

## Chapter 2

# The Agricultural Revolution and Beyond

Edward Baines

The creation of Rutland Water coincided with, and locally accelerated, changes which were taking place in agriculture throughout the country. The age of small mixed farms (arable and livestock) worked by individual farmers, was over. In their place came large intensive and specialized units, often more reliant on politics than on good husbandry for their profits. At the time Rutland Water came into existence there was considerable and understandable regret for the loss of a traditional way of life in the area. In fact the parishes most affected had seen several radical changes in the previous 200 years. The difference in 1974 was the scale of the change, its rapidity, and in particular its visual impact. A patchwork of small fields stitched together by hedges and dotted with stone houses linked by winding lanes was transformed into a lake.

*Looking from  
Hambleton towards  
Normanton. The  
stubble remains in  
the fields following  
the last harvest in  
this part of the  
Gwash valley  
(Richard Adams)*



The landscape in 1800 had already been altered: quickthorn hedges enclosed the fields and Normanton Park had ‘about two thousand large timber trees, principally oak, ash, beech and limes’ (Laird 1818, 122). The parishes which surround and overlap with Rutland Water had been enclosed in the 1760s and 1770s and Normanton Park itself extended to about 400 acres at the same date. In *Beauties of England* (1818), Laird commented that he did not approve of cottagers and farmers being forcibly removed so that a great man (Heathcote of Normanton) could enjoy his ‘lawns’. No doubt he would have been equally sympathetic to their successors in the 1970s who made way for sailors and fishermen.

In the immediate area around what was to become Rutland Water about three quarters of the land was grass, except for Empingham parish where the lighter soils favoured arable crops. There were 79 farmhouses in this area in 1808; the farms themselves varied in size from ten acres to well over a hundred. Fourteen thousand sheep, over 800 cattle and between 300 and 400 horses grazed the fields. At Normanton the cows in 1808 were ‘very large’ and 50 turkeys were reared each year (Parkinson 1808, 26-30 & 115-41).

*A prize-winning Leicester ram from an engraving published in 1871 by Rogerson and Tuxford (Edward Baines)*



*Below: A flock of sheep in a field near Beehive Cottage, Nether Hambleton, in 1973. Lax Hill can be seen beyond. This area is now under Rutland Water (Jim Eaton)*



*Above: Sheep shearing in 1910, before the introduction of powered shears (Hart)*



*Right: Sheep have been reared in the Gwash valley for both wool and meat for over 500 years, and the tradition continues. This flock of sheep is grazing on the south shore of Hambleton peninsula in 2006 (RO)*



*Peasgood's Farm, Empingham, from the Normanton Estate Sale Catalogue of 1924. It had 146 acres of pasture and 266 acres of arable land. This was one of eighteen tenanted mixed farms included in the sale. They varied in size from 50 to 500 acres (Edward Baines)*



*Farms at Middle Hambleton before the flood. Beech Farm (left), a smallholding, was lost. Old Hall Farm (right) lost its farm buildings and most of its land, but Old Hall itself just survived. All the land in the foreground of this picture is now below Rutland Water (Richard Adams)*



The landowners usually let their farms, but Richard Parkinson, who reported on the agriculture of Rutland in 1808, noted that an unusually large number of 'gentlemen farmers' were actively involved in day-to-day farming. Two hundred years ago the Gwash valley would have looked like every child's picture of the countryside. Green fields contained white-fleeced sheep and lambs, brown cows and placid carthorses, while in every farmyard poultry, 'kept for domestic use' as Parkinson noted, scratched in the dust.

This idyllic state of affairs continued for the next 150 years. Farming during that time went through several cycles of economic peaks and troughs, particularly during the great agricultural depression of the late nineteenth century, but the landscape remained largely unaltered until the 1940s.



## The Farming Landscape in the Mid-Gwash Valley



*Left: Looking towards Nether, Middle and Upper Hambleton from Lax Hill in 1970 (Jim Eaton)*



*Above: Looking east along the Gwash valley towards Normanton in 1970 (Jim Eaton)*



*Above: Looking north towards Barnsdale from Upper Hambleton in 1968 (Joan Wild)*



*Left: Old meadow at Egleton in 1971 (Jim Eaton)*

## Willingham Fowler

Willingham Fowler initially farmed at Manton before becoming a tenant of the Earl of Gainsborough at Hall Farm, Exton. He left Manton in 1873 following the sale at auction by Messrs Royce of his beasts, horses, implements, carriages, and grass, hay and straw keeping (rented land). At Hall Farm, where he lived with his wife Ellen and three daughters, he became well known for his herd of pure-bred Short-horn cattle. His most famous young bull was 'Royal Windsor', whose offspring won many prizes at local shows, including the Cottesmore Hunt Prize at Oakham Show eight times in a period of nine years. He later sold this bull to HRH The Prince of Wales.

