

The Kirkforthar Ditches

By Michael T. Tracy

The Kirkforthar ditches are located on the Kirkforthar estate in Markinch Parish, Fife, Scotland. These ditches basically begin at Star Moss, merge with a watercourse from Gateside and end around New Inn where there is a further merge with the Pittilock Burn. Additionally, there are auxiliary ditches that feed into them. Dug by hand by estate workers, these ditches can still be seen today. Their origins as to when exactly they were built remain unknown to this day.



Fig.1. Kirkforthar ditches, Markinch Parish, Fife, Photograph Courtesy of Neil Sutherland, Chairman, Markinch Heritage Group

Kirkforthar Feus

Kirkforthar Feus is a small hamlet of cottages located about 1 5/8 miles northwest by west of Markinch and is described in the 1853-1855 Ordnance Survey Name Books as “a row of cottages with garden attached feued from the Kirkforthar Estate, also a private school.”¹

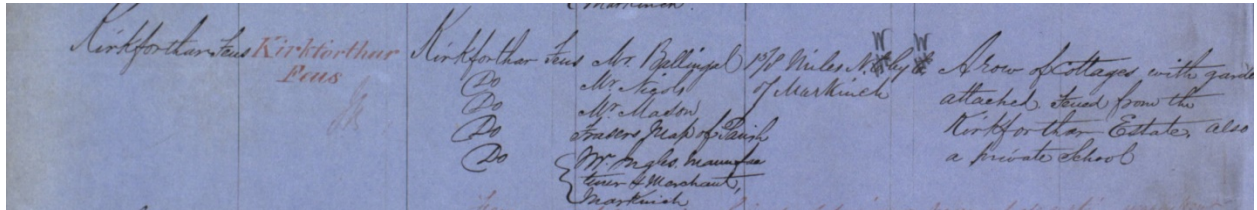


Fig.2. Ordnance Survey Name Book for Kirkforthar Feus, Markinch Parish, Fife, Photograph Courtesy of ScotlandsPlaces.gov.uk



Fig.3. Ordnance Survey Map showing Kirkforthar Feus, Markinch Parish, Fife, Photograph Courtesy of the National Library of Scotland

¹ Ordnance Survey Name Books, Fife and Kinrossshire Ordnance Survey Name Books, 1853-1855, Volume 92, OS1/13/92/6

The Kirkforthar area is known to have existed during the seventeenth century and quite possibly earlier than that. “In the beginning of the seventeenth century, the small parsonage of Kirkforthar, belonging to Lindsay of Kirkforthar, a cadet of the family of Crawford, was suppressed and annexed to Markinch. The ruins of the church of Kirkforthar are still to be seen; they stand in the middle of the old churchyard which is enclosed by a wall.’ Forthar, noted for its lime-works, is in the neighbouring parish of Kettle... The name is probably the old Gaelic *fother* or *forthar*, signifying a fortified place.”² The Lindsay Laids occupied the Kirkforthar House which today is a ruined 18th century house. George Johnstone Lindsay, Laird from 1488, through at least seven generations down to 1672 occupied this house.³ Kirkforthar House stood three stories high and was once surrounded by a moat which has since been filled in.⁴ The house can still be seen today and is located on Roys Highland Map (1747-1752) which is reproduced below in Fig. 5 along with Ordnance Survey Opendata overlaid furnished by Mr. Neil Sutherland, Chairman of the Markinch Heritage Group.



Fig.4. Kirkforthar House, Markinch Parish, Fife, Photograph Courtesy of James Allan, Geograph.org.uk, Photograph 2860592

² MacKinlay, James Murray. *Influence of the Pre-reformation Church on Scottish Place-Names*. Edinburgh: William Blackwood and Sons, 1904, p. 128

