Changing Farming Methods in County Monaghan

By JONATHAN BELL and MERVYN WATSON

Most of County Monaghan lies within the 'drumlin belt' of south Ulster. Drumlins are low, rounded hills made up of glacial deposits. They are rarely more than a few hundred feet in height, and the highest point in Monaghan, in the north west of the county, is just 1230 feet (369 metres). Patrick Kavanagh wrote grimly about 'the stony grey soil of Monaghan,' but some parts of the county are noted for their good soils. In the 1830s, for example, the soil of Aughnabog and surrounding parishes was described as 'a rich … alluvial soil … peculiarly adopted for agriculture,' and in Currin parish the soil was said to be rich and fertile, and 'exuberantly productive.'[1]

Landlords

In the nineteenth century, the biggest landowner in County Monaghan was Evelyn Philip Shirley, who owned 26,386 acres in the Barony of Farney.[2] Landlords aimed at maximising the rents they could obtain from their tenants, and relationships could be very hostile. For example, in 1843, the Shirley's agent W.S Trench instigated a riot when he told a mass meeting of tenants that he would 'collect the[ir] rents at the point of a bayonet if necessary.'[3] As elsewhere in Ireland, the extent to which landlords became involved in the day to day management of their estates varied. This could be seen in the general lay-out of the estate, and particularly in the way fields were enclosed with hedges and ditches. In Donaghmoyne parish in the 1830s, for example, fences were said generally to be made simply from stones or sod. However, in the parish of Killamy, it was reported that 'Of late that part of the parish belonging to the Shirley estate has been much improved by a new laying out of fields, which are regular and uniform. The fences are generally quickset hedges faced with stone.'[4]

Farm size

The social and economic distance between landlords and their tenants was increased in Monaghan by the small size of most of the rented farms. Since the eighteenth century, Monaghan's farming history has had a pattern unique to the linen producing regions of Ulster. Most farms in the county were small, even by Irish standards. In 1801, it was claimed, 'Farms in general, on an average, contain about ten acres, and very little produce, of course, comes to market, except of potatoes or flax … very little proportion of pasture is under dairy, and the feeding grounds are mostly confined to the centre of the county. Some of these are excellent.'[5]

In one of the earliest systematic accounts of farming in the county carried out in the 1830s, surveyors repeatedly noted farms that were of less than 10 acres, and often as few as 3 acres.[6]

However, there were also some very big farms in the county. In 1859, for example, McCabe's farm in Carrickmacross was 3,928 acres.[7] However, even on this farm, it seems that most of the land was let out to small tenant farmers, and Mr McCabe only farmed a small part of it himself.

There were two main reasons for the spread of tiny holdings in Monaghan; population pressure, and the spread of linen manufacture. In Ireland generally there was a very rapid growth in population between 1750 and the Great Famine, which started in 1845. In the decades before the famine, many desperately poor people moved on to uncultivated mountain and bog land, and 'reclaimed' tiny patches on which they could keep their families alive by growing potatoes. Landlords throughout Ireland allowed this movement, as it turned what previously had been unproductive ground into farmland for which they could charge increasing rents. In the 1830s this movement was recorded in Monaghan in parishes such as Donaghmoyne, where cultivation had spread up the highest hills, and in Muckno parish, where cultivation was observed reaching almost to the summit of Mullyash, a hill 1034 feet (310 metres) high.[8] In the parish of Currin, it was claimed that 'None of the soil … is applied to grazing. The subdivision of its surface into small farms renders this impracticable. It is … wholly devoted to the cultivation of potatoes and grain.'[9]

Weaver Farmers
Outside Ulster, landlords were usually reluctant to allow poor people to settle on good land, and farms in these areas remained much bigger. In Ulster, however, landlords did allow the spread of tiny holdings on better land, because of the growth of the linen industry. During the eighteenth century, the production of linen was a 'cottage' or home industry, which spread throughout most of lowland Ulster. 'Weaver-farmers' grew several acres of flax that the family then processed into linen thread, which was woven at home. Farming only took precedence on these holdings when linen prices fell. The manufacture of linen was so labour-intensive that it was best suited to the combination of a small farm and a big family.   It was this specialised activity that led to the spread of tiny farms even on the best land in Monaghan.

