VII

THE ROLE OF GEORGE CULLEY OF FENTON IN THE DEVELOPMENT OF NORTHUMBERLAND AGRICULTURE

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GEORGE CULLEY is best known as co-author of the *General View of the Agriculture of Cumberland and Northumberland*, sponsored by the Board of Agriculture and first published in 1794. He also wrote *Observations on Livestock*, which appeared in 1786. These works are useful for supplementary information about Culley's agricultural role, and essential to an understanding of the history of Northumberland agriculture, but they are products of Culley the self-publicist; they represent Culley as he wished to be seen, not necessarily as we might wish to see him. They have been discussed before[1] and will not be mentioned here again.

George Culley originally came from Denton, near Darlington, where he was born in 1734 and where his father owned a small estate. He was the youngest of four brothers. The two oldest brothers took no more than a sporadic interest in farming, but George and the third son, Matthew, wished for nothing else. When George was only eight, he made a pact with Matthew to farm in partnership. Both farmed Denton in their twenties, though they paid regular visits to Northumberland to buy stock. Even at Denton, the Culleys were far from typical farmers. The family was related to the Collings and Matthew later married into the Bates family, both famous for their efforts to improve Shorthorn cattle. In 1762, George stayed at Dishley in Leicestershire as the pupil of Robert Bakewell, renowned for his breeding of the New Leicester sheep. By 1766, the brothers had had enough of the heavy soil, the small farm and perhaps also the paternal supervision at Denton, and determined to try their luck in Northumberland. Manoeuvres to take a farm at Dilston, near Hexham, in that year failed and the following year found the Culleys tenants at Fenton in Glendale. The Culleys were to do

[1] D. J. Rowe, "The Culleys, Northumberland Farmers, 1767–1813", Ag. Hist. Rev., 19, 1971, pp. 156–74 and D. J. Rowe's Introduction to J. Bailey and G. Culley, General View of the Agriculture of Northumberland, Cumberland and Westmorland, 1805, reprinted 1972, pp. i–xxiv. I am most grateful to D. J. Rowe and to Dr. McCord for their assistance in the preparation of this paper.

well in Glendale. By 1800, they tenanted at least half a dozen large farms, paid a rental of four or five thousand pounds, and were themselves to become landlords in the early 19th century. Their total profit in 1799 was in excess of £5,000, and in 1801 more than £9,500.[2]

Two well known commentators visited Glendale prior to Culley's arrival. Arthur Young in the 1760s thought its agriculture execrable,[3] but Daniel Defoe had thought it outstanding in its excellence in the 1720s.[4] It is more realistic to see the situation as a contemporary just across the Border did, as a few progressive farmers dotted among the majority of more backward men, like colonists in a wilderness as he put it.[5] It would seem that the Culleys joined the ranks of the pioneers. All that is known of them during this early period is derived from stray scraps from various estate records; notes from land agents to landlords recommending the Culleys as tenants because they were said to be the best farmers in the neighbourhood, or recommending other farmers because they were said to be almost as good as the Culleys.[6]

George Culley's visit to Bakewell in 1762 and many subsequent visits convinced him of the essential worth of the Dishley sheep. He had hired his first tup from Bakewell in 1763 and hired many more after, swearing he would breed from no other stock.[7] The Dishley, or New Leicester, was a short barrel-bodied sheep, long-wooled but with fleece weight much below that of the Lincoln. Its great advantage was that it fattened quickly and economically to produce wether mutton at 2 years instead of the 3 usual for other breeds. Dishley mutton was, by Culley's own admission, inferior to that of most other breeds, especially the mountain sheep.[8] A sheep that could easily be fed to produce seven inches of fat on its back was hardly likely to appeal to delicate palates.[9] But it did satisfy the hunger of a growing, important market. The comparatively well-paid industrial workers of Tyneside and the towns of the West Riding were well pleased with cheap, mass-produced meat and were the main market for Dishley mutton. And Culley, the first man in Northumberland to hire a Dishley tup and one of the very few to breed almost exclusively from Bakewell stock, was the main seller in the new market that rapidly developed among Northumberland farmers for Dishley blood.

Though Culley had early and constantly castigated the large lanky breeds of lowland sheep, more like deer than sheep,[10] he was salesman enough to surreptitiously incorporate the blood of the huge Teeswaters into his flock, not to produce a better sheep, but to offend less the prejudices of his neighbours and customers.[11] Of all things Culley was a salesman: he was not going to try to sell a product so rarified that he would have had to have stimulated a new demand for it. Much better to sell an improved product in an established market. The breeds of sheep common in Northumberland before the introduction of the Dishley were the Cheviots on the hills of the north and the Blackface on the higher land in the south. On the Bamburgh coast a separate long-wooled breed existed, derived and replenished throughout the 18th century and well into the 19th by imports of the giant heavy-wooled Lincoln breed. Against

[2] Northumberland County Record Office (NCRO)/ZCU/33.

