

# Highland Estate Management and Mapping: Holdings at Golspie, Sutherland, c.1870–c.1920<sup>1</sup>

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The Sutherland estates papers are amongst the most important archival records for nineteenth-century Highland history, providing researchers with a rich repository of information relating to all aspects of Highland life. A significant body of historical evidence has, however, been generally overlooked or ignored – namely, maps. A new project began in January 2011 to investigate this hitherto neglected area of the Sutherland estates papers, and what it might reveal about the nature of Highland transformation and the role of land surveying and estate mapping in the modern era. The project aims to put each map or selection of maps illustrating a certain theme into their archival context, reflecting the way in which both documents and maps were originally intended for use. This article offers some preliminary examples of key themes concerned with managing the landscape, from the rise of commercial sporting lets in the late nineteenth century to twentieth-century land settlements and crofting tenancies.

For much of the nineteenth century, the Sutherland estates, held by the earls and, after 1833, the dukes of Sutherland, were the largest landed estates in western Europe. With holdings in excess of one million acres in the north of Scotland, and with scattered but significant properties in England, the dukes of Sutherland were among the richest patrician landowners of the age, heavily involved in the royal Court, politics and Empire.<sup>2</sup> This formidable power in landed property and aristocratic authority, stretching from the twelfth to the twentieth centuries, has produced an extensive array of documentation.<sup>3</sup> The Sutherland estates papers are among the most important archival records for nineteenth-century Highland history, providing a rich repository of information relating to all aspects of Highland life: from records on the landless cottars, to

<sup>1</sup> The authors gratefully acknowledge the financial support of the Carnegie Trust for the Universities of Scotland which supported the research for this article, the unfailingly helpful attitude of the Sutherland Estates staff, particularly Chris Whealing, and the kind advice of Olive Geddes and Chris Fleet, at the National Library of Scotland, and Professor Charles Withers, University of Edinburgh.

<sup>2</sup> A. Tindley, *The Sutherland Estate, 1850–1920: aristocratic decline, estate management and land reform* (Edinburgh, 2010).

<sup>3</sup> National Library of Scotland (hereafter NLS), Sutherland estates papers, Dep. 313, Dep. 314, Acc. 10225, Acc. 10853, Acc. 12173, TD. 2971; Staffordshire County Record Office (hereafter SCRO), Sutherland estates papers, D593.

the dukes and their families; from the day-to-day management of the estates to the big capital projects initiated by generations of the Sutherland family – clearances, land reclamation and the conversion of the bulk of the estates to commercial sport.<sup>4</sup> The importance of this archive is reflected in numerous works of Scottish Highland history which have made significant use of the Sutherland papers in particular.<sup>5</sup>

In some of this work, however, a significant body of historical evidence has been either overlooked or ignored – namely, maps. There are, in part, good reasons for this, in that until recently the map collections from the Sutherland estates have not been identified. In order to exploit this resource in an innovative way, the authors are working on a project designed to shed light on this hitherto neglected area of the Sutherland estates papers.<sup>6</sup> The project aims to bring the two sections together and examine the Sutherland estates maps, a nationally significant body of material, as vital evidence in explaining the nature of Highland transformation in the modern era.<sup>7</sup> This article identifies the results of initial inquiries into the mapping collection, specifically the maps retained by the Sutherland estates in the estate office in Golspie, Sutherland. As these maps are still in private hands, we have chosen to focus on them here in order to put them within the context of the larger collection held at the National Library of Scotland (NLS).

As one of the largest documentary manuscript archives in Scotland, the Sutherland estates papers have a complex archival history. Until 1980, the entire Scottish archive was held privately by the Sutherland family, mainly in Dunrobin Castle and at the estate office in Golspie.<sup>8</sup> Another large section of the archive relevant to the English estates and the Head Office in Stafford House, London, was (and still is) held by Staffordshire County Record Office (SCRO), deposit D593.<sup>9</sup> Due to pressures generated by an increasing number of requests from researchers and the public to access the papers, as well as time

<sup>4</sup> Tindley, *The Sutherland Estate*, 6–7.

<sup>5</sup> For example, E. Richards, *The Leviathan of Wealth: the Sutherland fortune in the Industrial Revolution* (London, 1973); T. M. Devine, *The Great Highland Famine: hunger, emigration and the Scottish Highlands in the nineteenth century* (Edinburgh, 1988); W. Orr, *Deer Forests, Landlords and Crofters: the western Highlands and Islands in Victorian and Edwardian times* (Edinburgh, 1982).

<sup>6</sup> A. Tindley and C. Anderson, ‘New Sutherland Estates Research Project’, *Cairt*, 18 (2011), 7.

<sup>7</sup> For example, the last major studies of mapping in Sutherland were published over fifty years ago: R. J. Adam (ed.), *John Home’s Survey of Assynt*, Scottish History Society, 3<sup>rd</sup> series, vol. LII (Edinburgh, 1960); H. Fairhurst, ‘The surveys for the Sutherland clearances, 1813–1820’, *Scottish Studies*, 8 (1964).

<sup>8</sup> O. Geddes and A. Tindley, ‘Who owns history – archivists or users? The Sutherland Estates Papers: a case study’, *Scottish Archives*, 13 (2007), 23–4.

<sup>9</sup> For extensive listings and context of the Sutherland estates papers held at SCRO, see <http://www.sutherlandcollection.org.uk/estate/>.

and space pressures, the Sutherland family, led by the Countess, decided to place the papers in public hands.<sup>10</sup>

The NLS received its first deposit of Sutherland papers and maps in 1980. Given the volume of the archival material, it was agreed then to limit the deposit to materials up to the death of the second Duke in 1861 (Dep. 313). Once received, the archive was listed and the maps within it were transferred to the NLS Map Library, as it had the necessary storage facilities (including large plan chests and space for roller maps) and expertise to care for the maps more effectively. It is one of the principal aims of this project to work with the documentary archive and map archive in a way that effectively brings them together again, and reflects both the purpose and manner of their creation.