     The weaver-farmer system was very common until the 1830s, when spinning mills were becoming established, and the spinning of linen thread at home slowly died out. The dual economy of weaving and farming began to decline. In Aughnamullen parish, for example, it was reported that

> The manufactory of Mr Davidson of Laragh for linen cloth has in it 30 frames for spinning worked by a water wheel and attended by girls. He has about 600 looms which employ as many men … but weaving is only resorted to by the men at such seasons as agriculture cannot be followed.[10]

In Ballybay parish, both spinning and weaving were still carried on as home industries,[11] but in Currin parish, linen manufacture in general was said to be in decline. The growth of the English cotton industry was said to be a major factor in this.

> An extensive and profitable trade in linen was carried on in the parish previous to the general introduction of cottons into England … In those days the spinning wheels and looms

occupied a large space in every dwelling and produced by their activity and occupation not only the full yearly rent of the holding but a considerable surplus of income … [However] this branch of domestic economy … is [now very] depressed.[12]

Flax growing had a revival during the American Civil War (1861-1865). It was scutched in a local mill and sold at the flax market. However, by this period spinning and weaving were located largely outside the county.[13] Many of the tiny holdings that had flourished when the farm was also producing linen were not viable for agricultural production, and a slow process of consolidation began, as more successful farmers began to rent or buy up smallholdings that had become vacant. This process has continued, but even today farms in Monaghan are small compared to other parts of Ireland.

CROPS AND FARMING METHODS

From 1800 until the mid-nineteenth century, potatoes, oats and flax were the main crops recorded in Monaghan, along with some wheat and barley. Most wheat was grown in the south-east of the county. Many small farmers had a vegetable garden of around one quarter of an acre, but several observers commented on the absence of turnips, clover and mangel wurzel grown as field crops.[14]

CROPS	Wheat	Oats	Barley	Potatoes	Flax	Hay	Pasture	Total crops
1851	5,518	80,851	4,265	23,354	14,602	12,841	132,099	286,161
1901	465	41,058	600	18,729	3,213	39,818	170,744	283,661
1953	1986	32,302	847	19,409	945	47,398	180,141	283,028
1980	110	246	2211	703	none	35,185	74,268	129,089 [15]

Preparing the Ground

Intensive cultivation could only be carried on if the land's fertility was maintained. In the early nineteenth century, the small farmers of Monaghan achieved this by resting land for several years after a four or five year rotation. In the west of Currin parish in the 1830s, for example, it was claimed that at any time one half of a farm might be left uncultivated.[16] The only manure used was 'the very scanty accumulations of pig-sty and byre.' Cattle were permitted to roam in the fields throughout the year, and it was pointed out that a lot more manure would have been saved if cattle had been housed in byres.[17]

In the 1830s, it was claimed that in Aughnaboy parish, the potato was the only crop manured, mostly 'by burning of the soil than by any other process.'[18] Burning of soil had been forbidden by an act of the Irish Parliament in 1743, but it continued in many areas of marginal land, as a way to reduce old plants and roots to productive ash. It was recognised by some improvers that the practice was only harmful to soil if it was used repeatedly, and it was reported in many parts of Monaghan in the 1830s.[19] However, by the later nineteenth century paring and burning seems to have been confined to small farms in the west of Ireland.[20]

From the mid-eighteenth century at least, Irish farmers had been very aware of the importance of putting lime on land. Lime counteracts acidity in soil, a common problem in wet, ill-drained land. In the 1830s, it was reported that lack of lime was a problem in Ballybay parish, but lime, lime-rich 'blue clay' and marl were said to be abundant in Donaghmoyne parish.[21]

