

Forám Oidhreachta an Chláir  
Clare Heritage Forum



## **Comhairle Contae an Chláir Clare County Council**

# **AN AUDIT OF ANTIQUE FARM MACHINERY IN COUNTY CLARE**

*Implemented under the Clare Heritage Plan 2003- 2007 with the support of the  
Heritage Council and in conjunction with the Clare Heritage Forum*

**MINOGUE & ASSOCIATES  
ENVIRONMENTAL & HERITAGE CONSULTANTS**



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# 1 Chapter One: An Audit of Antique Farm Machinery in County Clare

## 1.1 Introduction

Clare County Council in association with the Heritage Council and the Clare Heritage Forum, commissioned Minogue & Associates to undertake an audit of antique farm machinery within the County as part of the Clare Heritage Plan Implementation. This Final Report presents the findings of this study. The following section outlines the objectives of this project and a brief overview of the methodology used to carry out this study.

## 1.2 Objectives of the Study

The overall purpose of the study was to undertake an audit of early agricultural machinery currently unprotected and unrecorded in County Clare. The historical and socio-economic importance of these machines was also assessed as part of the study brief. Finally, a number of recommendations were developed relating to the conservation and heritage management of these machines which will contribute to the establishment of a strategy for the conservation and future posterity of such machinery. Samples of farm machinery under consideration included: harrows, seed drills, haymaking machinery, ploughs, rollers and horse carts.

**Figure 1a; Pierce Pulper, Tulla.**



### 1.3 Methodology

A number of tasks were undertaken as part of this study and are detailed below.

1. **Media Campaign.** The project commenced in early June with a media campaign. This campaign involved a number of interviews with the following:
  - Radio Corca Baiscinn, Clare FM and the Farm Focus programme (also on Clare FM).
  - A segment on the study was included as an item on 'Nuacht' on Teilifis na Gaeilge on the 15/16<sup>th</sup> June.
  - Within the print media, a press release was issued on 11<sup>th</sup> June 2007. The Farmer's Journal, the Clare People and the Irish Examiner included articles on the study on 23<sup>rd</sup>, 15<sup>th</sup> and 16<sup>th</sup> June respectively.
  - The press release was picked up by a number of internet sites such as <http://www.talk-ireland.com>, <http://www.ftmta.ie/news.asp> (farm tractor and machinery association), <http://www.enviro-solutions.com/index.html>, and <http://www.agmachine.com>
2. **Consultation.** Consultation was undertaken throughout the project and included interviews in relation to the conservation, display and educational aspects of this study with a number of specialists. These include the National Museum of Rural Life, National Museum of Agriculture and Rural Life, Vandaleur Gardens, the Canadian Conservation Institute, and Bunratty Castle and Folk Park. In addition, all persons who have contacted the study team with information on antique farm machinery have been noted and the study team has completed twenty full site visits and audits. A number of other potential audit sites have been identified that could be visited at a later stage. *Annex A* presents the details of farm machinery identified to date through submissions by interested individuals. In addition, the study team met the Clare Heritage Forum on 27<sup>th</sup> July 2007 and this provided an excellent opportunity for further comments on the project and identified other potential sources of farm machinery within the County. The Clare Heritage Office invited Professor John Connolly, a professor of Agricultural Economics in UCD to attend this meeting which was extremely beneficial to the project.
3. **Literature Review.** A study objective was to assess the evolution of farm machinery within County Clare within an approximate time period from 1800 to 1950s. This assessment is presented in *Chapter Two*. A full bibliography is included at the end of this Final Report.

4. **Development and piloting of audit form and approach.** This is a pilot study, therefore particular emphasis has been given to the development of an appropriate approach to undertaking such studies, and also to assess the transfer of this methodology elsewhere. A preliminary audit form was developed at the start of the study and has now been tested in the field. This has led to a number of amendments to the form and the revised form is presented in *Annex B*. In addition, the original approach for carrying out field surveys was to undertake site visits arising from the sites identified by consultation and the media campaign. Once again, due to this being a pilot study, the team has also undertaken an audit based on a sample townland to ascertain if such an approach would be practical in future audits. A discussion of these two approaches is discussed in *Chapter Five* of this Final Report.
5. **Audit Findings.** The findings of the audit have been recorded and analysed in an excel spreadsheet. A summary of the findings and their significance are presented in *Chapter Three*. The detailed spreadsheet presenting the findings of the site visits can be found in *Annex C*.
6. **Case Studies.** Three case studies have been identified that present indicators of how farm machinery may be displayed and interpreted. The case studies are presented in *Chapter Four*.
7. **Recommendations.** Part of the study brief required that an outline strategy be developed for the conservation and storage of farm machinery within the County, and also how future farm machinery audits might be undertaken. These recommendations are informed by the site visits, case studies, interviews with curators in existing agricultural museums and the professional judgement of the consultants. The recommendations are presented in *Chapter Five* of this Final Report.

This Final Report is structured as follows:

- Chapter Two: Literature Review
- Chapter Three: Audit Results and Discussion
- Chapter Four: Case Studies
- Chapter Five: Recommendations
- Glossary
- Bibliography
- *Annex A: List of consultees*
- *Annex B: Revised Audit Form*
- *Annex C: Detailed Audit Results*

## 2 Chapter Two: Literature Review

### 2.1 Introduction

This review assesses the available literature on farm machinery within County Clare and presents an analysis of how this machinery developed and evolved within this county context.

This review is divided into three distinct periods, 1800 to 1850, post famine to 1900, and from 1900 to the 1950s. This division reflects the changing nature of agricultural activity within County Clare and associated changes in how agricultural production was carried out.

### 2.2 Farm Machinery in County Clare 1800s to the Famine

Hely Dutton's<sup>1</sup> Survey of the County in 1808, describes in great critical detail the nature of agricultural production in the County during this period. It must be borne in mind that following the Georgian agricultural revolution in the United Kingdom, many commentators were dismissive of the slow uptake by Irish farmers of these new techniques. Hely Dutton states when describing County Clare:

*'There is scarcely a county in Ireland, where a farming society is more wanting than in this very background one'.*



**Figure 2a: Tumbling Paddy, Kilmaley**

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<sup>1</sup> A Statistical Survey of County Clare, 1808. Hely Dutton, Dublin Society. Quotation from Chapter Five, Section 13.

As Young's earlier tour in 1776 -79<sup>2</sup> had described, farms commonly used exhausting rotations, there was little use of manure and tools were wholly inadequate. The plough was often a sharpened log shod with iron, and solid discs of wood were still being used for cartwheels.

The techniques employed by the English and Dutch farmers such as improved crop varieties, rotation and increased mechanisation were more difficult to adopt to County Clare's conditions for the following reasons:

- A large population increase that was totally reliant upon farming;
- A subsistence agriculture based on hand cultivation, utilising loi/spade cultivation;
- Small and increasingly untenable farm sizes – the 1841 census estimated that 22,000 families in Clare had no land at all and that 80% of farms were between 1 and 15 acres in size.



**Figure 2b: Collection of sharpening stones, Kilkishen**

The twenty years before 1815 saw large farms prosper within the County due to high market prices for agricultural produce. In turn this facilitated some investment by certain landlords in modernising their farming activities. Lewis<sup>3</sup> in 1837 asserts that in the area around Newmarket on Fergus and Timfinloe

<sup>2</sup> A Tour of Ireland, with general observations on the state of that Kingdom, 1776- 1779. Arthur Young.

<sup>3</sup> A Topographical Survey of Ireland. Samuel Lewis, 1837. Quotation from his description of Timfinloe

*‘the state of agriculture has been much improved, chiefly owing to the example and exertions of Sir Edward O’Brien of Dromoland’*

Following the battle of Waterloo in 1815, there was an immediate drop in demand for Irish food, leading to a large cut in prices and commencing a long depression in tillage farming. This in turn led to an increase in rents and increasing dismal prospects for much of the County’s population, in particular the landless. The potato increasingly became the main subsistence crop for the small landowner and landless. Hand implements such as the loi and spade remained the principal agricultural tools at this time. Scythes and sickles were the predominant harvesting implements. There is no doubt that many such hand tools were produced in the County during this period.

Following the drop in prices post 1815, landlords increasingly looked towards grazing and pasture instead of tillage production. This was a far less labour intensive activity, making many of the people formerly employed in tillage, obsolete. Combined with the increased population, declining tillage prices and unviable plots of land, a resentment and resistance to the larger landowners spread, as evidenced by the Terry Alts agitations. With considerable violence these concerns were made known.

An attempt to address these concerns led to the establishment of the Ralahine Commune in 1831, on the estate of John Vandeleur at Ralahine. In an attempt to keep his tenants away from secret societies Vandeleur brought a socialist called Thomas Craig from England to advise on the establishment of the commune. Although it only lasted for two years, the commune initially prospered and the first mowing machine in Ireland was introduced by the Ralahine Commune.



**Figure 2c: McCormick Mowing Machine, Kilmaley**



The agricultural depression continued until the 1850s when demand from the Victorian cities brought about the High Farming Period. There was talk of a 'meat famine' in England in 1860 and there is no doubt that there would have been severe meat shortages except for the large number of cattle shipped from Ireland at this time.

In this period oats were the principal cereal crop. This cultivation pattern had oats following after potatoes which would have received manure, and the cultivation of this grain often continued until the ground was completely exhausted. Once exhausted, the ground was fallowed for a number of years and burnt when vegetation established. This sequence would start again. It often resulted in very poor crop yield. Farmyard manure was widely appreciated and considered a valuable resource as was lime, marl, seaweed etc.

In summary, farm machinery as such was confined to hand implements for the majority of the population, horse-powered mechanisation was confined to the few

resident or improving landlord estates. However with half the land owned by absentee landlords, this was the exception. With the large population existing in the County there was an economic rationale behind maintaining high labour intensive production. With the decline in tillage activity and transfer to grazing activities, investment in machinery such as it was, turned towards hay making machinery such as mowers and rakes. These were becoming increasingly available as the industrial revolution increased in pace and manufactured machinery became cheaper and easier to acquire with the spread of the railways. For the smaller farmers and labourers the focus of their work was subsistence agriculture with cereal as a cash crop and most work done by hand.

### ***2.3 Farm Machinery in County Clare post Famine to 1900s***

The switch from tillage to grazing was accelerated following the Great Famine. The period 1841 to 1861 saw a drop in the population from 286,000 to 166,000. The marginal settlements associated with the rundale and clachan systems were largely destroyed.

The effect of these changes forced consolidation and enclosure through individual and landlords' actions. Death, emigration and eviction facilitated this process. The field pattern was characterised by a series of narrow strips that were enclosed from previous infields in rundale. This was surrounded by a circle of small rectangular fields which were the old outfield. Combined with this increase in pasture at the expense of tillage was also the action of consolidation by larger farmers who tended to rent the limestone rich pastures, whilst remaining farmers had to frequently contend with producing on more marginal lands. By 1850 rundale was only found in the worst estates and isolated areas.

Later in the nineteenth century, the government took responsibility for this land rationalisation through the Land Commission. The farms from this time are often square or blocky in form.

This period of grazing coincided with increased demand for beef and dairy products. Between 1871 and 1884, the price of wheat dropped by 41%, and the cost of freight from Chicago to Liverpool more than halved in the same period (Knapp, 1996). Competing with the great plains of North America, Irish farmers had no economic incentive to remain in tillage as a cash crop. The introduction of refrigeration also brought increased international competition to the market.

This emergence of an international global economy impacted not only on the commodification of agricultural goods but also the labour required to service that market. In addition, the opening up of communications routes via the railway constructions and activities of the Congested District Boards led to a greater distribution network - again for labour and produce. As a result emigration continued apace with increasing wages available in the States, Australia and the

UK attracting a constant flow of Irish men and women. In turn, the availability of labour for agricultural activities was reduced and the expectations of wages here also rose, giving greater economic rationale to purchase machinery. The innovation arising from the industrial revolution was soon adopted and evolved by various Irish companies in regard to agricultural machinery design and manufacture.

The twenty five years post famine up to the mid 1870s sees the gradual introduction of farm machinery on the land within the County. This is the period when mechanisation of agriculture becomes firmly embedded on farms in the county The William Kavanagh Plough (of Kavanaghs in Nenagh) won a medal at the Royal Show at Tullamore in 1864 (Watson, 1993). In 1846 James Pierce of Wexford designed a horse powered thrasher and followed this with designs for root cutters, pulpers, chaff cutters and churns.

Mackenzies of Cork date to 1848 and they won prizes at the Limerick show in that year. Strong links were established between Mackenzies and Walter A Wood, Banfords and Massey Harris machinery. Boyds sold farm machinery throughout Limerick and Clare. There is little evidence of manufacturing in Clare, with only one definitive foundry identified through the audit – Minogues of Whitegate. However, there was likely to be a number of locally produced items such as harrows using recycled metals that would have been manufactured by blacksmiths. In Limerick, the Shannon Foundry and Lees manufactured ploughs and other items. Boyds of Limerick were founded in 1848, initially trading as general merchants and then specialising in machinery and pharmaceuticals. The International Harvesting Company (IHC), imported horse drawn mowers to Ireland between 1840 and 1960. These machines went under the brands Deering, McCormack or Osbourne.