In the mid-1990s, material originating from the period 1861 to 1920 was deposited with the NLS (Acc. 10225); the cut-off date of 1920 was decided upon given the volume of material and because the current estate management wanted to keep more recent papers useful to the management of the contemporary estates. This second accession was quickly followed by another (Acc. 10853), consisting of material found in a shed, principally leases, tacks and rentals. In both cases, any maps found in these deposits were extracted and organised into parallel deposits (Acc. 10225, Acc. 10853). In 2001 a final deposit was made (Acc. 12173) from material generated by a selection and rationalisation process between NLS and SCRO of relevant Scottish material that had hitherto been held in England, a deposition itself prompted by the Sutherland family's sale of the Staffordshire papers in that year.<sup>11</sup>

The sheer scale of the Sutherland estates papers presents an interesting set of challenges to both the archivist and the researcher. With 500 linear metres of shelf space, one of these challenges is to piece back together sections of the archives to create a more coherent picture of a particular topic, period, person or place of interest, and this is no better illustrated than by the role of mapping in estate management and its archival traces.<sup>12</sup> That this presents an enormous opportunity to the researcher is without doubt; the minutiae that both the maps and the documentary archive present of everyday life in the north of Scotland is almost without parallel.

The Sutherland estates maps are currently split between four repositories, the primary ones being the NLS, the National Records of Scotland (NRS), and the estate office at Golspie. A fourth deposit, at Dunrobin Castle, mainly consists of architectural drawings, blueprints and plans of the castle and estate buildings, either under construction or repair and alteration. The collection as a whole is large, with around 1,500 maps dating from 1759 to the 1920s.

This collection offers a means by which to evaluate the utility of maps in planned reforms that would gradually modify the structure of the Sutherland estate. In particular, it provides an opportunity to investigate the role of land

<sup>10</sup> Geddes and Tindley, 'Who owns history,' 23; Tindley, *The Sutherland Estate*, 1, 6–8, 58–9.

<sup>11</sup> Geddes and Tindley, 'Who owns history,' 25–6.

<sup>12</sup> Geddes and Tindley, 'Who owns history,' 21–2.

surveying and estate mapping in a period of social and economic change in the Highlands. Scotland had virtually no land surveyors before the early eighteenth century; there was no need for them in any number before the agrarian reforms of the mid-eighteenth century and after.<sup>13</sup> From the 1720s, a commitment to a new agricultural system arose in Scotland, one that would see, over time, the open field system replaced by enclosed fields of new crops with isolated farmsteads, the division of common lands, villages planned, roads and railways built, marsh and moorland reclaimed and new rural industries established. For over 150 years, land surveyors made a major contribution to agricultural modifications by surveying and drawing plans, interpreting the potential of the land and annotating their maps to highlight the ‘Improvable Ground’.<sup>14</sup>

The decline of the land surveyor in the nineteenth century owed, in part, to their own success: they had, by then, helped establish a system of improvement and agricultural prosperity that provided fewer opportunities for large-scale dramatic alteration. A further factor in the decline was the rise of the Ordnance Survey (OS) whose militarily trained surveyors working to standard map scales provided a resource against which estate factors could plot proposed new development without the need for surveyors to prepare the maps themselves. This shift in mapping technologies, from manuscript hand-drawn maps by private land surveyors to the copper plate engraved maps of the OS, later gave rise to the lithographed plans of commercial cartographers, such as Bartholomew and W. & A. K. Johnston in Edinburgh. As a research resource, therefore, the Sutherland estates maps – dating from the 1750s to the 1920s – have the potential to contribute to the history of cartography as well as studies into Highland historiography.

Currently, the NLS holds Sutherland estates maps under two accession numbers – Dep. 313 and Acc. 10225 – which have parallel documentary estate records. In Dep. 313, there are 434 maps, half of which fall in the 1750–80 and 1810–69 periods. In Acc. 10225, there are a further 349 maps, the bulk of which fall within the period 1870–1920.<sup>15</sup> These numbers, however, do not account for any folded maps still to be found within the papers. One of the most striking map volumes in the NLS holdings is that of John Home’s ‘Survey of Assynt’, the earliest detailed comprehensive mapping of this parish, undertaken

<sup>13</sup> Sarah Bendall, *Dictionary of Land Surveyors and Local Map-Makers of Great Britain and Ireland, 1530–1850*, 2<sup>nd</sup> ed. (London, 1997), 4–58.

<sup>14</sup> NLS, Dep. 313/3583, John Kirk, ‘Navidale; E Helmsdale’, 1772; I. H. Adams, ‘Economic Process and The Scottish Land Surveyor’, *Imago Mundi*, 27 (1975), 13–18; I. H. Adams, ‘The Agents of Agricultural Change’, in (ed.) M. L. Parry and T. R. Slater, *The Making of the Scottish Countryside* (London, 1980), 159–60, 167–9; T. M. Devine, ‘The Transformation of Agriculture: cultivation and clearance’, in (ed.) T. M. Devine, C. H. Lee and G. C. Peden, *The Transformation of Scotland: the economy since 1700* (Edinburgh, 2005), 79, 87.

<sup>15</sup> The listings for Dep. 313, Acc. 10853 and Acc. 12173 can be viewed at <http://www.nls.uk/catalogues/online/cnmi/list.cfm?letter=S>.

in 1774.<sup>16</sup> For the estate, it was the most expensive survey of the eighteenth century, resulting in a ‘cartographic masterpiece’: a beautifully executed volume of sixteen plans of farms, with detailed accompanying descriptions.<sup>17</sup> Slightly earlier, and no less descriptive, are two volumes of manuscript estate plans, a survey of farms in Golspie and Loth parishes, by the estate surveyor, John Kirk, undertaken between 1771 and 1773. They include a plan of part of the parish of Golspie with a picturesque cartouche of Dunrobin Castle by John Home.<sup>18</sup> The NRS, meanwhile, holds approximately 260 plans and plan books on Sutherlandshire, dated about 1925 or earlier.<sup>19</sup> This material, however, has not yet been examined by the authors since only a small proportion is relevant to the Sutherland estates.