Ploughs

In the 1830s, observers were often critical of the farm implements in general use in Monaghan. In Aughnaboy Parish, for example, it was reported that 'The implements of husbandry in general use are of crude construction. The wooden plough and a large bunch of thorns for harrows are in general use. Much of the grain is carried to market in the old Irish car and the slide is also still retained.'[22] The wooden ploughs (Fig.3) used in the county were sometimes pulled by three horses yoked abreast. 'The greatest fault appears, that the single horse is always walking on the ploughed ground.'[23] These 'common' ploughs also required up to three men to work them effectively.
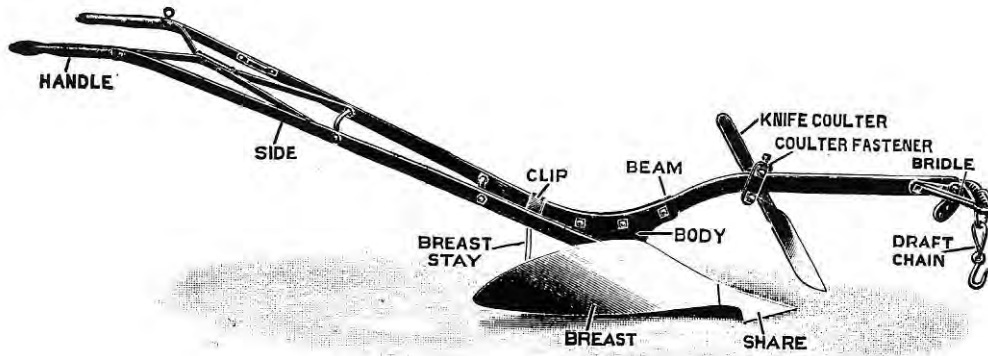

Fig.1 An improved swing plough, with its working parts named

By the early 1800s, improved 'swing' ploughs of Scottish design were beginning to be used in Monaghan. These were made of iron, and were pulled by two horses (Fig.4). Their working parts – share, coulter and mouldboard, were scientifically designed to turn plough furrows smoothly over, and they could be operated by one man.[24] By the 1830s, the new ploughs were widely used. In Ballybay parish for example, it was claimed that they had become common, while in Inishkeen parish, it was claimed that there were never more than two horses harnessed to a plough. The same was claimed for Killamy, Magheraclone and Magheross parishes, and it was also said that the system of one man managing a plough without a helper was also becoming customary.[25] In Currin parish, the improved two-horse plough was also used. Here it was claimed that few of the tenant farmers could afford to keep two horses, and they made up a team by borrowing a horse from a neighbour. In the county generally, it was claimed that only farmers with more than twenty acres of land would keep two horses. This was in line with the recommendations of contemporary improvers, such as the Irish agriculturalist Martin Doyle.[26]

Fig.2 Benny Moen of Corcaskeagh using a horse-drawn wheel plough in 2005 (Photo: Colman Doyle)

The small size of Monaghan farms meant that manual labour was more commonly used than horse power (Fig.3). In 1801, it was claimed, 'The farms being so small, wheel cars are little required. Dung and manure of all kinds are carried in baskets, flung across a horse's back, and are called bardocks [from the Irish *bardóige*], and a considerable quantity is carried in a basket or hand-barrow: there is no county where there is more manual labour.' The spade, rather than the plough, was the key tillage implement. 'In the various branches of tillage of their little crops, they are industrious … every crop having the spade and shovel in one or more of its stages, and some have no plough at all.'[27]

Spades

There are hundreds of different patterns of Irish spade. One basic difference is between spades that have a foot rest on each side of the shaft, and those which have a foot-rest on one side (fig.4).

In Monaghan and elsewhere this type of one-sided spade is known as a loy (Irish: *láighe*). In the 1830s, the usefulness of loys was recognised in Currin parish, where they were used for making the narrow, steep-sided cultivation ridges on which most crops in Ireland were grown at this time.

