

The Isle of Axholme before Vermuyden

By JOAN THIRSK

THE Isle of Axholme lies in the extreme north-western corner of Lincolnshire, separated from that county by the river Trent, and from Nottinghamshire and Yorkshire by the former channels of the Idle, the Torne, and the Don. Once one of the natural regions of England with an economy distinct from that of its neighbours, it retains to this day its island situation, and something of the insularity which marked its former way of life.

The isle covers an area of 51,104 acres, and until the nineteenth century contained nine parishes, of which three, Belton, Epworth, and Haxey, each measured more than eight thousand acres, and together encompassed more than half the island. Large parishes denote a sparse population in the early days of settlement. The land was unattractive to the farmer, for much of it was permanently inundated, and all of it exposed to the floodwaters of the Humber, the Trent, and smaller rivers. The island was not densely settled at the beginning, therefore, but served the invaders as a corridor to the Midlands. First the Danes and then the Normans contributed vernacular elements to make up its modern name.¹

Scant attention has hitherto been paid to the farming history of the island before the drainage operations of the seventeenth century. Vermuyden has held the centre of the stage ever since Dugdale in his *History of Imbanking and Draining* described his efforts at draining Hatfield Chase and the flooded parts of Axholme, and deplored the opposition he encountered from the islanders.² Dugdale was echoing the official view of an obstinate, ignorant peasantry, clinging to a miserable life because they were incapable of grasping the superior benefits of drainage. The same story has been told with additional detail many times since. Writers have admitted that Vermuyden made mistakes. George Dunston went so far as to say that "while he (Vermuyden) effectively drained Hatfield and Thorne, he made the condition of the Islanders considerably worse than before."³ But no one has yet attempted

¹ According to Ekwall, the meaning of the name Axholme is 'the holme or island of Haxey', Haxey being a village in Axholme, meaning perhaps 'Haks island'. The Normans added the synonym 'isle'. The result was 'Isle of Axeyholme', later contracted to Isle of Axholme.—E. Ekwall, *Concise Oxford Dictionary of English Place Names*.

² W. Dugdale, *The History of Imbanking and Draining* . . . , 1662, p. 145.

³ G. Dunston, *The Rivers of Axholme*, 1909, p. 27. This book contains the best account of

to see the project in its contemporary setting, as a scheme summarily embarked upon, without much prior investigation into the islanders' old way of life, or consideration of its merits.

It is the purpose of this article to examine farming practice in the Isle of Axholme in the sixteenth and early seventeenth centuries, in order to judge the drainage project from the point of view of the inhabitants. Seen in this way, Vermuyden's work appears not as an attempt to establish a system of husbandry where none had been before, but to substitute one economy for another. The old economy was pastoral, the new one arable. We can look back on the controversy three hundred years later and see the triumph of Vermuyden's plans. The island was effectively drained, and nowadays cereals, roots, and green vegetables are its principal crops. But long before Vermuyden's day, the islanders had evolved a system of husbandry which had come to terms with nature, and made good use of the existing resources. The principal produce of the isle was meat, dairy produce, leather, wheat, and hemp—commodities for which there was a steady demand in sixteenth-century England. Vermuyden promised to make the fen fertile for rape and corn, apparently unaware that the old husbandry could fully justify itself on economic grounds. His struggle with the islanders was not, therefore, a struggle to create prosperity in place of poverty; its object was to substitute a new economy for the traditional one.

Axholme can best be described as a lop-sided version of the shape of England and Wales.¹ A central ridge with a maximum height of 133 feet runs the length of the island from north to south, occupies about one-quarter of the total area, and accommodates the principal townships of Crowle, Belton, Epworth, and Haxey, as well as a number of hamlets. The market towns were Crowle and Epworth, but all four main centres of population were comparatively large. In 1603 over 150 families lived in each parish.²

