

Agriculture of East Lothian

Alexander Fenton

In 1975, a German student called Dietmar Beck completed his thesis on the cultural landscape of East Lothian. It was published in German, and though it contains much interesting material, it may not be very well known amongst Scottish historians.

I want to start by quoting from the opening paragraph, because it shows East Lothian through an outsider's eyes:

'The first impression a stranger gets of the landscape when he travels by train or along the A1, is of a fertile stretch of countryside. He is impressed by the large farms, lying separate from each other, often surrounded by a group of trees and set within their wide-stretching, geometrically arranged, well cared for fields. Yet these give no feeling of monotony; for green hedges and narrow strips of trees mark off the fields from each other, the courses of small streams and small valleys break up the regularity and so prevent too great a degree of sameness. Further relief is brought by the stately country seats - stylish and splendid witnesses to a time of estate owning. Each of these is the core of a landscaped park with well-tended lawns and an open spacing of trees that sometimes run on into ornamentally shaped stretches of woodland or naturally graceful areas. Villages or village-like settlements are hardly to be seen by the stranger passing along the main thoroughways' (Beck 1975,1).

He went on to expand these points:

'The most attractive element is provided by the dwelling places of the gentry, castles or castle-like dwelling places in the midst of large adjacent parks. They go back to feudal, latterly Norman, roots; yet the contrived linking in with nature, ie harmony between castle and park, and the aversion to park layouts in lineal or circular form, appear to be a purely British heritage'.

At a distance of one or two kilometres (closer in the coastal stretches and more scattered in the foothill areas), lie the farms with their outbuildings arranged in a basically four-sided form, with the farm-house - whether of owner or tenant - lying at a little remove. 'In layout, material and stylistic elements, these farms have a high degree of uniformity. The reason for this must lie in their broadly comparable dates of origin', in connection with the enclosure period.

'The third, equally striking element is the cottages, the former living quarters of the farm workers. These are narrow, mostly single storey houses,

originally with two rooms and a small kitchen between them at the back, and less often an attic with a mansard gable. In spite of variations from different building periods, nevertheless they give a stereotyped impression; for, although they mostly consist of buildings set against each other in rows, they are usually situated at about 200 metres from the farm, so marking in physical space the social differentiation between farmer and paid worker'. And he noted also that such originally tied workers' cottages were becoming increasingly superfluous, and that many were being sold to people from the towns and converted as homes for commuters (Beck 1975, 10-11).

Beck's observations appear to me to be just, and they match those I had myself when I first travelled south from my very different crofting and small farming district of Aberdeenshire. The contrast was certainly striking, and I realised I was in one of the best farming districts of Scotland. Later, I came across the saying somewhere that an East Lothian tenant farmer was the equivalent of an Ayrshire laird, which emphasises well the different scales of economics and explains why 19th century Ayrshire farmers, sorely pressed by their hilly and not easily drained fields, and by the unremitting pressures of milk producing that was as yet not eased by 20th century technology, were eager to come east for a farm. Some, like the Wrights at North Berwick, did indeed continue their dairy farming in East Lothian. So, clearly, East Lothian was an attractive area in itself, and a magnet for others from less well favoured districts of Scotland.

Dietmar Beck's description was influenced by the nature of the agricultural landscapes that he knew in Middle Europe, characterised by farming villages around which the fields radiate. Air travel in modern times can give a splendid birds' eye view of such layouts, and the fact is that those who carry out research in the countryside in such areas speak of 'village research' rather than what would undoubtedly be seen as 'farm research' in the British equivalent. Yet conditions in Scotland were once not so very different from those in continental Europe and our countryside was once characterised by 'ferm-touns' also. It was the period of agricultural improvements in the late 18th and early 19th centuries that swept these away.