³ Canmore. Accessed at: canmore.org.uk/site/29994/kirkforthar-house

⁴ Canmore. Accessed at: canmore.org.uk/site/29994/kirkforthar-house

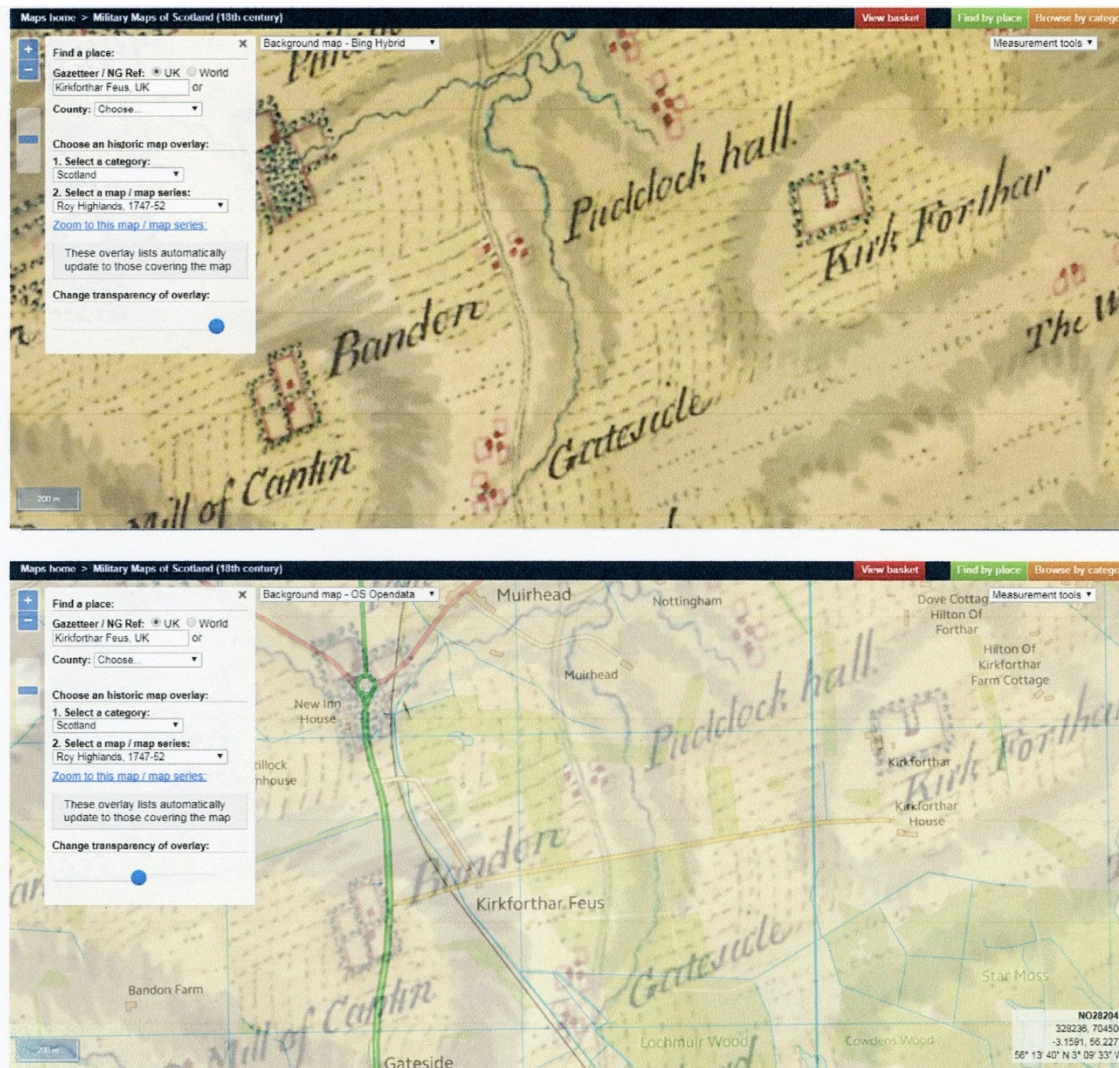
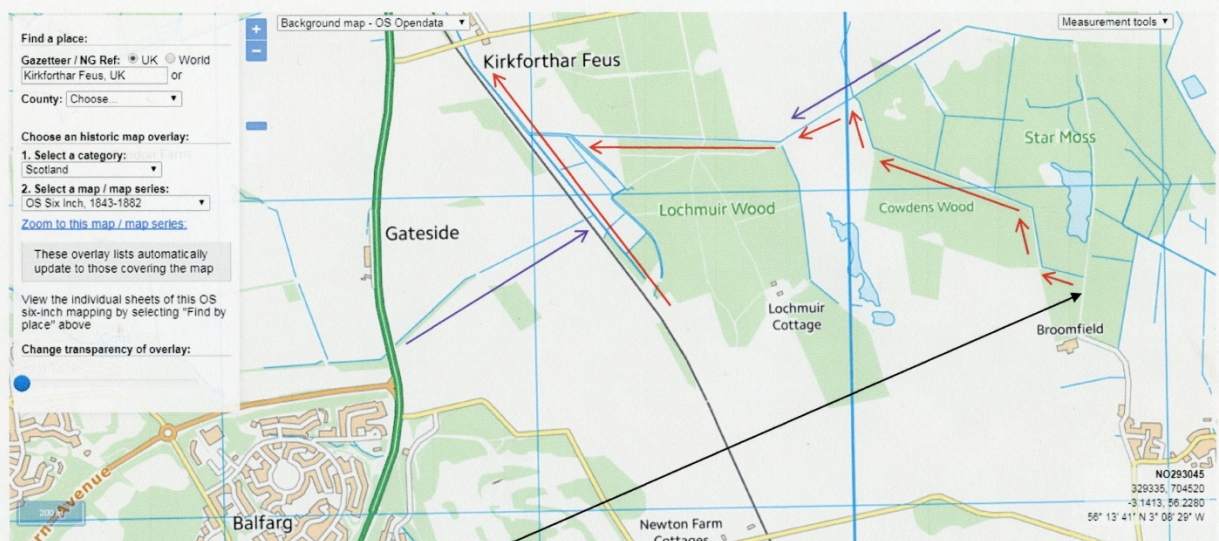