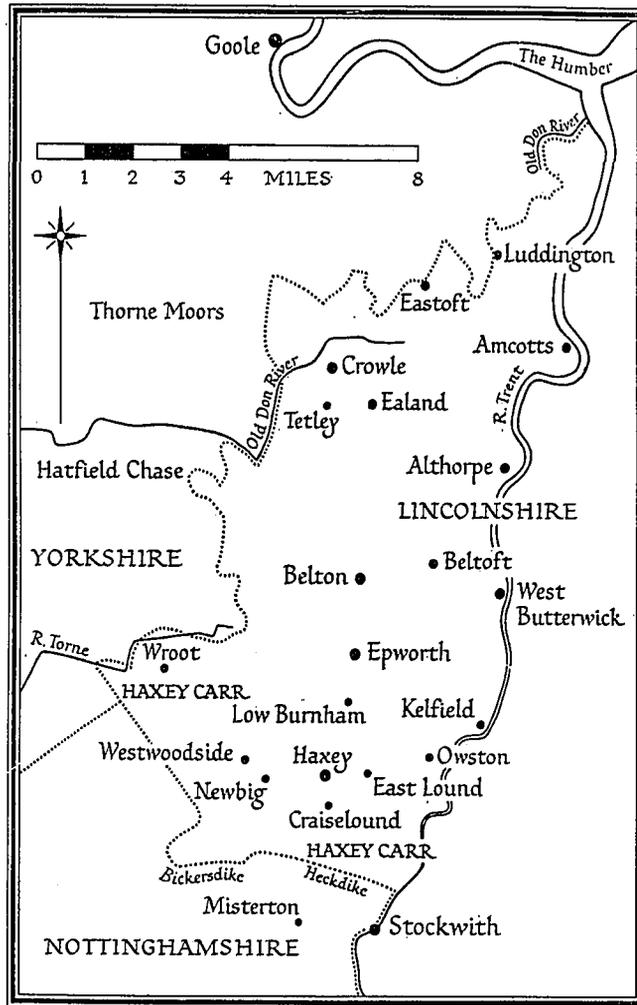
Originally, the whole of the island was comprised within the ancient manor of Epworth and its members. In the seventeenth century one of these was severed from it, when Crowle manor, which occupied the northern quarter,

the condition of the island before and during the drainage operations. It omits, as does this article also, any account of Vermuyden's work in Hatfield Chase. Although the drainage of Hatfield Chase and the fens of Axholme was one scheme, it is probable that the condition of each before the drainage was different. Even so, the oft-repeated statement that Hatfield Chase was a useless waste land needs to be tested by the facts, and a fresh study of the sources seems desirable.

¹ See map on p. 18.

² In 1603 Belton and Haxey parishes each had 700 communicants (approx. 210 families), Crowle 740 communicants (approx. 222 families), and Epworth 500 communicants (approx. 150 families).—*The State of the Church*, ed. C. W. Foster, Lincoln Record Society, xxiii, 1926, pp. 340–51.

was conveyed by Charles I to the City of London as part of the Ditchfield grant.¹ The rest, with the exception of some small estates,² remained the property of the Crown. It comprised the manor of Epworth, which stretched from Althorpe and Belton south as far as Burnham, and the manor of West-



¹ W. Peck, *A Topographical Account of the Isle of Axholme*, 1815, Appendix No. 3. The Ditchfield grant was crown land conveyed to the City of London by Charles I in 1628 in satisfaction of two loans earlier made to him by the Corporation of London. Crowle manor was re-sold to Sir Gervase Elwes, Jeremiah Elwes, and Nicholas Hamerton. I owe this information to Mr Robert Ashton.

² There are references to Haxey Hall Garth manor and Ancowe manor in a survey of 1607. These may be the "smaller properties" referred to by Dunston, and said to have developed in the sixteenth century under crown ownership and to have been subsequently enfranchised. —PRO LR 2, 256, f. 194; G. Dunston, *op cit.*, p. 16.

wood, another member of Epworth, which stretched from Burnham to the southern boundary.