The 20th century picture is really very different from that of preceding periods. The amount of tree cover, for example, is something new, perhaps partly stimulated by the activities of Thomas, 6th Earl of Haddington, who published a book on forest trees in 1756 (Haddington 1756), but also by general concepts of shelter that accompanied the enclosing of fields. A traveller in 1587, however, noted that Lothian had 'many hills, and little

woods; but for its excellent Corn-lands, and civility, is commended above any County in Scotland' (Camden (Gibson) 1695, 895) (translated by a later editor as 'interspersed with hills, few trees, but rich cornfields, being better cultivated and civilised than any county of Scotland' (Gough 1806, 40)). The present tree cover, therefore, was not an outstanding earlier feature.

On the other hand, the emphasis on grain production has to be noted. Not only Camden, but also later writers noted the quality of the soil and the crops. Sir William Brereton observed the use of seaweed around Dunbar in 1636, 'laid thick upon the ground', for growing corn (quoted in Brown 1891, 135). Daniel Defoe, merchant adventurer and government spy, best known as the author of **Robinson Crusoe**, also journeyed through the area about 1725, and greatly praised the use of sea-ware and marl in producing crops (Defoe 1769, 67-8). Again in 1759, the Welshman Thomas Pennant described how, after passing through the bleak stretch of Coldingham Moor, 'the country now becomes extremely fine; bounded at a distance, on one side, by hills, on the other, by the sea; for East Lothian is the Northamptonshire of North Britain: the land is in many places manured with sea-tang', the crop being barley (Pennant 1776, 54).

The cumulative impression from these observations is one of broad tracts of corn land, but this was not really so. The forms of land use were very different from those of later times, and the appearance of the landscape also differed accordingly. It is worth having a look at the pre-improvement situation in order to point the contrast more sharply.

It has been a common assumption amongst historians that the 'standard' form of land occupation in pre-Improvement times was the multiple-tenancy farm, or 'ferm tou', in other words the Scottish equivalent of a joint farming village. In this system, the piece of ground, the 'farm', was shared by all the individual families in the community, on what was known as the run-rig system. Each family - and no doubt there was a good deal of interrelationship also - made use of a number of scattered patches and strips of land that might be changed around between them from time to time so that there was -perhaps more in theory than in practice - a reasonably equal sharing of poorer and better quality soil.

The arable of each run-rig unit was divided into units known as infield and outfield. The infield was the most productive land, nearest to the house, and was also called the croft land or the muckit land, because this was the area that got all the manure. This consisted of dung from the byre and stable, rotted turf from worn out dykes and from the walls and roofs of houses,

and ashes from the peat fires, applied directly or after a period of maturing in composted earthen middens, of which there was in earlier times quite a sophisticated variety. It was the common practice in East Lothian to divide the infield into four 'breaks' or 'shotts', for growing pease, wheat, bere or barley, and oats, in that sequence; if no wheat was grown, there would be a threefold sequence of barley, oats and pease. Since the infield got hardly any rest, and was cultivated with an almost horticultural intensity, it needed all the manure that could possibly be found, though it was said in 1794 that all the manure was put on the ground intended for pease and the succeeding three (or it might be two) crops received nothing further until the time for pease came again (Buchan-Hepburn 1794, 49). Little wonder, therefore, that the average return was little more than threefold (Fenton 1963, 3-4).

Like the infield, the outfield was marked by the broad ridge and furrow surface corrugations of the old Scotch plough. It was a more extensive area, possibly by a factor of two, and was used for general resources such as close-at-hand grazing, the provision of turf for a variety of purposes, and the growing of oat crops. As a resource centre, it had to be 'managed', in a way appropriate to the times. In the south-east of Scotland, it was normally divided into 5 to 7 parts, of which up to three were usually under an oat crop. According to Lord Belhaven, writing in 1699, such divisions were more characteristic of the Lothians and the Merse than of other parts of Scotland. They consisted of folds built of turf walls, within which sheep and other stock were confined to manure them with their dung. The folds were then cropped with oats, year after year, without further manuring, until they became useless and were left to recover, growing weeds and grass until the time came for them to be folded again. That the system was used in the 16th century is suggested by the fact that when Archibald Napier wrote an article on manuring with salt in 1595, he related it to an intricate system of folding animals also - presumably, if the salt failed, the dung would do the trick. This was the son of the Edinburgh mathematician, John Napier, well-known as the inventor of logarithms, and obviously of as inventive a mind as his father. The outfield, therefore, was a flexible area where agriculture was practised in a shifting way, and not as on the fixed infield rigs.

