NORFOLK MARKET TOWNS AND THEIR INDUSTRIAL DEVELOPMENT IN THE NINETEENTH CENTURY

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Contents

ISBN 9780-9526815-6-4

Published in Norwich, United Kingdom by the
Norfolk Industrial Archaeology Society.

www.norfolkia.org.uk

Foreword

The Norfolk Industrial Archaeology Society is 50 years old this year. During this time it has recorded thousands of sites, many of which have now gone. The Society continues recording sites and accepting donations for its archive, which is kept with the rest of Norfolk's Historic Environment Record. The Society also has meetings each year at which talks are given.

It was at one of these evenings that Adrian gave a presentation based on his researches for his thesis, *Norfolk Market Towns and Their Industrial Development In the Nineteenth Century.* This talk was in some ways an outsider looking at Norfolk and its industries in a different way. Interestingly Adrian came to the same conclusion of many of the Society Members – the Industrial Revolution did not pass Norfolk by. As elsewhere entrepreneurs started businesses, some of which grew to be large concerns employing hundreds if not thousands of workers. The shape and character of our market towns today is a legacy of the expansion that took place in the nineteenth century.

Adrian pointed out that agriculture, itself a large industry, spawned other businesses, from the suppliers and makers of agricultural implements, to the maltsters converting Norfolk barley into malt for brewing. Adrian also gave examples of how a businessman saw an opportunity to fill a local demand for products. A niche is filled, and by originality and innovation, the business grows to supply a larger market. A success providing at the same time employment for many skilled workers and a significant boost to the local economy. The sheer number and variety of industries operating in rural Norfolk and its market towns is a surprise to many.

At the end of his talk Adrian offered to make available his thesis for members to read. Having taken him up on this offer it became clear to me that this work deserved a wider audience. And so the decision for NIAS to publish this book.

The book is easy to read, full of interesting detail to all with an interest in local history. It certainly helps to explain the size and character of each of the towns studied. For those who like to delve deeper then the extensive references used by Adrian in his researches will prove a goldmine.

Philip Tolley
Chairman, Norfolk Industrial Archaeology Society
January 2020

The Author

Born Adrian Zółkowski in 1945, the son of a Polish Air Force officer and English nurse, the family changed its name to O'dell in 1948, by choosing a surname at random from a telephone directory. Along with a brother, he was raised in Norfolk and had his secondary education at the City of Norwich School, a state Grammar School. His early interests included the French language and travel.

After failing his A-Levels, he re-sat them at Norwich City College where he met his wife-to-be, Jane and then became a management trainee with Bernard Matthews Ltd., the celebrated Norfolk turkey enterprise. In 1967, the international oil drilling and exploration industry which had recently began North Sea operations from Great Yarmouth lured him away and he spent five years working in Nigeria with his wife and young daughter Lucy, during the period remembered for its Biafran civil war.

In a career lasting twenty years with a U.S. oilfield service company, the family (then including a son, Alex) lived and worked in Aberdeen, Indonesia, and London before Adrian started his own business in office printers and printer consumables, back in Central Scotland. He attended the University of Stirling as a mature student and gained a BA degree in Business Studies.

Adrian and Jane returned to their roots in Norfolk in 2010 and he decided to return to University to study Landscape History at UEA. As a very mature student, he was awarded a Post Graduate Diploma and followed that with an MA degree in the same discipline. His extra-curricular interests include having been a trustee and volunteer with the Norfolk and Norwich Heritage Trust (Dragon Hall), Chair of the Norfolk Polish Heritage Group and a regular lecturer on Landscape History topics around the county.

He has a passion for Norfolk and its history and, although he and his wife still travel regularly, they intend to spend the foreseeable future under the broad skies and among the fields and woodlands that surround their home in North Tuddenham, a few miles west of his beloved Norwich.

Introduction

Norfolk is most commonly characterised as a county with large skies and correspondingly wide, open landscapes with a sparse and scattered population and an economy dominated by arable agriculture. It is clearly a rural county with only one large city at its centre and small ports dotted around its seaboard. However, "from late Saxon times this was the wealthiest, the most densely populated and most economically precocious area in England"[1] and this dominance was documented in Little Domesday.