This article is drawn from examination of the material within the holdings at the estate office at Golspie. Over 600 maps are held in various states: flat sheet maps in a large wooden plan chest, folded and boxed maps in cupboards, large-format map books and framed or rolled display copies. Whilst some of these maps currently remain in regular use by the factor’s office, others must have been simply overlooked at the time of the several deposits in the NLS. Most date from the late nineteenth and early twentieth centuries, the only notable exception being a *Map of the County of Sutherland made on the basis of the Trigonometrical Survey of Scotland in the years 1831–1832*, by George Burnett and William Scott, surveyors to the duke of Sutherland, of which there are multiple copies in the NLS.<sup>20</sup> The vast majority of the Golspie collection comprises OS second edition, six-inch series maps – the most detailed (basic) scale from which smaller scale maps were derived – which have been annotated to varying degrees. The amendment of OS maps to local purpose must not overlook the fact that such ‘standard’ maps were themselves not arrived at in a straightforward fashion. The introduction of the OS six-inch maps of Great Britain is closely linked to Scotland. In March 1839, the Directors of the Highland and Agricultural Society of Scotland called for more information to

<sup>16</sup> NLS, Dep. 313/3585 (nos. 1–16).

<sup>17</sup> Home presented the volume to the Sutherland Tutors along with his bill for £324 9s. 2d. – over half the total annual rental from the whole of Assynt; C. Fleet, ‘John Home’s Survey of Assynt, 1774’, *Cairt*, 6 (2005), 1–4; Adam, *John Home’s Survey of Assynt*; Adams, ‘Economic Process and The Scottish Land Surveyor’, 13; <http://maps.nls.uk/estates/assynt/index.html>.

<sup>18</sup> NLS, Dep. 313/3582, volume of 13 plans of Golspie and environs, 1767–1829; Dep. 313/3583, ‘Book of Plans of the Parish of Loth’, surveyed and planned by John Kirk, 1772; C. Fleet, ‘John Kirk – Survey of farms in Golspie and Loth parishes, Sutherland, ca. 1772’, *Cairt*, 12 (2008), 4; <http://maps.nls.uk/estates/golspie-loth/index.html>.

<sup>19</sup> The authors are grateful to John McLintock of the National Records of Scotland for this preliminary information.

<sup>20</sup> Burnett and Scott’s county map proved a useful and popular base for the Sutherland management; 310 copies of this map were printed by Bartholomew in December 1904; see NLS, Bartholomew Archive Printing Record, Acc. 10222/PR/37a.

be shown on OS maps. They suggested that there ought to be a ‘special survey’ of the manufacturing and mining districts and of the cultivated agricultural areas at the six-inch scale. Given Britain’s rapidly-expanding economy, there was a growing need for detailed maps for the purposes of land valuation, registration and conveyancing, agricultural improvement, mineral development, railways and planning and recording urban expansion. In a Minute dated 1 October 1840, the Treasury noted that, ‘if the nation incurs the cost of a survey, that survey ought to be the kind which is admitted to be the most generally useful’, and gave consent to the survey of the whole of Scotland and northern England at six inches to one mile.<sup>21</sup>

A lengthy and often heated debate over the most appropriate scale for a national survey, however, ensued for more than a decade.<sup>22</sup> Various other scales were suggested for Scotland, including the one-inch scale which would have resulted in 640 acres being shown by a square inch. Henry James, Superintendent of the Survey from August 1854, gave a derisory response to this, that ‘we might draw the plan of an estate of 500 acres on the proprietor’s thumb nail’.<sup>23</sup> Amongst other arguments, it was stated as ‘absurd’ to map at the six-inch scale, ‘the barren wastes and rugged mountains of Scotland,’ that comprised two-thirds of the country.<sup>24</sup> In 1854, approval was finally given for surveying all cultivated rural areas at the 25-inch to the mile scale (1:2,500), from which six-inch and one-inch maps would be reduced and published. By 1859, most of the Scottish Lowlands were complete and by 1869, most of Scotland as far as the Great Glen had been surveyed, with work in Highland districts delayed not only by the terrain and snow but also by proprietors of deer forests objecting to survey work between July and October.

The tension between the surveyors and the sporting community was apparent in Sutherland’s maps and is humorously illustrated in an album by Henry Kirby (*d.* 1912) (Pl. 1). Kirby was a regular visitor to Forsinard Lodge as a guest of his friend, William Henry Fox of Bradwell Grove, Oxfordshire, who was a tenant of the duke of Sutherland from 1870.<sup>25</sup> Kirby’s sketch of ‘Those x x x sappers’ is accompanied by an observation, prompted by frustration no doubt, that, ‘HK with Robbie in the Hope, went for some deer that bolted in a most unaccountable way. When we got up we found some sappers taking

<sup>21</sup> W. A. Seymour, *A History of the Ordnance Survey* (Folkestone, 1980), 109.

<sup>22</sup> R. C. Boud, ‘The Highland and Agricultural Society of Scotland and the Ordnance Survey of Scotland, 1837–1875’, *The Cartographic Journal*, 23 (1986), 3–26, esp. 7–9.

<sup>23</sup> James’s Minute to the Treasury of 7 May 1855, quoted in Seymour, *A History of the Ordnance Survey*, 129.

<sup>24</sup> 1851 debate by a House of Commons Select Committee chaired by Francis Charteris (later Lord Elcho), quoted in C. Fleet and C. W. J. Withers, *Ordnance Survey Maps – Six-inch 1<sup>st</sup> edition, Scotland, 1843–1882*, NLS: [http://maps.nls.uk/os/6inch/os\\_info1.html](http://maps.nls.uk/os/6inch/os_info1.html), accessed 2 February 2011.

<sup>25</sup> NLS, Acc. 12786: Henry Kirby – Forsinard albums, 1870–c.1912. Five books sketched by Henry Kirby which is a history of his sporting life with his friends.



Plate 1 Henry Kirby, 'Those x x x Sappers' (Forsinard, c.1870-7). (Courtesy the National Library of Scotland.)

an observation for the survey'.<sup>26</sup> Two red-coated sappers are either surveying heights using a spirit-levelling technique as established in the 1830s by William Gravatt or fixing the position of a distant object using a theodolite, the most common surveying instrument used in uncultivated or mountainous areas in the late nineteenth century. Not until 1877 were all the field surveys finished, and it was 1882 before the final six-inch map of Scotland was published.<sup>27</sup> In appreciation for assistance provided by landowners in surveying their estates and, in the case of Sutherland, perhaps a reflection of excellent working relations, the OS sometimes presented leather-bound volumes of finished maps to the estates. This may explain the eight beautifully bound volumes of 25-inch OS maps of the county of Sutherland in the estate office in Golspie.<sup>28</sup>

<sup>26</sup> NLS, Acc. 12786, vol. 1: Kirby, Album, 1870-99 – scenes at Forsinard.