[3] Arthur Young, *Tour Through the North of England*, 1770, 2, pp. 199–200.

[4] Daniel Defoe, *A Tour Through Great Britain*, 1769, 3, pp. 253–4.

[5] T. Pennant, *A Tour of Scotland*, 1774, p. 42.

[6] Joseph Hutchinson to Lord Tankerville, Aug. 18th 1775, NCRO/Tankerville/Box 5/A unsorted; Joseph Oxley to Sir John Delaval, May 30th 1784, NCRO/2DE/4/16/14; John Bailey to Lord Tankerville, May 12th 1786, NCRO/Tankerville/Box D/4 unsorted.

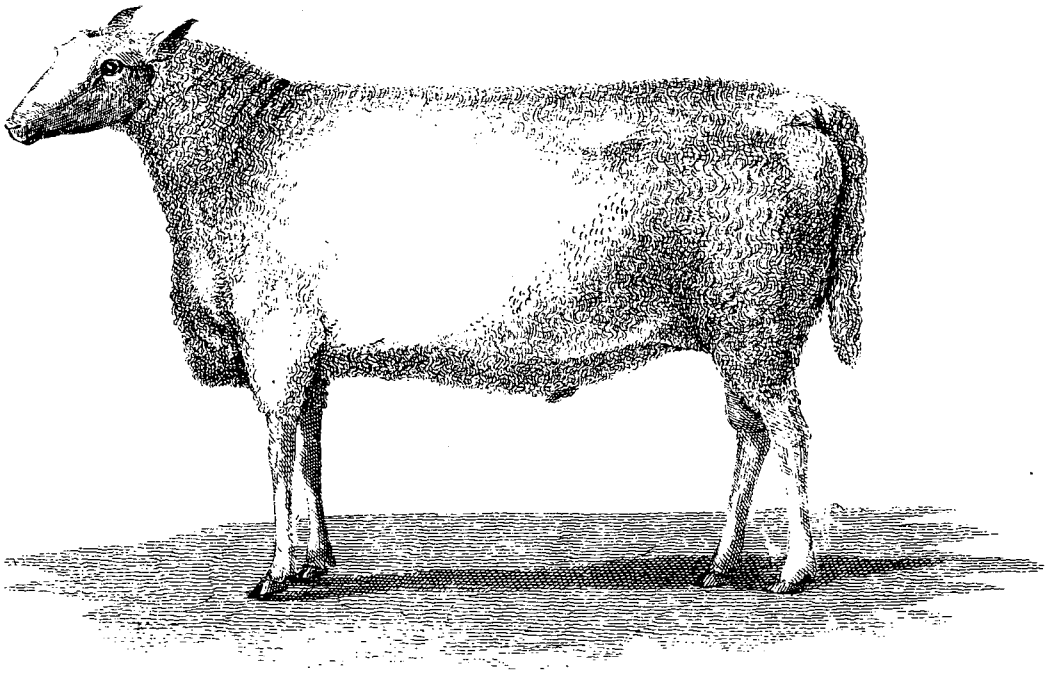
[7] NCRO/ZCU/33; George Culley to John Bailey, April 27th 1789, NCRO/ZCU/31.

[8] George Culley to Sir John Sinclair, July 1792, NCRO/ZCU/2.

[9] George Culley, *Observations on Livestock*, 1801, p. 106.

[10] *Farmer's Magazine*, 4, 1803, pp. 303–4.

[11] George Culley's *Tour Journal*, 1765, NCRO/ZCU/1.



A new shorn RAM of the improved LONG WOOLED BREED.

these opponents there is reason to believe that the Dishley made little headway. The Bamburgh men raised sheep on their rich coastal pastures for wool and for large joints of mutton from gargantuan and venerable beasts. When the introduction of the Dishley threatened the superiority of the Bamburgh Lincoln, it also threatened the superiority of the Bamburgh Lincoln breeders so that by 1800 the men of the coast had become even more proud of their breed and more determined to keep it than they had ever been.[12] Cheviot and Blackface men also clung to their own breeds but with more logic to justify their resistance. The Dishley sheep would have found it difficult to eke out a living where the Cheviot and Blackface thrived, indeed, they would have been unlikely to have even survived. Where the Dishley did make progress was on the remaining lowland areas of Northumberland, which were occupied by a local breed known appropriately as "Mugs", having more wool covering their eyes than most other parts of their bodies. The Mugs seem to have had no redeeming features whatsoever and offered little opposition to the spread of the Dishley. By 1800, the Dishley occupied all the lowland areas in the north as far south as Whittingham with the exception, of course, of Bamburgh. What remains to be seen is to what extent Culley was instrumental in effecting this change.