Fig.5. Rois Highland Map 1747-1752 (Upper) with Ordnance Survey overlaid (Lower), Photograph Courtesy of the National Library of Scotland

Description and Location of the Kirkforthar ditches

The Kirkforthar ditches can be described as a long narrow excavation dug in the earth for drainage purposes. Their starting point, if one can look at it as a starting point, begins at Star Moss and end around New Inn. Mr. Neil Sutherland writes that using this as the starting point of the section is “because Star Moss has a raised trackway running through it roughly north to south which effectively splits it in two and has the effect of preventing water from the eastern side reaching the western side, the side which we are concerned with here.”⁵ For further reference please see the Kirkforthar area maps below.

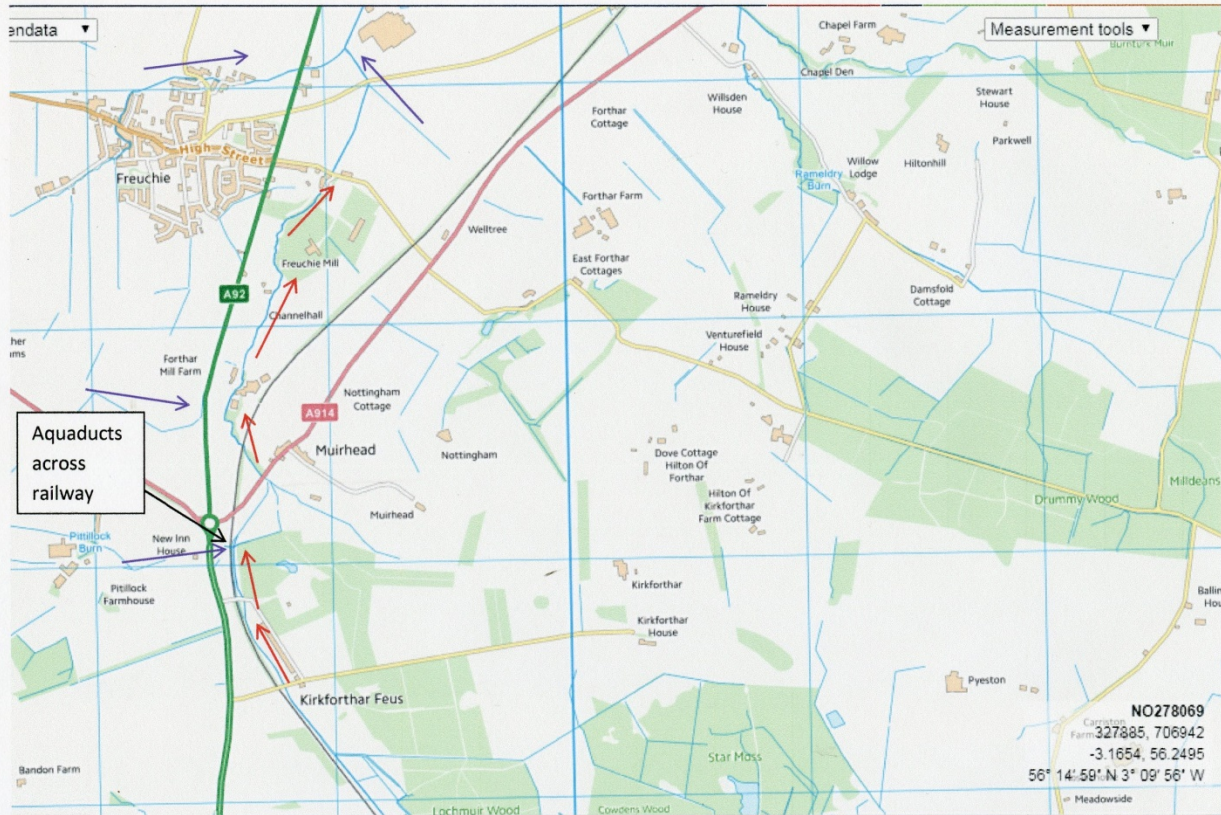
⁵ Email communication of Neil Sutherland to Michael T. Tracy, 26 November 2017, Markinch, Fife, Scotland