However, this success was not to last and the herd was sold at auction in 1899. The following extract from the auction catalogue makes the reason clear:

'Through the long continued agricultural depression, the owner has at last been forced to relinquish agricultural pursuits, and sell off his choicely-bred herd at short notice, and without the usual preparation, so that the cattle will be found only in breeding store condition, and will be absolutely sold, without any reservation whatever.'

Census returns show that Willingham Fowler and his family had left Hall Farm, Exton, by 1901.



*Left: The sale particulars for Willingham Fowler's farm at Manton in 1873 (Edward Baines)*

*Right: Willingham Fowler outside Hall Farm, Exton (Edward Baines)*

**MANTON, RUTLAND**  
TO BE SOLD BY AUCTION, BY  
**MESSRS. ROYCE,**  
ON MONDAY THE 21<sup>st</sup> DAY OF NOVEMBER, 1873,  
Upon the Farm & Premises of Mr. WILLINGHAM FOWLER, at Manton, (in consequence of his leaving the Manton Land.)

**42** well-bred short-horn **BEASTS**

Viz., 3 barren Cows, 2 mated Heifers, 13 2½-year old Steers, 4 two-year old Heifers, 8 yearling Steers, 9 yearling Heifers, and 3 red Bulls of the pure Turnell breed.

**FIVE valuable HORSES,**

Lot 1.—Superior Bay Cart Mare, "Brick"  
Lot 2.—Superior Chestnut Cart Horse, "Sharper"  
Lot 3.—An excellent Half-bred Chestnut Horse, quiet in harness

Lot 4.—Half-bred Grey Mare, 8 years old  
Lot 5.—Very promising 3-year old Roan Nag Colt, by broodmare to "Rapid Horse," bred by "Master"

**THE MODERN AGRICULTURAL IMPLEMENTS & CARRIAGES**  
Comprising Scotch cart on iron arms, with raves (scarcely new) narrow-wheel cart on iron arms (nearly new) 4½-inch wheel cart on iron arms, cake breaker by "Hornby" (nearly new.) 2 iron ploughs, 2 pairs of wood harrows, wood drag, tackle for 3 horses, saddles, wheelbarrow, 3 drag rakes, pitch and hand forks, and the usual minor tools and implements.

**THE SADDLERY,** including set of pony harness, hunting saddle, 2 double rein bridles, set of horse clothing, breast plate, saddle and bridle.

**THE VALUABLE GRASS, HAY & STRAW KEEPING**

In the following lots, viz.,

	A.	R.	F.
Lot 1. Home Field, rich feeding land	10	2	6
Lot 2. The Mires, rich feeding land	24	3	0
Lot 3. Wing Meadow, ever even Eddish	4	0	0
Lot 4. Old Meadow, together with about 12 Tons of prime well-gut old Hay	8	0	0
Lot 5. Collingwood's Meadow, together with about 12 Tons of prime well-gut Hay	8	0	0
Lot 6. Collingwood's Chase, full of keep	23	0	0
Lot 7. Harby Straw off 14 acres, (not straw off 5 acres, about 6 Tons of prime well-gut Hay, and the use of a warm and convenient yard)			

Conditioned Credit will be allowed for the Keeping, and careful persons provided to shepherd and fodder the Stock.

\*,\* Lots 1, 2, 3, & 7, of the Keeping will be let until the 1<sup>st</sup> of April, and Lots 4, 5, & 6, until the 24<sup>th</sup> of March, 1874.

The Auctioneers beg to direct attention to this Sale. The Beasts are full of hair, of good color, and exceedingly well-bred. The Horses are good workers. The Keeping is principally upon first-rate feeding land, and the whole will be unreservedly sold.

Sale to commence at Half-past TWELVE for USE prompt.



