# 11
# Agricultural Improvement at Dolphinstoun

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# FOREWORD

This series of books was specifically developed to provide an authoritative briefing to all who seek to enjoy the Industrial Heritage Museum at the old Prestongrange Colliery and, more broadly, what were the medieval baronial lands of Prestoungrange and Dolphinstoun. They are complemented by learning guides for educational leaders. All are available on the Internet at www.prestoungrange.org the Baron Courts' website.

They have been sponsored by the Baron Courts of Prestoungrange and Dolphinstoun which my family and I re-established when we were granted access to the feudal baronies in 1998 and 1999. But the credit for the scholarship involved and their timeous appearance is entirely attributable to the skill with which Annette MacTavish and Jane Bonnar of the Industrial Heritage Museum service found the excellent authors involved and managed the series through from conception to benefit in use with educational groups.

The Baron Courts are delighted to be able to work with the Industrial Heritage Museum in this way. We thank the authors one and all for a job well done. It is one more practical contribution to the Museum's role in helping its visitors to lead their lives today and tomorrow with a better understanding of the lives of those who went before us all. For better and for worse, we stand on their shoulders as we view and enjoy our lives today, and as we in turn craft the world of tomorrow for our children. As we are enabled through this series to learn about the first millennium of the barony of Prestoungrange we can clearly see what sacrifices were made by those who worked, and how the fortunes of those who ruled rose and fell. Today's cast of characters may differ, and the specifics of working and ruling have surely changed, but the issues remain the same.

I mentioned above the benefit-in-use of this series. The Baron Courts are adamant that it shall not be 'one more resource' that lies little used on the shelves. A comprehensive programme of onsite activities and feedback reports by users has been designed by Jane Bonnar and is available at our website www.prestoungrange.org – and be sure to note the archaic use of the 'u' in the baronial name.

But we do also confidently expect that this series will continue to arouse the interest of many who are not directly involved in educational or indeed museum services. Those who live locally and previously worked at Prestongrange, or had relatives and ancestors there (as I did in my maternal great-grandfather James Park who worked in the colliery), will surely find the information both fascinating and rewarding to read. It is very much for them also to benefit – and we hope they will. The reception for the first ten titles published in July 2000 certainly seems to show the authors' work is greatly appreciated.

Dr Julian Wills
*Baron of Dolphinstoun*
*November 30th 2001*

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*The powerhouse of the farm until the introduction of tractors in the 1920s. Shown here are five pairs of plough horses and two carthorses with their dedicated handlers in Dolphinstoun farmyard (about 1910)*

The Dolphinstoun Barony lies inland of Prestongrange House and south of Prestonpans, between Birslie and Wallyford. Its farm lands and buildings straddle the old toll road between Musselburgh and Tranent. The barony itself has formed part of the lands or 'policies' attached to Prestoungrange from the seventeenth century.

For many centuries, until the intellectual flowering which came to be known as the 'Age of Enlightenment', farming at Dolphinstoun followed the traditional pattern of agriculture in Scotland. From the second half of the eighteenth century until the later years of the nineteenth, the application of scientific method to both industrial and agricultural practices brought significant innovations to farm management in Scotland. These innovations were destined to change the Scottish landscape beyond recognition. This examination of changes in farming methods in the baronial lands of Dolphinstoun offers an insight into the practical, social and technological innovations which were instrumental in bringing about this change, and considers the evidence for their impact at Dolphinstoun in particular.

In order to appreciate the magnitude of these changes, it is first necessary to provide an overview of the landscape of East Lothian prior to the beginning of the eighteenth century.

## 1. BEFORE 1700

In the opening years of the eighteenth century, nine out of ten people lived by working on the land and farming in Scotland followed a pattern which had been established for generations.[1] In exchange for goods or labour, feudal landowners leased their land to tenant farmers who, in turn, relied on landless labourers for their workforce. Farming was not for profit, but subsistence, ie, the tenants and labourers relied on the produce of the land to support themselves and to provide a share of the produce to the landlord. Each person farmed a number of sections or 'rigs'. These rigs were exchanged from time to time to make sure that everyone had a share of the best and worst rigs.[2] This 'runrig' system, common throughout Scotland at this time, was not, however, a system designed to maximise

productivity. Samuel Smiles of Haddington, writing about the lowlands of Scotland in the early eighteenth Century, states:

> "In the interior there was little to be seen but bleak moor and quaking bogs…each farm consisted of 'out-field,' or unenclosed land, no better than moorland, from which the hardy black cattle could scarcely gather herbage enough in winter to keep them from starving. The 'in-field' was an enclosed patch of ill-cultivated ground, on which oats and 'bear', or barley, were grown; but the principal crop was weeds."[3]

There was little interest in improving crop yields or farm buildings. The feudal system of sharing the land between a group of tenants with limited tenancy rights and consequently little security, did not encourage farmers to work towards increasing the future fertility of their land.

Farmhouses at this time were not the substantial dwellings of later years. Farm labourers generally inhabited 'cot-houses', single-roomed, thatched cottages built of local materials with walls of turf, mud, or stone covered with clay. The homes of the tenant farmers were not much better indeed "the greater part of the farmhouses were very mean and, except in having more apartments, differed very little in point of comfort, from the cottages of their servants"[4]. Typically, these buildings were single storey, with the housing for livestock a continuation of the living space.[5]

The pre-improvement farm comprised an infield, an outfield and common land or moorland. The infield was closest to the farm dwellings and received what little manure the farm produced. It was, therefore, the land which received the benefit of enrichment. Generally three crops – peas or beans, barley and oats – were grown in annual rotation on each section. However, since the land was not allowed to lie uncultivated in any season, crop yields were poor, rarely more than three times the amount sown.[6] The three-crop rotation was sometimes extended to include wheat as a fourth crop. There is evidence that wheat was grown in East Lothian during prehistoric times and even later[7, 8]: "I speak from the authority of record, when I states (sic) that wheat was certainly a regular crop in this county and used as bread in the 12th century."[9] By the 17th century, though, wheat was no longer a cultivated crop in the Highlands and in the Lowlands was rare enough to be something of a marvel: "When the first crop of that grain was

tried on a field near Edinburgh, about the middle of the last century [ie 1750], people flocked to it as a wonder."[10]

The outfield was usually sown with oats. However, only around half of the area was used to grow crops at any one time, the remainder being left unsown for two years, then used as pasture. Since two years was not long enough to produce good pasture for grazing animals, their manure was of poor quality. This in turn affected the quality of the harvest when the land was later sown with oats. On the whole, farm animals were in poor condition as there was a lack of winter fodder and poor grazing meant that very few animals were kept alive from one year to the next. The outlying moor, or common land, provided further pasturage for stock, as well as supplying turves for building work and compost. Most of this land was open land, with no walls or fences and little effort was made to improve the quality of the land by drainage or otherwise.[11]

Traditionally, ploughing was done using a heavy single-sided 'swing plough'[12] pulled by a team of oxen, not horses. These ploughs required substantial effort; at least four oxen and often more to pull it and a team of workers to assist. Furthermore, the plough was made of both wood and iron and required considerable upkeep due to frequent damage.[13] After ploughing, grain was sown by hand or 'broadcast'. This was a slow, labour-intensive process as the sower was required to carry the seed and could therefore use only one hand. Furthermore, it required an expert worker to make sure it was distributed evenly. At harvest, crops were cut using a sickle. A team of harvesters worked their way across the rigs, cutting, binding and stacking the sheaves before they were transported to grain sheds, where the sheaves were 'threshed', to separate the seed from the chaff by beating the heads with a flail.[14] Storage facilities for crops were minimal and often poorly designed and threshing by hand often meant that the grain lay too long on the damp barn floor so that much of the seed was spoiled before threshing was complete.[15]