By the sixteenth century the Isle of Axholme had a large population of small peasants. More than a quarter of the tenants of Westwood manor had holdings of one acre and less, and over half (54 per cent) had five acres or less.¹ Arthur Young's description of conditions in his day would have been equally appropriate two hundred years before. Farms, he said, were small, and amounted often to no more than four or five acres, while twenty acres supported a family very well because of the exceptional fertility of the land. The very poorest cottagers were proprietors of farms, and though "poor respecting money," were "very happy respecting their mode of existence."²

The arable land of the townships of Axholme lay on the higher ground of the central ridge. An Elizabethan map of part of the isle south of Haxey shows that the common fields lay within the triangle formed by the villages of Epworth, Haxey, and Owston, with no common pasture to separate them. Haxey fields abutted on the fields of Burnham and Craiselound, Burnham fields on those of East Lound and Owston, Owston fields on those of Kelfield and Kinnard's Ferry. Many farmers held land in more than one village, but they did not necessarily walk long distances between the different parts of their holdings.³

The soil on the higher ground of Axholme was renowned for its fertility long before Arthur Young proclaimed it "among the finest in England." John Leland over two centuries earlier deemed it "meatly high ground, fertile of pasture, and corne," and this view was confirmed in more precise terms by Charles I's surveyors. The soil in the common fields of Epworth was said to be of two kinds. The major part lying nearest the town was a black, sandy ground, worth sixteen shillings an acre, the rest a stiff clay worth twelve shillings an acre. The richer soil was sown with hemp one year, barley the next, hemp the next, and rye the next, apparently without any fallows. At Crowle and Eastoft, on the other hand, there is evidence that the common fields were fallowed every fourth year, and this, taken together with the fact that in Westwood manor a balanced farm holding was dispersed in four fields, suggests that a four-course rotation, including one fallow, was the alternative system, if not the more usual one.⁴ Certain it is that the arable land was more than usually fertile, and was made to bear as many crops as possible.

¹ PRO LR 2, 256, f. 52 et seq. The first page of this survey is missing, but since the whole covers over 150 pages, the figures are not seriously defective.

² Arthur Young, *General View of the Agriculture of the County of Lincoln*, 1799, p. 17.

³ PRO MPB 16; LR 2, 256, f. 52 et seq.

⁴ Arthur Young, *op cit.*, p. 10; G. Dunston, *op cit.*, p. 18; PRO E 315, 390, f. 37v; E 134,

By the 1630's the enclosed demesne lands of Epworth manor were managed on a different system, eliminating the need for fallows altogether. A scheme of alternate husbandry was in operation, the tenants dividing their closes into three parts, and using them alternately for hay, grazing, and crops. The estate amounted to roughly 722 acres. In 1633, 56 per cent of the whole was subject to this alternative husbandry, and was classified as arable, meadow, and pasture. Twenty-two per cent was pasture, twenty per cent meadow, and only two per cent strictly arable.

This system of land use was frowned on by John Hynde, the surveyor of the manor, who argued that the land had originally been used for pasture and meadow, and that, since the soil was of the stiff clay kind, ploughing would quickly impoverish it. His reasoning was faulty, but since it would have been difficult with the implements then available to produce as good grassland after ploughing as before, he was probably right. At any rate, by 1650 his words had produced their effect. The land classified as arable, meadow, and pasture had fallen from 56 to 32 per cent, the arable area had increased from two to 31 per cent, and the pasture from 22 to 33 per cent. One of the leases contained a clause prohibiting the tenant from ploughing up meadow and ancient pasture.¹

The holdings of manorial tenants in Axholme lay for the most part in strips in the open fields, and judging by Westwood manor, which comprised roughly one-quarter of the isle, included a high proportion of arable. In 1607, Westwood had sixty per cent of its cultivated land under the plough, thirteen per cent meadow, ten per cent pasture, and ten per cent of enclosed ground. Four and a half per cent was described as arable, meadow, and pasture, and was probably used in the same way as the demense land of Epworth manor, while the rest consisted of hempland, and land of unspecified use. Compared with the figures of land use in the Holland fenland, it is clear that the peasants of Westwood, and probably of Axholme as a whole, had a much higher proportion of their village lands under crops than the farmers of Holland.² At the same time, the economy of both was pastoral, for the village lands in both regions were only a fraction of the total land. Westwood manor

13 Eliz., Easter 5; LR 2, 256, f. 52 et seq. The court roll of Crowle manor for 1381 contains the order for the fallowing of a quarter of the common fields every year.—Lincoln Record Office (=LRO), Crowle Manor, 1, 34, 4.