**EXTON HALL FARM**  
NEAR OAKHAM, RUTLAND.

**A CATALOGUE**

OF THE ENTIRE HERD OF PURE-BRED

**Short-horn Cattle**

The Property of Mr. WILLINGHAM FOWLER  
(who is relinquishing Farming).

**FOR SALE BY AUCTION,**  
On THURSDAY, NOV. 2nd, 1899,

At the Hall Farm, Exton, four miles from Oakham Station on the Peterborough and Leicester Branch, and the Kettering and Nottingham section of the Midland Railway.

**CONVEYANCES WILL MEET THE TRAINS AT OAKHAM STATION.**

Exton is also eight miles from Stamford, fourteen from Melton Mowbray, ten from Little Bytham and Essendine, and sixteen from Grantham.

The "Crown" and "George" are good Hotels at Oakham.

**BY MESSRS. ROYCE**

*Bottom Left: 'Eryholme Prince 35th', one of Willingham Fowler's prize-winning bulls (Edward Baines)*

*Left: The catalogue title page for the auction of Willingham Fowler's Short-horn herd (Edward Baines)*

Even the effects of the 1914-18 War did not materially change the pattern of farming in the area, although there was a brief increase in the arable acreage towards the end of the war. Far more significant was the social and economic aftermath. Agriculture, like industry, suffered in the depression of the 1920s. The land in some cases reverted to a condition probably not seen since the Middle Ages: under-stocked and poorly cultivated, its rank pasture and untrimmed hedges provided an enjoyable cross country ride for huntsmen but a very scanty livelihood for those who worked on the land. Most of the Normanton estate was sold off in 1924 and the hall itself demolished in 1926.



*In the latter part of the First World War the Food Ministry ordered 500 of these 35-horsepower 'chain rail' crawler tractors from Clayton and Shuttleworth of Lincoln to assist with the production of food. This example was photographed at the rear of Forsyth and Ferrier's garage in Main Street, Great Casterton (Hart)*

*The title page of the Normanton Estate Sale Catalogue of 1924 (Edward Baines)*

**Rutland**

Between Stamford and Oakham, about 4 miles from Stamford Station (L. N. E. Ry.) and (L. M. & S. Ry.), 2 miles from North Luffham (L. M. & S. Ry.) and 4 miles from Oakham (L. M. & S. Ry.).

*Illustrated Particulars, Plans and Conditions of Sale*  
of the  
**VALUABLE FREEHOLD, RESIDENTIAL,  
AGRICULTURAL & SPORTING ESTATE**  
known as the  
**NORMANTON ESTATE**  
including  
**AN IMPOSING AND HISTORICAL EARLY 18th CENTURY MANSION,**  
Occupying a beautiful position within its noble Park, and containing—Hall, 9 Reception Rooms, 30 Principal Bed and Dressing Rooms, 5 Bathrooms, Ample Servants' Quarters, Excellent Stabling and Garage Accommodation.

Also  
**EIGHTEEN HIGH-CLASS MIXED FARMS** (some with possession)  
varying in size from 30 acres to 500 acres, each equipped with exceptionally fine Farmhouses and Buildings.  
**NUMEROUS SMALL HOLDINGS. ACCOMMODATION LANDS.**  
**THE ENTIRE MODEL VILLAGE OF EMPINGHAM**  
including the Valuable Free and Fully Licensed Premises, known as  
**THE WHITE HORSE INN,**  
**TWO SUPERIOR RESIDENCES. PART OF THE VILLAGE OF EDITH WESTON,**  
**BUILDING SITES AND WOODLANDS.**

The whole extending to about  
**6,000 Acres**  
and producing an actual and estimated rental of about  
**per £8,000 annum.**  
Underlying the Estate are valuable beds of limestone.

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**Messrs. DUNCAN B. GRAY & PARTNERS**  
in conjunction with  
**Messrs. ROYCE**