Before 1700, some attempts were made to increase the fertility of the land by the use of seaweed and lime to enrich acid soil.[16] However, activities such as this were limited by two factors: the difficulty of transporting materials on ill kept roads and a poor understanding of how various substances, particularly animal products, could be a valuable resource in increasing crop yields: "…the uses of manure were as yet so little understood that, if a stream were near, it was usually thrown in and floated away, and in summer it was burnt."[17]

Use of seaweed was limited to land near the shore. Lime, although highly valued as a source of soil enrichment, was only used where the land lay within five miles of the outcrops of carboniferous stone which were quarried for lime.[18]

There is very little evidence remaining of the type of agriculture followed in the barony of Dolphinstoun before the nineteenth century. However, a strong indication that land management at Dolphinstoun was typical of 17th century East Lothian, and of Scotland as a whole, is indicated in maps of the total Prestoungrange Lands in the late nineteenth century which give details of the crops grown there.[19] These maps specify names only for the fields nearest the farmhouse, ie Kinnegar, Angle, Foreshot and the Barnyard. The outlying fields are numbered 1-6 Backfield and the remainder numbered 1–4 Brae. This strongly suggests that in the past, farming had followed the typical Scottish pattern, with an infield (the named fields), and outfield (the Backfields) and the moor or common land (the Braes).

## 2. THE ENLIGHTENMENT

After the Act of Union in 1707, Scotland's Parliament was disbanded and political control of the country was transferred to Westminster until 2000. With this loss of self determination, it could have been expected that Scotland would lose any impetus for development. Surprisingly, instead of a decline, the country at this time experienced a vigorous period of intellectual growth. Perhaps Scotland felt it had to prove that, despite its loss of sovereignty, it had not lost its capacity for innovation.

From the universities of Glasgow and Edinburgh, the philosophical concept of an 'Age of Reason', developed by philosophers such as David Hume, spread the notion of a universe bound by laws which could be described and acted upon. This concept of order is exemplified in the building of Edinburgh's 'New Town', with its classical style and ordered streets and gardens. The new thought formed the core of a scientific method which applied mathematics and physics to the natural world, developing an understanding of the physical implications of these laws. Through the activities of a range of innovators, this was translated into practical developments in both agriculture and industry.

Developing markets in the English colonies offered Scottish merchants great opportunity for profit. There was therefore

great interest in mechanical innovations which could speed up processes of production. The development of steam powered engines (first by Thomas Newcomen and then James Watt) offered a new source of power with a wide range of applications. Inventions designed to improve methods of extracting the raw materials of industry such as coal and iron, increased the rate of production of goods.

The cost of producing such machinery was high. This, together with the fact that these early machines were of massive construction, requiring a great deal of space and constant maintenance, meant that manufacturing was transformed from a home to a factory-based industry. The increasing population in the growing industrial towns demanded a change in agricultural practices. The old style subsistence farming was no longer adequate to meet the needs of this population and gave way to profit-based agriculture supplying the town dwellers.

Another major incentive was a parallel progress in transportation. In the early eighteenth century, such roads as existed were all but impassable at certain times of the year and were filled with potholes which filled with mud in wet weather and were almost impossible to travel across when it was dry.[20]

By the middle of the eighteenth century, a turnpike system was introduced in Scotland. This system required road users to pay a charge for travelling on the roads which was used to fund road maintenance. Barriers were set up on all major routes and travellers were obliged to pay a toll before they were allowed past this barrier. Many place names in the Lothians originate from this eighteenth century innovation: Crewe Toll, Tollcross, Cameron Toll etc. Dolphinstoun was itself the location of such a toll and nineteenth century census returns provide details of both the residents of Dolphinstoun and those at Dolphinstoun Toll.[21] The tollkeeper was generally rigorous in exercising his duties. Peter McNeill, writing in 1905, recounts the story of a group of young men who arrived at Ravensheugh Toll close to Prestongrange Mine but were refused the right to pass through without paying for the pony they had with them: "They made a dash to get through behind a machine, but were caught. 'Not so fast my lads!' said the tollkeeper, 'not so fast!". The young men were obliged to carry the pony along the road to avoid paying the toll.

The turnpike system brought about a dramatic improvement in road conditions. This, together with the expanding railway network in the latter half of the nineteenth century, opened the

way for new markets not only for industrial goods, but also for agricultural produce. Furthermore, improved roads offered Scottish farmers the opportunity to widen the market for their cattle and Dolphinstoun barony was well placed to supply Edinburgh and new markets in England.

Though many individuals focused their attention on industrial innovations in the growing cities, status and income was still very much tied to the ownership of land. As the nobility turned their attention more to England, a new middle class, including lawyers, academics and merchants, bought or married into land ownership and many of them were keen to apply scientific method to agricultural improvement.

## 3. THE AGRICULTURAL REVOLUTION

Awareness of the poor management of agricultural resources in Scotland already existed at the dawn of the eighteenth century: the first printed work on agriculture in Scotland was published in 1697: 'Husbandry Anatomized: or an Enquiry into the Present Manner of Teiling and Manuring the Ground in Scotland'. This publication, by an Edinburgh publisher, James Donaldson, based its discussion on the assumption of a 60 acre holding divided into one third infield and two thirds outfield. This was followed in 1699 by 'The Countrey-Man's Rudiments: or An Advice to the Farmers in East Lothian How to Labour and Improve their Ground', by John Hamilton, second Lord Belhaven. This publication is clear evidence that East Lothian landowners had an active interest in increasing the fertility of their land:

> "…lyme therefore your clay land in the Summer, fallow it at Lambas [Lammas], Harrow it well after the first frost, seedfur [prepare the seed bed] and sow it some time in February and you may expect a good Crop of Oats that same year."

The county's proximity to the city of Edinburgh gave it an ideal location to test both practical and theoretical developments and the natural fertility of the soil encouraged landowners to develop its potential. John Walker, from Beanston, near Haddington, exemplifies the fact that East Lothian landowners and tenants were at the forefront of agricultural development. A tenant of Thomas, 6th Earl of Haddington, he conducted the

first experiments with fallowing, ie leaving the land uncultivated for one or more seasons.[22]

Probably the most significant East Lothian contributors to agricultural developments in the seventeenth and eighteenth centuries were Adam and John Cockburn, of Ormiston. In 1702, as manager (and subsequently owner of the estate), John Cockburn introduced autumn ploughing, winter-sown wheat, field enclosure and long-term leases of 30 years and over for tenants. John Cockburn also established a brewery and a distillery in Ormiston, as well as encouraging the growing of flax and providing opportunities for estate workers to develop the skills necessary for spinning linen yarn.[23]

Market gardening was a major interest. Although as a Member of Parliament he was based in London, Cockburn maintained a close interest in his estates at Ormiston, developing several schemes including fruit growing and tree plantations. Although by 1805, barley had become a much less common crop in East Lothian, it was grown in the neighbourhood of Ormiston for the distillery established by Cockburn, which is now a museum. A distillery still operates near Ormiston today at Glenkindie:

> "The top-grade barley grown in the Lothians is the direct legacy of the Society of Improvers of Knowledge of Agriculture, a revolutionary eighteenth-century body that put Scotland in the forefront of the European farming scene at the time. The society was founded by John Cockburn of the village of Ormiston".[24]

The establishment of The Society of Improvers in the Knowledge of Agriculture was another of Cockburn's major achievements. It provided a forum in the early years of the eighteenth century for the exchange of ideas amongst landowners throughout Scotland.