Essentially all water courses to west (left) of raised trackway through Star Moss drain/flow westwards and all water courses to east (right) of raised trackway through Star Moss drain/flow eastwards.

- routes walked AND direction of water flow
- water flow direction of other drains/ditches/burns (streams) not walked

Fig.6. Kirkforthar Area Map as referenced by Mr. Neil Sutherland, Chairman, Markinch Heritage Group, Photograph Courtesy of the National Library of Scotland



Legend as previously

Fig.7. Kirkforthar Area Map as referenced by Mr. Neil Sutherland, Chairman, Markinch Heritage Group, Photograph Courtesy of the National Library of Scotland

The Kirkforthar ditches run from observations of Mr. Neil Sutherland, Chairman of the Markinch Heritage Group, a distance of approximately two miles and their width varies, but on average, at ground level around 8 feet and at water level approximately 3 feet on average and the sides are noted as steep by Mr. Sutherland.⁶ Reproduced below is an approximate location of the main Kirkforthar ditches as observed by Mr. Neil Sutherland.

⁶ Email communication of Neil Sutherland to Michael T. Tracy, 24 November 2017, Markinch, Fife, Scotland

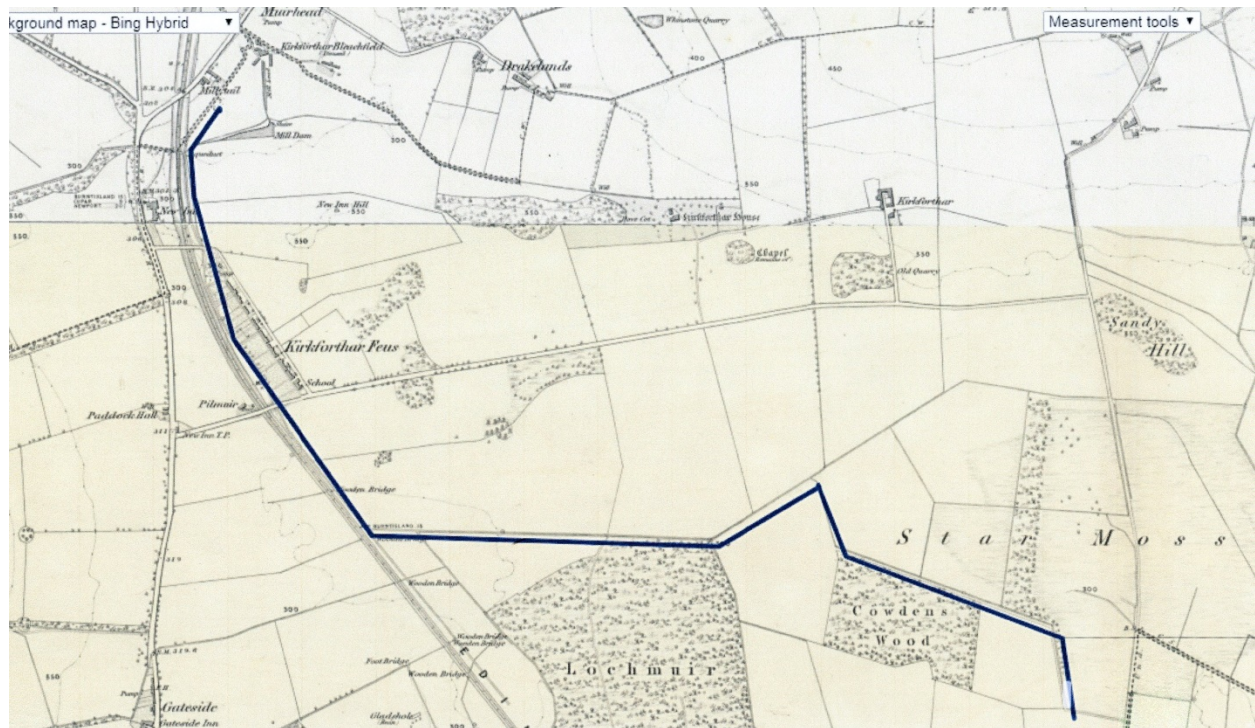


Fig.8. Location of the Kirkforthar ditches, Photograph Courtesy of the National Library of Scotland, marked up by Neil Sutherland, Chairman, Markinch Heritage Group

The blue line drawn is exactly where the main ditches are and was measured using an online map measurement tool.



Fig.9. Kirkforthar ditches, Photograph Courtesy of Neil Sutherland, Chairman, Markinch Heritage Group

In late October of 2017, Neil Sutherland set out on a journey to explore and photograph the Kirkforthar ditches. His brief account is as follows: "I started at Kirkforthar Feus and headed south but it was difficult to remain immediately next to the ditch. I followed it as far as I could before hitting dense trees and bog. Next, I attempted to follow the ditch west to the railway by starting at Star Moss. This was successful until I got to within a few hundred yards of the railway and again met a morass with low growing trees... So I did not quite get to the point where the westward ditch met that heading north to Kirkforthar Feus but believe I was close to that junction.