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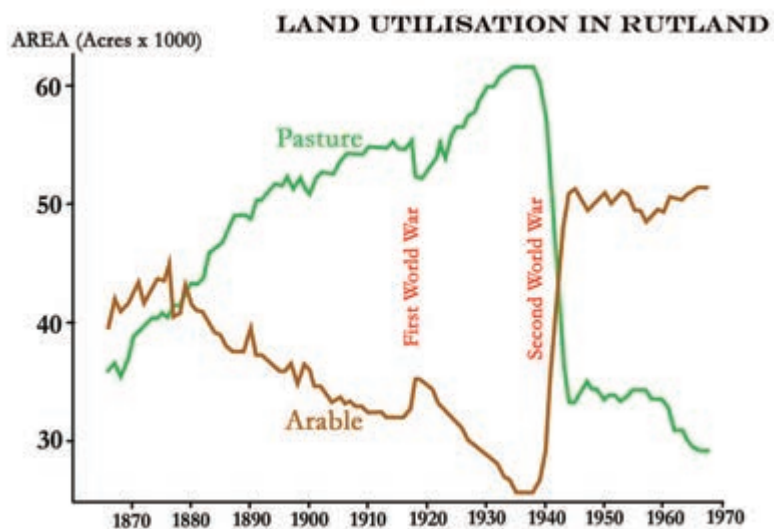
will offer the above for SALE BY AUCTION in Lots, on **Wednesday and Thursday, 17th and 18th September, 1924, at 11.30 a.m. and 2.30 p.m.** o'clock each day at the  
**STAMFORD HOTEL, STAMFORD, LINCS.**  
(unless previously disposed of privately)



The change in the actual ownership of land did not in itself result in a change in farming patterns. If Richard Parkinson in 1808 had stepped into a ‘Tardis’ and arrived at Whitwell in 1937, he would not have noticed dramatic differences.

It was in the early 1930s that Dudley Stamp, an eminent British geographer, instigated the First Land Utilisation Survey of Great Britain. He organised schools throughout Britain to map land use in their local area using a simple classification which included the main rural land uses of arable, grassland, woodland, heathland, water and built land. Survey work began in 1931 and was completed for most counties by 1935. The survey of Rutland was organised by Margaret Broughton and published as Part 53 of the *Land Utilisation Survey* in 1937.

In 1939 the most significant alteration of all had taken place. Allotment holders and gardeners were urged to ‘dig for victory’ and on the farms the plough, now usually pulled by a tractor, carved furrows across virgin turf. Over 70 per cent of the land had been pasture; now that proportion was needed to grow corn. The German U-Boat was the most influential agricultural implement of the century.



*This chart highlights the dramatic change in land utilisation from pasture to arable in Rutland during the Second World War (Messenger 1971, 23)*

Interesting aspects of history are to be found as often in footnotes as in headlines. The 1924 Normanton Estate Sale Catalogue stated that ‘underlying the estate are valuable beds of Ironstone’. Had these been worked, Empingham might have been another Corby and open-cast mining would have pre-dated the excavations for the reservoir by 50 years. In the event, the nearest ironstone quarry was to be at Exton Park, some two miles to the north of Rutland Water, which was worked from 1957 until 1974.

In fact farmers and smallholders adapted to the need for increased production in order to make a living. The memories of those directly involved reveal a snapshot of rural life typical not only of Rutland but of the country as a whole.



*In 1948 the Earl of Gainsborough gave the United Steel Company permission to quarry ironstone at Exton Park, approximately two miles to the north of the future Rutland Water. Sundew, the world's largest walking dragline worked here from 1957 until mining ceased in 1974. Sundew then walked to Spanhoe airfield, near Haringworth, Northamptonshire, its final resting place (Richard Adams)*

The following example serves to illustrate this. In 1951, 85 acres of land at Whitwell were sold to a local farmer. He remembers that the 'War Ag' (War Agricultural Committee responsible for maximising food production from farmland) would inspect the farm annually and the mixed arable farm still worked in the traditional way. It was still labour intensive. Horse-drawn machinery was converted to tractor-drawn, but some practices were as old as farming itself. For instance, sowing seed:

'This was quite an art and we used to have a sling – hold a bucket in our left hand and sling between the thumb and pointing finger with a sort of half-closed hand and broadcast the seed five yards to the left and right' (Philip Joyce).

Harvest could take weeks and farming was financially precarious. Not surprisingly, when the acquisition of land for the reservoir took place, people who had invested time and money into the land felt aggrieved when the rewards of a lifetime's effort were snatched away by an arbitrary and inexorable process:

'They classed it as third-class agricultural land and I got up at a village meeting and stated that in future it would not be third-class agricultural land, it would be nothing but the Klondike and people would be selling property at a million pounds . . .' (Philip Joyce).

Undoubtedly at a time of economic inflation, the delay between valuation for compulsory purchase and the actual payment of compensation meant that the farmers could not afford to buy replacement land at the same price, so the bitterness felt at the construction of the reservoir was both understandable and justified.