Unfortunately, despite being innovative, these schemes were costly. John Cockburn bankrupted himself and was ultimately forced to sell the land he had invested so heavily in for over 40 years. It was probably Cockburn, among others, that the great Scottish economist Adam Smith had in mind when he wrote in 1776:

> "He embellishes perhaps four or five hundred acres in the neighbourhood of his house, at ten times the expense which the land is worth after all his improvements; and

> finds that if he was to improve his whole estate in the same manner, and he has little taste for any other, he would be a bankrupt before he had finished the tenth part of it."[25]

The Cockburns are particularly interesting in that they demonstrate the broad interests of these early improvers. The 'agricultural' and 'industrial' revolutions were not, in fact, separate events: the opportunities represented by a science-based approach to production applied to farming practice as well as industry and landowners were equally interested in both. Furthermore, increased crop production, changes in type of tenancies and the change from rig farming to enclosed fields were not, of themselves, sufficient to supply Scotland's growing city-based population. New equipment and machinery were required to speed up production and roads and railways were needed to transport food as well as raw materials and finished products.

Although landowners were heavily involved in innovative developments, the reorganisation of farming methods was in many cases applied in practice by the new breed of tenant farmer. These tenants, with more secure and longer leases, and a growing interest in farming for profit, were conscious of the benefits of enhancing the productivity of the farms they leased. A tenant farmer who shared the landowners interest in agricultural improvement was a valuable asset to the owner:

> "The proportion of land cultivated by proprietors is inconsiderable, a circumstance which may be accounted for, partly by the non-residence of some of them, and chiefly by there being no necessity for gentlemen to execute improvements at their own expense, in order to get them effected."[26]

Increased productivity meant new machinery, new crops and new methods of land management. All the traditional elements of farm activity – ploughing, sowing, harvesting and threshing – were subject to scrutiny and change. By 1780, the Carron Company ironworks was producing a new style plough developed by James Small from Berwickshire.[27] The old Scottish plough was replaced by a lighter plough, requiring less maintenance, which could be pulled by horses instead of oxen and which created a furrow on both sides, thereby reducing the time required and the uneveness of the soil. The Statistical Account of Scotland from the 1790s describes these changes on the farmland around Prestonpans: "Horses alone

are employed in husbandry work. Horse-hoeing was introduced about 24 years ago…Small's plough with two horses is generally used." The Statistical Account further states that by this time almost all of the parish of Prestonpans was enclosed, mainly with walls rather than hedges, which were somewhat unpopular due to the fact that hedges gave shelter to birds which fed on the crops.[28]

Seed was sown in straight lines or 'drills' using a machine known as a 'fiddle' which regulated the amount of seed as it fell to the ground (later replaced by more sophisticated machinery developed in England by Jethro Tull, which buried the seed as it was sown). The scythe gradually replaced the sickle as a harvesting tool until it, in turn, was replaced by mechanical reapers, the first of which was invented in 1828. Threshing the grain to remove the chaff and leave the seed was mechanised by 1786,[29] with mills, initially using water or horse, then steam as the power source to drive the equipment. Steam driven mills were relatively common in East Lothian, due to the availability of coal.[30]

By the beginning of the nineteenth century, East Lothian farms were cultivating a much wider variety of crops than before: wheat, barley, oats, beans, pease, rye, vetch, potatoes, yams, various types of turnip and flax.[31] Cabbage was not a common crop, although it was widely grown in the area around Prestonpans:

> "About Prestonpans, a vast number of cabbage plants are annually raised, which serve the greater part of the county, and probably supply a good deal beyond the limits of it to the west. These plants have so high a character, that scarcely any other can find a market while they are to be got."[32]

Clearly, the eighteenth century thatched mud-walled cottages and peasant life of the farmworkers described by Samuel Smiles[33] was not appropriate to the new breed of tenant farmer. Nor did the lack of facilities for livestock suit the new methods of farming: cattle were driven from all over Scotland to markets in England and storage was required for fodder as well as housing to keep animals in good condition throughout the winter.

In addition to crops and livestock, close attention was given to what the new-style farmstead, suitable for the more prosperous tenant farmer, should comprise. By 1805, the average acreage of a mixed arable farm was 200 acres,[34] significantly

larger than the 60 acre holding assumed by Donaldson in 1697. Lord Belhaven, in 1699, offered advice on the layout of farm buildings,[35] but "nearly 100 years were to pass before it could be called general".[36] Somerville, in 1805, advises that a proper farm steading should comprise separate housing for cows, hogs and poultry, barns, stables, feeding-houses, granaries and buildings to store equipment. Barns intended for grain storage should have raised floors to keep the crop away from the damp ground and the farmhouse itself should include:

> "…two good sitting rooms and from four to six sleeping apartments for the family, besides closets, garret rooms for servants etc.; the kitchen should be behind the house and the dairy, brew-house, store-house, laundry, etc. in the wings."[37]

## 4. PRESTOUNGRANGE LANDS AND BARONS

At the dawn of the age of agricultural improvement, the Prestoungrange Lands were in the hands of the Morison family, who were owners of Prestoungrange and Dolphinstoun from 1624 till 1734. However, the last Morison to own Prestoungrange, William Morison, was given to gambling and in 1734, the property was 'sequestrated' to pay his debts.[38]

In any case, there was little likelihood that East Lothian could have made significant progress in improvement in the first half of the eighteenth century. The Jacobite rebellions of 1715 and 1745 brought war and unrest to the county and were responsible for significant changes in land ownership, when supporters of the Stuart claim to the throne such as the Seton family, significant landowners in East Lothian, were stripped of their lands.[39]

Moreover, although the enclosure of land into large areas farmed by individual tenants had been promoted by legal statutes in the 16th and 17th centuries, these statutes did little, of themselves, to change the type of farming in East Lothian:

> "…it may be truly said, with very few exceptions, that the eighteenth Century was nearly half-run before much attention was bestowed making inclosures for the purpose of promoting agriculture."[40]

William Morison died in 1739 and by 1745, the property had

come into the hands of William Grant, the second son of Francis, Lord Cullen. He purchased the Baronies of Prestoungrange and Dolphinstoun in 1745.[41]

William Grant had four daughters, a circumstance which caused him some concern in terms of the future of the Prestoungrange estate, since the estate would be shared among them on his death. Landowners at this time were interested in expanding their estates, not reducing them. They were also concerned to leave their property to male inheritors rather than female, since the property laws relating to married women at this time would result in the estate passing into the husband's family, not the wife's. An entailed property is one which is left to an individual family member. Sir William's first choice of entail was therefore to add his property to that of the other members of the Grant family, by leaving it to his elder brother. He drew up a deed of entail in 1756 in which he left Prestoungrange to Archibald Grant of Monymusk.[42]

William's elder brother, Grant of Monymusk, is known as the 'father of Scottish agriculture'. As the eldest son of Lord Cullen, he took over the Monymusk Estate in 1716. After setting up permanent residency on the estate in 1734 he began a programme of agricultural improvement designed to pay off his debts and set an example to other lairds. These improvements included land clearance, enclosure, the planting of fodder crops such as turnips, crop rotation and forestation programmes. Although these improvements were met with some degree of mistrust, particularly by his tenants, improved yields and better security eventually quelled such opposition. Archibald Grant died in 1778, fourteen years after his brother William.[43] Archibald Grant's example proved to other landowners that agricultural improvement was a potentially profitable enterprise. It is interesting to speculate what the impact might have been on Dolphinstoun baronial lands if this enthusiastic and highly successful agricultural improver had inherited the estate of Prestoungrange instead of his niece, Janet Grant.