These old farming communities consisted of patches of infield or outfield arable and grazing lying scattered in the midst of unreclaimed moorland, peatbogs and undrained marshy areas, quite different from the orderly, geometrical layout of fields and farms that came later.

Linking the various areas, however, was a very important feature - the loan or loaning, a grassy strip that acted as a throughway from the houses through the arable to the common grazing beyond. It served for access to the different fields, it acted as a common green, and here cows were grazed on the tether and were milked by the women in summer. That is the reason for the obsolete Roxburgh word *loanie*, 'Milk, especially when warm from the cow and newly strained' (Watson 1923, 202), and for the 18th century proverb, 'you are as white as a loan Soup', said to be 'Spoken to Flatterers who speak you fair, whom the Scots call *White Folk*' (. Kelly 1721, 371). The loan or loaning, immortalised in numerous place-names, was not only an essential functional element in the working of the farming villages, but was also the social centre or rather social artery, where people met and exchanged news as they drove their stock to the grazings or moved to the fields with their farming tools.

A third major element in the farming organisation was the rough grazing or moorland areas that surrounded the ferm-touns. Like the outfield, this was an essential service area, providing all the raw resources that were needed in the days of subsistence farming - grazing for the stock, under the hopefully watchful eye of the herd laddies or sometimes lasses, peat and turf fuel for the domestic fires, turf for building dykes and house walls, for lining house roofs under the thatch, and for mixing with household refuse and animal manure in the compost middens, and possibly an occasional addition to the pot in the form of wild fowl and their eggs, and game such as rabbits and hares.

The system worked, provided there were no runs of bad weather or other misfortunes such as those caused by raiding and war. As the 18th century proceeded it began to be strained to breaking point by an increase in population, the reasons for which have not yet been fully explained, and change became inevitable, though it was to lead to a good deal of rural disruption. There had to be greater productivity, and this at first could only be achieved by an expansion of the arable acreage. Questions of improved crops, stock, farm-buildings and field layouts came later.

The fact that there was some movement within the old system cannot be disputed. At one level, change is indicated by the way in which markets opened up throughout the countryside outside the royal burghs. A study of Acts of Parliament authorising markets and fairs shows an astonishing increase of 246 in rural trading centres between 1660 and the Union of the Parliaments in 1707, as against 10 in the period 1571-1660. At another level,

there was a series of items of enabling legislation, the most noteworthy of which were those of 1695 relating to the enclosure of lands lying run-rig, and to the division of commonties, and there were other Acts dealing with enclosing in 1661 and 1685. Allied to this was the spread of what might be called the information network. The first major contribution was by James Donaldson, an Edinburgh printer and journalist, whose book, **Husbandry Anatomized**, published in Edinburgh 1697, owed a good deal to earlier English agricultural writers, but it would not have appeared unless there had been a perceived demand. The second, and more down-to-earth, work, however, was by John Hamilton, 2nd Lord Belhaven, **The Countrey-Man's Rudiments**, Edinburgh 1699. Though written by one of the landowning elite, nevertheless it was intended for tenant farmers, in whose hands the future large-scale improvements in agriculture were to lie.