¹ PRO E 315, 390, f. 37v.; E 317, Lincs. 16.

² The arable amounted to between 40 and 42 per cent of the land of two manors in Skirbeck wapentake in Holland, and between 4 and 25 per cent in six manors in Elloe.—Joan Thirsk, *Fenland Farming in the Sixteenth Century*, Occasional Paper No. 3, Department of English Local History, University College, Leicester, pp. 22-3. Strip cultivation continues at Epworth to this day.

was typical of Axholme estates in having only about 1,500 acres under cultivation, while its common, in which the tenants shared pasture rights with the tenants of Epworth manor, amounted to 14,000 acres.

Although the surveyors of Epworth spoke only of hemp, barley, and rye growing in the fields, these were not the only crops, nor even the most important ones. Peas and beans, oats, and wheat were grown as well as flax.¹ The probate inventories show that wheat occupied nearly three times as much ground as rye, and peas rather more than twice as much ground as hemp. Barley was the biggest crop, however, as it was in all other regions of Lincolnshire apart from the marshland, and occupied one-third of the sown area each year. Wheat occupied over a quarter of the sown area (28.4 per cent), and peas rather less than a fifth (18.8 per cent). Hemp occupied 8.4 per cent and rye 10.7 per cent. Oats and flax lay in store, but in the inventories of property used here are not found growing in the fields. They were probably less usual crops and were grown in small quantities.²

In the choice of crops there were significant differences between Axholme and the fenland of Holland. Not only was the arable acreage in Axholme relatively larger, but the balance struck between spring and winter sown crops was different. The two facts were probably interconnected, for all Lincolnshire farmers in the sixteenth century appear to have regarded the spring crops—barley and pulses—as the essential ones no matter what the size of their holdings. If more land was available for crops in one region than in another, then the less important crops, wheat and rye, were given a larger place. Hence more ground was given to winter corn in Axholme than in Holland. Three times as much wheat was grown, and four and a half times as much rye. A reduced acreage of barley (33.4 per cent in Axholme compared with 54 per cent in Holland), and of beans and peas (18.8 per cent in Axholme compared with 28.6 per cent in Holland) compensated for the larger acreage of wheat and rye. There was a much closer resemblance between the crops of Axholme and those of the marshland clays of Lincolnshire, for almost the same proportion of winter corn and barley was grown. Here the chief difference lay in the fact that Axholme grew hemp in quantity, while the marshland grew very little. The acreage devoted wholly to pulses in the marshland was divided in Axholme between hemp and peas.

The importance of hemp and flax is heavily underlined in the probate inventories. They were not grown as cash crops for direct sale, but laid the foundations of a comparatively large-scale domestic industry of spinning and weaving, which was of exceptional importance in the fen regions of Lincolnshire. Whereas few Axholme peasants had any wool in their possession, and

¹ PRO E 134, 13 Eliz., Easter 5.

² LRO Probate inventories.

less than one in five kept any sheep, hardly a single inventory has been found which does not mention hemp, and sometimes flax, together with the goods made from them. John Parish of Beltoft, who died in 1590, left line cloth, femble, and harden cloth worth £3 5s. 4d., femble yarn and harden yarn worth ten shillings, heckled line and femble worth two shillings and sixpence, braked hemp worth six shillings and eightpence, and hemp and linseed worth ten shillings. John Farre of Epworth died a year later, and left sacks and sack yarn worth 26s. 8d., and hemp on the ground worth £3. John Harrison of Newbig left two acres of hemp, and forty yards of sack cloth worth 52s. Robert Pettinger of Haxey parish had hemp seed worth 13s. 4d. and three stones of hemp worth six shillings. John Pettinger of East Lound had nineteen yards of linen cloth, twenty-two yards of femble cloth, twenty-six yards of harden, pilled hemp and braked hemp, hemp ground and hemp seed, sack cloth and yarn.¹ These are random examples typical of the rest. They show that the flourishing sack- and canvas-making industry of Axholme in the nineteenth century had a long history behind it. To the average peasant family of the sixteenth century it was a profitable by-employment. To the poor it was one of the principal ways of earning a living. One of the victories won by the inhabitants of Axholme in their prolonged legal battles with Vermuyden was an award in 1636 of £400 for a stock to employ the poor in the making of sack cloth, to compensate them for the loss of fishing and fowling rights.²