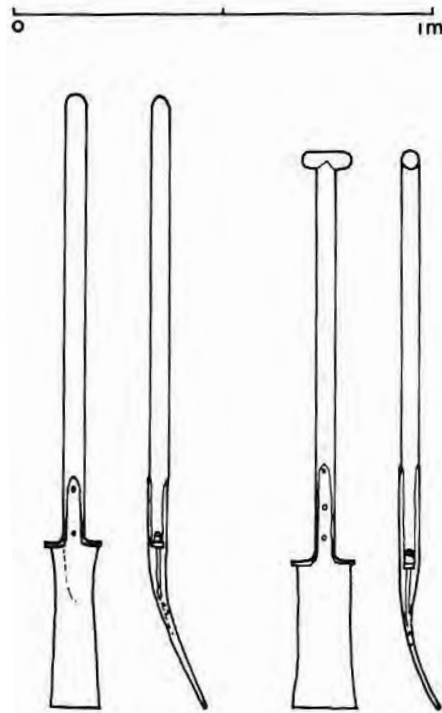Fig.3 George Stinson of Corcaghan making a ridge with a McMahon spade in 1985

Fig.4 A one-sided loy and two-sided spades
made by McMahons of Clones

The great length of its blade … is not applied to trenching the soil [ie turning it all of it over so that it lies level], but for the purpose of turning up long narrow strips which its shape and size affects with very great facility.

The system of preparing the soil for every denomination of crops generally pursued is by dividing the soil into ridges about 4 feet broad, leaving a space for the trench about four feet between them. The soil, exhausted by a previous succession of crops without manure, remains several years fallow, until its natural fertility and fructifying power of the elements clothe it again with verdure, when the rotation of crops is as follows.

The ridges unbroken by plough or loy are covered with manure and potato seed thickly deposited; a portion of the soil is now raised and spread over the seed, and as the young vegetable rises the trenches again supply successive coverings…

The second year oat-seed and a small quantity of flax are sown upon the same ground, and produce exuberant crops, and these are followed by oats the third, fourth and fifth years, until the soil is no longer capable of sustaining vegetables.[28]

Two-sided spades were increasingly used in Monaghan during the nineteenth century. In Ulster, mills specialising in the production of spades and shovels were established around this time. By 1801, a spade mill operated at Scarnageeragh (Emyvale). This was powered by a water wheel, and the three men working there could produce 60 spades in a day.[29] Another spade mill operated at Stonebridge in Latgallan townland in 1834. This early mill was used only for the

heavy work of plating, and the spades were finished in a nearby forge. The mill was owned by a Samuel Benson during the 1830s and the 1840s.[30]

Benson's mill was acquired by the best known spade makers in Monaghan some time in the early1900s, the McMahons of Clones.[31] Theo McMahon has outlined the McMahon family history.

> The progenitor of this spade making family was John McMahon, Knockmacarooney, Co. Fermanagh, who had a forge there… In the townland of Tonity Bog he leased a site around 1860 for the first spade mill …[John's son] Patrick and his son …James … took over the spade making in 1903 …
>
> There are many who still decry the loss of their spade with its special 'lift' well suited to the 'stony grey soil' not only of Monaghan but of neighbouring counties as well.[32]

In the 1920s, after the partition of Ireland, the McMahons moved their business across the border to Drumard townland in county Monaghan, but the they retained the name Shannock, a townland in Fermanagh, until the mill closed in 1969.[33]

McMahon's mill produced many different patterns of spade for farmers in south west Ulster and north Connacht, and even today the McMahon spade is remembered with affection. A poem, written by Matt Dougan, who was born in Maguiresbridge in 1914, describes the vital role of the spade in farming, and the origins of McMahon's business, just across the county border in county Fermanagh.

> The Oul' McMahon Spade
>
> When the mighty loy had done its work and the men who forged it died
> And we hadn't got a tool to take its place
> The praties and the oaten meal had still to be supplied
> Or starvation stared the people in the face.
> Then a genius called McMahon from the parish of Rosslea
> Built a foundry and put a lift into a spade
> He got the people's blessing as they used it every day
> And Fermanagh got the oul' McMahon spade.[34]

In fact the 'lift', formed by a bend or crank in the spade blade mentioned above, was a feature of many traditional and improved Irish spades, and was observed in Monaghan by Charles Coote as early as 1801.[35] Also, despite the poem's implication that the McMahon spade was always two-sided, we have seen that McMahon's made loys as well as two-sided spades (Fig. 4). Irish spade mills made a huge range of spade types (Fig.5) However, as the above quotes suggest, almost all of them had narrow curved or angled blades, which were especially suited for increasing leverage when working in heavy ground, and for building up cultivation ridges.