This sense of the destruction of a way of life, which had played its part nationally by adapting to war-time requirements, was widespread. The



farming families were an integral part of the local community and women as well as men were actively involved. Again, one voice – that of Joan Wild – speaks for many: ‘My mother used to make butter and we sold cream’. This family also sold eggs, fruit and meat directly from the farm and, in common with most, kept and killed a pig. The bacon was home-cured in a lead salting trough, ‘as long as a settee’, and was then hung on hooks in the farmhouse kitchen.

Farming has always been seasonal, but the introduction of mechanisation accelerated the pace of change. Thus hay making and corn harvesting are now completed in days, but even in the 1950s were more drawn out:

‘The grass was mown and each time they went around the field they called it a swathe of hay. If the weather was good it wasn’t much trouble but if they had spells of rain . . . they had a swathe turner which allowed the air to dry it and then it was raked into rows and collected by a sweep into cobs (small heaps) before being carted to the stack yard and built into stacks which were then thatched’ (Joan Wild).



*Albert Wild of  
Home Farm,  
Hambleton,  
with his hay  
sweep  
(Joan Wild)*



*Collecting hay  
on Home Farm,  
Hambleton in  
1948  
(Joan Wild)*

*Building haystacks in a Hambleton stack yard in 1910 (Hart)*



The hay was used for winter fodder for cattle and sheep and cut from the stack using a large metal hay knife. The hay harvest in June and July was followed by the corn harvest in August and September. Before the combine harvester (a machine which combines cutting the corn and separating the grain from the straw, thus removing the need for threshing) was widely used, the process was carried out in stages. First the corn was reaped using a self-binding reaper, often referred to as a 'binder'. This Victorian invention cut the corn and automatically bound it into bundles, known as sheaves. These were then propped into stooks of six or eight. When they had dried in the field they were carted to the stack yard and built into stacks and then thatched. At some point during the winter, the threshing machine would arrive to separate the grain. This would be driven by a steam traction engine and this operation was usually contracted work.



*Reaping with a horse-drawn self-binding reaper at Home Farm, Hambleton. Arthur Wild continued to use horses until well into the 1950s, but by this time many farmers had adapted their binders so that they could be drawn by a tractor. Others had been using combine harvesters since before the Second World War (Joan Wild)*

Messrs Nourish of Langham were threshing contractors hired by many Rutland farmers. Threshing day was an important event – though not without danger from unguarded machinery. In common with many farming activities, it often involved neighbours helping out and doubled as a social occasion. During the winter, rats and mice would creep into the corn stack, and as the sheaves were removed the final layers would reveal scores of rodents, which would provide good sport for the workers who had brought their terriers especially for this hunt.

‘The corn was put into big sacks which the men used to carry on their shoulders to the barn, where it was stacked up. Then my father would go off to the Melton or Peterborough corn exchange to sell it. Mother used to make small linen bags for the samples of corn, and when it was sold it was collected on lorries’ (Joan Wild).



*Above: Sheaves of corn propped into stooks to dry (RCM)*

*Left: Stooking sheaves of corn (RCM)*



*Left: A Deering horse drawn binder demonstrating that it is still in good working order (Noel Bridgeman)*



*Loading sheaves of corn ready to be carted to the stack yard at Stokes' farm, Normanton in August 1934 (Hart)*



*Neatly thatched stacks of corn sheaves in a stack yard. Thatching was necessary to keep the corn dry until it was time for threshing (RCM)*



*Below: Steam threshing from a Clayton and Shuttleworth of Lincoln advertising poster. This was a common sight in stack yards throughout Rutland until well after the First World War. Tractors replaced the steam engines until the late 1950s by which time the combine harvester had been universally adopted (RCM)*





*Above: This Massey Harris No 780 combine harvester, manufactured in 1950, was restored by Ron Knight of Great Casterton (Noel Bridgeman)*

*Right: Straw left behind by the combine harvester is compacted into large bales (John Nowell, Zodiac Publishing)*

*Right: This huge stack of straw bales at Normanton is destined for a straw-burning electricity power station (RO)*



*Above: Harvesting the modern way. This New Holland combine harvester has an air-conditioned cab to protect the driver from dust and heat, and lights to allow work to carry on through the night. The corn is emptied into a huge trailer for carting to the farmer's grain bins (John Nowell, Zodiac Publishing)*