However, when William's daughter Agnes, wife of Sir George Suttie, gave birth to a boy in 1759, William Grant changed the entail so that the estate was left to his eldest daughter Janet, Countess of Hyndford, and then to the first son that any of his daughters might have.[44] This meant that, by means of the entail, the estate would remain intact.

Entailed property had significant implications in terms of the relationship between landowners and their tenant farmers: Robert Somerville, writing in 1805, states:

> "The laws of entail…operate more directly against proprietors, and rather indirectly against farmers, but chiefly against the public…it is impossible that proprietors of estates, which are strictly entailed, can ever enter as heartily into the spirit of improving, as those who are differently circumstanced."[45]

Somerville's argument was that an owner with only a life interest in a property who would not necessarily be able to leave the estate to his own nearest relatives, would not be as willing to make improvements, such as tree plantations, to benefit future generations. Furthermore, any tenancy agreements would be of shorter term, ie only within the life expectancy of the current owner and therefore tenants too would be less interested in improvements which would not necessarily benefit themselves.

It may be largely due to the entail that there is little evidence of experiment and improvement on the Prestoungrange lands, including Dolphinstoun, when the estate was owned by William's eldest daughter Janet, Countess of Hyndford. Janet Grant inherited the estate from her father in 1764 and took over full control after the death of her husband in 1783. Lady Hyndford ran the estate until her own death in 1815. Apart from the building of a number of dykes, there is no evidence of agricultural improvement at Dolphinstoun during this time.[46]

This does not mean that Janet Grant neglected the estate. On the contrary, in 1789 she took the opportunity to extend it when she purchased the farmlands of Myles and Birslie,[47] formerly part of the estate of the Earl of Seton and forfeited after his involvement in the Jacobite uprising of 1715.[48] Excellent maps were drawn. By the time her nephew, Sir James Grant Suttie inherited in 1818, the estate included the farms of Dolphinstoun, Dolphinstoun Mains, St. Clements Wells, Myles and Birslie, as well as the land immediately surrounding Prestongrange House.

A further reason for limited interest in improvement at Prestoungrange might well have been a lack of incentive. While other landowners were working to improve the fertility of their land by means of fertilisers, fallowing and innovations in crops and rotation, the lands around Prestonpans were already noted for their fertility: "The soil…is a light, black, rich loam, of a quality considerable different from the greater part of the county."[49]

The richness of the soil, combined with the ready market in Edinburgh, was no doubt also the reason for so many market

gardens in the neighbourhood of Prestonpans, including one at Dolphinstoun: 'The land appropriated either to sale, gardens or nurseries…is situated chiefly in the parishes of Dunbar, Haddington and Prestonpans.[50]

A market garden existed at Dolphinstoun Farm throughout the nineteenth Century and remained for the most part in the control of the same family. The earliest census records in 1841[51] includes the family of Thomas Gray, who ran the market garden. Thomas Gray at this time was 78 years old, therefore the family had presumably been in residence for a good many years at this date. By 1881, the Gray family were still involved with the market garden.[52] The area of the garden ground can still be easily seen surrounding the dovecot, which itself, is perhaps the only relic of pre-improvement farm life at Dolphinstoun.[53]

These were presumably the circumstances which limited the degree of interest in agricultural improvement at Dolphinstoun. However, when Agnes Grant, daughter of William Grant and niece of Archibald Grant, married Sir George Suttie, she married into a family with as strong an interest in agricultural improvement as her own.

Sir George Suttie was the son of Sir James Suttie of Balgone, near North Berwick. The Suttie family had a long established presence as landowners in East Lothian[54] and Sir George was a significant agricultural innovator, although his influence was at a more local level than that of Archibald Grant.

Sir George is credited with a number of agricultural improvements on his Balgone estate. In his youth, he travelled to Flanders as a soldier and also spent time in the county of Norfolk, in England. In both these places, he observed how farmers were introducing a new method of crop rotation. The English innovator 'Turnip' Townsend, demonstrated how the introduction of turnips into crop rotation not only aided the fertility of the land, but provided ample fodder for over-wintering animals. This 'Norfolk' system was first introduced to Scotland by Cockburn of Ormiston,[55] but it was Sir George who made the first serious attempts at the system in Scotland:

> "soon after the year 1750, he [Sir George] introduced the regular Norfolk system of horse-hoed turnip, barley, clover, wheat, upon his own farm, which he successfully followed until the infirmities of age induced him, in a great measure, to give up agriculture."[56]

This was not Sir George's only innovation: methods of enclosure varied: in some cases, hedges were planted, in others, stone walls. This latter method, however, was relatively costly. Sir George devised 'stone pailing', a method of making thorn hedges fenceable by building a wall, about 2 feet high, immediately behind the hedge to provide a solid foundation. He also pioneered a type of 'outfield culture' whereby the land was left fallow then sown with oats. This crop was followed by clover which was then ploughed into the soil before the next crop was sown, resulting in significant improvements in the quality of the subsequent harvest.[57]

Sir George was the father of Sir James Suttie, who changed his name to Grant-Suttie (becoming Sir James Grant-Suttie of Prestoungrange and Balgone) in 1818, when the Prestoungrange estate passed to him on the death of his aunt, Janet, Countess of Hyndford.

There is no evidence that he left his existing home on the Balgone Estate. However, although his son, Sir George Grant-Suttie, did not inherit the Prestoungrange estate until the death of his father in 1836, he is listed as resident at Prestoungrange House in the census report of 1841[58] and probably lived there before this date. Significant improvements were made to the property in 1830,[59] a circumstance which implies that Sir George Grant-Suttie had a personal interest in the quality of the accommodation. Moreover, the record of a tenancy agreement for Dolphinstoun Farm for the period 1833 to 1852 identifies Sir George as responsible for the Dolphinstoun Barony even before inheriting it in 1836.[60] Sir George Grant-Suttie was therefore responsible for the major changes which took place at Dolphinstoun Farm between the period 1855–1875.

By the nineteenth century, the Grant Sutties were major East Lothian landowners:

> "Sir Walter Hamilton-Dalrymple of Leuchie House, divides much of the property with Sir George Grant Suttie, sixth Bart…of Balgone and Prestoungrange, the Dalrymple estate within the shire comprising 3039 and the Suttie 8788 acres."[61]

and Sir George evidently had a strong interest in the relationship between landlord and farm tenant. In 1871, he published a pamphlet entitled 'On Land Tenure and the Cultivation of the Soil'.[62] Although this publication is essentially a political argument against the theories of John Stuart Mill, one of the

nineteenth Century's most famous political theorists, it does offer an insight into the relationship between landlord and tenant on the Prestoungrange lands in the second half of the nineteenth Century.

Mill was a prolific writer, who advocated the concept of 'collective agriculture' and was a founder member of the Society for the Reform of Land Tenure. His 'Principles of Political Economy', published in 1848[63] was intended to provide a theory of economics which would replace that of eighteenth century economist Adam Smith, who maintained that: "Those who live by rent, those who live by wages and those who live by profit…are the three, great, original and constituent orders of every civilised society."[64]

Sir George's pamphlet (reprinted as Appendix 3) forcibly attacks Mill's arguments for reform on a number of issues, firstly, that Mill's ideas are valueless because a moral standpoint without belief in God and the established order is impossible: "It is the general opinion that no sane man can be an Atheist". Secondly, using France as an example of how increasingly divided plots of land impoverishes the community and leaves no opportunity for agricultural improvement, Sir George maintains that: "…peasant-proprietorship and division of the land are alike incompatible with improved cultivation or increased production." Thirdly, Sir George rejects Mill's arguments on the basis that his opinions are based on theory alone, not derived from any real experience of agriculture and that he had attempted to apply these theories to a country, ie Scotland, where the situation is quite different from that in the remainder of Britain and in Europe: in Scotland, argues Sir George, landowners encourage: "progressive agriculture…, expending their capital in permanent improvements and by encouraging and granting long leases to a superior class of tenant-farmers."[65]

Clearly, Sir George Grant Suttie felt strongly that a landlord who maintained an active interest in the land and property occupied by his tenant farmers was not only entitled to make a profit from those lands, but would also be contributing to the advancement of agricultural methods. Economic advantages for landlords were justified by their own investments on their estates, a point of view which evidence clearly indicates was put into practice on the Prestoungrange and Dolphinstoun lands.