Meadow land constituted about thirteen per cent of the land of Westwood manor, and judging by the field names and the small size of individual holdings (two or three roods or one or two acres were the usual allotment) lay in strips grouped among the arable fields, wherever water was conveniently handy. Kelfield, for example, had its meadow along the banks of the Trent. Hay was cut in certain parts of the commons as well, and was specially abundant in wet summers. It was also gathered along the banks of the dikes, for a poor man called Bointon had the right to cut hay along the Idle river in return for keeping the banks in repair, and thus gave his name to Bointon Stile.³

Outside the ring of townships and arable fields lay extensive common pas-

¹ LRO Probate inventories, 80, 61; 81, 481, 448; 80, 5, 34. Line is flax; femble—the female plant of the hemp; harden—a coarse hempen cloth; heckled line=dressed flax; braked hemp=dressed hemp; pilled hemp=stripped hemp.

² 'A Brief Account of the Drainage of the Levels of Hatfield Chase and parts adjacent in the counties of York, Lincoln, and Nottingham', by G. Stovin (1752). Printed in *Yorks Archaeolog. Journal*, xxxvii, 1951, pp. 386 ff.

³ PRO E 134, Supplementary 901, 1D, Lincs.; E 134, 1 & 2 Jas. II, Hilary 25; E 134, 39 Eliz., Easter 14; LR 2, 256, f. 52 et seq.

ture, of which the greater part lay in the western half of the isle. Crowle manor possessed between three and four thousand acres of common. Epworth manor, with its member manor of Westwood, possessed some fourteen thousand acres, roughly half of it lying south and west of Haxey and Owston, the rest north, east, and west of Epworth and Belton. The large commons of Epworth were divided by name into smaller units, but there were no barriers to the commoners' cattle apart from those imposed by the dikes. All the tenants of Epworth manor could graze their stock wherever they liked throughout the common.¹

The common pasture was intersected by natural creeks and man-made dikes, serving to drain away the surplus water. Burnham Skiers was an example of a natural creek which separated Burnham's open fields from Haxey North Carr. Heckdike was a man-made channel, first mentioned in documents at the end of the thirteenth century, which linked natural creeks in the southern part of Haxey Carr with the river Trent. It was but one of several sewers built to drain the commons before Vermuyden's day.²

Dikes, sewers, and rivers provided waterways all over the isle. The main traffic routes, which linked the western, southern, and eastern boundaries, were the river Idle, Bickersdike, and the river Trent. On these, ships with mast and sail carried passengers, and goods which included flax, hemp, corn, peat, and coal.³ The dikes and creeks were mostly narrower waterways, leading off into the heart of the isle, and carrying small craft only. In winter the waterways multiplied and widened and provided an excellent system of communications. At the same time they acted as barriers to keep out strangers, and kept the island to some extent cut off from the rest of the world.⁴

From the commons the islanders took turves and wood for fuel and building repairs, sods and clay to manure their arable lands, hay at the right season, and fish and fowl. In Epworth manor, fishing rights in the river Idle were leased to a few individuals. But all tenants and inhabitants of the manor had the right to set bush nets and catch white fish on Wednesdays and Fridays.⁵ Most important of all, the commons provided grazing for stock. So great was the feeding capacity of Crowle commons that the village regularly took in stock in summer from other places. Four grassmen, appointed by the

¹ PRO E 134, Supplementary 901, 1D, Lincs.; E 178, 5412.

² PRO MPB 16; Gover, Mawer, and Stenton, *Place Names of Nottinghamshire*, English Place-Name Society, xvii, 1940, p. 39; PRO E 134, 39 Eliz., Easter 14. Two of the sewers in Haxey Carr were called Queen's Sewers, and were probably constructed in Elizabeth's reign.