Despite Culley's declared ideals to improve agriculture in any way he could wherever he could, that ambition took a back seat whenever his own interests were involved. It did not suit Culley's interests to flood the market with Dishley sheep. When tups could let at anything up to £100 a season, it was as well to preserve the degree of scarcity which made such prices possible. This would have been easier had Bakewell and his Leicestershire disciples not

[12] *Farmer's Magazine*, 5, 1804, pp. 454–6.

already cornered much of the national market and the fanciest prices. Culley supplied what he could of this market, but had early determined that a degree of catering for the larger local market, at prices well below those of Bakewell, would be most profitable.[13] Hence Culley let tups to his neighbours and to make sure this market remained open as long as possible, he refused to follow the usual practice of Northumberland sheep breeders, that of selling draught ewes to bear one last lamb in the south of the County or in Yorkshire before fattening and slaughter. Instead, he fattened all his own sheep and when the time for the butcher inevitably arrived, he or a representative generally witnessed the slaughter.[14] Not surprisingly, Northumberland farmers were furious and yet it would be rash to say that Culley's restrictions inhibited the diffusion of the Dishley. It is thought that there is perhaps a greater inclination to possess what is rare and valuable than what is cheap and commonplace. There is often a delicate and conflicting balance between the desire to acquire and the ability to do so.

In the 1780s and '90s, Northumberland demand for the Dishley was so great that many other breeders thought it worthwhile to enter into competition with Culley. Some had obtained their stock from Leicestershire, some by buying blood from Culley, and some, much to Culley's chagrin, by buying Culley blood from less reputable butchers. The result was that by the 1790s Culley could see sheep prices rising and the market steadily slipping from his control. His solution was the Northumberland Tup Association, founded by George Culley in 1792 with the declared aim of encouraging the diffusion of Dishley blood in Northumberland. In reality the Association existed for less egalitarian reasons. The Leicestershire Tup Breeders had agreed to deal only with the Culley organisation and the Culley organisation to deal only with those prepared to pay exorbitant prices. The Association originally consisted of just 10 Northumberland breeders, new ones to be elected by a two-thirds majority.[15] As Culley was related to 4 of the other members and was close friends with the remaining 5, it was very much his society, founded and controlled by George Culley. And it was Culley who bore the brunt of Northumberland indignation at this blatant restrictive practice. Boycotts were organised by farmers in Berwick, Coldstream and Alnwick and a co-operative was founded to use what Dishley stock had already been distributed in Northumberland or could be bought from renegade Leicestershire breeders.[16] It may have been the availability of stock from Leicestershire which brought down the Northumberland Tup Association, but it is more likely that the resentment of Culley's neighbours made life so unpleasant for him that the Association had to go. Moreover, there seems to have been too much Dishley blood already diffused in Northumberland by 1792 for such a late closed shop to have been successful. The Northumberland Tup Association was dissolved in 1793.[17] Two years later, Culley was still apologising by circular letter to his customers.[18]

Despite all his efforts to create demand for Dishley blood in highland areas, it was not until 1800 that Culley induced the first Cheviot breeders to try a Dishley cross.[19] Even his amazing offer made ten years earlier to let Cheviot breeders use his best Dishley tups free of charge had

[13] George Culley to Matthew Culley, Oct. 24th 1784, NCRO/ZCU/9.

[14] Matthew Culley to John Welch, Oct. 6th 1799, NCRO/ZCU/6.

[15] *Newcastle Courant*, July 14th 1792.

[16] *Ibid.*, June 1st and 30th, July 7th and Aug. 4th 1792.

[17] Nathaniel Stubbins to George Culley, Jan. 10th 1794, NCRO/ZCU/18.

[18] NCRO/ZCU/20.

