

## ***The Greenwood maps online.***

*by Derek Denman*

The late Michael Grieve, who made such a large contribution to the Society, wished us to have his copies of the Greenwood maps of Cumberland and Westmorland. The committee agreed that these maps should be part of our archive, but also that a project should be established to scan the maps and to make them freely available on line for historical researchers and others. This would be done in his memory, recalling his personal interest in old maps. This article provides a short discussion of the maps and a guide to their use on the Society's website at [www.derwentfells.com/greenwood](http://www.derwentfells.com/greenwood).

These Greenwood maps are part of a series of county maps surveyed and published by Charles and John Greenwood from 1817. The Cumberland map was surveyed in 1821-2 and first published on 10 April 1823. The Westmorland map was surveyed in 1822-3 and first published in 1824. Single sheet versions at three inches were published in 1830. At the one inch scale a county would be covered by a number of sheets, originally three in the case of Cumberland and two for Westmorland. Ours are on paper glued in sections to linen to form folding maps, all housed in a single leather cloth slip case. They are hand coloured and are the second edition of 1844, which differs only in having the railways to that date superimposed on the original survey, and with Cumberland being on four sheets.

The Cumberland map, surveyed in 1821-2, remained the best and most detailed map of the county until the Ordnance Survey of the late 1850s/early 1860s. This allowed the Greenwoods a good period to make a return on their investment, for this was a private commercial venture for profit, and part of no official or quasi-official sponsored project. It seems a daunting project for two brothers to seek to map the country at that scale, and they did not complete all the counties. But their task was made easier by the fact that there had been an earlier part-sponsored project to map the counties accurately. From 1759 the Society of Arts offered prizes for the production of county maps to this scale. They must be based on a trigonometrical survey, have

accurate road distances and correct latitude and longitude. Cumberland was surveyed by Thomas Donald in 1770-1 and published by Joseph Hodkinson in 1774. We have a claim to Thomas Donald because he married Ann Skelton of Foulsyke in Loweswater and was buried in Loweswater Churchyard, though not before producing some estate maps for local landowners. Thomas Jefferys' map of Westmorland was published earlier, in 1770

By the 1820s the Donald and Jefferys surveys were out of date in many respects, but they did provide a properly surveyed physical plan and a basic layout of the built environment. This could of course be re-used freely by Greenwood, and it is questionable how much of the Greenwood maps were a new survey, and how much they were based on the old county maps. It is most unlikely that the Greenwoods made a new trigonometrical survey. In Cumberland and Westmorland they may have had material from the national trigonometrical survey by the Board of Ordnance, commenced in 1780 but still incomplete.<sup>1</sup> The qualifications and actual surveying practices of the Greenwoods were matters debated between Christopher Greenwood and Thomas Hodgson in Westmorland in 1823. Hodgson had decided to produce and sell his own map of Westmorland, published in 1828 at one and a third inches to the mile. He and his supporters joined battle with Greenwood in the Westmorland Gazette between June and September. The full correspondence can be seen on the excellent Lakes Maps and Guides website by Martin and Jean Norgate.<sup>2</sup>

Hodgson used a surveyor's chain to measure linear distances, for example along roads, while Greenwood was said to employ men to make a paced 'eye-draft' survey.

Some time since, a man was seen stepping on the Roads through the Villages, &c. of Westmorland and, to the no small

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<sup>1</sup> I am grateful to Bill Shannon for advice on Greenwood's use of the Board of Ordnance information for Lancaster and Yorkshire, and for a reference to the Cumberland and Westmorland reports in the BL

<sup>2</sup><http://www.geog.port.ac.uk/webmap/thelakes/html/wgaz1823/gz01fram.htm>

amazement of those who saw him. He stopped at intervals, and seemed to be writing on a piece of paper; but nobody knew what he was, or what was his object in marching about in that way. Can Mr. Greenwood, (from his superlative education, together with the instructions he had at Leeds,) tell me whether it is possible for this man to have been taking a Survey for a County Map?<sup>3</sup>

The rivals debated their training as surveyors and their access to mathematical and astronomical instruments, but never their actual use of these techniques and equipment – which one therefore suspects was minimal. It was not the accuracy of the survey of the C18th maps which was the problem, but that the content was out of date. This debate about the accuracy of the rival surveys was probably just a diversion. They each needed to spend their time and money on adding content, and to divert their rival into resurveying the land.