The mechanical separator was invented in 1879 and this allowed for the immediate processing of dairy products. With the mechanical separator you could get into mass and centralised processing. The dairy farmers wanted to retain control of the processing and production. Plunkets slogan 'Better Farming, Better Business, Better Living' summed up some of the confidence that was evident at the time.



**Figure 2d. Separator, Kilmaley**

The Irish Agricultural Organisational Society (IAOS) was founded in 1894 to take on vested interests. The creameries also started co-operative agricultural stores that immediately challenged the Manure Manufacturing Alliance (MMA) and the price of fertiliser as a consequence was slashed. In 1897, the Irish Agricultural Wholesale Society Ltd (IAWS) was formed; this organisation supplied the co-operative stores with guaranteed quality goods for resale (prior to this, goods did not have a guarantee of quality). As a consequence, the price of seeds and fertiliser dropped by as much as 50%, on previous merchant prices. IAWS started directly importing farm machinery from France and Canada, bypassing the established agents and merchants and passing on the savings to members.

In tandem with these activities, the first co-operative agricultural bank was established in 1894. This institution, for the first time, facilitated credit in goods for farmers. This allowed the purchase of significant investments for agriculture such as pulpers and separators. The ancient system of meitheal was partly incorporated into the co-operative regime and continued in some form through this period.

This was the period of horse drawn machinery and manual labour saving devices such as churns and pulpers. Some mechanical operations required teams of horses, often requiring the pooling of animals to make a team and the sharing of cost of machinery. Whether or not a farmer could support a horse or oxen depended on whether they could feed the animal over the winter. By 1895 there were 15,000 horse drawn reapers and 10,000 horse operated thrashing mills in use in the country (Feehan, 2003). Donkey numbers increased significantly also, rising from 100,000 in 1850 to 240,000 in 1900. Donkeys had advantages over horses on smaller sized fields, were easier to keep and cost less. A range of machinery such as donkey ploughs developed that reflected the usage of donkeys as a working animal.

## ***2.4 Farm Machinery in County Clare up to the 1950s***

The twentieth century brought greater security for farmers, greater access to markets and the realisation that mechanisation brought greater returns. Harvesting grains and saving hay no longer required high labour inputs. The steam engine and associated powered mobile and fixed machines evolved from the late nineteenth century into the twentieth century.

The use of steam was not widespread in rural Ireland, with one exception – steam thrashing. Steam engines were used on some of the larger estates for cable ploughs, mills and pumping. Some of those owned by contractors when not used for threshing were used for road construction. Water power was used for milling corn. The lack of steam power and innovation was in part due to the lack of available fossil fuel.

**Figure 2e: Farmall Tractor, Tubber**



The First World War offered a good opportunity for Irish farms for all agricultural products and investment in horse drawn machinery continued. This was followed by the global depression and the 'Economic War' (1933-38) characterised by severe protectionist measures by both the Irish and English government. The first Massey Harris self propelled combine harvester was launched in 1938 and some may have reached Ireland before the outbreak of the Second World War.

In 1917, there were an estimated seventy tractors in Ireland. Massey Harris entered the tractor business selling the Whiting Bull, a three wheeler tractor being sold to the Earl of Dunraven in Adare, County Limerick. The Overtime tractor came in numbers from 1917 onwards, there is a restored model claimed to have been bought in 1914 within the County (Watson 1993).

The Fordson dominated the 1920s tractor market; in 1928 there were an estimated 800 tractors in the country, in 1939 there were 2000 and by 1951, 16,000 (Watson 1993). The cost of these machines meant that only large estates and wealthy farmers could purchase these tractors. The relationship between farm size and tractor was explicit and endured till the early 1970s. In 1968, in County Clare, 3.8 % of farms between 16 to 30 acres had tractors. This increased exponentially with 29% of farms over 75 acres possessing tractors in the same year.

In 1938 Ferguson teamed up with Henry Ford to develop the little grey tractors and associated equipment that would change the face of Irish agriculture forever. There were 600 trailed combines and 800 binders sold during the period 1936 to 1952 by McGees of Ardee, County Louth. These machines were vital in ensuring a food supply during the Emergency. However it is worth noting that horse powered machinery remained in use throughout the country through this time.

The Emergency and Second World War made growing more food paramount due to sea blockades. In County Clare, in 15<sup>th</sup> February 1941 the Clare Champion, Ennis Parish Council issued the following recommendations:

- Grow more food - *'Every available bit of land should be tilled'*
- To lay in provisions

Between 1939 and 1940, tillage increased by over 36% in the County. The wheat acreage went from 1,313 in 1939 to 3,280 in 1940. This was by no means a record – in 1918 at the end of the first war, there was 5,800 acres of wheat grown in the County. Wheat cultivation requires fertile and very well cultivated soil. T Sheils and Co of Ennis were giving demonstrations for the Ford Fergusson Tractor Plough in January 1941.. Guaranteed markets were introduced in 1941 for wheat. The drive for increased wheat is reflected in a statement by Sean Lemass: *'The farmer who could grow wheat and fails to do so is letting the country down'*

As a result of the guaranteed market, good prices and a general nationalistic call to grow wheat and all cereals and vegetables, mechanisation increased during the 1940s. Many of the ploughs and harrows found in County Clare date from this time and can be found in areas not traditionally associated with tillage.

### **2.4.1 Conclusions**

This literature review has addressed the evolution of agricultural machinery within County Clare over a period of 150 years. This time period has seen immense changes to the agricultural economy, society and environment of the County. By situating the machinery within a wider historical context it is intended to demonstrate the relationship between tools and machinery and the wider socio-economic milieu of the County. This review should provide a context to the discussions over the following sections and give some insight into the rationale behind the increasing mechanisation of agriculture within County Clare.

## **3 Chapter Three: Audit Results**

### **3.1 Introduction**

This section outlines the findings of the antique farm machinery audit. As this is a pilot study, two different spatial approaches were undertaken:

1. Site visits identified from publicity campaign and consultation. In total, fifteen sites were visited, the machinery identified, catalogued and photographed, and interviews were held with the owners of the machinery.
2. Sample townland based approach. The consultants undertook a walkover of a townland in East Clare to assess if a townland sample would be viable. For the purpose of the pilot study, half the townland was assessed. Again where possible, the machinery was identified, catalogued and photographed and interviews were held with the owners of the machinery. The results of this audit are presented in *Section 3.3* below.

The following *Section 3.2* presents a summary of the findings of the audit through the first approach, ie: site visits based on information received from consultation and publicity. *Section 3.3* discusses the findings from the townland based approach. This Chapter concludes with an analysis of the significance of the audit findings. This is discussed in terms of the following headings:

- Historic significance
- Aesthetic significance
- Social and Scientific significance
- Overall Heritage Significance

This Chapter concludes with an outline assessment table to assist in the evaluation of the heritage significance of these items. It is not considered definitive and would benefit from further discussion and refinement.

### **3.2 Summary of audit**

#### **3.2.1 Introduction**

To date, 23 sites of antique farm machinery have been identified as a result of submissions from interested parties over the course of the media campaign. In addition, arising from the meeting with the Clare Heritage Forum on 27<sup>th</sup> July 2007, a number of other contacts have been identified who may also have antique farm machinery in their area. In this way, the study team now have

sources identified throughout the County. In addition to the townland based survey, twenty sites have been visited altogether as part of this study.

### **3.2.2 Headline Findings**

In total 278 items relating to agricultural machinery have been identified to date utilising the first approach. The study team have included hand implements where they have been identified as it is extremely rare to find machines in the County dating from the pre-Famine period. A decision was made to include hand implements as they were the principal agricultural technology prior to the Famine and to ignore them would be to ignore a large section and sample of agricultural technology in the County. Moreover, most of these implements were locally made and sourced and therefore represent a significant resource demonstrating local skills and materials.

In two instances, the collections identified were so significant that a full audit of these collections would take a number of days. Therefore this figure of 278 represents the minimum identified, rather than the most comprehensive<sup>4</sup>.

The following *Table 3.a* presents a breakdown of the principal machinery identified from the audit. This is followed by a discussion and analysis.

***Table 3.a Principal Machinery identified in audit.***

<b>Machinery</b>	<b>Amount</b>
Ploughs	32
Tractors (upto 1960)	27
Mowing Machines	18
Pulpers	12
Harrows	11
Rakes (side and wheel)	11
Car (horse/donkey)	9

### **3.3 Audit Results**

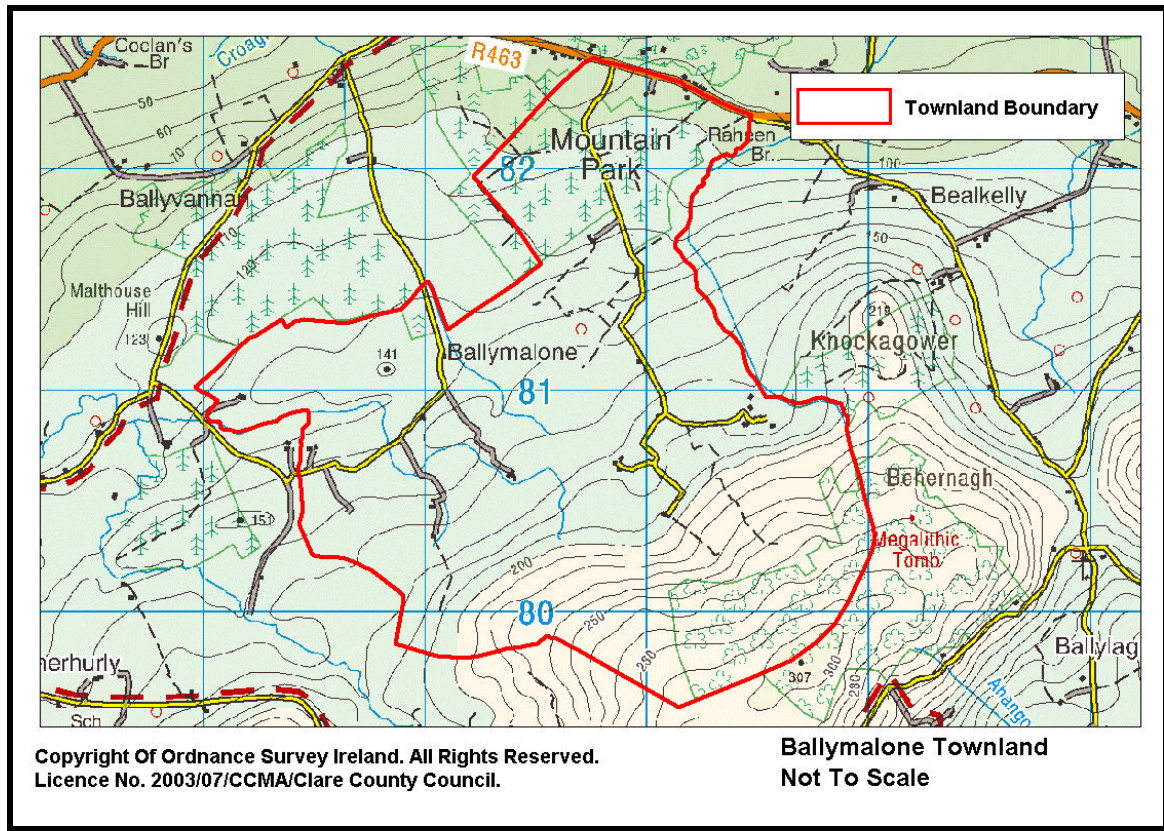
In recognition of this being a pilot study and arising from discussions with the Clare Heritage Forum, the consultants decided to investigate a sample townland

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<sup>4</sup> The Talbot Collection at Bunratty has not yet been fully catalogued. The consultants spent a number of hours at Bunratty identifying and cataloguing machinery but the whole site is not completed. The audit here concentrates on the machinery in the Courtyard and in the surrounding sheds. The second collection is held in two containers that are full of both implements and machinery and contain a vast amount of items. A minimum of two days would be required to photograph and list all these items.



area as an alternative means of undertaking antique farm machinery audits. The townland is Ballymalone in East Clare and is shown below in *Figure 3a*. The methodology and results are presented below.