The stage was gradually being prepared for wider change, but the first attempts to expand production on the ground took place on the outfield. In a world where the bulk of the cereals was grown in the infield, farmers were essentially very concerned about activities that affected that area and were unwilling to take risks. There was, of course, the occasional exception, like James Walker, tenant in Beanstown, near Haddington. He also kept an inn, and was advised in 1690 by an English traveller to try the effect of fallow. He did so on a 6 acre stretch of infield, leaving it uncropped for a year, and when he found the subsequent crop to be very productive, he fallowed 20 acres in the next year (Buchan-Hepburn 1794, 50-51). This, however, was exceptional and the real effort towards expansion of cereal production and improvement of yields was carried out on the more neutral territory of the outfield. The medium was lime, which in the early 17th century was beginning to be recognised as a fertilising agent. From the **Reports on the State of Certain Parishes in Scotland, 1627** (Macgrigor 1835, 107-8) it can be calculated that the use of lime had led to increased rents and teinds already by 1627. Lord Belhaven strongly recommended its use in 1699, but as yet without any concept of the need for regular manuring. He proposed that lime on the best ground would allow a succession of 7 or 8 successive crops, on poorer ground 5 or 6, and on the worst ground 3 or 4 (Belhaven 1699, 18). By the use of lime as a fertiliser for oats, the limed part of the outfield could gradually be taken into the infield, and this was the start of the process that historians have retrospectively called the 'agricultural revolution'. The outfield deserves star treatment, of a kind it has not yet received, for its important role in the improving process.

In looking at pre-Improvement farming, it has been a common assumption amongst historians that the 'standard' form of land use was through the multiple-tenancy farm, with shared use of the resources and joint or individual payment of rent. However, it is beginning to appear that the picture must now be modified. From study of the 17th century Poll Tax Returns, which survive for six counties, including Midlothian and West Lothian, but not East Lothian, it appears that of the 2145 holdings listed in the 1690s, 644 were multiple tenancy farms and 1121 were single tenancy holdings. There may always have been a mix, but two points must be made. First, the form of rental, the marketing possibilities for produce, the level of technical development and the labour needs for both types were the same, creating restrictions that prevented single tenancy from being a liberating influence. Secondly it is nevertheless clear that there was a steady increase in the number of single tenancy farms as the 17th moved into the 18th century (Devine 1994, 9-10, 24-29), and by the later 18th and early 19th centuries, individual farm units had won a complete victory, with farm buildings and houses standing on their own enclosed units of ground and with fields subdivided and cropped rotationally.

There is little doubt that the financing of the immense changes that took place were due latterly to the knock-on effects of the French Wars of the late 18th and early 19th centuries, which gave a boost to both the Scottish and English economies. But enabling legislation was in place long before then, and expansion of the cultivated acreage had begun already in the early 17th century. In 1963 I published a table relating to the progress of enclosure in East Lothian from sources dating to 1776, the 1790s and the 1840s. By 1776, many individual farms were enclosed, or their enclosure was in progress, including Fenton Barns and West Fenton. At Whitekirk and Tynningham enclosing started in 1707, at Ormiston in 1718, and at Salton farms were enclosed by 1776, though the fencing off of individual fields within the enclosed whole units had not as yet taken place. By the 1790s, enclosing was well in hand everywhere, though the burgage lands near Haddington remained open, as did a number of areas of higher lying ground. The process was not, in fact, complete even by the 1840s, for 60 acres of common remained undivided at Yester, and 30 acres of links remained as common at North Berwick (Fenton 1963, 13), but nevertheless the East Lothian landscape of the present day was now in place in all its features, as observed by the German student Dietmar Beck, so that by 1832, William Cobbett, the

English writer on matters agricultural and many other things, saw as he passed through East Lothian:

'such corn-fields, such fields of turnips, such turnips in those fields, such stack-yards, and such a total absence of dwelling-houses, as never, surely, were before seen in any country upon earth. You very frequently see more than a hundred stacks in one yard, each containing, on an average, from fifteen to twenty English quarters of wheat or of oats; all built in the neatest manner; thatched extremely well, the thatch bound down by exterior bands, ...' (Cobbett 1984, 14).

Just how much of a change took place, especially in the early years of the 19th century, is rather hard for us to visualise now. The multiple-tenancy and single tenancy farms of the old system, islanded amidst great stretches of moor and uncultivated land, disappeared and were replaced by unbroken stretches - for the most part - of arable and grass. The old irregularity and incompleteness were replaced by a geometrical shaping of the landscape through the enclosing of fields for the control of stock and for rotational purposes. Within these fields the former irregular ridges and furrows made by the old Scotch plough and its large team were replaced at first by parallel, equidistant ones of even height. It was not until after the 1830s that systematic underground drainage was able to produce the level fields with which we are now very familiar, but nevertheless, the new ridges, made by the plough type developed by James Small and with a much smaller team, were low enough in the crowns to permit the adoption of a major innovation, drill husbandry.