³ PRO E 178, 5412.

⁴ The inhabitants claimed that Bickersdike kept out thieves and marauders from the isle until a bridge was built in Elizabeth's reign. See *infra*.

⁵ PRO E 134, 1 & 2 Jas. II, Hilary 25.

townsfolk, supervised the arrangements, and "tooke as many Cattell of forreyn Townes as they coulde gett." The profits—about forty shillings a year—were put to the use of the town.¹

Much of the commons, of course, lay under water in winter from Martinmas (November 11) till May Day. But this was not all loss. As the inhabitants of Epworth informed the king's commissioners, too late to undo Vermuyden's work, the floods brought with them "a thick fatt water," which enriched the ground, and enabled it to support large numbers of cattle, sheep, and pigs in summer. Moreover, although the fen was inundated in winter, there were always portions of the commons which remained dry. Some parts, like Curlehall Wood on Crowle commons, remained dry islands in the midst of water, and had to be reached by boat. Others adjoined the arable fields and were accessible all the year round. By using these dry patches of commons, as well as the grazing in the arable fields and enclosed pastures, the inhabitants of Epworth and Westwood manors kept 12,000 cattle besides sheep and swine during the winter.² Similarly, at Crowle the commoners had four hundred acres of "good and drye pasture" in winter, and were able to keep "a great Number of great Cattell and shepe goinge in their fennes and Common in Wynter season." In dry years the grazing at Crowle was adequate. The only time of shortage was in wet years from the beginning of spring until Whitsuntide, when the stock was multiplying and the common was not yet dried out. No one at Crowle, however, had ever been known to farm out his stock in other places for want of grazing.³

The area of commons was large, and, as the commoners of Crowle declared, adequate for their needs. But an increase of population in the sixteenth century threatened to produce a pasture shortage in the southern part of Axholme, and gave rise to disputes between the islanders and their neighbours in Nottinghamshire about common rights. A hundred years earlier the farmers of Misterton and Stockwith in Nottinghamshire had taken cattle unchallenged into Haxey Carr.⁴ But the population began to grow, and all villages faced the problem of feeding increasing numbers on a fixed amount of land. At Epworth manor one hundred additional cottages were built between about 1590 and 1630. At Misterton thirty new cottages were erected in forty years.⁵ More people meant more stock, and a greater demand for

¹ PRO E 134, Supplementary 901, 1D, Lincs.

² PRO E 134, Supplementary 901, 1D, Lincs.; E 134, 1 & 2 Jas. II, Hilary 25; E 178, 5430, 5412.

³ PRO E 134, Supplementary 901, 1D, Lincs.

⁴ Although, according to Thomas Hullam of Nether Burnham, they did it secretly "for feare of being espyed."—PRO E 134, 39 Eliz., Easter 14.

⁵ PRO E 178, 5412; E 134, 39 Eliz., Easter 14. Similarly at Crowle, Tetley, and Ealand there was an increase of forty households in forty years.—PRO E 134, 19 Eliz., Hilary 8.

pasture. Misterton's cattle began to invade Haxey Carr in large numbers.

Doubts and disagreements arose out of uncertainty about the boundaries of the commons. Haxey Carr had a definite southern boundary—Bickersdike—but Bickersdike was not the county boundary at this point, nor the manorial boundary. A portion of Haxey Carr between Bickersdike and Heckdike lay in Nottinghamshire, and was claimed as common by the inhabitants of Misterton and Stockwith. But they were unable to get to it easily across Bickersdike. They swam their cattle across in summer, and at other times led them the long way round, first into Stockwith and then across Bickersdike by the farthing ferry. The ferry was replaced in the 1530's by a bridge, but the long journey into the Carr continued to be a deterrent to its use. The common rights which Misterton claimed, therefore, were not consistently exercised until Elizabeth's reign.

In the late 1570's the farmers of Misterton decided to make access to the Carr easier by building a ford, and a few years later a bridge, across Bickersdike at the nearest point to the village. Thenceforward, nothing prevented them from driving unlimited cattle into the Carr. Sheep and pigs, which had never been taken over from the Nottinghamshire side, were driven across in the morning and taken back at night.