<sup>27</sup> Fleet and Withers, *Ordnance Survey Maps*; Seymour, *A History of the Ordnance Survey*. Six-inch, first-edition maps of Sutherland were published between 1877 and 1881.

<sup>28</sup> Published in 1879, these are of the Scourie District and all parts thereof: Assynt, Durness and Eddrachillis; and the Dunrobin District: Clyne, Kildonan, Creich, Loth, Dornoch, Lairg, Golspie and Rogart. One volume – of the Tongue District – may be missing although Tongue is included with Durness and Scourie. Like many estate managements

The large quantity of maps in the estate office in Golspie is a reflection of the rapid growth in the production of maps, particularly OS maps, as they became better known and, crucially for a large landed estate such as the Sutherland estate, more affordable.<sup>29</sup> Sutherland estate mapping, therefore, has useful implications for understanding OS mapping too, and especially its onward use in, for example, the earliest use of the OS primary triangulation by Burnett and Scott, illustrations of OS surveyors, extensive use of County Series mapping as base mapping, and lithographic enlargements and/or reductions of OS mapping for particular purposes. By the later nineteenth century, the Sutherland estate management no longer had to ask the question of maps, ‘What do we own?’, but to ask instead, ‘How can we improve it?’<sup>30</sup> Five case studies have been chosen to assess this fundamental question at the heart of the Sutherland estate management. These studies have allowed us to put each map, or selection of maps, illustrating a certain theme, into their archival context, which was the way in which both documents and maps were originally intended for use.

Mapping is both a constructive and a communicative process. What the following case studies make explicit is the mutual dependency of text and map: in planning, describing and recording the social and economic affairs of the Sutherland estates in the late nineteenth and early twentieth centuries. Maps were read in the context of the estates papers; conversely, maps were essential to illustrate the textual descriptions.<sup>31</sup>

The first three case studies reflect one of the most important themes in Highland estate management in the late nineteenth century: the conversion and consolidation of huge tracts of land into commercial sporting lets.<sup>32</sup> Although the Sutherland estates are more famous for their early-nineteenth-century conversion to sheep farms, the later reconversion to deer forests, although relatively neglected in the historiography, was arguably a more fundamental and longer-lasting change to the economy of the estate and had a wider impact on the landscape in the county as well.<sup>33</sup> Our first case study illustrates this process of change in minute detail. It is evident in two folded and bound maps, ‘Sutherland Estates Shootings and Deer Forests’ (Pl. 2) and ‘Sutherland Sheep

in the Highlands, that of Sutherland actively approved of mapping in their territories as a tool for improvement and progress.

<sup>29</sup> B. M. W. Third, ‘Changing landscape and social structure in the Scottish Lowlands as revealed by eighteenth century estate plans’, *Scottish Geographical Journal*, 71:2 (1955), 89, 92–3; Adams, ‘The Agents of Agricultural Change’, 168.

<sup>30</sup> Adams, ‘The Agents of Agricultural Change’, 155–7.

<sup>31</sup> M. H. Edney, ‘Reconsidering Enlightenment Geography and Map Making: Reconnaissance, Mapping, Archive’, in (ed.) D. N. Livingstone and C. W. J. Withers, *Geography and Enlightenment* (Chicago, 1999), 165–98, esp. 187–90.

<sup>32</sup> Orr, *Deer Forests, Landlords and Crofters*, 24; E. A. Cameron, *Land for the People? The British Government and the Scottish Highlands, c.1880–1925* (East Linton, 1996), 56, 77–81; J. Hunter, *The Making of the Crofting Community* (Edinburgh, 1976).

<sup>33</sup> Orr, *Deer Forests, Landlords and Crofters*, 28–37; Tindley, *The Sutherland Estate*, 4–5, 108–9.





Plate 2 ‘Sutherland Estates Shootings and Deer Forests’, c.1904–12. An annotated OS map of the county of Sutherland, reduced, showing the proposed conversion from sheep farming to commercial sport. The base is formed from an OS map of the county reduced by Bartholomew. (Courtesy of the Sutherland Estate.)

farms and Shootings’ (1885, using Morrison’s 1853 revision of Burnett and Scott’s survey of the county), and an OS six-inch first edition, Sutherland sheet LXIV, from the 1880s (Pl. 3), annotated in red pen, marking a reorganisation of the boundary between the key deer forest of Loch Choire and Ben Armine.

What these three maps represent is the scale of the Sutherland estates’ conversion from sheep farming to commercial sport from the 1880s, demonstrated very clearly by the 1885 map of ‘Sutherland Sheep farms and Shootings’. The mid-1880s was the point at which the Sutherland estate management finally accepted that income from sheep farm rents was never going to recover, due to a British-wide collapse of sheep and wool prices from 1879.<sup>34</sup> The details of changing sheep farm and shooting lets on the sleeve of

<sup>34</sup> SCRO, D593, K/1/3/81/a, Evander McIver, Sutherland factor to H. Wright, Head office, 24 June 1893; Orr, *Deer Forests, Landlords and Crofters*, 16–24.