From what I could make out on the ground the ditch complex matches that shown in blue on the above map. I have to conclude that it seems reasonable to assume Niel Ballingal was responsible for creating at least the main ditches but given the close proximity and very parallel nature of the ditch to the railway we may have to wonder to what extent the original north-south ditch has been rerouted when the railway was constructed in the 1840s.”⁷

Niel Ballingall, the Factor of Balbirnie

Niel Ballingall (1750-1843) had been the Factor of Balbirnie since the year of 1770.⁸ He would continuously serve the Balfour family in this position for the next 72 years. Professor David Munro in his book *Loch Leven and the River Leven: A Landscape Transformed* wrote “By [1824] his [Niel Ballingall’s] reputation not only as an agricultural improver but also as a water engineer was legendary. He had demonstrated the ways in which landowners could squeeze a greater income from their estates not only by promoting the more productive use of land but also by diversifying into industry. Proprietors who had first looked to an increase in revenue from farms could not see the possibilities to be derived from leasing mills on the River Leven to industrial operators. To do this effectively, however, they had to employ men of skill to act as their agents, factors, surveyors and managers. Neil Ballingall, who was all of these rolled into one, vigorously engaged himself not only in land improvement but also in the development of coal and lime works, road building and the more effective control of water from the River Leven for industrial use.”⁹

On Wednesday, 22 December 1824 all interested parties including the landowners, mill owners on the River Leven and most likely Niel Ballingall met for the first time at the Plasterers Inn near Balbirnie Bridge to discuss options on how the River Leven could be used to provide a more regular supply of water during periods of drought.¹⁰

⁷ Email communication of Neil Sutherland to Michael T. Tracy, 29 October 2017, Markinch, Fife, Scotland

⁸ Ballingall, Rev. James. *The Ballingalls of Sweetbank, Markinch*. Typescript, undated