Spades and horse ploughs were used well within living memory in Monaghan, and sometimes they were used together. In the 1980s, John Joe McElroy of Tydavnet remembered making ridges on steeply sloping ground, when he had the use of only one horse. He would build up one side of the ridge by ploughing down the hill, and build up the other side using a spade.[36] Ridges in this part of the county were levelled only when horse drawn reaping and mowing machines became common.

Fig.5 Spades manufactured by McMahon's of Clones at the time of the spade mill's closure in 1969

Harvest implements

By the late nineteenth century, the collection of farm machinery preserved in Monaghan Museum shows that standardised horse-drawn equipment had become common on larger farms in the county. Wheel ploughs, swing ploughs, drill ploughs, harrows (Fig.6), grubbers, and a range of harvesting equipment (Fig.7), manufactured in big Irish foundries and elsewhere, were all used. However, on small farms, the reliance on hand implements continued well into the twentieth century. Hay was mown with a scythe, and grain reaped with either smooth-bladed reaping hooks or toothed sickles. Memories of the use of hooks and sickles persisted into the 1980s.[37]

Processing harvested grain involves two main operations, threshing and winnowing. Threshing separates the seed in the grain heads from the straw, and winnowing removes the hard shells, or chaff, that surround the seeds. On small farms these operations were often done by hand. Flails were used to beat the seed out of heads of grain. A sheaf of grain was laid on a sheet placed on a wooden floor or board, and then beaten with the flail.

Irish flails were generally made from two pieces of stick tied together at one end. One stick, the *handstaff*, was held, and the other, known in parts of Monaghan as the *souple*, was used to beat the grain. Flails in the collection of Monaghan Museum are tied in two ways (Fig. 9).

The tying had to be as strong as possible. Eel skin was used, or flax, but in Monaghan some people also might use strips of skin cut from the carcass of a donkey.[38]

Most methods of winnowing used in Ireland in the recent past involve letting the dry shells (chaff) that surround the grain seed blow away in a breeze or artificially created current of air.

Fig.6 Harrowing ground with horses (photo Monaghan County Museum P2642).

Fig.7 Benny Moen of Corcaskeagh reaping oats with a horse-drawn reaper in 2005

Fig.8 Robert Berry, who was born in Corby Rock, demonstrating the use of a flail in 2009 (Photo J Bell and M Watson)

In Monaghan as elsewhere, winnowing was often done on a breezy day, when the seed was poured from a tray, and let fall on to a sheet. The tray used in Monaghan was sometimes known as a *dallán* or *wight* (Fig.10).[39]

The trays were constructed in the same way as the southern *bodhran*, from cured animal skin stretched across a circular wooden rim. They were used in Monaghan well into the twentieth century, but as with most other farming operations, winnowing was also mechanised in the nineteenth century. Some winnowing machines had been installed at corn mills in Monaghan by the 1830s.[40] The county museum collection has several winnowing machines, known as *barn fans* (Fig.11).

A handle at the side of the barn fan turned small wooden paddles inside, which set up a light draught of air. Seed was poured into the top of the machine, and as it fell past the fans,
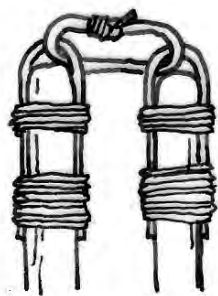
Fig. 9 Tyings for a hole flail and
a cap-flail

Fig.10 A winnowing tray in
use in the west of Ireland

Fig.11 A nineteenth century illustration of a barn fan in use

the light chaff was blown out, while the heavier seed fell straight down on to a sheet laid out
below.

By the 1830s, machines for threshing grain were becoming common in parts of eastern
Ireland, and a few were noted in Monaghan. However, the situation in Currin parish was
probably more typical.