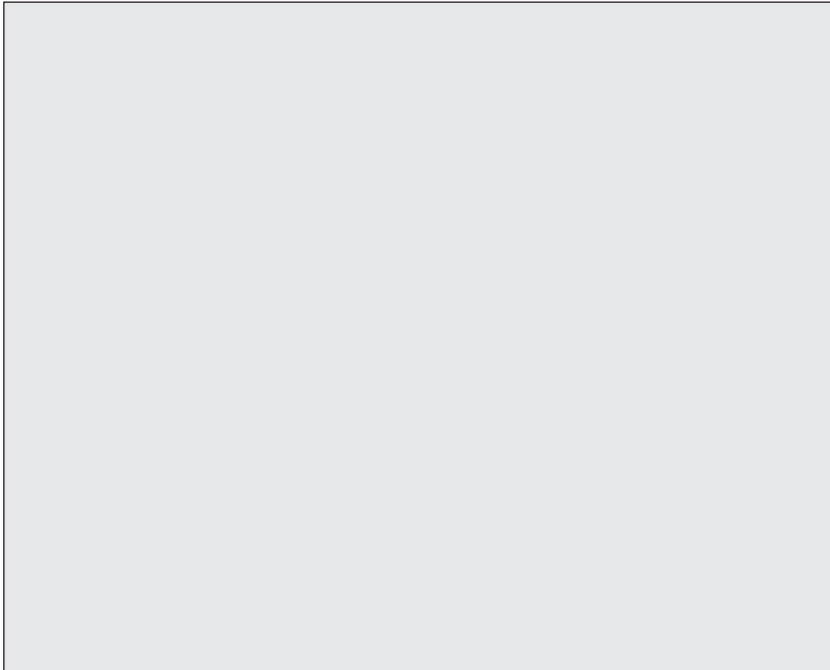


Plate 3 Part of OS six-inch first edition, Sutherland sheet LXIV, c.1880, showing the estate's investment into a new shooting let at Loch Choire, Sutherland: new stalking paths, a stable, bridges, and boundary readjustments. (Courtesy of the Sutherland Estate.)

this map (Pl. 4) shows the rapid move by the estate management, in a period of little over ten years, to the more lucrative pursuit of commercial sport; this was to prop up the estate rental well into the twentieth century.<sup>35</sup> OS six-inch Sutherland sheet LXIV further demonstrates the level of estate investment into new shooting lets, including the building of new stalking paths, additions of kennels, larders and improvements to existing shooting lodges and the near continual small-scale adjustment of boundaries between different shooting lets, to maximise tenant satisfaction and therefore the rents they could charge for each forest.

The second case study deals with the same issue, and provides an example of how the estate management viewed its landed resources more generally, within the context of the growing economic dominance of commercial sport. For purposes of administration the Sutherland estates were divided into three areas: the Dunrobin, Tongue and Scourie managements, each with its own factor

<sup>35</sup> Tindley, *The Sutherland Estate*, 5.

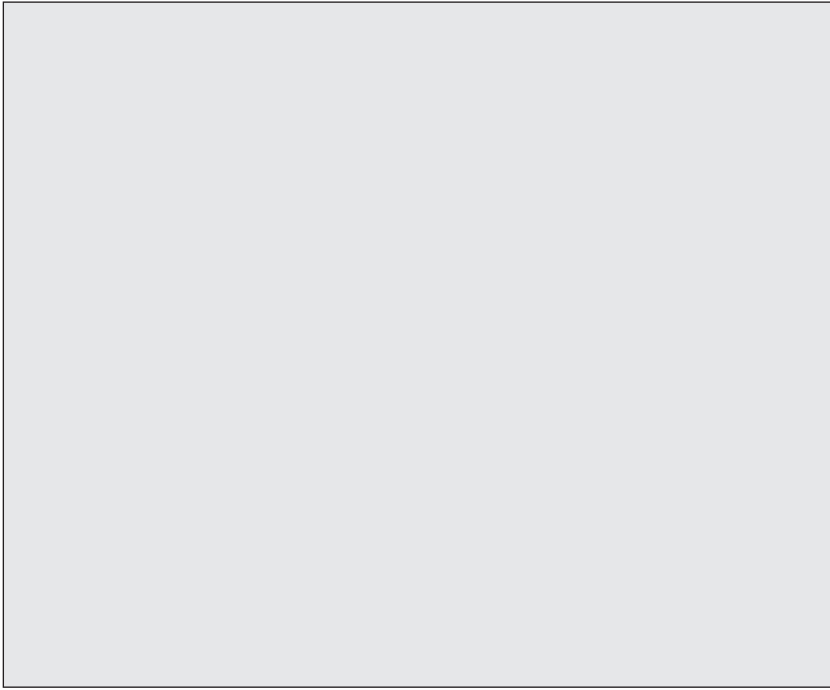


Plate 4 'Sutherland Sheep farms and Shootings', 1885. (Courtesy of the Sutherland Estate.)

and numerous ground officers. Each one of these managements is represented on a sheet map, a montage of OS one-inch, first edition maps published in 1880, and annotated with their boundaries of shooting lets and crofting areas. Here, the shooting let of Loch Choire in the Tongue management serves as an illustrative example (Pl. 5).

Loch Choire was an important shooting let for the Sutherland estates, bringing in a significant and increasing annual rental. In 1891, for example, the tenant paid £650 per annum, but this had risen by 1915 to £2,400 per annum for access to 16,640 acres of 'excellent stalking ground'.<sup>36</sup> For this high price, tenants could expect a large 'bag' of game every year. In 1911, for example, the game books for the let show that no fewer than 130 stags were shot.<sup>37</sup> Shooting lets such as Loch Choire provided the estate with the bulk of

<sup>36</sup> NLS, Acc. 10225, Rentals, 16 (Tongue, 1891); Rentals, 27 (Tongue, 1915); Acc. 10225, Shooting and Game [no number], 'Loch Choire (with Ben Armine)' with a map – OS one-inch, Scotland sheet 108 trimmed – showing the boundary of the forest in 1891.

<sup>37</sup> NLS, TD. 2971/54, Loch Choire game book, 1901–25.