The inhabitants of Haxey complained that their pasture was being overcharged, and started a dispute which raged in the courts for more than thirty years.¹ In 1570 the judges decided that Misterton and Stockwith had pasture rights for all cattle, but were not entitled to put a cattle herd or shepherd in charge of them. The quarrel did not end there, but its later history is of less interest than the information about husbandry already given. The so-called unprofitable fens of Axholme had long been exploited by the inhabitants for grazing and other purposes. So heavy were the demands made on them in summer, indeed, that the floods were essential to enrich them again in winter. Even the land which continued wet in summer was not wasted, but was cut for hay. In short, "the very lowest ground in the manor of Epworth in the overfluds was usefull to the inhabitants."²

In the light of these facts, it is not difficult to explain why the inhabitants of Axholme fought a bitter struggle against the confiscation of two-thirds of

¹ PRO E 178, 2932; E 134, 17 Eliz., Easter 11; E 134, 39 Eliz., Easter 14; J. Korthals-Altes, *Sir Cornelius Vermuyden . . .*, 1925, p. 21.

² PRO E 134, 1 & 2 Jas. II, Hilary 25. It may be that some of the misconceptions about the fenland have persisted because of an error in interpreting contemporary documents. The crown called the fenland "unprofitable". This has been taken to mean that the fen was unprofitable in every sense, when, in fact, the crown was speaking as a landlord only, and complaining that it did not receive any rent for the fenland. It was not concerned with the question whether the fen was profitable to the inhabitants.

their commons by Vermuyden, his associates, and the Crown. But neither the Dutchmen nor the king and his advisers were sufficiently informed to understand the opposition which they aroused.

The drainage works were begun before the inhabitants of Axholme were given any opportunity to put forward a case for the old husbandry. Vermuyden signed an agreement with Charles I in May 1626, and eighteen months later claimed that his work was done.¹ In fact, this was but the beginning of a long struggle with the inhabitants. By 1629, when the land promised him in payment for his work was being surveyed, the bitter war between them was well under way. The Exchequer commissioners, visiting Axholme in the same year to assess the situation at first hand, met an angry, suspicious population, who insisted on accompanying them on their inspection of the drains at Althorpe. "Their claymours," they said, "were soe great, and they soe ready to affirme any thinge to serve their owne desires, some complayning that they should have too much water, others that they should want water, some making one doubt, others moving another as wee were satisfied that wee might not believe any thinge uppon their information but what our owne view did justifie unto us."² Other accounts of the hostility and active opposition of the islanders are familiar enough to require no repetition here. The reasons that lay behind the opposition, however, are little known and deserve a hearing.

In the first place, the tenants were convinced that the king had no power to dispose of their common, since it had been granted to them, exempt from all improvement, by the former owner of the estate, Sir John Mowbray, in 1359. In the second place, the tenants claimed, correctly, that the flood waters, which deposited silt on the commons in winter, were vitally necessary to their husbandry. As they discovered when Vermuyden had finished his work, the "thick, fatt water" which had enriched their land became a "thin, hungry, starveing water," impoverishing the common and rendering it unable to support as many stock as before. In the third place, the islanders found that part of the common was drained so dry by Vermuyden that they were unable to get enough water for their cattle in summer. Even the Exchequer Commissioners admitted that it would have been better had certain drains not been made, and that the tenants would probably have to let the Trent into the commons at their own costs for lack of water.³ In the fourth place, the islanders claimed that some of the land which had hitherto lain dry during the summer was flooded for the first time owing to Vermuyden's interference. No precise evidence was given to the commissioners on

¹ L. E. Harris, *Vermuyden and the Fens*, 1953, pp. 47, 49.

² PRO E 178, 5412.

³ PRO E 134, 1 & 2 Jas. II, Hilary 25; E 178, 5430.

this point, and since there was a difference of opinion among the witnesses, the commissioners paid little attention to it. But engineers who have examined the technical aspect of Vermuyden's operations have accepted the charges as true, and have blamed Vermuyden for failing to construct a wide enough channel to carry away waters previously diverted into three courses.¹ In his own lifetime, the belief that Vermuyden had made things worse than before clung to him, and prompted at least one joke at his expense.