# 5. DOLPHINSTOUN FARM

At Dolphinstoun Farm, little remains of any buildings from the eighteenth century or earlier, except for the 'beehive' dovecot typical of those built before the late 1800s.[66] The dovecote is close to a raised bank which is all that remains of a building already in ruins by the beginning of the nineteenth century, its origins long forgotten:

> "The estate of Prestongrange, including the lands of Dolphinston, Morisonshaven &c., long belonged to Lady Hyndford. It is now the property of Sir George Suttie, Bart, of Balgone…In the hamlet of Dolphinston a ruin of broken walls and gables is to be seen, which is supposed to have been a monastic establishment in its day."[67]

An alternative history is offered by P. McNeil[68] who suggests that Dolphinstoun may have originally been a fortified dwelling, or 'fortalice', and its position, midway between Fa'side and the lands of Preston, meant that the inhabitants frequently changed sides in local disagreements. However, there is no positive information for who originally settled at Dolphinstoun, nor how the farm got its name. Indeed records of baronial lands show that it was previously known as Colthrople.

A major source of information on agricultural practices at Dolphinstoun during the first half of the nineteenth century is the tenancy agreement for Dolphinstoun Farm between James Mitchell and Sir George Grant Suttie mentioned earlier.[69] This agreement demonstrates a radical change from the previous 'laissez faire' approach on the part of landowners during the early eighteenth century and before. By this time, feudal owners required legal guarantees that tenants would maintain the farmland efficiently and would return it to the owner in a fertile condition on completion of the lease. Instead of short-term joint tenancies, often with no written agreement, this formal document refers to a leasehold agreement between the landlord and a single tenant of 19 years duration, from 1833 to 1852. Even with the entail, it seems, landlords could offer far more security to their tenants than before.

The agreement details the 'Proposed mode of culture of the farm at Dolphinston' and is very specific in terms of the

tenant's obligations, especially in the last three years of the lease. It specifies what proportion of the land should be returned on completion of the lease as fallow land and grass, the order of crop rotation and the exact quantities of fertiliser to be applied to the land between crops. Evidently, the innovative ideas of the previous century regarding crops, fallowing and pasture land are now accepted practice at Dolphinstoun Farm.

Of major significance is the contrast between the earlier ignorance of the use of fertilisers and the recognition of its importance and its value in this document. It is perhaps entertaining to imagine the scene when: "Dung shall be brought to the farm of equal value to what was removed…and the Dung so brought to the farm shall be put in heaps and shown to the Landlord or some person authorised by him."[70] But this is a clear indication of the value placed on manure as a fertiliser by this date and demonstrates the attention the landowner paid to the good management of his lands even when they were farmed by others.

Similarly, the condition that the grass seed to be sown in the last three years should be paid for by the tenant, but selected by the landlord and that it should be "grass seeds of the best description"[71] makes it clear that this agreement between landlord and tenant is intended to ensure that the land is returned to the landlord on completion of the lease in the best possible condition.

It has already been mentioned that landowners had a dual interest in the agricultural and industrial improvements of the eighteenth and nineteenth centuries. The notion of a rural economy based on a combination of agriculture and industry exemplified by the activities of John Cockburn was typical of many East Lothian landowners. Not only did their lands provide food for the increasing population which inhabited the growing cities, their lands were also the source of the coal, iron and clay which provided the raw materials of developing industries.

By 1850, modern mining was well established at Prestongrange Colliery[72] on lands leased to tenants who brought with them the expertise and finance to develop the mine. At the same time, investment in modernisation was taking place on the farm lands which comprised the Prestoungrange Policies. Unlike John Cockburn, Sir George did not bankrupt himself by his efforts: he concentrated instead on provision of suitable accommodation for a prosperous tenant farmer, housing for workers and buildings to house livestock, especially cattle.

In 1857, a programme of improvement began at Dolphinstoun Farm with the erection of two new cottages, alterations and repairs to the Farmhouse and drainage works on the farm itself.[73] Although the drainage works may well have been carried out in response to the poor summers of 1856 and 1857, when East Lothian harvests were badly affected by rain,[74] it cannot be assumed that the building of these drains was part of a process of agricultural improvement. Mining had been taking place in the area surrounding Prestonpans for over 500 years and beneath the surface there was a network of old mine workings. Water flowing through these workings created drainage problems for any new mineworkings at sea level. Prestoungrange Colliery was on the shore and was therefore particularly susceptible to flooding; these drainage works may have been undertaken to prevent flooding at the mine rather than for agricultural reasons. Certainly, Sir George Grant Suttie was no stranger to the pitfalls of draining boggy land. On his Balgone estate there was "a little loch…formed… after vain and expensive attempts had been made to drain a morass."[75] For whatever reason, drainage work was carried out between May and October 1857, using tiles supplied by Sir George's own brick and tileworks on the Prestoungrange estate.

More direct evidence for Sir George's commitment to the permanent improvements is available from estate records of the period 1857–1864. Between 1857 and 1861, the farmhouse at Dolphinstoun was extensively renovated and a number of new cottages built, in keeping with the new style of single tenant farmer living separately from other farm workers, who no longer had a share in the tenancy agreement.[76]

Between 1862 and 1864, building work at Dolphinstoun concentrated on provision for livestock and farm equipment.[77] Whereas earlier cattle cribs had been unroofed and open to the front, using the walls of existing buildings for support, the cattle courts erected at Dolphinstoun were more substantial structures, roofed to provide good shelter in the winter along with roofed feeding cribs for the animals.

> "The special features that distinguish East Lothian farms are: cart and granary sheds, horse mills, tall chimneys, doocots and cattle-courts…Cattle were traditionally kept in cattle-courts during the winter; hence the large size and often symmetrical design of steadings. Four to six courts could house as many as a hundred cattle fed on turnips and other crops stored in a central shed."[78]

With the exception of the chimney, this offers a good picture of the layout of Dolphinstoun Farm in the second half of the nineteenth century. Livestock farming no longer consisted of limited numbers of ill-fed cattle grazing on land arranged according to the old infield/outfield system and left to fend for themselves through the winter. These new arrangements, together with the new style of crop rotation which provided turnips and hay as winter fodder, meant that large numbers of animals could be housed and fed on the farm.

In terms of those living on the farm, the period between 1841, the date of the first census, and 1881 was one of great change. Dolphinstoun in 1841 was a small community, comprising mainly agricultural labourers. By 1861, the class of tenant and their style of living has changed: there is a housekeeper registered, a Land and a Farm steward, a forester and two young men whose occupation is given as clerks. Although the number of agricultural labourers had fallen, by 1881, there had been an increase in their number, presumably due to the erection of new cottages. However, the building of cattle courts meant that the type of work had changed somewhat, with more emphasis on livestock. By this time, due to increased mechanisation of farm processes, the number of workers required to work the crops had diminished dramatically: according to the Royal Commission on Labour in 1893 "in 1820…to cultivate, reap and deliver five different crops…would have taken 53 days, while in 1892 the same operations would be performed by those using modern methods in 35 days".[79]

Other changes to the lives lived by agricultural workers can be inferred from census information on place of birth. In 1861, Thomas Todd, born in Peebleshire, married an East Lothian woman and all their children, aged between sixteen and five, were born in the same place, ie Tranent.[80] However, in 1881, George Purves, agricultural labourer, has four children registered as born in three different locations in East Lothian.[81] Clearly, by this date, many farm workers were not long term residents of one area, but travelled around East Lothian depending on where work was available. Except for the Gray family, who ran the market garden and whose name appears on the census records throughout this period, no family names remain consistent between 1841 and 1881, and only three appear on more than one census form.