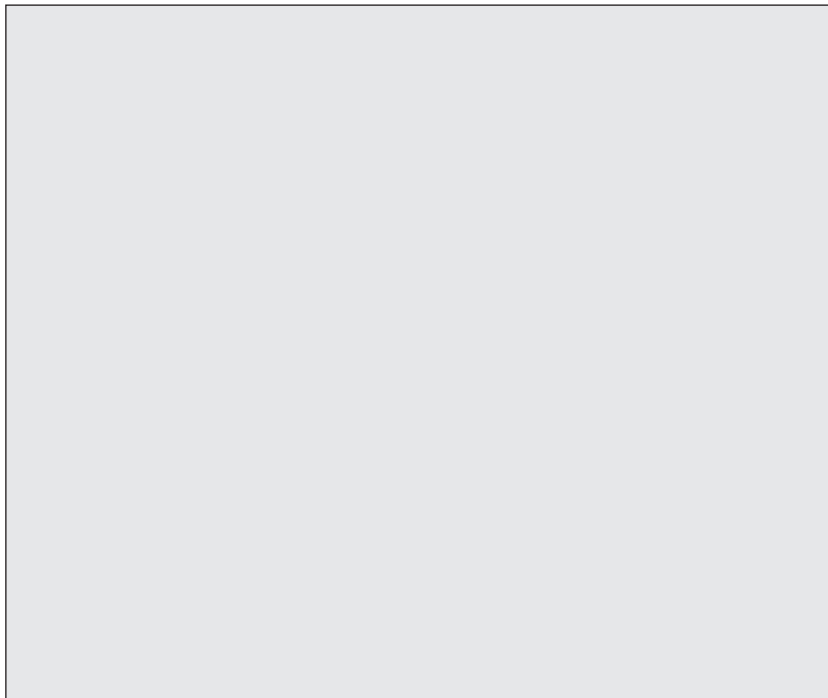


Plate 5 Part of OS one-inch, first edition, Scotland sheets 108 (Altnaharrow) and 109 (Auchintoul), c.1880, showing the boundary of Loch Choire shooting let. (Courtesy of the Sutherland Estate.)

its rental income well into the twentieth century, and were much more valuable economically than the mass of tiny crofting tenancies across the estate.<sup>38</sup> These maps reflect the growing frustration of the estate with its perceived ‘burden’ of uneconomic crofting tenancies, as compared with the lucrative sporting lets. The map of the Scourie management (not illustrated here) offers a particularly good example of this conflict over land. The lands reserved for shooting lets are again clearly defined in red, a feature which seems to be the convention in these annotated OS maps. Unlike the other two district maps, however, this one also shows bordering additions in green annotated with ‘Durness horse grazing’, an area of forest and areas of small tenancies with their acreages marked. The reasons for this colouring and annotation are hinted at in the documentary sources, which are filled with examples of the estate factors having to pacify their shooting tenants frustrated with crofters’ stock frequently trespassing onto

<sup>38</sup> Tindley, *The Sutherland Estate*, 4–5.

their lets, and the crofting community, aggrieved at the depredations of deer on their land.<sup>39</sup>

The third case study consists of a multiple boxed set of OS six-inch, second edition maps, covering the entire county of Sutherland, supplied by W. and A. K. Johnston of Edinburgh, one of the leading geographical and educational printers and publishers in late-nineteenth-century Britain. What makes these maps valuable to the researcher is their use as working plans and documents by the Sutherland estate management in the years after 1906. Several of the sheets are covered in annotations, adjustments and additions, all illustrating in map form both day-to-day and longer term changes to the Sutherland landscape and economy. For example, Sutherland sheet XCVII (Pl. 6) in this series, which shows the area around Loch Brora on the eastern side of the county, has a series of annotations made in pencil relating to improvements made on the River Brora for fishing, multiple annotations relating to tree plantations, and evidence of a right-of-way dispute with Sutherland County Council. They show the changing economic priorities of the Sutherland estate management during and after World War One: the now almost complete break from sheep farming to commercial sport, here seen in the guise of fishing lets; the move towards commercial forestry as demand leapt up during and after the war; and the increasing confidence of local agencies in dealing with the Sutherland estates, after decades of deference by these bodies to the ducal family.<sup>40</sup>

The fourth case study tackles a different, but no less important, area of estate management: the crofting community, and the relationship between it, the estate management and, after 1886, the British government. That year saw the passage of the Crofters Holdings (Scotland) Act, which for the first time introduced government agencies into the management of crofting tenancies in the Highlands.<sup>41</sup> Initially this consisted of setting crofting rents, dealing with arrears and limited croft enlargements, but this was extended in 1897 with the Congested Districts (Scotland) Act to cover enlargement of crofters' holdings via purchase. Under this legislation and, later, the 1911 Small Holdings (Scotland) Act, government agencies were remitted to negotiate with landowners for setting aside and sometimes purchasing land for crofters' holdings.<sup>42</sup>

The map which constitutes our fourth case study (Pl. 7) is an example of this process, and is relative to a scheme for the creation of crofters' holdings in Shiness, Sutherland, negotiated over the period 1916–19 between the Board of Agriculture for Scotland (BoAS), the agency responsible for such schemes, and the Sutherland estate management. Leases for the sheep farms in and around Shiness were due to terminate in 1918, and in 1916 the Fifth Duke of

<sup>39</sup> Tindley, *The Sutherland Estate*, 108–11.

<sup>40</sup> Orr, *Deer Forests, Landlords and Crofters*, 1–5; Tindley, *The Sutherland Estate*, 84–5, 115, 167.

<sup>41</sup> Hunter, *Making of the Crofting Community*, 169–70; I. M. M. MacPhail, *The Crofters' War* (Stornoway, 1989), 173–4.

<sup>42</sup> Cameron, *Land for the People*, 83–4, 144; L. Leneman, *Fit for Heroes? Land Settlement in Scotland after World War One* (Aberdeen, 1989), 8.

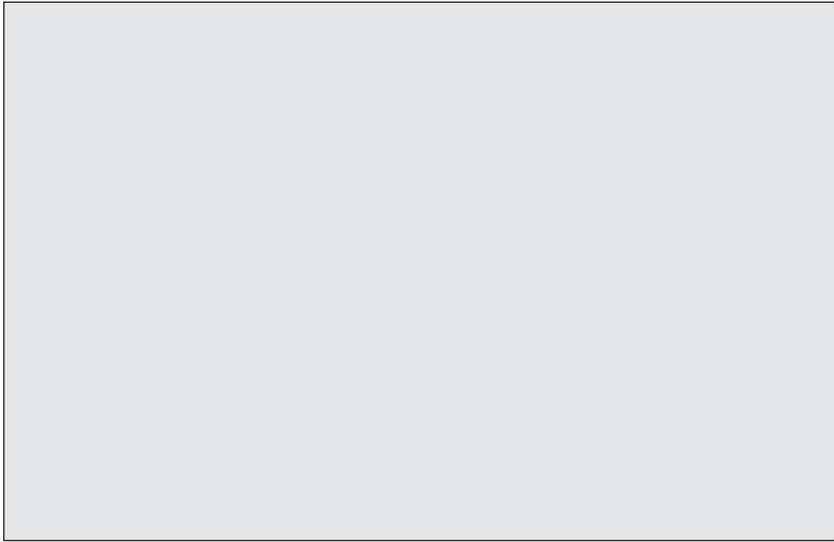


Plate 6 Part of OS six-inch, second edition, Sutherland sheet XCVII, showing new fishing pools made on the River Brora: 'All good except no. 2 which is merely a nest for fish'. (Courtesy of the Sutherland Estate).