The potential threat to the viability of these maps came from the official and quasi-official mapping projects which were slowly developing. Maps of the Board of Ordnance at one inch scale were briefly available in southern England starting with Kent in 1801. Publication was prohibited between 1811 and 1816, but thereafter Ordnance Survey one inch maps became increasingly available in the south.<sup>4</sup> The need for publically funded mapping came firstly from military requirements, and then for cadastral surveys which were sufficiently accurate and detailed to act as a basis of valuation and taxation of landholdings. It was the latter need which caused the Board of Ordnance to be charged in 1824 with mapping Ireland, which had been part of the United Kingdom since 1800. The Ordnance Survey Act was not passed until 1841, and from 1846 maps started to become available from the full survey of England Scotland and Wales at six inches and approximately 25 inches to the mile. An earlier opportunity to use the Tithe Commutation Act of 1836 as the justification for a full

cadastral survey of England and Wales had been rejected due to the cost.

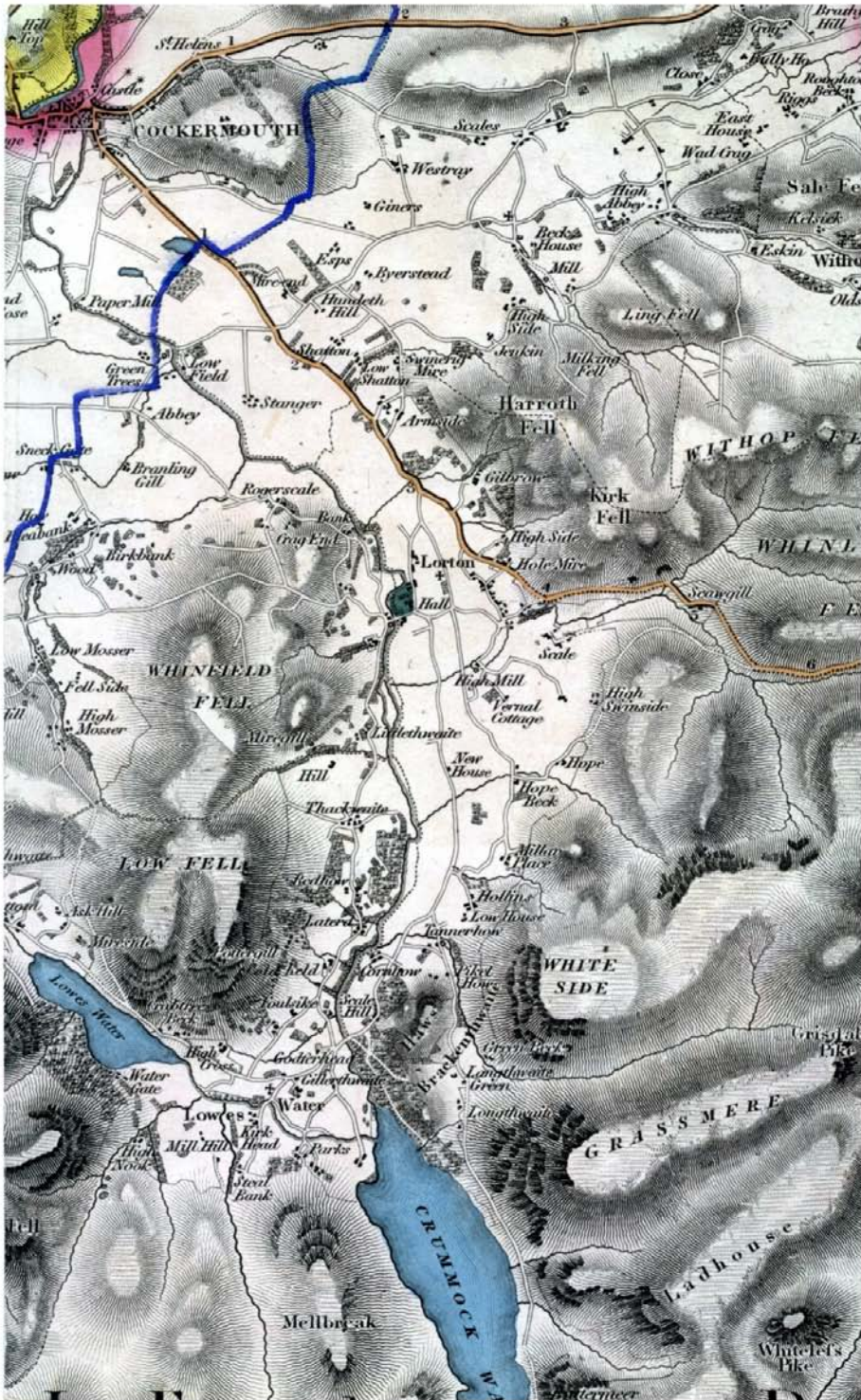
The duration of the window of commercial opportunity open to the Greenwoods was most uncertain when they started, which clearly added to the pressure to make their surveys as simple and speedy as possible, and their county maps just sufficient for the needs of their customers for an up to date county map. One compromise was perhaps to exclude any heights or contours, or indications of steep roads, which could have been useful to travellers, especially with carriages. This might have been particularly useful in Cumberland and Westmorland – for example on the Whinlatter Pass. However, the Greenwood map did recognise the local importance of tourism by its depiction of the fells. Donald had shown the periphery of the fells by hachures and added a few names. Greenwood used extensive hachuring to give more detail of the fells themselves, plus their watercourses. Many more names of fells, watercourses and summits were given, with a list of the heights of the principal mountains.