> Threshing machines are unknown: the flail and the centre of the road in fine weather supply
> the convenience of barns and threshing machines, and indeed the scanty stack yards are very
> speedily disposed of when submitted to the influence of a couple of active flails; and it is
> worthy of record and almost incredible, how gigantic are the labours of 2 resolute Hibernians
> when engaged by the bulk on this duty.[41]

In 1859, even on larger farms, threshing machines were said to be rare, and if used, were hired for a few days until the grain was threshed.[42] However, the hiring of portable threshers had become much more common by the later nineteenth century. Most of these early machines were powered by a steam traction engine (Fig.12).

The threshing complex would travel from farm to farm, and neighbours joined together to thresh each farm's crops in turn. Up to fourteen men were needed to carry out all of the tasks involved. The use of a portable thresher continued well into the mid-twentieth century, later machines being driven using tractor power. Threshing days were seen as one of the high points of the farming year, and memories of them are generally very happy. Patrick Kavanagh described the pleasure of working at a threshing day.

> The threshing mill was set-up, I knew,
> In Cassidy's haggard last night,
> And we owed them a day at the threshing
> Since last year. O it was delight
>
> To be paying bills of laughter
> And chaffy gossip in kind
> The work thrown in to ballast
> The fantasy-soaring mind…
>
> I'd be carrying bags today, I mused,
> The best job in the mill
> With plenty of time to talk of our loves
> As we wait for the bags to fill.[43]

Fig.12 A portable threshing machine in use at Inishkeen c1930 (Monaghan County Museum photo no. 12A75/4)

LIVESTOCK FARMING

LIVESTOCK	Horses	Cattle	Sheep	Pigs	Mules/ Donkeys	Poultry	Goats
1851	9,697	61,499	7,861	19,313	4,723	226,069	9152
1901	12,403	89,775	17,446	31,098	4,723	703,052	12,099
1965	2,511	124,422	30,850	80,486	*	1,143,737	*
1980	933	175,984	10,238	33,303	69	2,937,832	314 [44]

The huge amount of crops grown in Monaghan during the century before the Great Famine was exceptional. Throughout most of history livestock farming has been dominant in Irish agriculture. Despite the increased mechanisation of farming in county Monaghan, as in the rest of Ireland, cultivation of crops began a slow decline from around the period of the Great Famine (1845-49), as farmers made a long term move towards livestock farming.

Cattle

During the last two centuries, cattle were at the core of farming in Monaghan. In the early nineteenth century, there had been some selective breeding in the county. For example, some resident landlords and 'gentlemen farmers' in the parish of Ematris kept Ayrshire and Durham cattle, and practised 'green-feeding' with turnips and clover – the best system of management known at the time. Ayrshire and Devonshire cattle were said to be common in Ballybay, but elsewhere the cattle kept by small farmers were dismissed as very inferior.[45] Efforts to improve cattle, and introduce new breeds became more common during the century. By 1900, Shorthorn cattle dominated in the county and Shorthorns continued to be important for most of the century. The Kilnacloy Shorthorn herd, for example, which was sold in1940, was especially well-known (Fig.13).[46] However, during the twentieth century the number of breeds of cattle kept on Monaghan farms increased (Fig.14) by the 1980s Friesian cattle had become the dominant breed in Monaghan, more than ten times more numerous than Shorthorns.[47]
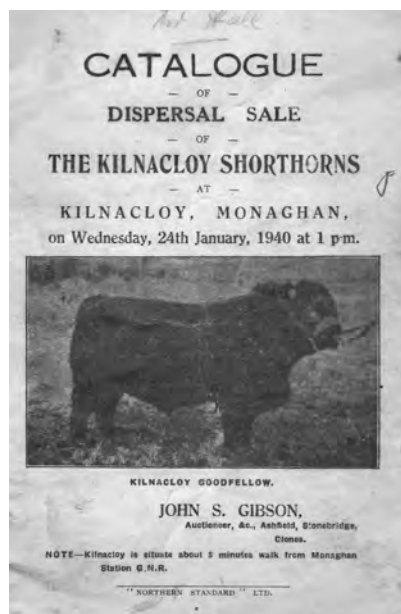
Fig.13 Catalogue of the Kilnacloy herd of Shorthorn cattle in Monaghan, in 1940