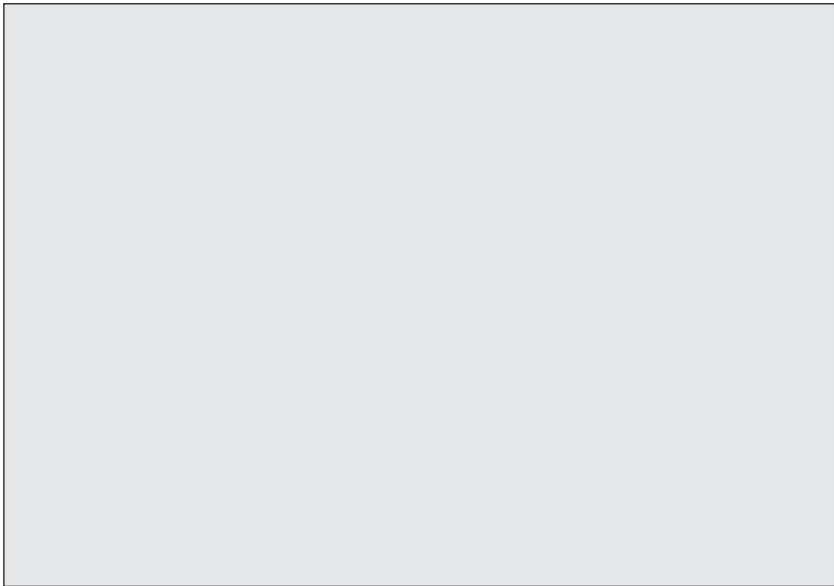


Plate 7 OS six-inch, second edition, Sutherland sheet LXXXV, 1908, showing the planned Shiness land settlement scheme of 1916. (Courtesy of the Sutherland Estate.)

Sutherland offered the farms to BoAS to divide into 30 small holdings, to be set aside for local men who were army and navy veterans of World War One. This move was part of a wider campaign in the Highlands for ‘Land fit for Heroes’, which the Duke was keen to support.<sup>43</sup>

The proposed Shiness land settlement scheme is represented in detail on an OS six-inch, second edition map, Sutherland sheet LXXXV, published in 1908. At this scale, it was possible for the boundaries of each small holding to be clearly marked (in orange on the map): some boundaries following existing fences, others forming new ones, with areas of forest (in purple) to be excluded from the scheme. Each holding is numbered and coincides with the ‘Table of Areas’ pasted to the bottom left of the map. A prospective tenant could therefore see how much of his holding was turned over to arable, old arable or plantations, rough ground, buildings and roads.

More importantly, this case study demonstrates the importance of using the map records with the documentary archive: behind the straight lines and shaded areas lay heated negotiations between the BoAS and the estate management over reserved rights to fishing and shooting and plantations of trees, which had recently become a lucrative source of income for the estate.<sup>44</sup> The map does not reflect the tortuous negotiations, including a long process of choosing suitable applicants for the new holdings.<sup>45</sup> For that, the documentary archive needs to be consulted and used alongside the map, in order to effectively track the slow progress of the scheme, and so affords an insight into the workings of the BoAS and its relationship with important Highland estates in the highly politicised and controversial issue of postwar land settlement. That the map was a crucial aspect to the negotiations is made very clear: for BoAS officials based primarily in Edinburgh, using the map as a tool to aid their visualisation of how the scheme might look ‘on the ground’ was clearly crucial to its development.<sup>46</sup>

The last example provides an excellent illustration of life for Sutherland’s large crofting community, and takes us away from a solely estate-centric view of their mapping collections. Despite significant land sales made by the Sutherland family between 1898 and 1920, they still held considerable amounts of land on the eastern side of the county, much of which was under crofting tenancies and had been so for roughly a century. One of the best examples of this was in and around the townships of Helmsdale and Gartymore, which had been established as clearance villages in the early nineteenth century to

<sup>43</sup> Leneman, *Fit for Heroes*, 53–70; Fifth Duke of Sutherland, *Looking Back: the Autobiography of the 5<sup>th</sup> Duke of Sutherland* (London, 1957), 84–5.

<sup>44</sup> NLS, Acc. 10853, Crofters, ZX/b, D. Horne to John Morrison, 22 June 1917; Robert Wright, BoAS to Macaulay, 17 July 1917 and 24 July 1917.

<sup>45</sup> For example, Acc. 10853, Crofters, ZX/b, BoAS to Morrison, 19 September 1917; Morrison to Colin McDonald, BoAS, 5 June 1918; Colin McDonald to Macaulay, 21 November 1919; BoAS to Macaulay, 7 August 1919.

<sup>46</sup> Acc. 10853, Crofters, ZX/b, Robert Wright, BoAS to Macaulay, 16 July 1917 and 17 July 1917; BoAS to Morrison, 16 April 1919.