Those living in the farm cottages were also no longer necessarily employed on the farm itself. The re-opening of


*The agricultural output of all the baronial lands including Dolphinstoun in the late 19th Century (I)*

mine workings on Prestoungrange lands is presumably the reason for the presence of colliery employees – a gatekeeper, an 'oversman' and an engineman.[82] This reflects a national trend in the later decades of the nineteenth century. In 1851, 30% of the adult male population of Scotland was employed in agriculture. By 1901, many had left the land to find work in mines, factories and industry and only 14% were agricultural workers.[83] The census also lists a grocer, a mason and a blacksmith, who like the colliery employees, had valued skills to offer and were therefore likely to expect more comfortable accommodation than that enjoyed by farm labourers in the past:

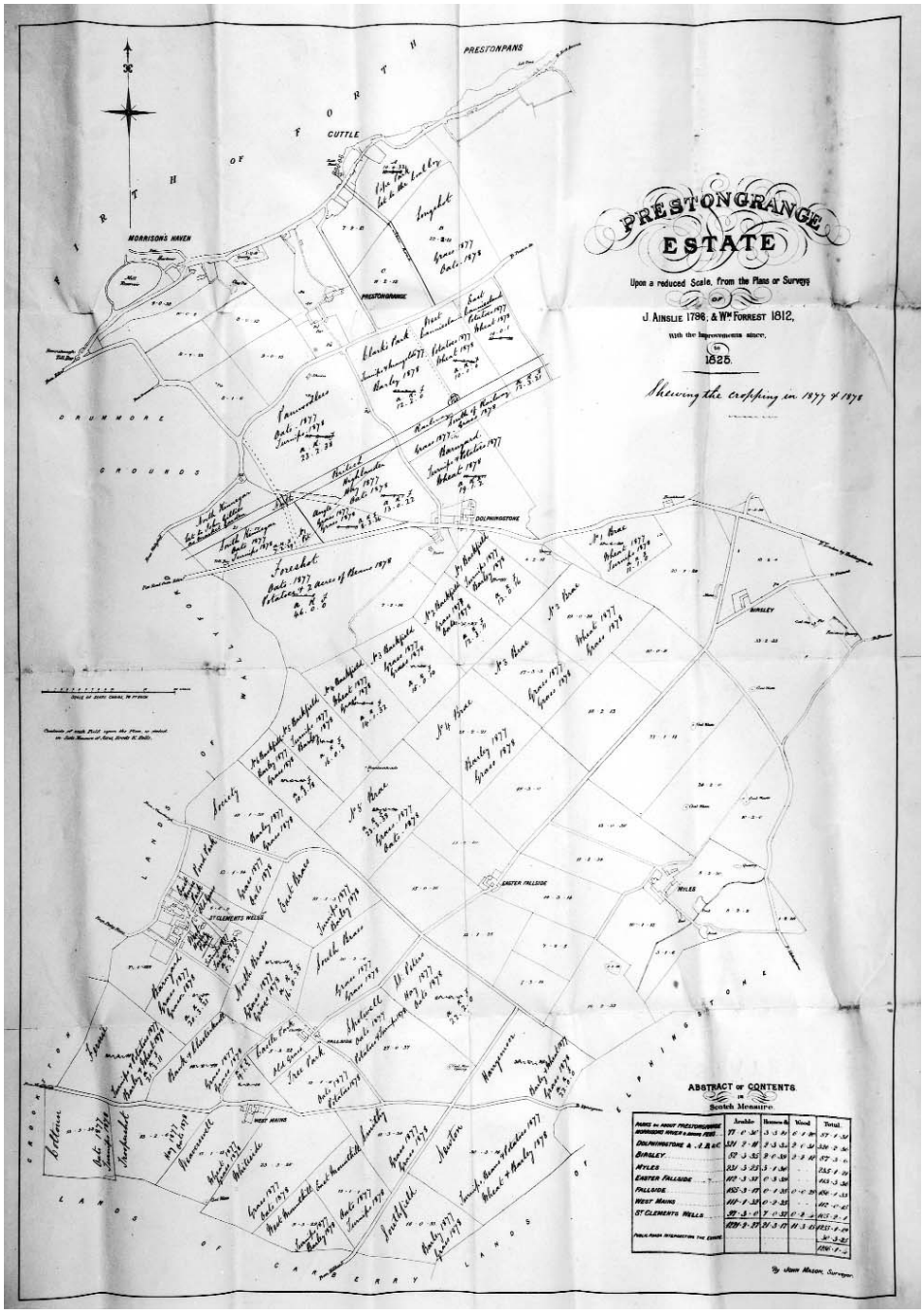
> "Instead of being four square walls covered with thatch, having a small hole twelve or fifteen inches square, with a fixed piece of glass, for a window…on many estates they had been rebuilt in a commodious and comfortable manner."[84]

Evidence also exists of a closer relationship between landowner and farm: in 1878, Dolphinstoun Farm had no tenant.[85] This, together with the listing of a land and a farm steward in the census return for 1861 and a farm grieve in 1881,[86] suggests that Sir George Grant Suttie, or his employees at this time had a more direct involvement with the running of the farm.

By 1868, maps of Dolphinstoun with details of fields and the crops to be grown there[87] reveal that nothing remains of the old runrig system except the names of the fields. The cropping for the period 1868–1878[88] show that the land is no longer divided according to the old 'infield/outfield' system and the traditional three-crop rotation of oats, pease and beans has been replaced with a wider range of crops in all fields: oats, turnip, barley, potatoes, wheat and grass.

Much of the land is given over to pasture which, together with the turnip crop, would support increased numbers of livestock in both summer and winter. The estate inventory of 1878,[89] lists cattle, sheep and horses. No oxen are part of the inventory, their greater strength no longer required to pull the new-style, lighter, double furrow plough, which also forms part of the inventory.

The inventory also lists the tools and equipment used on the farm. In addition to a variety of ploughs and harrows, there are reaping machines, weighing machines and a potato washer,




*The cropping of all the baronial lands of Prestoungrange Estate at the end of the 19th Century (II)*

these last two evidence of produce farmed for sale. These, and the presence of a threshing mill and engine, clearly demonstrate that farming at Dolphinston had, by this period, become highly mechanised.

Potatoes are no longer restricted to the farm gardens – they are now a major crop, grown in sufficient quantities not only for local consumption, but for the markets in Edinburgh and beyond.[90] Wheat is now widely grown and the small quantity of beans is further evidence that the old style of subsistence farming, with crops grown to feed the farmworkers and any surplus used as payment for tenancies to the landowner, is no longer a significant element. The inclusion of 'tares' – corn weed grown as fodder – shows that even the weeds described by Samuel Smiles in his description of early eighteenth century Scottish farm practices[91] now have a clear function in the good management of the farm. Animal fertiliser, listed as 'straw dung' in the 1878 inventory, is now considered valuable enough to be listed as part of the farm's resources.