⁹ Munro, David. *Loch Leven and the River Leven: A Landscape Transformed*. River Leven Trust, 1994, p. 22

¹⁰ *Fife Herald Newspaper*, 16 December 1824, p. 1



Fig.10. Old Gullet Bridge, River Leven, near Scotlandwell, Photograph Courtesy of Stanley Howe, Geograph.org.uk Photograph 4006542

Thusly, an ingenious scheme was devised to regulate the flow of the River Leven from Loch Leven. The scheme devised by Ballingall and others included the partial drainage of Loch Leven and creating a “cut” through some 4 miles of the meandering river leading from it. Professor Munro writes that “this could only be achieved by straightening the River Leven and perhaps lowering the level of the loch an engineering operation far larger than any that had been previously undertaken in this part of Scotland.”¹¹

¹¹ Munro, David. *Loch Leven and the River Leven: A Landscape Transformed*. River Leven Trust, 1994, p. 22



Fig.11. The Water Lade and Railway Viaduct, Photograph Courtesy of the Markinch Heritage Group

As a result of the expertise of Niel Ballingall and others, it ensured economic success for the riverside factories and put Markinch on the industrial map.¹² Ballingall was instrumental in the promotion and completion of the Loch Leven scheme and lived to see its completion in May of 1832.

¹² The Industrial Age. Accessed at: www.markinchheritage.org.uk

It is, therefore, apparent that there were many drainage works carried out during Ballingall's time as Factor at Balbirnie. The objective of these drainage schemes devised by Ballingall was obvious, to make the land usable by draining the boglands. Mr. Neil Sutherland points out "He [Ballingall] was clearly a very talented man... the Markinch area is well known for its boggy nature. In fact, the name itself most possibly means 'horse island.' Any place with inch in its name means island or at least surrounded by water."¹³ In the case of the Kirkforthar ditches, the same can be applied simply put, the area was bog land and Ballingall devised a drainage scheme to remove this water by surveying, implementing and constructing a series of about two miles ditches to remove the water.

¹³ Email communication of Neil Sutherland to Michael T. Tracy, 5 November 2017, Markinch, Fife, Scotland



Fig.12. Kirkforthar ditch, Photograph Courtesy of Neil Sutherland, Chairman, Markinch Heritage Group

Mr. Sutherland writes “Given the flatness of the Star Moss/Kirkforthar area constructing an incline northwards would be reasonably easy whereas there is a significant rise between Markinch and Star Moss/Kirkforthar.”¹⁴ With the lack of solid concrete evidence, the mystery of the construction of these ditches continues to the present day. The Factor Books for Balbirnie begin in the year of 1834 well after the construction of the Kirkforthar ditches. There is currently no direct evidence that Ballingall even devised a drainage scheme, constructed or even supervised these ditches. However, and more importantly, there is evidence on an assumption that he more than likely did give his knowledge in past surveying, construction and supervision of past projects like the Loch Leven scheme already mentioned here. Nonetheless contained in the Factor Books of Lord David Leslie-Melville (1785-1860) there is one reference made regarding Kirkforthar Feus but is general at best. In a correspondence written by Lord Leven’s Factor to Niel Ballingall on Saturday, 15 October 1814 it reads “I am fav [favoured] with yours and will waite [sic] till your return from Edin [Edinburgh] about fixing the day for the Kirkforthar business.”¹⁵