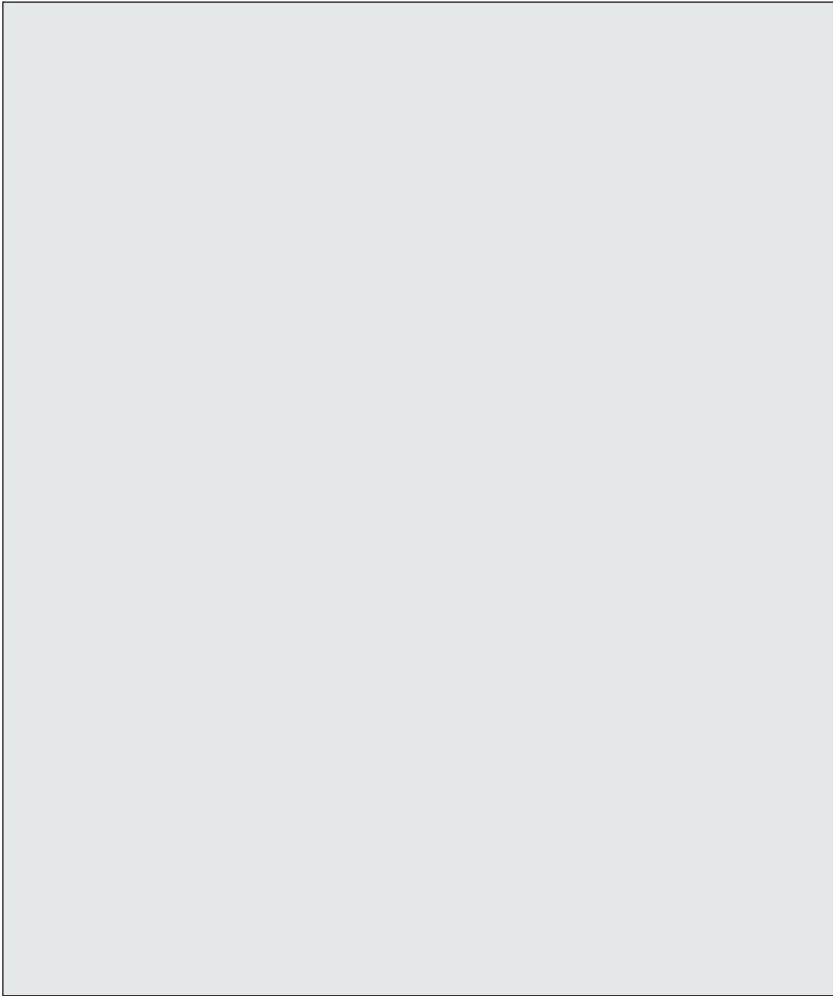


Plate 8 Part of OS 25-inch series, Scotland sheet XC.2., showing crofting boundaries and holdings for West Helmsdale. (Courtesy of the Sutherland Estate.)

house the tenants moved from the interior straths of Kildonan and Loth.<sup>47</sup> What the twentieth-century map (Pl. 8) demonstrates is how little these crofting tenancies had changed in the intervening one hundred years; the crofts are still closely packed together, and the land under each croft fragmented between

<sup>47</sup> E. Richards, *The Highland Clearances: people, landlords and rural turmoil* (Edinburgh, 2000), 159–60, 177–8.



narrow, long strips of arable land and small areas of pasture land elsewhere.<sup>48</sup> The estate management has mapped out who held what and where – the croft numbers are marked onto each patch of land and coloured pencil is used to outline individual plots.

What is clear from this map is that it is an attempt by the estate management to clarify existing crofting boundaries and holdings, not to create new holdings, as was the case in our fourth case study for Shiness. It is extremely useful to the historian of Highland estates and of the crofting community in showing, in minute detail, the confused picture of crofting tenancies, and how hopelessly congested and inefficient they must have appeared in the eyes of twentieth-century estate management. Unfortunately, we cannot know for what purpose this map was created by the estate: was it to compile a definitive picture of the crofting holdings in that part of the estate, or was it to be a precursor to a reorganisation of these tenancies, in conjunction with the government agencies remitted to secure the crofting community's interests? Whatever its original purpose, the map now holds multiple possibilities for the researcher; those interested in tracking the fine detail of crofting tenancies would have much to use here.<sup>49</sup> By working with the documentary archive, specifically the rental records, and also utilising the records of the Crofters Commission (after 1886), a very detailed picture of crofting life in Helmsdale and Gartymore could be built up, including acreages, stock type and numbers, who was living on each croft and their families, and rents and arrears.<sup>50</sup>

These five case studies demonstrate the value of the Sutherland mapping collections and their integral place in the estate's documentary archive. The documentary sources more commonly used by some researchers cannot be properly understood without the parallel utilisation of the maps, as this was the way in which the estate management itself worked. What this article has highlighted is that although it has long been recognised that the archives of the Sutherland estates are among the most important in Scottish or indeed, British history, the map collections within that archive have hitherto been neglected by researchers and historians. The project that has started with this article hopes to show that this should no longer be the case, by constructing an overview of all of the Sutherland estates mapping collections, including the material from the estate office in Golspie discussed here, and the larger collections held by the NLS in Edinburgh.

Secondly, as the case studies have shown, detailed use of the mapping collections in conjunction with the extensive documentary archive can have fruitful results for the researcher. This is especially the case for those researchers interested in the history of Highland estates and their management and

<sup>48</sup> There is no exact date for this map; it was possibly produced by the estate in response to the work of the Crofters Commission, or the Board of Agriculture for Scotland.

<sup>49</sup> Representations of the Sutherland population in map form had been part of the earliest mapping of Sutherland: Adam, *John Home's Survey of Assynt*, 41–3, 48, 50.

<sup>50</sup> *Crofters Commission Annual Reports*, 1886–1912.

the wider history of the Scottish Highlands and the processes of social and economic change occurring on them from the mid-eighteenth century. The examples used here illustrate these processes of change: the conversion of the economic landscape of Sutherland from sheep farming to commercial sport, and the shift in responsibility for the crofting community from the estate to the government after 1886.<sup>51</sup>

Another interesting point that can be gleaned from the Sutherland estates maps is the changing nature of the 'producers' and 'consumers' of estate and county mapping from the nineteenth century. The first mapping undertaken on the Sutherland estate was about the representation of the landscape in map form. By the mid- to late-nineteenth century, however, both the map-maker and the customer had changed – the former from the professional land surveyor to the state's Ordnance Survey, the latter from the land-owning aristocratic family to his estate manager – changing the appearance of maps through different production techniques, and the way they were subsequently used. Just as earlier eighteenth-century mapping was concerned with planning and creating the landscape, so later mapping, as evidenced in this article, was about then managing that landscape. This process is also reflected in the changing role of estate factors and managers into a profession in the nineteenth century, which demanded that the person of the factor take on multiple functions once carried out by many individuals.<sup>52</sup> Transition is, therefore, a key theme for researchers and archivists looking at estate mapping, a transition pushed forward by function – the transition of cartography from local to regional enterprises, the changing role of estate managers and their aristocratic employers – and these broad changes are reflected in the ways in which estates papers and maps were created and used.

<sup>51</sup> Tindley, *The Sutherland Estate*, 169–70.

<sup>52</sup> Adams, 'The Agents of Agricultural Change', 159, 167.