[19] Mr. Lawson to Newcastle Farmers' Club, April 7th 1860, Lit. & Phil., Bolbec, N630·6/2.

met with cold refusal.[20] The cross of a Dishley tup with a Cheviot ewe produced a lamb that would fatten quickly and yield larger joints of meat on the lower and more sheltered highland pastures. A cross with Blackface sheep had similar results and also improved the rather coarse wool of that breed. Second crosses were not tried and the highest and most exposed regions remained the terrain of pure-bred highland sheep. By the mid-19th century, the meat of the pure-bred Dishley had come to be regarded as too fat and coarse for even working class palates and the chief use of the Dishley, or the Border Leicester as it was then coming to be called, was for crossing with other breeds.[21]

It is surprising that Culley's interest in sheep did not lead to a comparable interest in cattle —more surprising when it is realised that Culley was running a herd of some 500 head by the 1790s.[22] Yet he played little part in encouraging the diffusion of Shorthorns in the County. There seem to have been two possible reasons for this. The first is that the most profitable animal was reckoned to have been the Scotch Kyloe, improved by the smallest dash of pedigree Shorthorn blood. This dash remained small because supplies of calves usually came from the cows of individual hinds and these were certainly not pedigree animals, nor was their breeding generally guided by the principles of genetics. It was widely believed that a cow first served by a good Shorthorn bull would forever produce calves with this first bull's characteristics no matter what bulls were used subsequently. Even the renowned Thomas Bates of Halton Castle, striving to compete with the Shorthorn breeders of Durham and probably the most illustrious Shorthorn breeder in Northumberland at the time, found it more profitable to use a Kyloe-Shorthorn cross than to breed for pure Shorthorns.[23] The second reason for Culley's failure to enter the lists was probably the fact that there were already too many established and reputable Shorthorn breeders in County Durham. Stiff competition with a product that is probably only marginally profitable is not a prospect to excite a businessman and it did not entice Culley.

Yet Culley did have one significant involvement with cattle. The heavy wooden ploughs used in Northumberland and most other places in the middle of the 18th century had required teams of slow-moving oxen to work them at depth, particularly on heavy soils. A plough team in Bamburgh at this time was reported to consist of no less than 12 oxen.[24] By the end of the century, smaller, much better designed ploughs with many parts of metal had replaced the old wooden implements and teams of two horses had taken over from the oxen almost everywhere in the County. Everywhere that is but on Culley's land. In 1801, Culley was said to have been using 150 oxen in the draught, more than any other man in England.[25] High wartime prices for horses was the reason given for retaining oxen so late, but even Culley had to admit that working them was uneconomic.[26] When cattle could be fattened at three years, there was little point in paying for their board and keep until they were 6 or 8 merely so they could be inefficient replacements for horses in ploughs or carts. Why Culley should have used draught oxen so long after his neighbours had given them up will probably remain a mystery, but it is

[20] George Culley to Arthur Young, Dec. 8th 1790, NCRO/ZCU/3.

[21] J. E. Scott Watson and M. E. Hobbs, *Great Farmers*, 1937, p. 150.

[22] NCRO/ZCU/33.

[23] Thomas Bell, *History of Improved Short-Horn Cattle*, 1871, p. 122.

[24] "A Volunteer", *Journey Through England and Scotland Along with the Army*, 1747, p. 48.

[25] *Farmer's Magazine*, 9, 1808, p. 513.

[26] John Bailey and George Culley, *General View of the Agriculture of Northumberland*, 1805, pp. 155–62.

an indication that individual character, in this case sheer stubbornness, can be a more powerful force in farming than agricultural economics.

In other matters Culley was again different from his neighbours. He seems to have been a pioneer in the use of one-horse carts in Northumberland, though perhaps a more accurate description in Culley's case would be one-ox carts. The waggon was scarcely used for agricultural purposes in late 18th century Northumberland, small carts being thought cheaper, faster and easier on horses. Culley had supposed the Hexham area to have been the first to have introduced such vehicles, copying the rather crude machines of Westmorland and Cumberland,[27] of necessity one-horse because the tiny farms of the regions often possessed no more. But it is more likely that the one-horse cart spread south from Scotland, where agricultural waggons had never been known. In 1801, Culley spoke of some of his neighbours not being particularly quick to follow his example,[28] but by 1803 a Scots traveller noted that the change from one-horse to the less wieldy two-horse carts occurred at a point, as he put it, four miles south of Alnwick.[29] By 1823, north Northumberland farmers felt compelled to petition Parliament against the new Turnpike Act, which demanded six-inch wide wheels on vehicles.[30] One-horse carts with narrow tyres were then said to be so universal in the north that agriculture would be crippled if these vehicles were to be liable to extra tolls. The situation at mid-century remained much the same: one-horse carts in the north of the County, two-horse in the south.[31] Yet from this it is hardly possible to gauge how much effect Culley had in influencing change in the north; the evidence is no more than circumstantial.