The townland chosen is where the study team live and therefore have considerable local knowledge and familiarity. A walkover was undertaken and five farms within the townland were visited. The following machinery was identified over the course of this walkover:

**Table 3.3a Audit Results from Townland based approach**

Farm	Machinery	Location	Farm type	Threats for preservation
Farm 1	Tumbling Paddy Mowing machine Horse scuffler	Located in old shed. Outside Outside	No longer an operational farm.	Wood decay  Rust, plant damage
Farm 2	Wheel rake Mowing machine	Outside Outside	Part-time cattle	Rust

Farm 3	Common horse car Plough Slide rake	Shed  Outside Outside	Part time farming cattle	Rot or wood decay
Farm 4	Up and over butter churn Milk separator Pierce plough Pierce wheel rake Slide rake Pierce 2 horse mowing machine scuffler	Shed  Shed Outside Outside  Outside Outside  Outside	Full time farming cattle and sheep	Good condition Good condition Overgrown vegetation Rust damage from modern machinery  totally corroded
Farm 5	Pierce 2 horse mower Pierce wheel rake	Outside	cattle	Damaged by nearby building works

A comparison between the two approaches is discussed in *Chapter Five*.

### **3.4 Issues of Significance.**

Best practice suggests that a statement of significance should be attributed to heritage objects and in this case antique farm machinery<sup>5</sup>. Whilst it is beyond the scope of this study to prepare a statement of significance for all 277 items, nonetheless, the audit findings can be discussed in terms of a number of parameters. Collectively these parameters assist in generating an overall statement of significance for the antique farm machinery identified over the course of this study. The significance headings are adapted from guidelines prepared by the New South Wales Heritage Office called ‘*Safe in the Shed*’ *Caring for Historic Farm Machinery*<sup>6</sup>.

#### **3.4.1 Historic significance**

<sup>5</sup> Statement of significance is particularly associated with UNESCO World Heritage Sites and a statement of significance is utilised to justify a site’s inclusion on the World Heritage Site List. In the publication *Safe in the Shed* (reference below), a statement of significance is considered a useful means to assess the heritage value of an agricultural machine. It is in this latter context that we utilise the term statement of significance.

<sup>6</sup> [www.heritage.nsw.gov.au/docs/safeinshed\\_final.pdf](http://www.heritage.nsw.gov.au/docs/safeinshed_final.pdf)

The results from the audit have highlighted several issues on which certain historical interest can be attached. The most striking thing that has emerged is that farm machinery found in the period 1800 – 1950 in Co. Clare bears little resemblance to the farm machinery engaged in the County today. The diversity of machinery audited illustrates the mixed nature of agriculture which was a feature throughout the study time-frame.

The pre-famine period was, for the majority of farmers in the County, a period based on subsistence agriculture. The few commercial farmers had little need for machinery, as labour was cheap and plentiful.

The reliance on animal and human draught power was a feature until the 1940's. The feeding of a considerable working draught animal (horse/ donkey/ ox /mule) population required substantial acreages of feeds particularly oats. Cereal tillage was widespread and production increased through better cultivation techniques facilitated by improved ploughs, harrows and corn drills. The harvesting of this corn was greatly facilitated by the advent of the reaper binder and mechanical threshing.

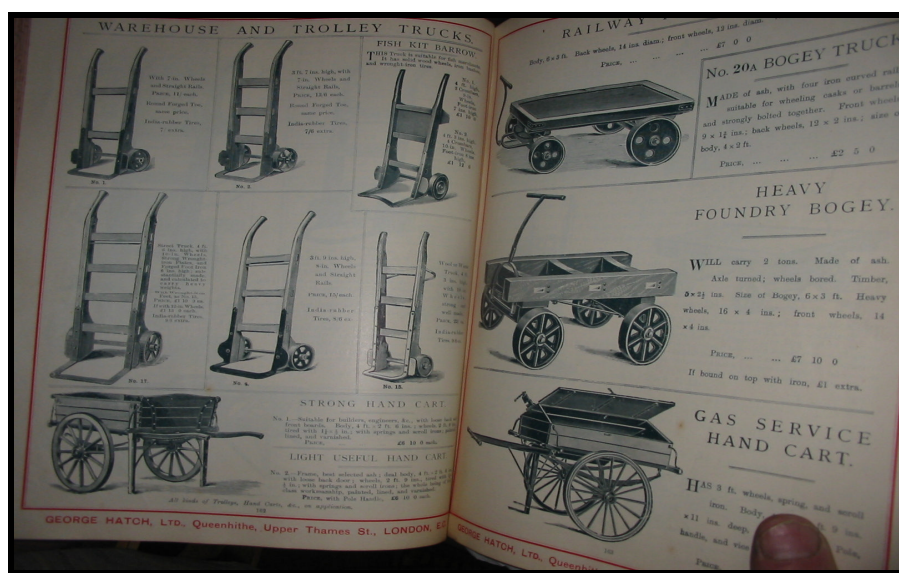
The changes that occurred after the Great Famine were widely reflected in Co. Clare's agricultural machinery. The increased industrialisation of England brought enlarged demand for agricultural products, in particular salted butter and salted meat. The foundries and ironworks associated with the new industrial production methods manufactured significant amounts of farm machinery both for the home market and export. These machines were easily distributed through the new railway system, as was the surplus agricultural products arising from the increasingly rationalised farms. The railways also aided the migration of the rural poor to economies with higher wages and labour shortages.

The creation of large regional markets for surplus production meant that farmers could plan production cycles without reference to local market conditions. The switch to pastoral systems of farming was in response to cheaper prices for cereals and a demand from the new urban classes for meat and dairy products. This switch was reflected in machinery with the increasing emphasis on winter fodder to maintain animals outside the grazing season. The introduction of mowers, hay turning and raking equipment and the use of sowers, pulpers and cake crushing machinery were essential for the increasing pastoral nature of Co. Clare's agriculture in the late 19<sup>th</sup> Century. This importance is reflected numerically through the audit results.

The late nineteenth and early twentieth century saw the organisation of the co-operative movement and the increased self-assurance associated with land tenure changes. This gave Irish farmers a confidence which was translated into machinery purchases such as separators, bellows and mangles. In tandem with this, the horse/pony trap transformed from a work tool to a means of transport.

The increased mechanisation of much farm work was limited by the amount of horses and available skilled labour; whilst the advent of the internal combustion engine and the early tractors increased productivity massively. The early Ferguson 20 was commented on by many of the people encountered in the audit as ‘*changing everything*’. As the tractors started to gain a foothold on larger farms, their associated machines increased also; for example large tractor powered threshers, wider fingerbar mowers and two and three furrow ploughs date from this mid century period.

**Figure 3a: Trade Catalogue, Corofin**



In the post war period the tractors in the County increased and the horses and tillage area decreased. In turn the landscape was changing in response to the increased oil-fuelled mechanisation. Field sizes were increased and gates and entrances were altered. The new technique of saving winter fodder as silage brought an end to fodder root crops and started to reduce the area under hay. The scene was set for the modernisation of agriculture and to a large degree the homogenization of farming methods and production that we see today.

### 3.4.2 Aesthetic significance and value

The agricultural machines were often decorated with motifs or symbols and extra finishes that in our age of mass production have endured as examples of quality craftsmanship. In the setting, maintenance and utilisation of horses and tackle a relationship between man-animal and machine was forged which when the machine is deployed on land or in soil becomes almost elemental.

Without a doubt the audit results have demonstrated considerable local craftsmanship, particularly in relation to blacksmithing, carpentry and stonework. Items such as locally produced limestone rollers, recycled wheel bands, stone rakes and bog barrows all illustrate considerable local skills. Further research

into former blacksmiths and quarries could prove a fruitful topic and provide greater interpretive material for displays at a future date.

**Figure 3b: Collection of seats, Corofin**



### **3.4.3 Social and Scientific significance**

The significance of farm machinery to modern Ireland would be hard to assess but until recently due to a large rural population, farm machinery was well known and understood. There is a certain nostalgic interest in the old farm machinery. It represents an important development in terms of technological transfer from industrial centres to rural areas. It also represents appropriate technology as the horse drawn equipment was after its manufacture carbon neutral and was powered by bio-fuels (oats). This is in stark contrast to the fossil fuel powered contemporary machinery and indeed production of feeds for modern livestock. Whilst not advocating a return to former production methods, there are skills and technological issues arising from this pilot study that merit further study and research.

### **3.4.4 Overall Heritage Significance**

The most important distinction to be made in relation to the preservation of these items is whether they exist as artefacts or as preserved functioning items. During the audit a number of significant items were discovered, and their merit was due to their excellent working condition or their oddity or rarity. From the start of the audit it was clear that a number of items were occurring rather frequently, and that many of these items were in moderate condition. It occurred to the auditors that in order to give representation and to ensure a diverse sample some sort of assessment criteria could be developed. It was suggested that this assessment could be based on cross referenced parameters such as rarity, occurrence, local manufacture as well as condition and associated skill. An example of such a grid assessment for the evaluation of farm machinery is given below in the following tables, *Table 3.4a* and *Table 3.4b*.

**Table 3.4a Assessment of Pierce Plough**

<b>Evaluation assessment for farm machinery in Co. Clare 1800 -1950</b>				
<b>Item: Pierce Plough Ballymalone, Tuamgraney</b>				
	<b>Age</b>	<b>Folk History</b>	<b>Function</b>	<b>Rarity</b>
Occurrence	1890-1920	Tillage and vegetables	Open soil for cultivation	Not rare
Provenance/Manufacturer/materials	Wexford	Pierce foundry	Cast iron with steel	common
Condition /preservation	Good	Na	Oil and store	good
Associated skills	Needs team of horses and harness	Needs land wheels	Requires considerable skills and knowledge	na
Model /history	PNP (?)	Remains on family farm	Lacking essential parts to function	

The Pierce plough is a relatively common piece of equipment, particularly if we compare this to a rarer item such as a horse-powered thresher;

**Table 3.4b Assessment of Threshing Machine**

<b>Evaluation assessment for farm machinery in Co. Clare 1800-1950</b>				
<b>Threshing machine Bunratty</b>				
	<b>Age</b>	<b>Folk History</b>	<b>Function</b>	<b>Rarity</b>
Occurrence	1870-1920	From the Talbot	To separate	very

		collection	grain from straw	
Provenance/Manufacturer/materials	Shannon foundry Limerick	Agent – W.F. MacNamara	Cast Iron with steel and wire	rare
Condition/preservation	Presently in Bunratty Folk Park in good condition	Presumably renovated by Talbot or Bunratty	Good working order	High value item
Associated skills	Needs power to be driven	Traditionally powered through a turn- table by horse.	Needs labour to ensure constant feeding of cereal crop	Skill needed to work horses or engine
Model/history	Was used with Pierce horse turntable	na	na	Presumed to have originated in Co Limerick

We can see that on many levels this item is of greater significance. The proportioning of value according to rarity, or province can be limiting, as a collector could buy a item from another region or state where it is common and locate it in an area where it is rare. In an instance such as this, the heritage value of a farm machine is distorted as the function and indigenous need for the piece of machinery was not fostered by the locality's conditions. It is due to the nature of the study that a multi-varied approach seems to work best.

The above examples are used to show that a system of valuation is required in order to identify examples for preservation. They also highlight elements of information which are important in assessing heritage value. The fact that there are two types of collections in the County - the serious collectors and the farms with a residual collection mean that the latter often have collections of greater local significance. The condition of these items is often only fair. The serious collectors on the other hand have machines in excellent order and functioning perfectly. These may have come from other parts of the country or the UK. Therefore an evaluation/assessment approach is particularly helpful in identifying items of high heritage value as a number of factors come into play.

### **3.4.5 Conclusions**

As this pilot study demonstrates there remains a significant amount of old farm machinery within County Clare and the machinery and hand implements identified, testify to the former diversity of agricultural production within the County. An increasingly important issue however, relates to the folk knowledge and technical skills associated with working and maintaining such machines and it is very timely that such an audit is being undertaken now.

In terms of methodology, the approach taken principally for this study has been found to work quite well, though a certain amount of revisions are required to the proposed audit form. The townland based approach was only lightly investigated in this study but does offer indications for an alternative, more community based approach. This approach could have educational interest in historical, agricultural and technological applications. For county level audits, the first approach works well, for smaller local audits, the townland approach has considerable merit.

In general, heritage value and significance for machinery and hand implements may be assessed against a number of criteria and this in turn may assist in prioritizing the collection and conservation of such items. In general, value can be proportioned when an item is manufactured in the County, when it was used in a locality, when an item is rare, when an item is functioning and is in good condition, when the skills are possessed to operate it and when there is some folk history related to it.



## **4 Chapter Four: Case Studies**

### ***4.1 Introduction***

In this section, three case studies are presented in relation to antique farm machinery and its conservation, display and interpretation. The case studies vary in scale and geographical spread but it is intended that these studies will provide an insight into opportunities for the promotion and conservation of antique farm machinery. Two telephone interviews were undertaken with the curators of two Irish attractions, one solely displaying agricultural implements and one which has incorporated agricultural machinery into its other focuses. These were important in discussing visitor reaction to and interpretation of old farm machinery.