Drill husbandry was a prerequisite for the transference of a number of crops, grown in gardens from the 17th century or earlier, to the fields. These included cabbage and kail, potatoes and turnips. The outcome was not only a further step in the geometrical shaping of the crops within the fields, but also a process which can best be described as the greening of the Scottish countryside. Fields neatly enclosed by walls of stone or earth, or by hedges, containing cleanly hoed squares and rectangles of drilled green crops, the colours of the green differing according to the crop, rotating with fields of grass or hay and of white crops of grain, became the rule and have conditioned the mental perception of the farming landscape for the last two centuries and more.

The wider implications or perspectives can perhaps be summed up by Keith Thomas. According to this scholar of the social and intellectual history of early modern England:

'To the agricultural propagandists of the sixteenth and seventeenth centuries, untilled heaths, mountains and fens had been a standing reproach. They wanted the bracken, gorse and broom removed, and they cherished the ground which had been painfully "stubbed or won from wood, bushes, broom or furze".' Agricultural improvement and exploitation were seen not only as economically desirable but as moral imperatives, the cultivation of the soil being considered a symbol of civilization. And Thomas adds: 'This landscape of cultivation was distinguished by increasingly regular forms..... The practice of planting corn or vegetables in straight lines was not just an efficient way of using limited space, it was also a pleasing means of imposing human order on the otherwise disorderly natural world' (Thomas 1984, 254-6).

And so the agricultural improvements of East Lothian, as of the rest of Scotland, can be seen as part and parcel of the mental attitudes and perspectives of the men of the enlightenment.

References

Beck, Dietmar, **East Lothian. Die Entwicklung einer schottischen Kulturlandschaft** (Universität Hamburg, Abhandlungen aus dem Gebiet der uslandskunde Band 74 - Reihe C (Naturwissenschaften) Band 22), Wiesbaden 1975

Brown, P. Hume, **Early Travellers in Scotland**, Edinburgh 1891

Buchan-Hepburn, George, **General View of the Agriculture of East Lothian**, Edinburgh 1794

Camden, William, **Britannia**, London 1695 (ed., E. Gibson); also London 1806 (ed., R. Gough)

Cobbett, William, **Cobbett's Tour in Scotland, by William Cobbett (1763-1835)**, ed., D. Green, Aberdeen 1984

Defoe, Daniel, **A Tour thro' the whole Island of Great Britain**, 7th ed., London 1769

Devine, Thomas M., **The Transformation of Rural Scotland. Social Change and the Agrarian Economy, 1660-1815**, Edinburgh 1994

Donaldson, James, **Husbandry Anatomized**, Edinburgh 1697

Fenton, Alexander, The Rural Economy of East Lothian in the seventeenth and eighteenth centuries, in **Transactions of the East Lothian Antiquarian and Natural History Society**, IX (1963), 1-23

Haddington, Thomas, 6th Earl of, **A Short Treatise on Forest Trees**, Edinburgh 1756

Hamilton, John, 2nd Lord Belhaven, **The Countrey-Man's Rudiments; or, an Advice to the Farmers in East Lothian how to Labour and Improve their Ground**, Edinburgh 1699

Kelly, James A. **A Complete Collection of Scottish Proverbs, explained and made intelligible to the English Reader**, London 1721

Macgrigor, A. ed., **Reports on the State of Certain Parishes in Scotland, 1627** Maitland Club 1835

Pennant, Thomas, **A Tour in Scotland; MDCCLXIX**, London 1776

Thomas, Keith, **Man and the Natural World. Changing Attitudes in England 1500-1800**, Penguin Books 1984

Watson, George, **The Roxburghshire Word-Book**, Cambridge 1923

Eloag, April 1996.