A further compromise might be found in the exclusion of information which might quickly become outdated. Donald had charged gentlemen to have their names against their seats, but Greenwood did not offer that. Raisbeck Lucock Bragg's seat at Lorton Hall was clearly surveyed by Greenwood and shown as a 'C' shape, but its owner's name was not given. More surprising is the exclusion of roadside inns and alehouses, important to travellers and particularly in our district, but perhaps too fluid to name.

The deficiency in the Greenwood Cumberland map was the lack of any town plans at a larger scale. Donald had provided plans of the three most important in 1770, Carlisle, Whitehaven and Cocker mouth. The industrial revolution was in full swing in 1820, even in parts of Cumberland, and so Donald's plans needed updating and could have been included. Greenwood, instead, used some of the white space for a view of Carlisle from across the river. The Westmorland map had no plan of Kendal, which Jefferys had included. However, the excellence of Greenwood's map of London of 1827, at eight inches to the mile, must be appreciated.

<sup>3</sup> *Westmorland Gazette*, 26 July 1823.

<sup>4</sup> See W A Seymour, *A history of the Ordnance Survey*, Dawson Folkestone 1980.  
<http://www.ordnancesurvey.co.uk/docs/ebooks/a-history-of-the-ordnance-survey/index.html>



The local panel from the Greenwood map of Cumberland at 1 inch to 1 mile, Surveyed 1821-2, first published 1823, this edition 1844 with railways added.

The main changes that the Greenwoods captured in our area were the roads, particularly in the context of the

enclosure of the commons. Many of the turnpike roads were already on the C18th maps, for example the two from





**Whinfell & Lorton from the Donald map, surveyed 1770-1**

Cockermouth on the section shown, to Keswick and Kendal via Whinlatter, and to Penrith via Heskett Newmarket (not via Keswick). The Greenwood survey predated the new turnpike from 1825 through Embleton and down the West side of Bassenthwaite, intended as a level alternative to Whinlatter. But elsewhere an up to date map of the good turnpike roads was needed.

Locally the major change was the enclosed commons, which by the time of the survey had reached Whinfell Embleton and Wythop, but not Mosser Loweswater and Lorton. The enclosed commons restricted the man on horseback, or walking, to the roads now available. Before they were enclosed and divided it was convenient to use the commons to pass over the fells from place to place, often avoiding the valley roads which were longer and often gated in many places. For example the route which Wordsworth and Coleridge used to walk from Embleton to Lorton in 1799 was not available in 1823.

To illustrate the change, a section including the Whinfell, Lorton and Embleton commons is shown here from Donald's map. The extent of the enclosures on both maps is shown as a thin full line, erratically in Donald, and roads on the commons are shown dashed as unfenced. On the Donald map the road from Low Lorton Bridge over Whinfell common approached Wood, while

Greenwood shows the full new enclosure roads, as in Embleton but not Lorton. It is interesting that the enclosure awards for Embleton and Whinfell were dated 1824 and 1826, after the Greenwood survey. The process of enclosure started after the earlier Acts of Parliament, and the awards recorded the completed process.

Further additions to the Donald map were boundaries, of Cockermouth borough, heavily coloured in blue, and of the divisions of townships/parishes as dashed lines. The boundaries between Lorton and Embleton were found and added in fine detail, though that with Brackenthwaite was missed. Clearly a new survey had been made, as evidenced by the transient Vernal Cottage name at Birketts. For our edition, of 1844, the railways to date had been drawn over the survey. The CK&PR did not yet exist, but our map includes the Cockermouth and Workington Railway, opened in 1847.

For a commercial venture, with an uncertain period to recoup the cost, the plan of the Greenwoods to map the counties must be considered ambitious and successful. For historians the maps provide a valuable and detailed 1820s update of the eighteenth century county maps, which would not be improved until the Ordnance Survey maps, starting in the late 1850s.

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