The growth of an organised dairying industry in the county was largely due to the activities of the Irish co-operative movement and the Department of Agriculture, which set up creameries in the Monaghan and elsewhere from the early 1900s onwards. These revolutionised the reputation of Irish dairy produce in Britain and northern Europe. The establishment of Monaghan Creamery in 1901, along with other co-ops, secured Monaghan's reputation as a major dairy producing region.[48]

Fig.14 Hereford cattle at Clones Show (Monaghan County Museum photo P2651)

Sheep, Pigs and Poultry

Sheep were important in Monaghan, but since the mid-nineteenth century, there were more than four times as many cattle as sheep This can probably be related to the lack of large areas of hilly land, which provided sheep walks elsewhere. In the late twentieth century, hill sheep of Cheviot and Blackface breeds dominated,[49] but next to cattle the pig was the most important animal in the small farm economy of Monaghan, outnumbering sheep by more than two to one. In many societies, the pig is a way to 'store' excess food. Crops can be fed to the pigs, and the fattened pigs kept until there is a need for extra food, or for cash.

Since the early 1800s, observers generally praised the types of pig and their system of management in Monaghan. For example, in the 1830s, it was reported that in Aughnaboy parish, 'The low, short-eared and small-headed Dutch breed of pigs is much esteemed. Jobbers in pork frequent every fair, purchasing for the English market.' Purchasers for the English market were also said to frequent the monthly fair in the village of Drum, while in Currin parish generally it was reported that these 'well-fed pigs [are] all … transported to make up the rent', and the same was claimed for Inishkeen parish.[50]

During the late nineteenth century, a distinctive type of pig was developed by Ulster farmers. These were large fat animals, probably produced by crossing native 'Greyhound' pigs with

Fig.15 A large White Ulster pig

imported Berkshire pigs. In 1907, they became established as a breed, the Large White Ulster Pig (Fig.15), and they remained common in Monaghan into the 1930s.[51] Large White pigs were a fat breed and easily bruised, so they were usually slaughtered on the farm, and brought to market as carcasses. Monaghan County Museum has rare examples of a pig killer's tool, the infamous *cleek*, which was hooked behind the pig's jaw as it was pulled out of its sty to be killed. Once the pig had been dragged into position, it was stunned with a mallet, and its throat was cut. (Many country people found pig killing upsetting.) After slaughtering and cleaning, hams and bacon might be cured for home use, and even if the pig carcass was sold, farm women made use of the heart and liver. In Monaghan the pig's stomach was also sometimes used. The stomach was stuffed with potato, oatmeal and onion. It was boiled and cut into slices, which were then fried.[52]

In the mid-twentieth century, methods of curing changed, and this, along with a growing taste for lean bacon, led to the decline of slaughtering pigs on the farm and also to the decline of the Large White Ulster Pig, which became extinct in the 1960s. Pig production peaked in the county in the 1960s, but remained important for the rest of the twentieth century. The most common breeds in Monaghan in recent times have been Landrace and Large White Yorkshire pigs.[53]

Poultry had become very numerous in Monaghan by the early nineteenth century. The 'common kinds' of chicken, turkeys, geese and ducks were all sold at local markets.[54] All over Ireland, poultry numbers grew very rapidly after 1850, and the egg trade became a major source of income for farm women who looked after the birds.

Fig.16 Man at a poultry show in Monaghan (Monaghan County Museum photo P2647)

 Eggs were traded to local shop keepers and egg merchants, and this continued in Monaghan well into the twentieth century.[55] However, as with dairying, the poultry industry was increasingly organised, with the development of deep litter and battery management of flocks. By the 1980s, there were almost three million chickens in Monaghan.