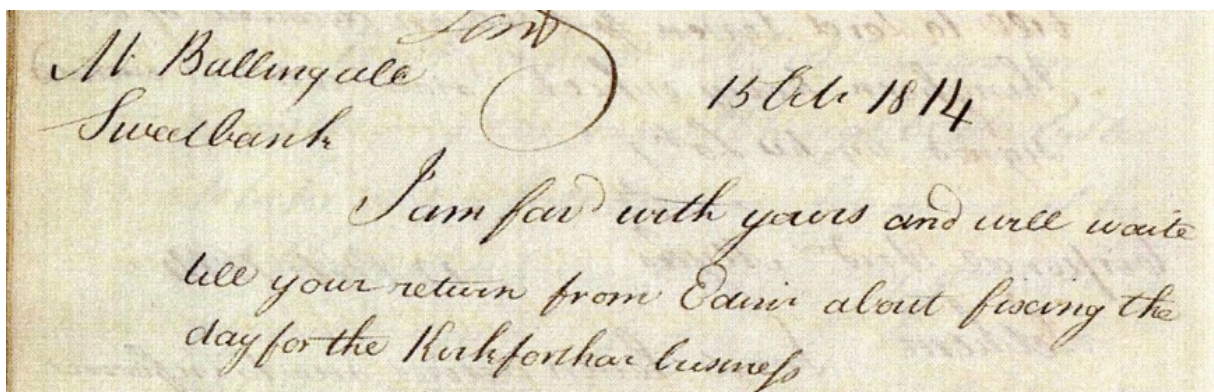


Fig.13. Letter (Partial) to Niel Ballingall from the Factor of David Leslie-Melville dated 15 October 1814, Photograph Courtesy of the University of St. Andrews Special Collections, Call Number msDA881.F4B21, Special Permission for the Use of This Photograph Granted by the Head of Special Collections

¹⁴ Email communication of Neil Sutherland to Michael T. Tracy, 5 November 2017, Markinch, Fife, Scotland

¹⁵ Letter to Niel Ballingall, 15 October 1814, *Letter Books of the Factor of David Leslie-Melville, Volume III*, University of St. Andrews, Call Number msDA881.F4B21

Mr. Sutherland again writes “Ballingall was likely charged with reclaiming the land for agriculture while leaving the Star Moss on the outskirts of Star available for peat cutting. A substantial drainage ditch acting as a flowing watercourse and fed from various channels can still be seen south of Kirkforthar Feus itself. [At one time this water and that from Pitillock Burn which crosses the railway would have fed mills to the north at Muirhead and beyond].”¹⁶

¹⁶ Email communication of Neil Sutherland to Michael T. Tracy, 21 October 2017, Markinch, Fife, Scotland



Fig.14. Ditch at the south most end of Kirkforthar Feus looking south, Photograph Courtesy of Mr. Neil Sutherland, Chairman, Markinch Heritage Group



Fig.15. Ditch behind Kirkforthar Feus Property, Photograph Courtesy of Mr. Neil Sutherland, Chairman, Markinch Heritage Group

Notwithstanding it is this author's conjecture that there was more to the construction of the Kirkforthar ditches than simply drainage as ingenious Factors such as his ancestor, Niel Ballingall introduced the industry to once agricultural only estates. From the early Ordnance Survey maps of the area, it should be noted that the water fed various mills on its way northwards before eventually joining the River Eden, giving the Factors of that era another reason to create these ditches. The water from the Star Moss area and that flowing eastwards from the south at Gateside had to have somewhere to go so in Ballingall's mind make that water to power or supply the mills. Mr. Sutherland writes "that these various mills would have been Forthar Mill, Channelhall Mill and Freuchie Mill... There were a mill and a bleachfield at Muirhead just north of Kirkforthar Feus (a cottage there now is called Mill Tail)... As one traverses north, and even by Forthar Mill farm, the volume of water increases significantly and by Freuchie Mill it's like a small river. Perhaps before Ballingall's ditches from Star Moss were constructed there was a mill at Muirhead supplied by the Gateside watercourse and that from Pittilock with insufficient/erratic flow. In these circumstances often a mill pond was constructed so to create a controllable large flow to the mill water wheel. The Kirkforthar ditches merged with the other watercourses would obviously produce a greater flow and volume."¹⁷

¹⁷ Email communication of Neil Sutherland to Michael T. Tracy, 5 November 2017, Markinch, Fife, Scotland

Conclusion

Niel Ballingall played an important role with regard to the possible planning, construction and supervision of these ditches at Kirkforthar. There are more numerous questions than answers with regard to these mysterious ditches at present. Further extensive research needs to be done to glean further knowledge. These mysterious two-mile ditches are an example of one man's true determination and ingenuity in the planning and construction of the Kirkforthar ditches in Markinch Parish. Ballingall was one of the most influential and effective Factors of his time. This there cannot be any doubt of. The Kirkforthar ditches are just one example of this Factor's industrious vision of transforming the Parish of Markinch into an industrial power centre in the Kingdom of Fife. Few men, indeed, few Factors have left a more indelible record of achievement than this Factor of Balbirnie.

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