The age-old pattern of seasonal work, carried out on small family farms, was already altering in the decade before the arrival of the reservoir. Many of the skills of the farm worker – thatching, horsemanship – were becoming redundant and the economic viability of small mixed farms was under increased pressure. As well as the effect on farming practice, the demographic changes were profound. Mechanisation meant that fewer people were required to work the land. In turn, this drift away from the countryside meant that cottages previously ‘tied’ to farms (and usually occupied as part of the remuneration for work on the land) were increasingly sold off or let to people who regarded the countryside as a recreational amenity rather than a place of employment. The proposals for the reservoir and its immediate surroundings recognised this change in attitudes to the countryside. ‘Rutland Water’, as it was subsequently named, was seen from the outset as a rural retreat for the urban population of the Midlands.

As the generation of Rutland farmers who had experienced this great change from the slower-paced but more physically demanding horse-drawn age to that of universal mechanisation retired from farming, especially in the 1970s and 1980s, the old equipment they had used was often laid out in a field or farmyard to be auctioned off in farm sales. Not all was lost. Some made its way into the collections of the Rutland County Museum or into the hands of local enthusiasts. Today, through displays, recorded memories, photographs and working days, something of the flavour and character of that agricultural era can still be savoured.

### Sharp's Tractors

Before Rutland Water, Frank and Noel Sharp farmed at Nether Hambleton. Frank lived with his sisters, Ivy and Mary, at Ivydene. Their brother Noel, his wife Dorothy and two daughters, Wendy and Christine occupied Red House (see Chapter 21 – Lost Homes).

By 1968 they were farming 363 acres, most of which was devoted to cereal crops. No root crops were grown on the farm and livestock included 400 sheep, 30 milking cows and 150 mixed cattle. By 1975 they had lost their homes and farm to the reservoir.



*Noel Sharp's former 1941 Model N Fordson tractor at a Rutland ploughing match (Ron Knight)*



In 1941 Noel purchased FP 3804, a Model N Fordson tractor which he needed as part of the war effort to increase their acreage under plough. It was used on the farm for many years until it was sold for scrap. Ron Knight of Great Casterton subsequently acquired it from the scrap dealer and set about restoring it. Noel was not aware of this until some years later he recognised it at a ploughing match.

Noel also acquired a little McCormick Deering International W12 tractor during the Second World War. Again it was used on the farm for many years until it was put into storage in a barn on Lyndon Hill. Ron Knight also purchased and restored this tractor. Its moment of glory came, in 2000, when it took part in the late Queen Mother's 100th birthday procession in Birdcage Walk, London.

*Left: Noel Sharp was reunited with his Model N Fordson at Toilethorpe Park in 2000 when this photograph was taken for the front cover of Farmer's Weekly (Ron Knight)*



*Above: Brian Knight driving Noel Sharp's former International W12 tractor in the late Queen Mother's 100th birthday procession (Ron Knight)*

It is perhaps ironic that wildlife flourished in 1800 as a by-product of the agriculture practised at the time, and in the twenty-first century environmental conservation helps to sustain farming. At Rutland Water this has meant that Dexter cattle have been introduced to maintain a suitable habitat for some bird species: a change of emphasis producing the same results (*see* Chapter 24 – Tim Appleton MBE – Thirty Years of Rutland Water Nature Reserve). Similarly, one of the skills of the farm labourer – hedge cutting – is now utilised so that volunteers are taught how to ‘lay’ a hedge. In this method partly-cut and mature hedge stems are bent and layered in such a way that stakes (inserted vertically) and binders (plaited horizontally) produce a stock-proof boundary which also provides a rich habitat for wildlife.

There is increasing recognition of the importance of the environment and it is likely that the Gwash Valley would have changed in line with the English countryside generally. To some extent this change was anticipated and accelerated by the arrival of Rutland Water. It has also meant that it has preserved the surrounding landscape in a way that would have been unlikely had the reservoir not been there. The man-made lake of the twentieth century sits in a landscape formed by men in the eighteenth and nineteenth centuries.

The modern farmers on the shores of Rutland Water, like their predecessors, are custodians as well as cultivators. No one is better placed to be so. They know the land and make their livelihoods from it, but they are also aware of their wider responsibilities. Their ancestors ploughed the fields to provide food in wartime; they in turn have adapted their methods to meet modern requirements. The result is the landscape you see: not an artificial theme park but the result of sensible compromise between farming and conservation.