## 6. THE ALTERED LANDSCAPE

By the final years of the nineteenth century and the beginning of the twentieth, East Lothian farmers had established a world wide reputation:

> "The farmers of the Lothians have for long been celebrated for their skill and progressiveness…and they are recognised as the foremost in Scotland, which means the world, for a readiness to introduce new methods, and to utilise the discoveries of experimental science."[92]

The farming community by this date displays a vigorous interest in all aspects of agricultural life: the first Scottish Women's Rural Institute, intended to provide an female equivalent of the Farmer's Institute for men, was established at Longniddry in 1917.

The agricultural lands of Prestoungrange and Dolphinstoun were at the forefront of this dynamic farming community:

> "June 16th 1880 was a real 'red-letter day' in a very wide surrounding district. The Agricultural Show on that day was being held for the first time within the Prestoungrange policies, and work in every shape and form, and all around, was brought to a stand for that day."[93]

Early experiments with enriching land with fertilisers had become standard and widespread; in 1903, guano was being imported to North Berwick as part of the programme of intensive crop feeding.[94] McNeil, writing in 1905, quotes 'The Scottish Farmer' on the quality of produce in the farmland near Prestonpans:

> "…it is now an accepted fact that the quantities of leek and cabbage plants grown in the Musselburgh, Levenhall, Pinkie, and Prestonpans districts, are considerable greater than the combined outputs of all the farmers and gardeners in all the other parts of Scotland."[95]

Although much of this was the produce of the market gardens, it is evidence of the quality of the area which includes Dolphinstoun Farm where, according to McNeil, the tenant farmer at Dolphinstoun in 1902, Mr. Shields, is "one of the most enlightened and industrious agriculturalists in East Lothian".[96]

However, landowners and tenant farmers were not driven solely by the desire to maintain the county's reputation for innovation and good management. The new-style farms of the nineteenth and twentieth centuries were designed to generate as much profit from the soil as possible. From the 1870s onwards, East Lothian farms were in competition with foreign imports which reduced the sale price of crops and livestock.[97] The machinery they depended on to maximise their yields was expensive to maintain and there was a constant drain of agricultural workers leaving the country to find work in the industrialised cities.[98] The driving force of economic imperatives required that farmland should be developed to its full potential.

Nevertheless, the Third Statistical Account of the Parish of Prestonpans in 1953 makes it clear that in the second half of the twentieth century, a willingness to experiment and innovate was still a significant element in local agriculture and could still prove financially worthwhile

> "…recent developments carried out by the Lowe Brothers at Burnside, East Loan, have produced a system of multiple cropping by forcing hitherto unknown in this country…vegetables of the finest quality are grown in regular succession and enormous annual crop production is realised from a comparatively small area."[99]

Dolphinstoun too, maintained its emphasis on maximising crop yields. The Third Statistical Account describes the farm at Dolphinstoun as an "intensively cultivated" farm, where "vegetables and early potatoes are grown in rotation with cereals and other farm crops."

In common with many other areas of East Lothian, farming still goes on today at Dolphinstoun. Little remains, though, of the: "funny-looking low-tiled houses… pleasant to behold always, with their whitewashed fronts, and flower pots each side the door, and so happy and clean-looking were the people, it was ever a pleasure to behold alike the village and the villagers". [100]

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# APPENDIX 3

ON

## LAND TENURE

AND

## THE CULTIVATION OF THE SOIL

BY

SIR GEORGE GRANT SUTTIE
BARONET

WILLIAM BLACKWOOD AND SONS
45 GEORGE STREET, EDINBURGH; AND
37 PATERNOSTER ROW, LONDON
MDCCCLXXI

# LAND TENURE

AND THE

# CULTIVATION OF THE SOIL

Land Tenure and the Cultivation of the Soil are at this moment attracting the notice of the most civilised nations in Europe.

The Government of France has instituted inquiries of the most searching and minute description in regard to them.

The system of land tenure and the cultivation of the soil naturally act and react on each other; they have, and must continue to have, a direct and powerful influence on the political organisation of all civilised nations.

The tenure of land and the agricultural organisation of Britain are altogether different from that of France; and on that difference it seems evident that much of the difference in the political organisation of the two countries depends.

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The advocates of monarchy and of republican institutions naturally take widely different views of this subject, and in the discussion of agricultural questions, political opinions often enter in a way to obscure the truth. In discussing these questions, it therefore seems important to separate, as far as possible, the material from the political question.

The material question is—How to raise the greatest amount of produce from the soil of a country for the use of its inhabitants with the least expenditure of their labour?

This seems a fair statement of the material question; and this or some definition of a similar nature ought never to be lost sight of in discussing these questions. It is therefore satisfactory to find, from his Edinburgh speech, that Mr Bright retains perfect freedom to judge and decide on the system of land tenure and cultivation of the soil best adapted to the position of Great Britain and Ireland; and that he is equally adverse to laws which compel the minute division of land, as to laws which tend to its too great accumulation. This is certainly a statesman-like view of these most important and difficult questions—difficult especially as regards Ireland – and contrasts most favourably with the extreme views industriously promulgated by certain political philosophers, who have acquired a name and influence by their metaphysical writings. In Mr S. Mill's estimation, the possession, tenure, and

cultivation of land are all defective in this country when compared with others. The land system in this country differs from every other country in Europe, and differs for the worse. As regards landlords, Mr Mill says the community has too much at stake in the proper cultivation of land, and in the conditions annexed to the occupancy of it, to leave these things to the discretion of a class of persons called landlords, who have shown themselves unfit for the trust.

As regards the cultivation of the soil, Mr Mill informs the farmers of England, that from Denmark or the Sound to Calais on one side, and from the Firth of Forth to Dover on the other, there is no blinking the fact that better crops are grown on land of equal quality over the whole extent when compared with England. On the best-farmed parish in Scotland or England, more land is wasted in borders of fields and in roads unnecessarily wide because they are bad, and bad because they are unnecessarily wide, than would maintain the poor of the parish.

Speaking of the labouring population, he says: "If, therefore, the choice were to be made between Communism with all its chances , and the present state of society with all its sufferings, and if this or Communism were the alternative, all the difficulties, great or small, of Communism, would be but as dust in the balance." He then proceeds: "When I speak either in

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this place or elsewhere of the labouring classes, or of labourers as a class, I use these phrases in compliance with custom, and as descriptive of an existing, but by no means a permanent or necessary, state of social relations. So long, however, as the great social evil exists of a non-labouring class, labourers also constitute a class, and may be spoken of, though only provisionally, in that character." These opinions are taken from a work by Mr Mill, intended to replace or supersede 'The Wealth of Nations,' which work, 'The Wealth of Nations,' he states in his preface, is in all parts imperfect, and in many obsolete—that is, out of fashion, as Mr Mill now seems to be with the electors of Westminster.

These opinions appear to me so singular as to approach insanity. It is the general opinion that no sane man can be an Atheist. In 'Mill on Comte' the following passage occurs, page 133: "Though conscious of being in an extremely small minority, *we* venture to think that a religion may exist without belief in a God, and that religion without a God may be even to Christians an instructive and profitable subject of contemplation." To ordinary mortals, a religion without a God is about as intelligible a proposition as a metaphysician without a mind.

There is a prevailing idea amongst a class of metaphysical philosophers that peasant-proprietors and minute division of the soil afford a certain remedy for

all the ills that afflict humanity. The perusal of the 'Enquête Agricole,' a work published by the authority of the French Government, must disabuse the mind of Mr Mill—that is, if he has a mind to be disabused of all such Utopian dreams. In France, things are exactly the reverse of what they are in England. Here, in general, a landlord has a number of tenants; there a tenant has, in general, a number of landlords. This will not surprise, when it is considered that in France there are above seven millions of landlords, and of that number only sixty thousand have more than £12 of rental.