The Theory and Practice of Improvement

Systematic attempts to record farming practice and encourage improvements in Ireland can roughly be dated to the establishment of the Dublin Society in 1731. By the early nineteenth century, farming societies were established in several counties. Monaghan Farming Society had its first meeting on 2nd March 1801. The membership fee of one guinea a year meant that it was joined mainly by 'gentlemen farmers', but as with other societies of its type it may have encouraged innovation through competitions, and especially ploughing matches.[56] There was at least one attempt to set up a local farming society in the county at this period. A society was established in Carrickmacross around 1830, which gave prizes for 'the best show of pigs.' Unfortunately the society was short-lived. In 1834, it was reported that due to 'differences between subscribers, it no longer exists.'[57]

 Despite the efficiency of small farmers, and the attempts at improvement by enthusiasts, by the 1830s, the countryside of Monaghan with its tiny farms was widely seen as overpopulated, and drastic solutions were proposed. Lieutenant Taylor, who reported for the Ordnance Survey at this period, seems to have had affection and respect for Monaghan small farmers, but he recommended that consolidation of holdings should be systematic, and that no new farm should be created that was less than 25 acres. He believed that 'the superabundant population' would 'gradually disappear' and that 'many will be enabled by the sale of their holdings to remove to America, which they are very desirous of doing.'[58] This 'solution' now seems brutal, but it became a policy adopted by a number of landlords during the Great Famine (1845-1849). After the devastation of the famine, emigration meant that the countryside became increasingly depopulated. Farmers who survived slowly began to consolidate their holdings, and by 1900 many were becoming owner-occupiers of their land, rather than tenants. Better roads, canals, and railways made the county much more accessible to urban and international markets, and production became more centrally organised and regulated.

 By the early twentieth century, farming in Monaghan was well developed. The co-operative movement was successfully established in Monaghan and Clones, and the county organised annual agricultural shows (Fig. 17).

 The Catalogue for Clones Farming Society's Agricultural Show in 1926 included sections for thoroughbred horses, colts or fillies 'suitable for agricultural purposes', donkeys, Shorthorn cattle, dairy
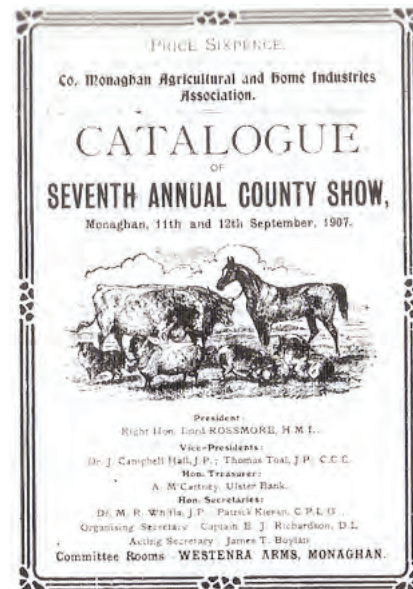

Fig.17 Catalogue cover for the seventh annual agricultural show, held in Monaghan in 1907.

cattle registered by the Department of Agriculture, Jersey and Friesian cattle, Border Leicester sheep, goats, pigs, nine breeds of poultry, turkeys, geese, ducks, wheat, oats, flax, turnips, cabbage, potatoes, carrots and other vegetables, butter and bread and eggs.[59]

For most of the twentieth century it was accepted that the government had a direct role in planning agricultural production, and supporting development by grants and subsidies. State intervention can be seen in the expansion of tillage during both World Wars. The British Government had a policy of compulsory tillage during the First World War (1914 -1918), and the Irish Government introduced a similar policy during the Second World War (1939-1945). The aim of the policy was to maximise home production of food. The success of this state intervention can be seen in crop returns for the county. For example, the cultivation of oats expanded from just over 38,000 acres in 1914 to almost 54,000 acres in 1918. Flax cultivation also increased, from just over 3,000 acres in 1914, to almost 8,500 acres in 1918. Similar expansion can be seen in acreages of crops during the Second World War.[60] Grant aid for agriculture was well established in Ireland by 1900, and continued during the twentieth century. Grants were given for everything from farm buildings to seed, fertilisers and tractors.

NUMBER OF WORKING HORSES AND TRACTORS IN MONAGHAN

	Horses	*Tractors*
1965	2166	2700
1980	141	5168[61]

As elsewhere in Ireland, tractors became significant during the period of the Second World War, when grants were given for the purchase of the new technology. However, it was not until around 1960 that the number of tractors in Monaghan outnumbered the number of working horses. Farmers in Monaghan continued to adapt new methods and technologies to their own systems, which also still might include techniques that had proved effective for centuries.

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