#### ***4.1.1 National Museum of Country Life, Castlebar, County Mayo***

The National Museum of Ireland - Country Life opened in 2001 and traces the traditions of rural life throughout the country from 1850-1950. Artefacts deal with domestic life, agriculture, fishing and hunting, clothing and textiles, furniture and fittings, trades and crafts, transport, sports and leisure and religion. The collections are housed in a purpose-built and award-winning museum building, which is set into the terraces of a lake and in the grounds of Turlough Park House. The consultants met with Dr Seamus MacPhilib, Curator of Folklife on 10<sup>th</sup> August 2007 to discuss the antique farm machinery study and to specifically address questions relating to their conservation and display. The following discussion is taken from this interview.

This museum does not actively collect farm machinery as the principal focus relates to folklore and folklife. Nonetheless, such items are offered to the museum quite frequently. Space constraints are a significant consideration, therefore much of the museum's machinery is currently stored off site at an OPW property in County Offaly.

In terms of conservation of farm machinery, the advice is simple – essentially keep such machines away from the elements and therefore stored under a roof.

In terms of interpretation and display the Museum of Rural Life has employed a specialist consultancy since 1999 for permanent exhibitions. This assists considerably with the development of interpretive material and graphic design. Key comments relating to the display and interpretation of artefacts are listed below:

- It is important to use a lot of imagery and quite limited artefacts;

- It is essential to communicate clearly with potential visitors – it is important to relate the object to people viewing it;
- It is important to develop a narrative, and essentially tell the story of the artefact. The use of human imagery is important to assist in relating the object to the person;
- Language should be clear and non-technical;
- The text on the wall or near the display should be quite limited, with good graphics and high quality imagery. There should be options to provide further information if people want to find out more information about an item;
- If the display is in a local museum there are opportunities to highlight local distinctiveness but generally hand implements will demonstrate more local knowledge and skills than machinery. There is generally more diversity on a regional rather than county basis regarding machinery;
- One option for display of machinery would be to relate the machinery to the local land use, field types, landscape types, farming context and vernacular farming buildings;
- Another option for the display and interpretation of machinery would be to present the comparisons between farming in the past and contemporary farming methods and machines, and
- An alternative to a centralised museum would be the ecomuseum concept that has been developed in Europe since the 1970s.

#### **4.1.2 Eco museum**

A relatively novel concept in Ireland, the ecomuseum may be a viable way to promote local heritage and display significant items of antique farm machinery. This section discusses what an ecomuseum is, and also briefly describes two ecomuseums in Europe.

Ecomuseums offer an alternative to a centralised museum holding a collection in a single location. Ecomuseums relate strongly to local regions, the landscape and the community who live within the region. Although there have been two attempts at ecomuseums in Ireland (one in Dublin and one Derry), they have not been viable and lessons can be learnt from these. Community involvement in the planning, development, ownership and management of an ecomuseum is a central tenet of the model and there is now a wealth of information available and indeed case studies from around Europe that can give guidance and provide technical knowledge about such an approach<sup>7</sup>.

An ecomuseum may be defined as follows:

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<sup>7</sup> For a discussion of ecomuseums and their application in Ireland, please see ‘Ireland: Museums, Identity and Community’. Presented by Robert Heslip, Irish Museums Association, 2003. [http://www.ecomusei.org/user/congresso/atti\\_Heslip.pdf](http://www.ecomusei.org/user/congresso/atti_Heslip.pdf)

*An Ecomuseum is a dynamic way in which communities preserve, interpret, and manage their heritage for sustainable development.*<sup>8</sup>

*An ecomuseum is a museum focused on the identity of a place, largely based on local participation and aiming to enhance the welfare and development of local communities.* Evidence from best practices identifies in this process two key elements: place-based development, and the improvement of local networks, where ecomuseums have to play a key role as catalysts of social capital development.

An ecomuseum is concerned with the presentation on the location where natural, historical and cultural historical subjects happen or happened in the past. Presentation is not just for permanent exhibitions in museums but also something that happens out in the landscape, placing the small individual experiences into a "whole".

Currently there are approximately 300 ecomuseums operating globally, with around 200 in Europe. The following sections briefly outline two such examples.

#### ***4.1.3 Ekomuseum Bergslagen, Sweden***

Bergslagen<sup>9</sup> is the name given to a large, diffuse area in central Sweden that covers several districts—Värmland, Närke, Västmanland, Dalarna, Uppland and Gästrikland. The name itself is related to "rock" or "mining", the "berg" suffix being found in countless place names where mining has been carried out. Grängesberg and Kopparberg are just two examples. The ecomuseum is open-air with approximately 50 heritage sites around the region.

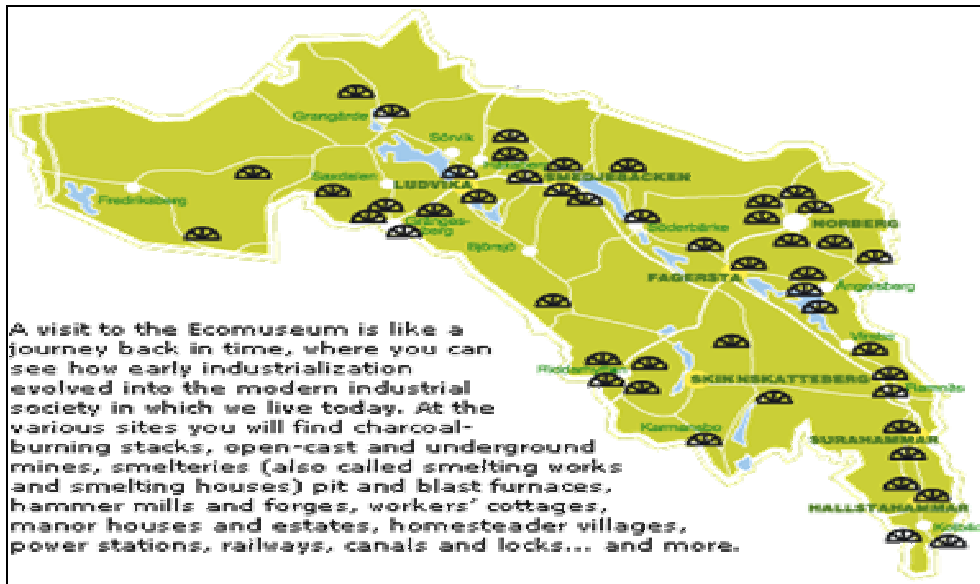
The museum explores how early industrialisation developed into contemporary times. The sites range from iron works and heritage parks, to self guided tours around small former mining areas to visits to local libraries to restored houses

#### ***Figure 4a: Map and outline description of Bergslagen Ekomuseum***

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<sup>8</sup> Declaration of Intent of the Long Net Workshop, Italy, May 2004.

<sup>9</sup> [www.ekomuseum.se/english/index.html](http://www.ekomuseum.se/english/index.html)



#### 4.1.4 Danish Lake District Ecomuseum

The Danish Lake District Ecomuseum<sup>10</sup> presents information and interpretation of the natural and cultural heritage of the region. Since the end of the Glacial period, humans have settled in this area due to the natural resources present.. The Danish Lake District Ecomuseum aims to strengthen and improve the presentation of the region's culture and nature in order to provide the local people and the many guests to the area with the best possible experiences and possibilities. The area covered by the Danish Lake District Ecomuseum is approximately the area covered by the County of Skanderborg that existed up to 1970. It is an area of 1,719 square kilometres.

An ecomuseum explains the interdisciplinary histories about the relationship between nature and culture and how it has developed the landscape into what we live in today. Landmarks in the landscape are precisely what they are in the broadest sense of the word. They may be a biotope, a cultural trace, a building, particular domestic animals, a special town house and much more.

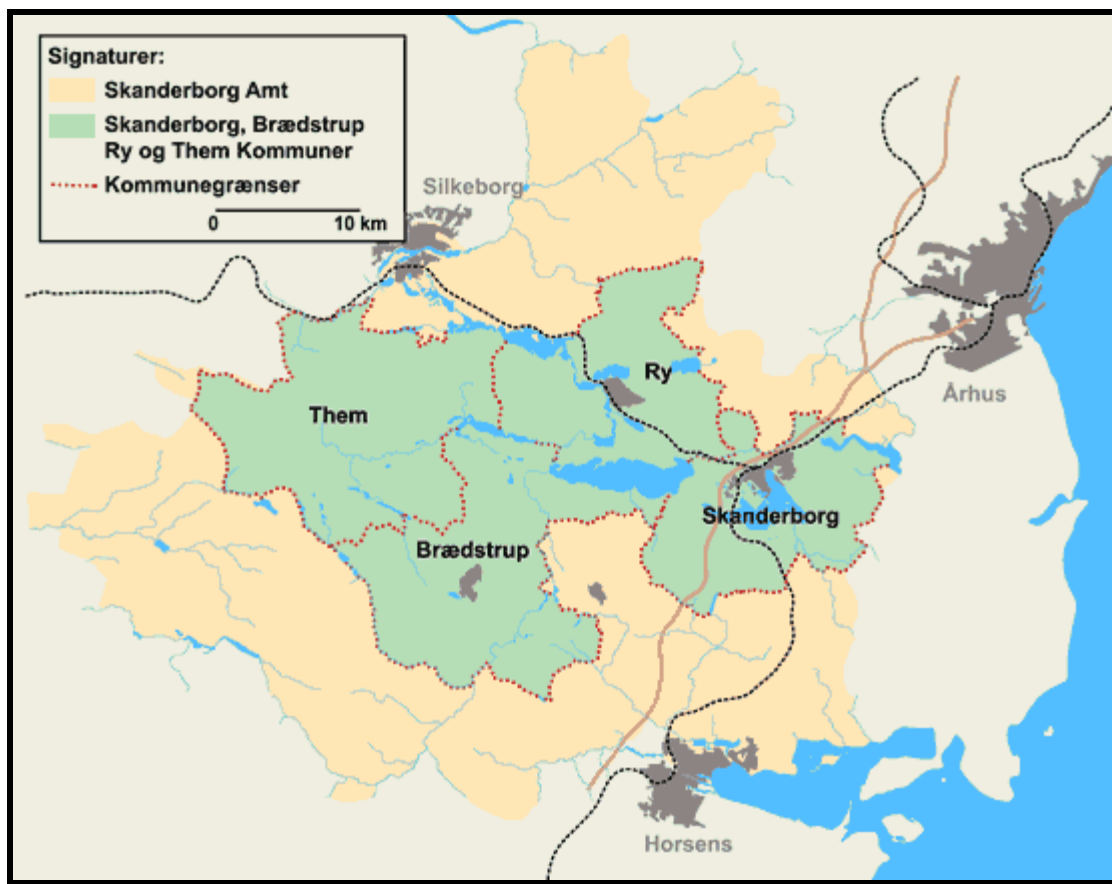
*Figure 4b* shows the photos from the homepage of the website, and *Figure 4c* shows a map of the region.

<sup>10</sup> [www.ecomuseum.dk/english/01gb\\_lake\\_district\\_ecomuseum.htm](http://www.ecomuseum.dk/english/01gb_lake_district_ecomuseum.htm)

**Figure 4b: Photos from homepage of Danish Lake District Ecomuseum and**



**Figure 4c: Map of Danish Lake District Ecomuseum**



#### **4.1.5 Principals of presentation**

A marked and well-defined network of routes and footpaths creates the visible connection in the Danish Lake District Ecomuseum, "the common thread". This presentation in the landscape follows a clear, uniform concept of marking and layout and the importance of "recognition" is the priority. The original idea is based on the concept used by the Danish National Forest and Nature Agency.

- Level 1 - point markers - a post or marker with a number or single letter.
- Level 2 - a path sign - direction to the next place of interest.
- Level 3 - plan boards and information boards.
- Level 4 - un-manned visitor centres.
- Level 5 - manned visitor centres.

The signature colour on signs and posts is brown so that they are not confused with the Swedish red used by the National Forest and Nature Agency. The brown colour, "earth", is recognizable abroad as it is the colour used for service and direction boards put up in nature reserves.

Information boards explain the history behind observations made on the spot. Point markers require that the information about the point is in a brochure that can be acquired at tourist offices or institutions.

The interdisciplinary histories in the Lake District of Central Jutland are about:

- The creation of the landscape during and after the Glacial period (the formation of the landscape and the importance of the water-level)
- Habitats for flora and fauna
- Early settlements by lakes and rivers ( the Danish Palaeolithic age 7,400-4,200 B.C.) - Theme "The Gudenå Culture".
- The foundation of hamlets and villages (the Viking Age 740-1050 A.D.) Theme "The Crown and war"
- Fishery in the fresh water - from fishing to supplement the housekeeping and professional fishing on to sports fishing.
- Overland travel - Theme "Roads and their different usages" (the importance throughout the Ages)
- Fords and bridges - Theme "waterways and their strategic importance".
- The use of woodlands.
- Monastic life - Theme "Monastic orders and the monasteries in the Lake District of Central Jutland.
- Skanderborg Fief
- Skanderborg Cavalry District 1590-1760
- Early industrialization 1845-1930
- Water as a power-source - Theme " Watermills".
- Market towns, provincial railway towns and villages.