Fortunately there is yet other evidence pointing to Culley's role as an innovator, though not always a successful one. There is absolutely no doubt that he was the first farmer to make water meadows in Northumberland. Streams were led over pastures by a complex system of channels and locks so that they not only watered the land, but also deposited their silt as manure. Culley had written to one George Boswell of Piddletown in Dorset, surely the national expert on the subject, and had gone to the incredible length of training one of his labourers in carpentry and then, in 1787, sending him 400 miles to Dorset to study the art of watering meadows with Boswell's men.[32] Upon his return, parts of Wark were watered and Culley prophesied that the system would have a wide following in Northumberland.[33] It did not. Only 7 farms are known to have used the method by mid-century.[34] Across the Border in Roxburgh, the few areas that had been irrigated were being ploughed up in the first decade of the 19th century.[35] Watering may have provided the early spring bite stock feeders needed for their animals, but by growing more turnips, especially the swedes, which would keep longer than the globe turnips, the stock farmer could extend his winter feed into the early spring. In Northumberland, therefore, water meadows could be little more than a very expensive substitute for the turnip and it is hardly surprising that they were not more popular. Perhaps Culley should be criticised for having gone to the enormous trouble and expense of sending Henry Rutherford to Dorset to learn an art which he should have known would have been of limited local use,

[27] *Ibid.*, p. 38.

[28] George Culley to John Welch, Nov. 7th 1801, NCRO/ZCU/6.

[29] *Farmer's Magazine*, 13, 1812, p. 197.

[30] *Newcastle Courant*, Jan. 18th 1823.

[31] John Allen to Newcastle Farmers' Club, May 5th 1848, Lit. & Phil., Bolbec, N630·6/2.

[32] George Boswell to George Culley, March 25th 1787, NCRO/ZCU/12.

[33] George Culley, *op. cit.*, p. 201.

[34] At Wark, Turvelaws, Yeavering, Coupland, Halton Castle, Ray and Kirkharle.

[35] *Farmer's Magazine*, 16, 1815, pp. 42–8.

but it is largely irrelevant that this particular innovation failed. What is of much more importance is that Culley was willing to pioneer, at his own risk and expense, a process known to have been successful elsewhere. It is important to have traced the existence of an actual working farmer not just willing to improve, but willing and able to run the risk entailed in initial introduction. Lords and dukes playing on their home farms could afford to amuse themselves with agricultural experiments: the rent-paying tenant generally could not. When, therefore, such a tenant did innovate, it would not be without careful consideration, nor would his new techniques escape the meticulous and probably critical scrutiny of his neighbours. The agricultural diversions of a landlord may have entertained or even impressed the neighbourhood, but it is doubtful whether they often convinced. What is important about Culley's introduction of water meadows is not that the innovation failed to catch on, but that a working farmer was willing to try it and to give other local farmers the opportunity of assessing it.

One innovation of very much more significance than water meadows and in which Culley seems to have played an important role was the drilling of crops in rows, particularly turnips, rather than sowing them broadcast. Culley said that he had first seen turnips drilled at the farm of a Mr. Pringle near Coldstream in 1766.[36] At that time only two other local agriculturalists were using the method, a Mr. Philip Howard at Corby in Cumberland and a Mr. Dawson at Frogden near Kelso, but because Pringle was an army surgeon newly turned to farming and therefore "book-learned", and Howard a squire and not a rent-paying farmer, these men had no imitators in their neighbourhoods. Only Dawson was a tenant farmer and it was from Dawson at Kelso that even the farming neighbours of Pringle at Coldstream learned to drill turnips.[37] Culley both visited Dawson himself and also sent agricultural students to study his methods and report back to Glendale.[38] Culley claimed to have been one of the first farmers in Glendale to drill turnips and by 1793, the method was said to have been general in the area,[39] though this was not so further south in the County. Corn crops were being drilled by Culley and a few of his neighbours in the 1790s, but the method does not seem to have produced a higher yield than broadcast sowing and was very much the exception to the rule even in the mid-19th century.

If Culley was at the forefront in many aspects of agricultural change in Northumberland, how did he come to have knowledge of possible improvements which the average Northumberland farmer seems to have lacked? It would seem that Culley shared the typical farmer's distrust of what are often regarded as the obvious channels of information. He cared little for agricultural experts and interfering landlords, though he was certainly always the former and even became the latter towards the end of his life. But there was no ready communication between landlord and tenant even in matters of mutual interest. Sir John Delaval was shipping improved ploughs from London for use on his Northumberland estate in the 1780s only for them to be condemned out of hand by the men who had to use them.[40] Sir Charles Monck spent years trying to persuade his tenants to grow peas to avoid clover failure only to find that they took an extra crop of oats instead.[41] Even such supposed experts as Arthur Young were decried by practical farmers as being agricultural incompetents.[42] Culley visited Young's farm

[36] *Annals of Agriculture*, 20, 1793, pp. 162–3.