This inquiry by the French Government is well worthy of attention, from the immense amount of information it affords as to the existing social condition of France. One hundred and sixty-one questions are put by the Government. These questions have been sent to every commune and parish in France; and answers, both written and verbal, have been returned to the different Prefects, who have drawn up long and able reports upon them. I will proceed to make a few remarks on some of the most important touched upon. The first in importance is the continued subdivision of the land. This is evidently giving the Government and the French nation great anxiety. From the evidence there appears to be a total absence of capital amongst the owners of land; and that, as a rule, no capital is applied by the landlord to what in this

country would be termed permanent improvements. All classes, without exception, deplore the effects of the law which compels the equal division of property amongst the children. The strongest feeling exists amongst the great mass of the small landed proprietors to preserve their properties from destruction after their death, and prevent their estates being cut up into the numerous small portions which, by the present law, is imperative. This feeling is so strong as to give rise to the most singular and unlooked-for results. The mass of the small landowners, being unable to leave their land to one child, seem decided to have only one child to leave it to: from the evidence, this fact is beyond a doubt. A fact such as this, no less strange than true, deserves to be made the subject of philosophical inquiry; and as Mr Mill has taken the fair sex under his peculiar protection, it is a subject he may now devote his leisure to investigate with advantage; and he may be able to ascertain whether the phenomena arise from physical or metaphysical causes. From the evidence, it is clear that all the educated classes in France desire some change in this law, to mitigate the evils now attending it; but no one ventures to propose its abolition, or even any change in the principle of the law of equal division of the father's property amongst his children. One change is very generally pointed out as possible—that is, to allow the father to leave his land to one

child, provided he can leave an equal amount of movable property to the others.

The families of from seven to eight millions of landowners—that is, nearly the whole population—have now a direct interest in maintaining the existing law. Any alteration in it would, therefore, seem impossible.

Fortunately, in this country, no such barrier as yet exists to the alteration of any law which the matured opinion of the country decides to be at variance with the welfare of the community.

To all who have the slightest knowledge either of British or Foreign agriculture, it would be a waste of time to show that peasant-proprietorship and division of the land are alike incompatible with improved cultivation or increased production.

The contrary opinion is, however, maintained by a class of writers, and of this class is Mr Mill, who has risen to distinction by his work on political economy. In it he asserts that the statesman and landlords of England show an insular ignorance of every system of agriculture except their own. Mr Mill's ideas of agriculture are certainly INNATE, since they are evidently *not* derived from experience. He states that as land was not made by man, he who appropriates more of it than *enough*, usurps the rights of others. The question of *enough* is one to be solved only by a deep thinker such as Mr Mill. Not being either a Communist or a Positivist, I may fail in the attempt. But to begin with a

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dwelling-house—a cottage, with two good rooms and a kitchen, is by many considered enough for a labourer with a family of children: a lofty library, more than equal to the whole cottage, with dining and drawing room of at least equal dimensions, besides other apartments, may not be considered *enough* by Mr Mill. Mr Bright, who in his Edinburgh speech indulges in some good-humoured satire at the expense of Scotch lairds, intended apparently to amuse, certainly not to instruct his audience, proceeds, nevertheless, to give the said lairds credit for the good sense they have shown by encouraging progressive agriculture in Scotland. He evidently does not, like Mr Mill in his 'Political Economy', take for granted that there is only one system of agriculture in existence from the Firth of Forth to Dover; on the contrary, he seems aware that the Scotch agricultural system differs in many essential respects from that of the midland and southern districts of England; and he credits the Scotch lairds with expending their capital in permanent improvements, and by encouraging and granting long leases to a superior class of tenant-farmers. And there can be no doubt that to these two causes must in a great measure be attributed any superiority possessed by Scotch agriculture. There is, however, a third cause equally influential; that is, the capital advanced by landlords to tenants by deferred rents. In the best-cultivated districts of Scotland, a tenant entering on a

farm under a nineteen or twenty-one year lease, sows, reaps, and disposes of the first crop before being called on to pay a sixpence of rent. The first half-year's rent is not due till he has been in possession of the houses and the greater proportion of the farm one year and nine months: in point of fact, he receives on loan from his landlord, for the whole term of his lease, one year and a half's rent without interest. If for such conduct the Scotch lairds deserve the pity of Mr Bright, what must be his feelings for English squires and Irish landlords?

The too great accumulation either of land or of money in the hands of individuals is unquestionably an evil, and laws which tend to prevent the natural division and dispersion of property, whether real or movable, ought to be abolished.

Since writing the above, the Land Tenure Association has been inaugurated under the patronage of Mr J. S. Mill. In a pamphlet explanatory of the objects of this Association, he begins by remarking that Mr Disraeli's Reform Bill of 1867 will shortly educate the landlords of the Kingdom into the belief that private property in land is a mistake, and that the land ought to be resumed and managed by the State, compensation being made to the proprietors. Judging from the past, Mr Disraeli's ability as a schoolmaster is such that, aided by Mr Mill, it is impossible to say what he may not accomplish; and he may thus finish the

education of the landed proprietors by putting an end to their existence as such.

Mr Mill does not appear to have made up his mind as to the best method of cultivating the soil of the United Kingdom; he is in doubt whether it should be by co-operative farms on a large scale, or by peasant-proprietors on a small one. Co-operative farming, having as yet no existence except in the imagination of Mr Mill, need not at present be considered: but it is far otherwise with his favourite system of farming by peasant-proprietors. On this question a vast amount of authentic information exists, which, strange to say, Mr Mill seems determined to ignore. The 'Enquête Agricole' is a work never alluded to either by Mr Mill or any other writer, such as Mr Fawcett, who takes somewhat similar views of these subjects. This is explained by the facts established in the 'Enquête' being entirely at variance with their views. The position of the peasant-proprietors of France is shown to be miserable, and daily becoming more so in many districts. Cultivation will be all but impossible, and the position of the Metayer farmer is, if possible, worse.

The first article in Mr Mill's programme is to remove all fiscal and legal impediments to the transfer of land. The 'Enquête Agricole' proves that this is the great and universal grievance of the French peasant-proprietor; and the fact that in one commune of 2000

acres, divided into 5000 separate parcels, each parcel paying a tax to Government on every transfer, shows a state of affairs requiring no farther comment. The second article in the programme is the abolition of primogeniture. No such law has existed in France for generations; it is for Mr Mill to explain to his Association and to the public the *moral* consequences attributed by numerous witnesses to the absence of this law.

As to the boasted efficiency of peasant cultivation in adding to produce, the fact stated in the Agricultural Statistics just published is an ample and sufficient answer. The produce of wheat in France is 17 bushels per acre; in Britain it is 28.

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*Lady Susan Grant Suttie (back row 2nd from left) with some of the wives and children of staff at Dolphinstoun Farm, part of the family's estate. Lady Susan became well known in the Prestonpans area for her interest in the local community (about 1900)*

*Men, women and children who comprised most of the outdoor and some indoor staff at Dolphinstoun Farm. Because of the advent of machines and horse drawn cultivators the number of workers, although still substantial, was much reduced from just a few years before (about 1910).*

*Every farm in the 1920s still kept a number of heavy horses, mainly for ploughing but also to draw cultivators, or as here pulling a load of hay. Thomas Hope driving the cart was a long serving member of the workforce at Dolphinstoun Farm. Mainly employed as a ploughman he, like the horse, had to be versatile.*


*Thomas Hope was a senior ploughman at Dolphinstoun Farm and worked there for 32 years. This certificate was awarded to acknowledge his long service at a time when it was more common for farm staff to move regularly, sometimes annually.*