#### **4.1.6 Conclusions**

The case studies presented above offer two potential routes to promote, conserve and enhance the agricultural heritage of County Clare. It is essential to relate the extant farm machinery to the local agricultural practices that in turn are informed by socio economic practices and conditions. A centralised museum is a more conventional approach and would need considerable capital investment, whilst the ecomuseum concept may offer an opportunity to present a more meaningful interpretation of the agricultural heritage of the County whilst situating the machinery in the most appropriate location. *Chapter Five* of this Final Report discusses both approaches in more detail.

#### **4.1.0 Interviews on machinery display and interpretation**

The benefit of examining other examples of farm machinery on display was suggested to the study team. Two museums were selected, one in the County illustrating how old farm machinery can be incorporated into other activities. The other is a National museum which holds important information on the history of farm machinery in Ireland. The following was discussed in relation to their old farm equipment;

- Display and interpretation
- Visitor experience
- Outreach or educational projects
- Conservation and preservation
- Relevance

#### **4.1.1 Vaneleur Walled Garden Kilrush Co. Clare**

The curator Suzanne Vlateuta provided the following information. The farm machinery is on display in the Courtyard of the Gardens. The courtyard and gardens of this former estate have been renovated. The house is gone although some of the cellars may be intact underneath a car park. The machines which were not audited for this study consist of hay making equipment and some tillage implements.

There are six machines currently on display donated by local people. Suzanne stated that she would be interested in receiving other items to increase the collection. At present it is planned to restrict access to the machinery as children enjoy playing on them which presents obvious dangers. Apart from the children there is great interest from men who have a connection to farming or older people who remember the equipment with great nostalgia. It appears that the men are interested in the machinery and the women's interest lies with the gardens. There are no educational projects relating to the farm machinery though

there are gardening workshops and a conference room available. This room also doubles as the Vandeleur Estate Museum, Suzane stated that it is important to keep a balance between the functions of the commercial conference centre and the museum.

The Staff are presently engaged in a FAS scheme, the machinery is maintained by the gardening staff, Displays state the machines function or name and the person who donated it. The relevance of the machinery was thought to be important in relating to how the estate was in the past. It could be incorporated into the story relating to the history of Vandeleur . It was felt that machinery could be used on display to recreate certain aspects of the past and presented as a booklet or dvd.

#### ***4.1.2 The Agricultural Museum Johnstown Castle Co Wexford***

The curator of this impressive collection is Sharon Quinn who supplied the following information.

In 1976 the museums previous curator Dr Austin O Sullivan who had an interest in machinery, went on to form a co-op group to collect old machinery. This is now the most comprehensive collection in Ireland and also has the largest archive on farm machinery. It also benefits from much of the document material from the Pierce foundry. The machinery which numbers around one thousand items ranges across all the agricultural enterprises undertaken in the Country. The machinery is restored to the original design and colour, Sharon said that the museum receives a lot of enquiries from people wishing to know which colour or style to restore the machine they are working on. The machinery is displayed in the former stables of the estate. Generally the name of the item, a description of it, its provenance and the person who donated it are displayed.

The majority of visitors are retired people although many do bring children along. The visitor experience is overwhelming positive as a visitor book records remarks. The people who relate most to the machinery are generally rural or from a farming background, while the people who require greater interpretation are urban. As this collection contains early tractors there are significant vintage enthusiasts who visit the museum. Sharon stated that every second visitor has a farm machinery story to tell.

There is no outreach or educational developments related to the collection though there are tours for school groups.

Two staff are retained for ten months of the year, one a technical assistant the other a carpenter. Sharon is the year round curator. Machinery is only sourced from Ireland and when it is known to have been worked on Irish farms. There was some concern expressed at the sale of Irish



collections in the UK. This arises when a collector wishes to sell certain items the market seems more developed in the UK. Collectors often shift their interest and get rid of some objects (such as farm machinery) and increase others (classic motorbikes). The mixing of component parts from differing models or makes would also be of concern to this museum; this is often undertaken by collectors who make one good machine out of several. It was felt that a visual presentation of the machinery working would greatly aid the interpretation of the function and design especially young people.

### **4.1.3 Conclusions**

This chapter has aimed to demonstrate the various options available relating to the presentation, display, conservation and interpretations of agricultural heritage and particularly farm machinery. Essentially one can adopt a centralised conventional approach that has its merits but also requires considerable capital investment initially. The ecomuseum option may offer a means for a more community focused management and interpretation regime. The interpretation and technical and folk knowledge associated with these machines is also a critical element and is key to bringing these machines to life.

## **5 Recommendations**

### **5.1 Introduction**

This chapter presents the conclusions arising from the study process and makes a series of recommendations. These are largely detailed under a series of headings - audit methodologies, conservation, skills and knowledge, education, presentation and display.

### **5.2 Audit Methodologies**

The bulk of this study and investigation has followed the methodology as originally envisaged in the tender brief –ie; publicity campaign and seeking information from the public. Such an approach relies on the goodwill of interested parties and also allows for a review of information received, before prioritising site visits. The advantage of this approach is that it is easily replicated, does not require particular local knowledge and can be undertaken in a straightforward manner.

The townland based approach relies more on local knowledge and it must be stressed that in part the study team could undertake this kind of approach, simply because they are familiar with the townland and indeed know all the farms that were visited. To replicate such an approach without prior knowledge would require the following:

- Identification of farms in the townland and their owners, and
- Introduction to the farmers and permission to go on site.

However the townland approach may work very well if it was to be undertaken by a community group rather than external consultants. In that instance, there would be local knowledge and familiarity with local townlands and the landowners therein. The townland based approach may offer educational possibilities also by including local schools in fieldwork and research.

At a county level, the first approach is likely to be the most efficient and easily replicated. However, from a community perspective, the townland approach would work well, but it would rely upon the knowledge, skills and enthusiasm of a community based group. A familiarity with farm machinery would be essential for both approaches in order to properly identify and discuss the items. This could be facilitated through the production of a guide to antique farm machinery.

In terms of the audit form, the first box that identifies townland, gives a unique number etc, works well in the field. However, a number of the prompt questions (such as whether the extant machine replaced earlier versions ) were found to not be helpful – principally because few people were knowledgeable enough about this issue, or had no memory of any previous machines being used. As a consequence, the audit form has been revised to better reflect the reality of issues arising during site visits. The form has been simplified with a smaller number of prompt questions, and a separate section to permit any additional or background information to be inserted. It is recommended that the data be entered regularly into the excel spreadsheet that has been developed for this for this audit, as this format allows easy interrogation of the data. The labelling and recording of items was based to a large degree on the work of Olive Sharkey<sup>11</sup> for this study. Accurate terminology is important when inputting this data. The proposed revised audit form is presented in *Annex B*.

Other issues of methodological interest were the framing of the material into time periods during the study. Following the fieldwork it appeared that the historical approach, (which neatly divided the time period into three fifty year units consisting of the pre and post famine era and after the land war and co-op movement) was useful in placing the machinery the context of the past. This approach was necessary to highlight the social, economic and environmental factors driving farm machinery evolution.

During the collection of the audit however it became apparent that another method of framing the 1800-1950 period could be undertaken which would focus more exclusively with the machinery and its workings. This method focuses on the source of power utilised to work the machinery. The three main phases would consist of; manual labour, animal powered and engine powered. These phases are not as distinct as the historical periods yet are a useful indicator of the dynamic of increased mechanisation. This method of study recognises that sweeping changes did not occur but thousands of individual decisions with differing circumstances created the agricultural heritage of County Clare. The decision to acquire a horse or a tractor was in most instances the first step in acquiring the associated equipment. To recognise this fact is important step in understanding the context of past machinery.

### **5.2.1 Recommendations**

- A list or guide to identification of farm machinery would be helpful for future audits.
- There is a need to use common terminology to allow county by county or national analysis.

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<sup>11</sup> Old Days, Old Ways – an illustrated folk history of Ireland. Olive Sharkey, 1987.

- The audit form could also have a data field that includes the local or folk name for machinery but the nomenclature used to identify the machines should be the same.
- The main methodology used for this study has worked well and is appropriate for county level audits;
- There is merit in investigating the townland approach for community groups at a later stage;
- The Ordnance Survey 1:50,000 Series were found to be adequate in undertaking and identifying sites.

### **5.3 Conservation, skills and knowledge**

As the audit has illustrated, there remains a significant amount of agricultural machinery and implements in the County. However the fact that they exist is largely due to chance or the enthusiasm of local collectors. The study team found that collections could be broken into two categories, each with their own advantages. These are discussed briefly below:

1. Farm machinery collectors and enthusiasts. There is a small but important group of collectors within the County, each with their own particular interests and focus. These people are largely fulfilling the custodial role of antique farm machinery within the County. Without exception, all collectors interviewed had some basic mechanical skills, and commonly, the ability to repair and make such machines functional again. Two people identified had particular expertise in working with horses- an essential skill when looking to demonstrate how much of the antique farm machinery was used. The working knowledge and skills associated with these collectors is very significant, and often they do have good recollections of the provenance of an item, whether purchased in England or saved from a ditch somewhere in the County.
2. The second category is not collectors *per se*, but people who have inherited machinery on their farms, or are aware of old machinery either at the back of the shed, or frequently in a ditch or hedgerow. These people sometimes have recollections of the machinery being used on the farm and whilst the number of items in their ownership may be quite small, the provenance of these items is more likely to be local. An example of this relates to the existence of stonerollers in limestone areas within the County.

#### **5.3.1 Recommendations**

- Bunratty Castle and Folk Park have a Harvest Day at the end of September that shows some of the machinery associated with harvesting.

Notwithstanding this, demonstrations at vintage/agricultural shows are currently the only instances where people have an opportunity to see the machinery in action. The fact that they can at all is down to the enthusiasm and technical knowledge of collectors.

- A monetary contribution towards the transport costs of bringing this machinery to shows would recognise the role that these people play and assist significantly in alleviating their transport costs. Consideration should be given to funding or part funding these demonstrations. If funding is available for such activities, it should be promoted to individuals and groups.
- A second recommendation relates to the conservation and functional viability of the machines. As already stated, collectors generally have some mechanical skills and working knowledge of the machines, and work with draught horses. The skills required to operate these machines and the ability to use working horses are essential for the ongoing viability of these machines. With no knowledge of how to work these machines, they become unviable as a heritage resource. Examples are available globally for communities seeking to identify people with the know-how to use and restore old agricultural machines<sup>12</sup>. Blacksmithing, mechanical knowledge of old machines, historical research capabilities and working with horses are all essential skills that are required to maintain this agricultural heritage. At a minimum, these skills should be accessed and made available at a national level; if only in the first instance, a list is developed of blacksmiths etc, still operating within the Country. At the least this directory would make identifying and contacting these craftspeople easier.
- Skillsnet and Heritage Council grants to community groups may offer another means to promote traditional skills and facilitate the transfer of knowledge relating to mechanical and conservation skills associated with farm machinery.
- The conservation of good machinery requires at a minimum protection from the elements and some basic maintenance in addition to mechanical skills if necessary. The New South Wales Heritage Office has produced an excellent guide to conserving farm machinery and this could be adapted for the Irish context. Outline guidance is presented in the following box:

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<sup>12</sup> <http://www.abc.net.au/widebay/stories/s2011733.htm>

*All moving mechanical parts need lubrication to ensure efficient running and prevent rust and corrosion. The metal machinery of the horse drawn era was often painted with bright distinct colours and this would have protected the metal frames and housing. Moving or working parts (chopper and mower blades, tynes mould boards and other steel parts) might have been wiped with an oily rag following use. Machinery often had oiling or grease point in gear housing, chains. Storage under cover ensures maximum conservation.*

### **5.3.2 Heritage Value and threats**

The heritage value of old farm machinery has been discussed previously in *Chapter Three*. The value proportioned to specific machines by the assessment criteria discussed above would rate certain items above others. Rarity and local manufacture would contribute to a higher ranking. The more common mass produced items when in good working condition with the appropriate horse or tractor would also achieve a high rank. Also items of historical local significance would merit conservation, an example being the Harris Seed Disperser from Toronto, that was imported to Clare from the Newmarket on Fergus Co-operative.

Despite considerable neglect, there remains a lot of old farm machinery within the County. This machinery is perceived by some as scrap and a few respondents told of cases where machinery was thrown into foundations. This was often encouraged at official level through the Rural Environmental Scheme (REPS). The perception of old objects with defunct functions does not aid their preservation. Indeed the commonplace occurrence of old machinery in ditches and haggards around the county has meant that these items are seldom looked on as heritage pieces. Their destruction is often as a consequence of them being too entwined with vegetation or being unrecognisable from decay and rust. Throughout the audit, objects were found that were impossible to identify due to vegetation and overgrowth. The main threats to antique farm machinery come from decay, rust, accidental damage from farm operations, field boundary removal and new development. The main way to safe guard these items is to bestow a real value upon them.