[37] R. M. Garnier, *History of the English Landed Interest (Modern Period)*, 1893, p. 242.

[38] *Newcastle Courant*, Jan. 14th 1848.

[39] *Annals of Agriculture*, 20, 1793, p. 164.

[40] John Bryers to Sir John Delaval, Feb. 14th 1783, NCRO/2DE/4/20/35; Joseph to Sir John Delaval, Feb. 22nd 1783, NCRO/2DE/4/15/3.

[41] NCRO/ZMI/B41/7.

[42] Thomas Bell, *op. cit.*, p. 250.

in Essex at least once and was shocked at the chaos and mismanagement he found there.[43] Chicory was apparently the main crop.[44] Perhaps the best idea of the practical farmer's opinion of agricultural interference from the social strata above is gained from a letter to Culley from his friend and mentor on water meadows, George Boswell. Written in 1793, it reads,

"I've just had a Letter from Sir John Sinclair acquainting me with the establishment of a Board of Agriculture, and with Desiring me to attend it in London as they wished to try an experiment of watering Hyde Park & Saint James Park. I have not yet answered it—He is quite ignorant of my situation in Life—, it will not suit my inclinations nor pocket to go two hundred miles as (*sic*) my expense to gratify the idle curiosity of every person that chuse to ask it—I have had one or two of those excursions already—*pro bono publico*, won't always do. I very much doubt of the utility of these things in the hands of Lords and Dukes. Plain Country Farmers are not *at home* when they are with such sort of Folks. My hand, heard (*sic*) & Table such as it is are allways at the command of my Friends and nothing give me greater pleasure than to exchange mutual knowledge; but to dance attendance upon great Folk, & to answer such Questions as they may deign to ask you & and then with an ungracious Nod be told you are done with—will not suit the stomach of your sincere Friend."[45]

It is doubtful whether the agricultural press had any greater influence with ordinary farmers. The information in some of the agricultural text books of the period ranged from the useless to the harmful, from the contradictory to the impossible. An example might be the advice that the best way to avoid breeding black sheep was to make sure the ewes had nothing black to look at while mating.[46] Some, and only some, of the advice in the agricultural periodicals was more sound. The *Annals of Agriculture* was one of the most prominent, but its circulation averaged only 4 copies per county in 1788 and most of these went to libraries and book clubs, not to farmers.[47] Culley occasionally contributed to these when badgered and one plea from the editor of the *Farmer's Magazine* is particularly illuminating as to the normal standard of contribution. He wrote to Culley in 1803,

"It is precisely such correspondents as you that I want; men who have learned wisdom in the school of experience and who do not attempt to pass base coin for sterling Money. I am under the Necessity sometimes of inserting Communications that are not altogether to my Mind, merely because that better cannot be got and also from a desire to keep well with people, who though imperfectly qualified to write are yet good friends to the Magazine."[48]

Nor were the few agricultural ideas broadcast in local newspapers likely to have been taken any more seriously. Editors showed little knowledge of or interest in agriculture. The Editor of the *Newcastle Courant* even recommended a wind-powered plough in 1811.[49] But the most usual form in which agricultural improvements were made known in newspapers was when their inventors advertised for a subscription to be paid before they released the secret to the subscribers. One Henry Vagg may serve as an example, especially as he elicited Culley's help

[43] George Culley to Matthew Culley, Dec. 23rd 1784, NCRO/ZCU/44.

[44] William Mure to George Culley, March 31st 1793, NCRO/ZCU/18.

[45] George Boswell to George Culley, 1793, NCRO/ZCU/18.

[46] Robert Wallace, *Farm Livestock of Great Britain*, 1885, p. 16.

[47] *Annals of Agriculture*, 10, 1788, p. 593.

[48] Editor of *Farmer's Magazine* to George Culley, March 17th 1803, NCRO/ZCU/25.

