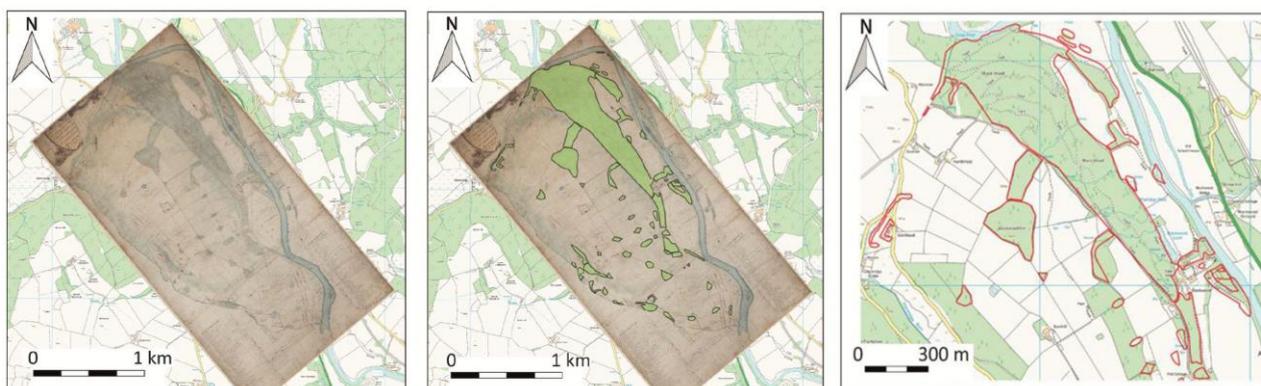
## Using Scottish estate plans (c.1740-1835) to map woodland cover changes over time

Through our collaboration with the Dumfries Archival Mapping Project (DAMP), we now have 480 estate plans online covering parts of south-west Scotland (<https://maps.nls.uk/estates/>). These estate maps have formed primary documentary sources for a recent doctoral study by Dr Thomas Muller, examining changes in woodland cover over time. Thomas was awarded his PhD in March 2019 (a detailed abstract can be read at <http://theses.gla.ac.uk/41074/>), and as part of his work, he georeferenced over 40 estate plans, which are now available online in our *Explore Georeferenced Maps viewer* (under *Scotland > Estate Plans*). We are very grateful to DAMP and to Thomas, as the results of their work has an enduring value for others.

Thomas' research highlighted how very useful estate plans are in assessing woodland cover from the mid-18th to the mid-19th centuries. For the chosen study area, whilst woodland covered about 3% of the study area in 1740-1799, it increased to 4.5% in 1801-1833, and to 6.5-8.5% in 1840s-1880s. The first half of the eighteenth century may have seen the lowest coverage of woodland, with an upper estimate of around 2.5%. Whilst these trends cannot be extrapolated to the whole of Scotland, they suggest that previous research may well have overestimated the amount of past woodland cover for Scotland.



This research has also allowed more detailed assessments to be made of 'ancient woodland sites', suggesting that the Scottish Ancient Woodland Inventory (AWI) has significant inaccuracies. The AWI defined 'ancient woodland' as those areas continuously wooded since c.1750, based on detailed analysis of the Roy Military Survey (1747-55), and the first edition OS mapping (1840s-1880s). Estate maps were not used in the AWI, and by incorporating their evidence in this research, it can be demonstrated that at least 40% of the 'ancient woodland' defined in the AWI may in fact be more recent. As 'ancient woodlands' are given a higher conservation priority, the definition of them is important, and demonstrates the value of estate maps in forming a more complete assessment. We hope that future digitisation and georeferencing of estate maps will allow a fuller picture to emerge.



**Above:** Illustrating the process of georeferencing, tracing woodland and viewing extents on a modern map base for the estate plan of Blackwood by J. Morrison, 1804. Contains OS data © Crown copyright and database right 2017.