### **5.3.3 Recommendations**

- A ranking/evaluation system similar to that outlined in *Chapter Three* would assist greatly in identifying priority pieces for conservation and protection.
- Media campaigns particularly on local radio work well and are a proven means to assist in identifying extant farm machinery.

- It is neither desirable nor practical to conserve every piece of old farm machinery, nonetheless certain items will and do merit conservation. The outline assessment table presented in Chapter Three could be discussed and further refined but it does provide an initial template to help identify items worthy of conservation. The farm machinery tells the story of agriculture in Ireland and this agricultural activity is what has made much of the landscape that surrounds us today.

### **5.3.4 Interpretation, Presentation and Display**

As the case study from the National Museum of Rural Life demonstrates, interpretation and display is essential. To educate and inform an increasingly urbanised population about such heritage requires lifting the machinery from being a ‘rusty auld thing’ in a ditch, to telling the story of who worked it, how it worked and why it was so important. Throughout the audit, folk knowledge about the machinery was extremely variable and frequently not known well (the collectors have significant mechanical knowledge which is equally important). There is an urgent need to investigate the folk history further and critically before the current generation who retain memories of these working machines pass on.

The ecomuseum concept presents an excellent opportunity for the County to develop the first such successful museum of its kind and in the study team’s opinion merits further investigation. Shannon Development already undertakes regional based tourism promotion and the development of self-guided trails within the County is not new (eg: Mid-Clare Way, Lough Derg Crafts Trail). Moreover, there already exists a wealth of baseline information on the natural and cultural heritage resources of the County – the Local Studies Unit at Clare County Library, and other commissioned landuse reports such as the Landscape Character Assessment and the Waterway Corridor Studies.

**Figure 5a: Antique Farm Machinery display in Whitegate, County Clare.**



What is especially attractive about the ecomuseum concept is that it can relate the agricultural machinery heritage of the county with the surrounding use of the landscape, vernacular architecture and community level involvement and promotion of heritage, which in the case of County Clare is overwhelmingly agricultural in nature. There already exists a network of local heritage centres, tourist offices and heritage sites around the County. In addition to certain outreach and education activities (such as demonstrations at agricultural shows, vintage rallies, school initiatives etc), a number of self guiding trails could be developed around the County that demonstrate and inform both the local community and visitors about County Clare's agricultural heritage.

### **5.3.5 Recommendations**

- The folk history associated with the farm machinery is a critical element in ensuring accurate and meaningful interpretation and display. Whilst research at local libraries can be extremely useful, interviews with people who remember the machinery being used would be an extremely valuable resource. One option would be to arrange an afternoon visit to a local nursing home or community hospital and informally discuss with interested residents their memories of working with these machines.
- Interpretive material and graphics have an important role to play in telling the story of farm machinery and agricultural heritage. Further work needs to be done in this area.
- Demonstrations play an equally important role and assist greatly in the maintaining this heritage.
- The ecomuseum concept should be explored further as a means to promote and display antique farm machinery and relate agricultural heritage to the wider landscape and history of the County. The existing sites around the County, such as Bunratty Castle and Folk Park, and smaller heritage centres could form a network and the basis for a number of trails around the County.

### **5.3.6 Education and outreach activities**

The age profile of both collectors and people with working knowledge of farm machinery is a concern that has already been alluded to in this report. In turn this makes the educational aspects of this study an important consideration. Transfer and exchange of skills relating to the function and maintenance of these machines is important knowledge that should be conserved, particularly in light of the increasing urbanisation of society and the decline in farming activity. Educational opportunities could range from primary school local projects to more technically advanced skills investigating metal work and wood work with transition year students.



### **5.3.7 Recommendations**

- Farm machinery lends itself to local and community based studies. Further consideration and investigation should be given to encouraging local studies of farm machinery within the school curricula. This could range from students conducting interviews in their locality with people who worked or remembered machines being used, to research on local co-operatives or distributors who sold these machines.
- The technical skills associated with maintaining these machines in good condition generally include welding and metalwork. Technical colleges could support projects from transition year students that involve making items for older farm machines within the community.
- The demonstrations of working farm machines are one of the best means to show people how these machines worked and crucially the handling skills required in order to work such machines safely and efficiently. School trips associated to demonstrations would be a means to show these skills to students. If some monetary contribution could be given to the demonstrators there could be more flexibility in bringing demonstrations to different parts of the County.
- The excel spreadsheet that has been developed for this study to detail items in the audit is user friendly and should be utilised for other studies and maintained within the County. There may be opportunities for the database to be shared and updated amongst groups.

### **5.3.8 Conclusions**

Agriculture could be said to have been in a constant state of dynamic change during the reference period of this audit. The reasons for this dynamic state have been mentioned above. The period represents huge changes in the landscape, society, politics, land tenure and economy of Co. Clare.

If the study of farm machinery is examined from an economic viewpoint the relationship is a basic fact of utilising capital to increase labour and land productivity. The machinery also increased the rate and scale of work undertaken, thus conferring certain comparative advantage to the farmers with horse powered machinery compared to those utilising manual labour. The drudgery associated with much agricultural labour has been all but forgotten in our modern age. The increased use of machinery and engineered solutions to farm work reduced this heavy labour load and increased the status of farm workers from labourers to machinery operatives.

From a historical or heritage stance, the machines that have been recorded represent physical manifestations of the evolution of agriculture in the county. The recording of machines provenance and the age of production can tell much about the state of agriculture, in that place and at that time.

The old machines illustrate how diverse our agriculture was through the engineered and mechanical methods used to obtain nutrients from the land. In the past a wider variety of farm products were produced on a wider variety of soils with more diverse plant and animal species. For example for winter fodder there were furze/gorse grinders, cake grinders, grain mills cabbage/hay choppers, and root pulpers. Now most stock in the county is fed with silage with bought in grains.

Hay equipment was very well represented with horse mowers, wheel rakes, hay kickers, slide rakes, side delivery turners, tumbling paddies, swathe turners, cock lifting carts/hay floats, hay rakes, hay forks, hay knives. This diversity is in stark contrast to the mower, baler and wrapper which represents the modern silage outfit.

Of especial concern is the increasing age profile of people who worked this machinery. These people possess functional understanding of the setting and operation of these machines. This is useful local knowledge related to historical artefacts and the divorce of this knowledge from the function and operation of this machinery would lead to the further abstraction of these machines.

The serious collectors and those that have an interest are presently undertaking a useful job in presenting their collections in pristine condition at local and county shows. The interest in these items when on public display is considerable. These shows and specialist events are where a considerable amount of networking occurs. There is often trading in items and information.

The interest in antique and vintage machinery has increased as the recent Cooley Vintage Tractor festivals success attests. This occurred in Co. Louth in August of this year. The event broke the previous world record for the highest number of vintage tractors working together. It had more than double the number of tractors than the previous record. It was well attended by vintage tractor enthusiasts from County Clare. The previous record (held by England) was smashed, considering the difference in populations between the UK and Ireland this festivals success would indicate a large number of active vintage enthusiasts. However, whilst vintage machinery may enjoy active and enthusiastic support, intervention is required to conserve local and frequently older machinery such as donkey ploughs etc.

It is the study team's aspiration that this report will increase the level of interest and investigation of these items in the County Clare and beyond.

# Glossary of Terms

<b>Bellows</b>	A mechanical device that blows a strong current of air, used to make fire burn more strongly and with greater heat.
<b>Congested District Board</b>	The Congested District Board [CDB] was established by the British Government in 1891 to encourage economic and social development in the 'congested' districts of the West, North West and South West of Ireland. It had been argued that governmental action was needed to provide industry for the surplus labour in the countryside, if the country was to avoid repeating the devastation caused by the Famine and the subsequent mass emigration.
<b>Churns</b>	A butter churn is a mechanical device used to agitate milk cream until it becomes butter.
<b>Clachan</b>	A nucleated group of farm houses where landholdings were organised communally, frequently on a townland basis and farmed by communities with strong kinship ties. Houses were surrounded by a permanently cultivated infield, defined by a study wall outside which lay the outfield and commonage.
<b>Emergency. Second World War 1939-1945</b>	As the Republic of Ireland was neutral during World War Two, the term 'Emergency' was the official word given to the period that covered the second world war.
<b>Foundries</b>	Factories or workshops that specialise in melting and casting metal into shapes.
<b>Georgian Agricultural Revolution</b>	The Georgian Period relates the reign of the four King Georges in England from 1714 to 1830. England was the at the forefront of the Enlightenment which saw in particular scientific principles and approaches being applied to agriculture.
<b>Great Famine</b>	The Great Irish Famine (also known as the Great Hunger and, in Irish, An Gorta Mór or An Drochshaol) was a famine, and its aftermath, in Ireland between 1845 and 1849.
<b>Harrow</b>	A harrow is an implement for cultivating the surface of the soil. In this way it is distinct in its effect from the plough, which is used for deeper cultivation. Harrows were originally horse-drawn. In modern practice they are almost always tractor-mounted implements drawn after the tractor.
<b>Hay</b>	Hay is dried grass or legumes cut, stored, and used for animal feed, particularly for grazing animals like cattle, horses, goats and sheep. Hay is fed when or where there is not enough pasture on which to graze an animal, or when grazing is unavailable due to weather (eg; winter), or animals being kept inside.

**High Farming Period**

This period is regarded as the golden age of agriculture in England and is related to the Georgian Agricultural Period.

**Infield**

Large open field surrounding houses with a clachan. This large open field was situated on the best ground and was divided up into a multiplicity of strips separated by sods or stones in which potatoes or stones were grown. Each family used a variety of strips, which were periodically redistributed (rundale). The infield was permanently cultivated and nutrients were replenished by the use of lime, seaweed or dung.

**Mangle**

Clothes drying for drying and ironing clothes by passing the item through two heavy rollers.

**Marl**

Marls are calcium carbonate or lime-rich muds or mudstones which contain variable amounts of clays and calcite or aragonite. Marl is common in post-glacial lake bed sediments, often found underlying peat bogs. It has been used as a conditioner for soil and as a neutralising agent on acid soils.

**Meitheal**

Meitheal is the Irish name for a work group, conveying the idea of 'connection with neighbour.' Traditionally, the term referred to rural agricultural groups. The practice was, and is, for a group of neighbours to come together to help each other in tasks such as preparing the hay, or gathering the harvest. Each person would help their neighbour who would in turn reciprocate.

**Mowing Machine**

A mower is a device for cutting crops or plants that grow on the ground. Mowers are used to cut hay or other crops and place the cut material into rows. Swathers are also used to cut hay.

**Napeolonic Wars**

The Napoleonic Wars were a series of wars during Napoleon Bonaparte's rule over France, fought mainly in Europe but involving some other parts of the world, and ending in 1815 at the Battle of Waterloo

**Outfield**

Poorer, more marginal or boggy ground where occasional reclamation might be made for the purposes of growing potatoes.

**Plough**

The plough is a tool used in farming for initial cultivation of soil in preparation for sowing seed or planting. It has been a basic instrument for most of recorded history, and represents one of the major advances in agriculture. The primary purpose of ploughing is to turn over the upper layer of the soil, bringing fresh nutrients to the surface, while burying weeds and the remains of previous crops, allowing them to break down. It also aerates the soil, and allows it to better hold moisture. In modern use, a ploughed field is typically left to dry out, and is then harrowed before planting.