[49] *Newcastle Courant*, April 13th 1811.

to collect subscriptions.[50] Vagg claimed to have discovered how to eradicate that scourge of the turnip crop, the turnip fly, and in 1788 demanded that a subscription of 2,000 guineas be filled before his secret was revealed. By 1789, the patent Vagg method had become public. The turnip fly, claimed Henry Vagg, caused no real damage to turnips at all. The real culprit was apparently the slug and this could easily be eliminated by attacking at night when they were busy eating and squashing them with a heavy roller.[51] Another means promoted in this same newspaper of dealing with turnip fly was to sow vast quantities of carrots with the turnips. The fly, preferring carrot to turnip, would then become so bloated that it would lack the appetite to attack the turnip.[52] To get rid of turnip caterpillars it was proposed that hundreds of ducks should be turned loose in the turnip field.[53] Presumably the ducks were to eat the caterpillars, but as the phrase used was "to stamp them out", that may have been the literal intention. No explanation was offered as to from whence one obtained hundreds of famished ducks or, indeed, how one was supposed to remove them from the turnips.

It is sometimes assumed that agricultural societies with their agricultural shows were instrumental in stimulating improved methods in that they inspired competition and emulation by the distribution of prizes. A few of these societies were active in Northumberland during Culley's lifetime, though he studiously avoided contact with them. This may well have been because they were often little more than exclusive social clubs dedicated much more to wining and dining than to agriculture. The Tyneside Agricultural Society held 30 meetings between 1807 and 1821 and during this time awarded 47 prizes for sheep and 109 for cattle.[54] Of the 47 sheep prizes, over half were won by 4 men and one man took more than a quarter. In the cattle section, 7 men took 60% of the prizes. The early agricultural societies were little more than self-congratulatory organisations formed to pander to the vanity of established leaders and uninterested either in stimulating new ideas or in spreading the best of existing practices. The Tyneside Agricultural Society often had great difficulty in getting someone to accept the prize for best bull, because it meant that other local farmers would then be able to use the animal for their cows.[55]

Experimental farms were another theoretical way of spreading the latest ideas and one was planned for Northumberland in 1793, an idea supported by Culley.[56] Plans for one in Durham advanced further but it is doubtful whether the ordinary rent-paying farmer would have been motivated to change his methods or even have been impressed by what he saw on a farm financed by the subscriptions of gentlemen, administered by a committee of gentlemen, requiring a capital of well over six times its rental and expected to make an annual loss of some £300 for many years.[57] We are back to our original dilemma, the gulf that existed between those who were in a position to know and those who most needed to know.

Working farmers, however, had other means of discovering new practices. Their social leaders, men like Culley, half-way between tenant and landlord, had the money and took the opportunity to travel. Culley listed the parts of Britain he had not visited as "Shropshire, Sussex, Devonshire, Cornwall, and a great part of Wales",[58] and it is certain that many of his

[50] *Ibid.*, April 26th 1788.

[51] *Ibid.*, June 14th, July 5th 1788 and Aug. 8th 1789.

[52] *Ibid.*, July 3rd 1802.

[53] *Ibid.*, Aug. 5th 1780, July 26th 1783, July 30th 1836.

[54] Figures compiled from show reports in the *Newcastle Courant.*

[55] *Newcastle Courant*, April 30th 1808.

[56] Nathaniel Stubbins to George Culley, Feb. 20th 1793, NCRO/ZCU/18; John Bailey and George Culley, *op. cit.*, pp. 192–3.

[57] *Newcastle Courant*, June 30th 1796.

[58] George Culley, *op. cit.*, pp. vii–viii.

more prosperous farming neighbours were similarly well-travelled. As the Grand Tour became accepted practice for the nobility, so the agricultural tour became traditional among leading farmers. They therefore saw and talked to working farmers throughout the country who were using all sorts of different methods. These could be seen and judged in practice and the best of them adopted at home. Culley had actually seen water meadows at Dishley and his brother, Matthew, had examined them in Scotland in 1770;[59] at Dishley both had learned from practical experience the value of the Dishley sheep and it was through the same personal experience that George had seen the good sense in drilling turnips. The only innovation Culley is known to have made from advice in a book, a change to a new type of turnip seed, was a total failure and was not repeated.[60]

Not all farmers, even in Glendale, were as well-travelled as Culley. One of his neighbours, George Hughes of Middleton Hall, Ilderton, kept a diary from July 1789 to October 1800 listing every journey made.[61] Of his 250 or so trips, 150 were to the nearest market at Wooler, 40 to Alnwick, 13 to Berwick, 12 to Whittingham, 11 to Kelso, 7 to Morpeth and 6 to Newcastle. Nearly all the remaining expeditions, with the exception even in Hughes' case of one agricultural tour of Scotland, were to local destinations. The neighbourhood and the market town were where agricultural ideas were normally exchanged and where the majority of working farmers probably first discovered new methods. In areas of small farms and poor copyhold farmers, as existed in parts of south-west Northumberland, few farmers ventured outside their own community and farming remained backward. In Glendale, with its substantial tenant farmers, there were many to bring back new ideas from distant parts. Of these Culley is an excellent example.