Banausus. I have a rare device to set Dutch windmills
Upon *New-market Heath*, and *Salisbury Plaine*,
To draine the Fens.

Colax. The Fens Sir are not there.

Banausus. But who knowes but they may be?"²

In the fifth place, the inhabitants who had rights of fishing and fowling in the waste lost an important source of income by the drainage. The copyholders' fishing rights in Crowle manor alone were valued at £300 a year in 1650, without counting their value to the poor who also relied on fish and fowl for their food. In the sixth place, the river Idle, on which the inhabitants had been accustomed to transport goods, was stopped up and ceased to be navigable.³ Lastly, and most important of all, the commons were reduced to between a half and a third their former size. The fourteen thousand acres belonging to Epworth manor were reduced to 5,960 acres, and Crowle common of between three and four thousand acres was reduced to 1,814 acres.⁴ Since Vermuyden's drainage project had been loudly proclaimed as a measure for making the fen more profitable than ever before, the islanders did not expect to have to reduce the numbers of their stock. Yet this was the almost unavoidable consequence when more than half the commons was taken from them, and the remainder reduced in fertility. The only alternatives were for the inhabitants to lease additional grazing in Yorkshire, or pasture their stock on land formerly kept as meadow, which meant a smaller hay harvest and less fodder for winter feed.⁵

¹ PRO E 178, 5412; L. E. Harris, *op. cit.*, pp. 49-50; G. Dunston, *op. cit.*, p. 26.

² T[homas] R[andolph], *The Muse's Looking Glass*, London, 1643, p. 37.

³ PRO E 178, 5444; E 134, 1 & 2 Jas. II, Hilary 25; E 178, 5412. Eventually the copyholders with fishing rights were compensated with 123 acres of land, called Fishers' Close.

⁴ According to the original agreement with Vermuyden, the drained common was to be divided into three equal parts. One-third was to be given to Vermuyden, one-third to the Crown, and one-third to the inhabitants. In fact the commoners received nearer a half than a third.

⁵ PRO E 178, 5430, 5444; E 134, 1 & 2 Jas. II, Hilary 25. To help matters, the remaining commons were divided among the townships in 1631.

Farming in the Isle of Axholme was not an exact repetition of farming in the fenland of Holland. Fewer cattle and sheep were reared, and more land was given over to crops, particularly wheat, rye, and hemp. The probate inventories also suggest that Axholme was not as wealthy a region as Holland. At the same time it is clear that the peasants of Axholme had evolved a perfectly satisfactory and profitable farming routine. Their husbandry was adapted to the natural conditions, they turned the seasonal floods to good account, and regarded them as a benefit, not a waste of their land. They had good reason, therefore, to defend their traditional way of life. The Dutchmen disturbed their routine, and ultimately transformed it out of recognition. They drained the land, made mistakes, altered the topography of the island and with it the customary farming arrangements, and then took more than half the land for their trouble. Dugdale wrote with admiration of the rape and corn which was sown in the fen after the drainage. What he did not appreciate was that the islanders did not need rape, and that they already had sufficient land for their corn. What they wanted in the fen was what they already had—grazing.

The charge that the islanders were stubborn and ignorant in opposing the drainage of the fens was made at the time, and is still current. It was a charge that ought with justice to have been made against Crown and Parliament, for they were utterly ignorant of conditions in Axholme before the drainage. Small wonder, indeed, that the islanders answered Parliament's demand for obedience in 1650 by saying it was "a Parliament of Clouts," and "they could make as good a Parliament themselves."¹

The drainage schemes of the seventeenth century changed the course of farming history in the fenland, and finally made it the richest arable region of Lincolnshire. But in his lifetime Vermuyden did nothing to prove his contention that the drained fen of Axholme could be made more profitable than the undrained. He proved only that it could be put to a different use.

¹ Dugdale, *op. cit.*, p. 147.