<b>Rundale</b>	Periodic re-distribution of strips of land in the infield of a clachan practically universal throughout the poorer lands in the west of Ireland. The re-distribution of strips of land ensured a fair distribution of all soil types to each family of the clachan.
<b>Separator</b>	A piece of machinery that uses centrifugal force to separate different matter – in this instance used to separate cream from milk.
<b>Silage</b>	Fodder harvested whilst green and kept succulent and digestible by partial fermentation traditionally in a silo, more commonly baled and wrapped in plastic nowadays.
<b>Subsistence</b>	This is a method of farming that usually refers to farming that is enough to feed the family but not enough to allow the family to participate in the case market.
<b>Terry Alt</b>	The Terry Alts were a secret society named after Terry Alt from Corofin, a protestant army pensioner and an ardent loyalist. He had come upon the scene of an assault on a man in Corofin, and was, by coincidence, dressed similarly to how the victim described his assailants. Locals picked up on the irony, resulting in all violent attacks being attributed to the innocent Terry Alt. The Terry Alts were one of many clandestine societies founded in Ireland from the 18th Century on, all involved in agrarian agitation in pre-Famine times. Each society usually had a number of issues relating to fair rents, traditional access to common land or payment of tithes to the established church and other similar issues. The Terry Alts movement began in 1828 in Corofin and raged through rural communities until 1831

**Annex A: List of consultees for Clare Antique Farm Machinery.**

	<b>Name</b>	<b>Location</b>	<b>Types of machinery</b>	<b>Contacted/rung back/</b>
1	Mr O'Brien	Mullagh, West Clare	1940s two tractors Seed disperser Old horse carts	√ Visited
2	Mr Dan Organ	Ennistymon	Working Mower Pierse Knows who to run machinery	√
3			Very old grinding machine	Left message fri 15/6/07
4	Martin Maloney	Kilmaley	Collector of machinery- old hay tosser, side rake, hay cart, mower, slide etc	√ Visited
5	Frances Naughton	O'Connell St Kilkee	Tomas gave us her details	Left message 09/07. does not have machinery
6	Nora Donnelan	Kilkishen	Swot turner and old ploughs etc	√
7	Shane Burke	Miltown Malby	Old thrasher and other machinery	√ visited
8	John Howard in Ruan			√ visited
9	Jim Cronin,	Bridgetown,	A lot of horse drawn	√

		Killaloe	machinery	
10	Tony Hynes, Kilfenora. Her husband has farm machinery.		Horse cart with iron wheels. V.good condition c.100 y/o Side car v.g Float for hay coxes Wheel rake Double mowing machine.	√ visited
11	* James Rouine - Cororfin		Has all in containers at his house..has restored a lot of them.	√ visited
12	* Séan Collins - Sixmilebridge -			√
13	* Paddy Joe McMahon - Tubber			Visited
14	Paddy Crawford		His uncle has beet pumper, donkey and horse ploughs	√ visited
15	Harry			√
16	Catherine O Halloran		Caherlow -Tulla. Pulper, mowing machine, seed spreader	√ visited
17	Michael Conroy Broadford		A number of items	√
18	James Marrinan Miltown Malbay-			√ Visited
19	Talbot Collection ,			√

	Roma O'Connor, Bunratty			visited
20	Declan Armstrong		Restoring 1806 house next to Cragganowen and wants to develop a farm machinery/rural life museum – I think its part funded by Shannon Development. Has a number of items.	Visited twice – not available.
21	Mary O'Rourke, Ennistymon (Clare coco)	Evenings suit best	Old horse plough, mowing machine, horse cart and MF165 tractor	√
22	Joe O Hagan Mills Road Kilkishen		Numerous items including rare seed spreader from Canada.	Visited.
23	Michael O'Dwyer Tubber		Various items	Visited

#### Historical Experts:

- Seamus MacPhilib, Farm Machinery Curator, Museum of Rural Life, Castlebar.
- Dr Pat Nugent, Institute of Celtic Studies, Liverpool University.
- Aoghan Behan, Talbot Collection, Bunratty,
- George Prytulak, Canadian Conservation Institute.
- Sharon Quinn, Johnstown Agriculture Museum



- Suzi Majekta, Vandeleur Gardens

## DRAFT FARM MACHINERY AUDIT FORM

<b>Site Number</b>	<b>Unique Number:</b>		<b>Grid reference:</b>  (This is made up of <i>County Code</i> – <i>1:50,000 sheet no.</i> – <i>Grid letter</i> – <i>Grid Reference</i> ) eg. LH-43-O-026765
	<b>Name</b>		<b>Postal Address</b>
<b>Location</b>	<b>Townland</b>		

## Site Data

<b>Machine</b>	<b>Model and Year</b>	<b>Provenance (if manufactured – insert foundry name). If locally produced- name of maker (blacksmith etc) and townland if possible</b>	<b>When was it last used?</b>	<b>Was it common in this area?</b>	<b>Any other information?</b>

- There should be a short description and representative photograph for every feature identified.



<b>Audit Number</b>	<b>Townland</b>	<b>Item</b>	<b>Manufacture</b>	<b>Model</b>	<b>Provenance</b>	<b>Date</b>	<b>Condition</b>	<b>No.</b>	<b>Notes</b>
<b>FM1</b>	<b>Kilkishen</b>	Hay Turner	Wexford Engineering	ST27	Wexford		poor	1	family farmed grazing, stopped farming c.1970s. Former wheat shop so explains some items in sheds
		Roller	Local		Local		fair	1	
		Bog barrow	Local		Local		good	1	
		Sprayer	Éclair Vermorel		France		good	1	
		Donkey Car	local		Local		good	1	
		Pulper	Pierce		Wexford		fair	1	
		Water pump						1	
		Mowing machine					good	1	with blades still edged and shaft
		Hay Knife	Pierce		Wexford		good	2	
		Slasher	Local		Local		good	1	
		weighing Scales						1	Evidence of cereal processing
<b>FM2</b>	<b>O'Callaghan Mills</b>	Hay spinner						1	
		Tractor	Holder		Germany		good	1	vineyard tractor
		Stone Rake	Local		Local	1800	good	1	used to be two man version
		Roller	Local		Local		good	2	
		Water pump	?		Limerick		good	1	
		Shortening Stones	Local		Local	1800s	good	8	One stone has date 1794. not included: 'Spriod Barna' =stone from Kerry with spirit of witch in it.
		Barrel Barrow	Vippen and Headly		Leicester	1800s	excellent	1	c
		Drill	Massey and Harris	Patented 1901, New Zealand no.103 corn drill	Toronoto		good	1	think this was imported via Newmarket Co-op
		Lathe			Cincinatti	1942	excellent	1	
		Engine	Amanco		Coney Island		good	1	taken from boat in Coney Island and adapted for use to power a thrasher in Clare in 1938
<b>FM3</b>	<b>Caherlohan, Tulla</b>	Pulper	Pierce	New Victor Marvel	Wexford		good	1	new wooden legs as old ones rotted, painted in original colours. Family farm

		seed sower	Pierce	T12A.Patent no; 1. 141	Wexford		fair	1	bought between a few farms in the area
		Mowing machine	Pierce	No.10	Wexford		good	1	original colours
		seed sower	Pierce	Victor Sower. 141	Wexford		good	1	original colours
		Plough	Pierce	Psp 5 PBP19	Wexford		good	1	original colours. Came from Thom, Feakle
		Plough	Lee	Imp No.2 98	Limerick		fair	1	
<b>FM4</b>	<b>Talbot Collection, Bunratty</b>	Plough		drill plough	Moher		good	1	
		Plough					good	1	
		Plough	Wexford Engineering				good	1	small plough, green and silver
		Thistle Topper	W.McBride and Son	G1 Simplex	Cork		good	1	
		Harrow		sprung tines			good	2	
		Hoe	Scuffler hoe				good	1	
		Roller	Furrow				good	1	
		Plough	Lee	Imp No.2	Cork		good	1	blue and silver
		Plough	Star	Potato lifter plough	Wexford			1	
		Turntable	Pierce	120			good	1	
		Thrashing machine	W.F. McNamara		Shannon Foundry, L		good	1	
		Plough	Star	no14	Wexford		good	1	
		Hoe	Steerage				good	1	forged
		Plough					good	1	
		Thrashing machine	Pierce		Wexford		good	1	spindle and thrashing machine
		Cutter	Gardiners				good	1	Harrison McGregor & Co Ltd
		Hay kicker	Pierce		Wexford		good	1	
		Cake Breaker	Banford		Uttexeter		good	1	imported by J & C Boyd Limerick
		Cutter	Gardiners				good	1	imported by Carrol and McGatcheon, Nenagh
		Swathe Gatherer	Pierce	Victor Junior	Wexford		good	1	
		Plough	Lee		Limerick		good	1	
		Harrow		with spike			good	1	
		Mowing machine	Pierce	No8a	Wexford		good	1	2 horse from Lahinch

		Drill	Star	force fed corn drill	Wexford		good	1	
		Thistle Topper	W.McBride and Son		cork		good	1	
		Hoe	Scuffler hoe	patent US 769			good	1	
		Plough	Howard	riding plough	Bedford	1886	good	1	
		Drill	R. Hornsby & Sons	15C 2. Corn drill, 2 horse			good	1	Grantham Engineering
		Hoe	Wexford Engineering	New Star	Wexford		good	1	
		Plough	Geo Seller & Son	3 horse, double furrow	Nuntley/Huntley		good	1	Agents Vincent and Paul, Dublin
		Harrow		zig zag			good	1	
		seed sower	Pierce	No.2	Wexford		good	1	hand spreaders
		seed sower	Pierce	No.10	Wexford		good	1	hand spreaders
		seed sower	Pierce	Patent	Wexford		good	1	hand spreaders
		Plough	Lee		Limerick		good	1	
		Drill cleaner	Wexford Engineering	New Star	Wexford		good	1	
		Plough	Pierce	PNP2 15	Wexford		good	1	
		Plough	Wexford Engineering	Start no.2	Wexford		good	1	
		Plough	Howard		Bedford		good	1	
		Plough	Star	No 3 IKCP1A	Wexford		good	1	
		Hay float					good	1	tram lifter
		Plough	Lee	No 1 Imp	Limerick		good	1	
		Chopper	Pierce	gorse hay chopper	Wexford		good	1	from Durras, Cork
		Hay float					good	1	tram lifter
		Slide Rake					good	1	
		Barrel Barrow					good	1	
		Churn		up and over barrell and barrel			good	1	
		Trap	pine	pony tub trap				1	
		Trap		tub trap black				1	
		Trap		tub trap			good	1	

		Trap		side car trap			good	1	
		Harrow		spike harrow			good	1	
		Barrow					good	1	
		Cutter	R.M Wade & Co.	powered portable log cutter	Portland Oregon		good	1	
		Engine	Marshall Sons & Co	Stationary engine	Gainsboro		good	1	driving the following three items listed below
		Cutter	Banford	Perfect root cutter	Uttexeter		good	1	
		Churn	G Llewelin & Sons	rotating churn - on its side	Haverford		good	1	
		Churn		up and over churn			good	1	from Adare, Limerick
		Spreader		dung spreader		1830	good	1	
		Reaper and Binder		A629. 3 horse			good	1	from Kilmallock, Limerick
		Plough		wooden			good	1	
		Spinner	John Wallace & Sons	Potato spinner. No.3 Champion. 10 p.o.	Glasgow		good	1	
		Grader		Potato grader			good	1	
		Thrashing machine		Thrashing machine			good	1	Suttons Ltd, Cork and Branches.Has a star emblem
		Horse Car		with creels			good	1	
		Hand trolley					good	1	
		weighing Scales					good	1	
		Mill	Richmond & Chandler	corn mill	Manchester		good	1	
		churn	G Llewelin & Sons	barrel side rolling	Haverford		good	1	
		Mower	Ransomes Jeffries Ltd	donkey drawn lawn mower	Ipswich		good	1	
		Plough	Pierce		Wexford		good	1	
		Pulper	Pierce		Wexford		good	1	
		Roller	Local	stone roller	Local limestone		good	1	
		Mower	Pierce	No8a	Wexford		good	1	2 horse mower



		Digger	New Star	potato digger 2 horse, 2 wheel	Wexford		good	1	
		Rake	Wexford Engineering	Celtic Self Rip wheel rake	Wexford		good	1	
		Swathe Turner	Blackstone	Mk 2. with side delivery	Stamford		good	1	
		Hoe	Pierce	Victor hoe	Wexford		good	1	
		Drill cleaner	Wexford Engineering	New Star			good	1	
		Plough	Star	No. 5a. Single plough	Wexford		good	1	
		Rake	Pierce		Wexford		good	1	
		Plough	Rian and Sons				good	1	
		Hoe	Pierce	Victor	Wexford		good	1	
		Rake	WEC	wheel rake			good	1	
		Hay Turner	Banford	side delivery			good	1	
		Bellows	Shannon Foundry		Limerick		good	1	
		Bellows	Pierce		Wexford		good	1	
		Hay float		tram lifter			good	1	
		Sprayer	Star Iron Works	Barrel sprayer	Wexford		good	1	
		Cake Breaker	Pierce	Victor	Wexford		good	1	
		Cutter		Chaff cutter			good	1	
<b>FM5</b>	<b>Kilmaley</b>	Hay turner	Banford	Ratchet Self Actor		100 y/o	excellent	1	from Kilmaley
		Mowing machine	McCormick	M9034. 4.5 ft. 7B mower			excellent	1	last used on farm in 1959, from Inch, ne Kilmaley
		Tractor	Massey Ferguson	35x			excellent	1	
		Tractor	Ford	3000		1976	excellent	1	
		Pulper	Pierce	New Victor. Size 10			excellent	1	
		Mowing machine	Deering	Deering Ideal. 3.5 ft mower	Chicago	100 y/o	excellent	1	from shed in West Clare
		Swathe Turner	Star		Wexford		excellent	1	from Kilmihil
		Plough	Pierce	No.2			excellent	1	