Another not dissimilar way of discovering new techniques was to send young, intending farmers to progressive agricultural areas to learn from experts. This was how Dawson had learned the value of drilled turnips, by spending six years as a young man in the Midlands. This was how Culley had perfected the drilling technique, by sending a student to live with Dawson. Many students came to live with Culley and many more had to be refused or be recommended to neighbours. At a lower social level, but of no less importance, information was transmitted by means of labourers skilled in advanced techniques. As Culley had sent a man to Dorset to learn about water meadows, so he sent Glendale labourers to Denton to teach ridging for turnips,[62] and was plagued by requests for skilled men to work in other parts of the country. By the 19th century, local newspapers were full of advertisements for Northumberland farmers and labourers to move to distant places, sometimes abroad, to teach specific skills to the locals. There is no doubt that this traffic, both to and from Northumberland, also took place in the second half of the 18th century and it is probable that the peculiar annual mobility of the Northumberland hind greatly aided the transmission of the latest skills from one part of the County to another.

The last way in which leading farmers such as Culley gained their information may seem rather obvious, but has generally been ignored for all that. It was by post. Culley kept up an extensive correspondence with progressive farmers from all over the country. The sternly agricultural nature of nearly all these letters is always surprising and rather sobering. Culley's

[59] Matthew Culley's *Tour Journal*, 1770, NCRO/ZCU/1.

[60] George Culley to Alexander Hamilton, June 3rd 1807, NCRO/ZCU/31.

[61] NCRO/ZSI/46.

[62] George Culley to John Welch, Nov. 1798, NCRO/ZCU/6.

letters and most of those to him rarely have any time for trivia, for politics, for religion or even personal topics. They are almost exclusively concerned with practical agriculture and, more specifically, how to make more money from it. Hence, new techniques were discussed in great detail and either recommended or condemned. It was by letter from Culley that Boswell in Dorset learned to drill and it was by letter that Culley introduced the farming techniques of north Northumberland to the family estate at Denton. Culley regularly wrote and received a letter a week from Denton at a total annual cost of about £5—a sum he reckoned cheap for the knowledge gained.[63] Nor was the late 18th century post as slow as we are prone to imagine. A letter posted after the market was over in Darlington on a Monday was expected to reach Glendale via Berwick on the Tuesday or the Wednesday at the very latest[64]—a performance not bettered by our modern Post Office.

We have then a situation in which it is envisaged that improved agricultural techniques spread by personal experience and communication, not by formal or institutional means; a situation in which information spread among farmers as equals or even from below from agricultural labourers, not one in which information came from above, from landlords and so-called agricultural experts. It is thought that George Culley, despite his financial success at farming, remained very much a practical farmer able to influence his fellows; and because of his financial success, able to maintain close personal contact with those employing the most improved methods. And it is suggested that it was through such local innovators and leaders as George Culley that agricultural improvements spread to the bulk of the farming community.

There is perhaps a tendency in any historical study centring on an individual to glamorise the person, to see him as being set apart from his fellow men, if only to justify the time and effort spent by the historian. It is important that this is not done in the case of George Culley. His significance in an agricultural role is as a representation of a type. He merely serves to illustrate, not prove, an important process that must have been going on in other places and at other times. It is thought that, despite modern improvements in communications, personal contact and experience is still a powerful factor in influencing decisions. Oblivious to all the advertising, we still choose a restaurant or a wine recommended by a friend, and our cars are serviced by little men we know. George Culley was no more than a somewhat bigger little man. It is by pure chance that record of him survives, record that suggests that he was greedy, vain, self-righteous and occasionally a liar. In short, a fairly ordinary person. Across one of the hundreds of letters he wrote to Denton are scribbled in pencil a few lines by the long-suffering recipient. They can just be deciphered and read,

"Geo Culley was the most windy, but Matt^{w} was more profound—Geo's principals were only skin deep but Matthew's belonged to his backbone—Geo was a man that regarded the world's opinion—Matt^{w} was a person that wished to do what was right—and cared for no man."[65]

It is as an example of the role in agriculture of an ordinary man, not a superman, that George Culley of Fenton is important.

[63] *Ibid.*, May 13th 1800, NCRO/ZCU/6.
[64] *Ibid.*, April 23rd 1802, NCRO/ZCU/6.
[65] *Ibid.*, 1799, NCRO/ZCU/6.