## Pulling Power

The agricultural revolution has changed farming out of all recognition, and these changes are nowhere more apparent than in the methods used by farmers for traction – from two horses pulling a single furrow plough 150 years ago to the huge 500 horsepower (and more) tractors seen on some of the larger farms today. The following pictures, all taken in Rutland, demonstrate this revolution.



*Rutland Ploughing Match, Empingham, 2006. The steel ploughshare was a big advance on its wooden predecessor, but it was still hard work for the ploughman, and the horses (RO)*

*Ploughing by steam using a single steam engine at Ridlington in October 1857 (Illustrated London News)*



Ploughing by steam was an important part of the countryside for 75 years following the introduction of the first commercially successful engine in the 1850s. The balance plough, which was introduced soon after, was pulled backwards and forwards across the field by a steel rope attached to drums on traction engines either side of the field. Sometimes only one engine was used with a system of pulleys round the field. This avoided soil compaction by the heavy steam engines.

Such a system was featured in the *Illustrated London News* (No 883 – Vol **XXXI**, Saturday, 17th October 1857):

An ‘. . . important feature in the proceedings of Tuesday week was the exhibition of the power of Fowler’s steam-plough, which was tried in a field upon Mr. Wortley’s farm, at Ridlington. Very great interest was excited by this somewhat novel exhibition . . . Mr. Fowler, who was on the ground, stated . . . that the steam-plough was capable of ploughing, with an ordinary eight horse-power engine, ten acres per day . . . The cost of the apparatus and engine would be about £750 . . . It was indeed extraordinary to see a rather clumsy-looking implement sliding smoothly along the field at a speed of about 100 yards per minute, and turning up the ground with ease at a depth of nearly seven inches. There were about 600 persons present in the field. Amongst this number we observed Lord and Lady Aveland; Stafford O’Brien, Esq.; the Hon. H. Noel; General Fludyer; R. W. Baker, Esq. . . .’

*One of a pair of matched Fowler BB1 ploughing engines owned by Brian and Ron Knight of Great Casterton. They were made by John Fowler of Leeds (Brian Knight)*





*Brian and Ron Knight's engines are used to pull their anti-balance plough, which is similar to a balance plough except that it has a mechanism to change the point of balance as it is pulled in each direction. It is seen here a Little Casterton Working Weekend (Brian Knight)*



*'Little Jim' at a Little Casterton Working Weekend. Smaller steam driven tractors like this one were later used for direct ploughing, but they were still very heavy and hardly overcame the soil compaction problem (RCM)*



*Below Left: An 'Overtime' paraffin tractor, manufactured about 1917 by Deere & Company in the United States. It was one of the first tractors with an internal combustion engine in Rutland and was owned by E Nourish & Sons of Langham who were steam threshing contractors. John Nourish is driving and Ebenezer Nourish is on the mowing machine (William Nourish)*



*The Fordson N was by far the most numerous type of tractor used in the Second World War ploughing campaign. It enabled self-sufficiency in the darkest days when the U-Boat menace nearly brought the United Kingdom to its knees (RO)*



It was Harry Ferguson's vision in 1917 to provide a completely new tractor and a full range of implements to integrate with it. This dream was achieved in 1946 when the grey 'Fergie' eventually went into production in Coventry, Warwickshire, and from then on thousands were manufactured for home and export markets. Farmers literally changed the way they farmed because of the 'Ferguson System' and the world's other tractor makers had to copy it or die.



*One of Harry Ferguson's tractors at the 2006 Rutland Ploughing Match (RO)*

*Below Right: It could be said that most modern tractors are just big 'Fergies' with cabs, but this does no justice to the technology under the shell. This Case MXU 135 four-wheel-drive tractor was photographed during the 2006 Rutland Ploughing Match at Empingham (RO)*







*Ploughing is a thing of the past on some of the larger farms. This disc set pulled by a Claas Challenger crawler made short work of cultivating the field. Wide rubber tracks give good grip without compacting the soil. Some Rutland farmers are even experimenting with dispensing with this operation – they are direct-drilling seeds for cereals crops into uncultivated soil (RO)*



*A big boy's toy? Even this Case STX Quadtrac 440 horsepower tractor is not the most up-to-date power unit, but its specification is very impressive (John Nowell, Zodiac Publishing)*