		Hoe	Star			100 y/o	excellent	1	
		Car					excellent	2	
		Separator	Diabolo	No. 0	England		excellent	1	
		Tractor	Massey Fergusan	35		1964	excellent	1	
		Thrashing machine	Harrison McGregor & Coi	Albion CD2	Horncastle		excellent	1	agents LA Church and Sons Horncastle
		Lorry	Thames	4 with Ford tractor engine			excellent	1	
		Tumbling Paddy			Local		excellent	1	
		Rake		side rake			excellent	1	
		Mowing machine	Deering	one horse	Chicago		excellent	1	local
		Tractor	Massey Fergusan	35		1961-62	excellent	1	
		Tractor	massey	35x		1964	excellent	1	
		Tractor	Massey Fergusan	35x		1963	excellent	1	
		Drill cleaner	Star	No 2	Wexford		excellent	1	from Barntick townland in Clarecastle
		seed sower	Pierce		Wexford		excellent	1	
		Mowing machine	Pierce	No.4 2 horse Victor	Wexford		excellent	1	
							excellent	1	
		Creels		for donkeys/horse			excellent	2	
		Tractor	Massey Fergusan	20		1952	excellent	1	from Sligo
		Hay float	Pierce	tram lifter			excellent	1	
<b>FM6</b>	<b>Moyglass, Mullagh</b>	Tractor	Fergusson	Tvo		1949	excellent	1	from Cullen, near Kanturk
		Cart		local			excellent	1	rescued from ditch near Kilfenora
		Pulper	Pierce	Pierces Special P421 New Victor			excellent	1	from the farm
		Seed sower	Pierce	No; 4. seeder and roller			good	1	from the farm
		Hatchet		bog deal hatchet	Local		good	1	

<b>FM7</b>	<b>Goodlands, Milltown Malbay</b>	Mowing machine	Pierce	No 9 Single Horse			good	1	farm bought by family in 1929. Did have double Pierce mowing machine but sold it 40 years ago.
		Chopper		Hay or root chopper			fair	1	farm used to be dairy but now drystock there before grandfathers time.
		Thrashing machine	Pierce				good	1	Neighbours would come to get wheat thrashed. Last used probably in the Emergency. 9-10 men used to work the trasher. Mother used to feed them from the open hearth. Front wall has milestone to Kilkee (15 miles), and part stone plate dated 1839
		Pulper	Pierce				fair	1	belonged to farm
		Ploughing Stick		single horse?			fair	1	
		Tractor	Fergusson	20. 4 cylinder diesel.		early 19	good	1	
		Table		stone table for storing corn away from vermin			good	1	
<b>FM8</b>	<b>Cloonaaha, Inagh</b>	Plough		Donkey			good	1	used upto last decade?. Uncle had local forge. Locally forged gate.
		Mowing machine	Pierce	single horse	Wexford		fair	1	
		Cart		Donkey			fair	1	
		Barrow	local	bog barrow			fair	1	
		Collar and harness		for donkeys/horse			good	1	
		Pulper	Pierce	marvel	Wexford		fair	1	
		Rake	Pierce	wheel rake			fair	1	
		Plough					fair	1	
		wheels	Pierce	off hay float			fair	1	
<b>FM9</b>	<b>Lismoher, Kilfenora</b>	Block maker			Dublin		fair	1	farm bought in 1926, lived in it from 1928. father a rate collector. Some dairying but mostly beef

				flotation bouys washed up at Lahinch			fair	1	
		Buoys					fair	1	
		Pulper	Pierce				fair	1	
		rake	Pierce	wheel rake			fair	1	
		Hay Swathe	Pierce	swathe turner			fair	1	
		Cart		horse with wooden wheels and creels.			good	1	belonged to grandfather.
		Cart		side car			good	1	
		Hay float					fair	1	
		Mowing machine	Pierce	Victor no.4. 2horse			fair	1	
		Mill		corn mill			fair	1	
		Scythes		local			fair	1	
		Seperator					good	1	
		Harness		horse			fair	1	
		Churn		up and over churn			good	1	
<b>FM10</b>	<b>Michael Corbett - scarriff show demo</b>	Tractor	Fergusson	Major		1952	excellent	1	
		Thrashing machine	Ransomes			1932	excellent	1	was thrashing until 1950-51. September to January. Worked around New Market, Tulla, Ogonnoloe, Bridgtown. Started in 1939 - paid for itself.
<b>FM 11</b>	<b>Corofin</b>	Hay kicker		converted to thistle topper			excellent	1	
<b>This collection is very si</b>		Drill cleaner					excellent	1	very rare
		Ploughs	several				excellent	1	
		Seed sower	several				excellent	1	
		harrow					excellent	1	
		Seed sower	Pierce	double sower			excellent	1	
		Seed sower	Teasdale		Scotland		excellent	1	

		rake	Pierce	wheel rake			excellent	1	
		seed drill	Pierce				excellent	1	
		digger	Pierce	potato digger			excellent	1	
		cart	donkey	has tackle and harness			excellent	1	
		swathe turner					excellent	1	
		Sprayer	Pierce	horse sprayer			excellent	1	
		Mowing machine		single horse			excellent	1	
		Mowing machine		double horse with reaper and two seats			excellent	1	
		Mowing machine	Bamklet	single horse mower. Blade run by petrol engine on rubber wheels			excellent	1	
		grappers	beet				excellent	1	cleaned the sides and removed certain plants
		Cake breaker	hand driven - cotton				excellent	1	
		Pulper	several				excellent	1	
		Chopper	hay, gorse and cabbage - several				excellent	1	
		car	horse car with creels				excellent	1	
		Grinders	corn grinders				excellent	2	
		Mangle	clothes				excellent	1	
		Bellows	Smiths				excellent	1	
		Iron Horse	petrol			c.1935	excellent	1	
		hand tools	selection - saws, billhooks				excellent	1	
		Harrow	Pierce				excellent	1	
		digger	Caledonian	potato digger			excellent	1	
		Thistle Topper	Pierce				excellent	1	
		Mowing machine	Banford	2 horse, 2 seat			excellent	1	

		Mowing machine	Royal No. 5				excellent	1	from Island, Ballynacally - belonged to Flynnes.
		Seed sower	with wooden roller				excellent	1	
		Winnowing machine	with hand driver. C.05 tonne/hour	wooden construction			excellent	1	
		Plough	Minogue	double board			excellent	1	from Tulla, Came from Minogue Foundry Whitegate
		Scufflers	Smiths				excellent	2	
		Block maker	local sandpit				excellent	1	
		Rake	Bamford	side delivery			excellent	1	
		Tractor	Massey Harris	one horse drawn, and converted to tractor			excellent	2	
		digger	Listor Blackstone	potato digger			excellent	1	
		Hay kicker					excellent	1	County Limerick
		Loader	Sack loader				excellent	1	
		Milking machine	Lister			1930-45	excellent	1	
		Tractor	McCormick Cub			1940-46	excellent	1	
		Tractor	Farmall A			1938	excellent	1	
		Thrashing machine	Lister Junior engine 3.5 hp.				excellent	1	bought in England.
		Engine	Lister Trolley Engine 4.5 hp				excellent	1	
		Tractor	Fergusson	20 petrol with scoop		1948	excellent	1	
		Equipment Tools	Cobblers, Smiths, soldering iron				excellent	1	
<b>FM 12</b>	<b>Tubber</b>	Tractor	Fergusson	20			excellent	1	
		Plough	Fergusson	2 furrow		1947	excellent	1	older Fergusson in continuous use. Bought in late 1970s early 80s.

									Dublin. Avclers in Dublin used it as a demo. Sold on to Mnaghan and Cavan. Bought at Oldcastle in Meath. Tvos cheaper to buy and government used to give rebate on petrol
		Tractor	Fergusan	tvo?		1940	excellent		
		Tractor	Deutz D15 N1	single cylinder		1959	excellent	1	
		Harrow					excellent	1	
		Mowing machine	Pierce	Victor No 4. 2 horse			excellent	1	
		Plough	David Brown	2 MA 2 furrow			excellent	1	
		harrow	Zig Zag				excellent	2	
		Mowing machine		5 ft finger bar			excellent	1	
		harrow		2 furrow			excellent	1	
		Harrow		spring tine			excellent	1	supplied by Stokesley Motors Ltd
		Bar	International Harvesting Company	5 ft finger bar			excellent	1	
		Tractor	Faramall A				excellent	1	
		Tractor	Ford	Nan 8N		1947	excellent	1	Ford had to cease productin after 1952 because Fergusan went to court. The monks in Ballinasloe used this for mowing grass
		Tractor	Alice chambers	ED40		1963	excellent	1	Used standard motor 4 cylinder. Used to provide 4 cylinders for Fergusan 35 until Perkins bought them out about 1961- came out same time as Fergusan 35 3 cylinder. Alice Chamber model was manufactured to use up old standard motor 4 cylinders
		Tractor	Ford	Nan		1950	excellent	1	with Perkins P3 with row crop wheels 1m. From Killimer, Galway
		Tractor	Fergusan	20	tvo petrol		excellent	1	
		Tractor	John Deere M	Twin cylinder petrol IR4903			excellent	1	
		Tractor	Massey Fergusan	25 4 cylinder			excellent	1	
		Tractor	Fergusan	20 Tvo			excellent	1	

		Car	Ford	7W (10)		1948	excellent	1	bought in England
		Tractor	Fergusson	35 two		1958	excellent	1	Was petrol, but converted to TVO. Bought in Cork.
<b>FM13</b>	<b>Ruan</b>	Pump					excellent	1	
		Pulper	Pierce				excellent	1	
		Plough	Lee	Imp No.2			excellent	1	
		Seed sower	Pierce				excellent	1	
		Rake	Pierce	wheel rake			excellent	1	
		swathe turner	Pierce				excellent	1	
		Plough	Wexford Engineering				excellent	1	
		Rake	Side delivery				excellent	1	
		harrow	tines				excellent	1	
		Block maker					excellent	1	
		Mowing machine	Banford	Royal No.5			excellent	1	
		Hoe	Steerage				excellent	1	
		Seed sower	Pierce	No 4			excellent	1	
		Pump	water hand pumped				excellent	1	from Clarecastle - supplied the village. A job to go down to pump daily and pump enough water to supply village.
		Car	Pony car				excellent	1	
		Pulper	Pierce				excellent	1	
<b>FM14</b>	<b>Milltown Malbay</b>	wooden plough	ass or pony		local		good	1	made by Joe and Jimmy Marrinan in the forties, iron work possibly forged by Sarsy Maguire Milltown
		mill stone	limestone		local		excellent	1	used for grinding cereals
<b>FM15</b>	<b>Tubber</b>	Seed sower	Pierce			1893	excellent	1	bought in Gort for 17 shillings and 6 pence
		hoe - scuffler	Ryan				fair	1	incomplete frame
		pulper	Pierce	Agitator			good	1	
		Roller	Stone roller with frame				excellent	1	
<b>Townland Approach</b>									
<b>FM16</b>		Tumbling Paddy					fair	1	





Item	Manufacture
Plough	Pierce
Plough	Lee
Plough	
Plough	
Plough	Wexford Engineering
Plough	Lee
Plough	Star
Plough	Star
Plough	
Plough	Lee
Plough	Howard
Plough	Geo Seller & Son
Plough	Lee
Plough	Pierce
Plough	Wexford Engineering
Plough	Howard
Plough	Star
Plough	Lee
Plough	
Plough	Pierce
Plough	Star
Plough	Rian and Sons
Plough	Pierce
Plough	
Plough	
Plough	Minogue
Plough	Fergusson
Plough	David Brown
Plough	Lee
Plough	Wexford Engineering

Mowing machine	
Mowing machine	Pierce
Mowing machine	Pierce
Mowing machine	McCormick
Mowing machine	Deering
Mowing machine	Deering
Mowing machine	Pierce
Mowing machine	Pierce
Mowing machine	Pierce
Mowing machine	Pierce
Mowing machine	
Mowing machine	
Mowing machine	Bamblat
Mowing machine	Banford
Mowing machine	Royal No. 5
Mowing machine	Pierce
Mowing machine	
Mowing machine	Banford

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		Plough	Pierce	Psp 5 PBP	Wexford		m	good
		Plough	Lee	Imp No.2	Limerick		metal	fair
FM4	Talbot Coll	Plough		drill plough	Moher		wood	good
		Plough					wood	good
		Plough	Wexford Engineering				metal	good
		Plough	Lee	Imp No.2	Cork			good
		Plough	Star	Potato lifter	Wexford		metal	
		Plough	Star	no14	Wexford			good
		Plough						good
		Plough	Lee		Limerick			good
		Plough	Howard	ridging plough	Bedford	1886		good
		Plough	Geo Seller	3 horse, double	Nuntley/Huntley			good
		Plough	Lee		Limerick			good
		Plough	Pierce	PNP2 15	Wexford			good
		Plough	Wexford E	Start no.2	Wexford			good
		Plough	Howard		Bedford			good
		Plough	Star	No 3 IKCP	Wexford			good
		Plough	Lee	No 1 Imp	Limerick			good
		Plough					wooden	good
		Plough	Pierce		Wexford			good
		Plough	Star	No. 5a. Single	Wexford			good
		Plough	Rian and Sons					good

1	original colours. Came from Thom, Feakle			
1				
1				
1	small plough, green and silver			
1	blue and silver			
1				
1				
1				
1				
1	Agents Vincent and Paul, Dublin			
1				
1				
1				
1				
1				
1				
1				