Even after the start of the Industrial Revolution in the mid-eighteenth-century and in the north of England with its pitheads, mills and blast furnaces, Norfolk was a county where steam engines and railway locomotives were built, a canal was cut and navigations created. Today, hidden beneath its surface or disguised by later development there is a wealth of industrial remains to be studied or recorded, all testament to the fact that nineteenth-century life in even the most 'rural backwater' was affected by the technology of that time.[2]

In less productive agricultural areas, poor soils had been improved by the spreading of lime and marl,[3] the former extracted from the chalk substrata and then burned industrially to provide a useable product. In low-lying regions, scores of wind-powered pumps drained the land of excess water. Urban and rural building work relied on locally-sourced materials and in 1860 Lucas records there were 114 brick yards across the county.[4]

Norfolk has enjoyed the reputation of being an agricultural leader and, "the county, for a long series of years, was justly considered to be the point from which most of the great practical improvements in Agriculture emanated".[5] Advances in agricultural practice spawned innovation in machinery in Norfolk although Arthur Young (d.1820) the celebrated agriculturist reported in 1804 that "for more than half a century the implements of Norfolk remained without alteration or addition… but of late years many and great improvements have been made".[6] These developments came from designs created and built by local manufacturers, some of whom grew to gain international reputation while most remained small-scale but widespread and included foundry operations or agriculture-related blacksmithing and metal-working facilities. Over fifty maltings supplied nearly forty breweries throughout the county but there were also many more specialised industries such as tanning, gas works and even razor blade manufacture located close to town centres or dispersed among the scattered villages and farmsteads which characterise the Norfolk landscape.[7]

Norfolk has always been one of the more thoroughly studied counties in England in terms of its history and its industrial archaeology has also been energetically well-documented. For over forty years the Norfolk Industrial Archaeology Society (NIAS) have carried out extensive research into more than 2,600 individual industrial sites. Other academics have also worked to compile a broad compendium of industrial activity, for example in the admirable "Historical Atlas of Norfolk" while others, such as Robin Lucas in his doctoral thesis, diligently analysed a specific industry – in his case brick making. However, there is a missing element in the historiography of industrial activity in the county and that relates to the contribution made by the host of uncelebrated entrepreneurs, craftsmen and labourers who inhabited the market towns of the county; urban concentrations acting primarily as market, social and administrative centres.[8] It was they who worked in close proximity to the fields and farmlands which were the productive powerhouse of this county's economy and it was from their factories and modest workshops that products and technologies were created to provide the "great improvements."

Norwich, of course, had substantial and numerous industries while those in the two other large towns, King's Lynn and Great Yarmouth, were usually associated with the sea. "In all other parts of the county industries were agriculture-related"[9] and the focus of this investigation will be on the more rural hinterland and specifically on the incidence of industrial activity in five market towns located in disparate regions of the county :-

East Dereham - Central Norfolk[10]

Downham Market - West Norfolk

Fakenham - North Norfolk

North Walsham – North-east Norfolk

Diss - South Norfolk

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1 Wade-Martins, S. and Williamson, T., Roots of Change: Farming and the Landscape in East Anglia, 1750-1870 (Exeter, 1999) p.8

2 Brigden, R. Industrial Archaeology in Rural Areas (c.2008): Norfolk Industrial Archaeology Society archive (HER Gressenhall, undated)

3 Marl: a generic term for a variety of mixtures of chalk and clay; calcareous earth dug at various depths and then spread on the surface of fields as a fertiliser. Its use made possible Norfolk's complicated crop-rotation system(Riches, N., The Agricultural Revolution in Norfolk (London, 1967) p.77-8

4 Lucas, R., The example of Norfolk in the English brick-trade: a collection of historical studies (UEA, 1993) Table 5

5 Bacon, R., The Report on the Agriculture of Norfolk (London, 1844) p.1

6 Young, A., A General view of the agriculture of the county of Norfolk (London, 1804) p.52

7 Norfolk Industrial Archaeology Society: Archive Catalogue (NCC HER Gressenhall – 1972-2008)

8 Eastwood, T., Industry in the County Towns of Norfolk and Suffolk (Oxford, 1951) p.50

9 Alderton, D., The Batsford Guide to the Industrial Archaeology of East Anglia (London, 1980) p.106

10 Throughout this work 'East Dereham' has been abbreviated to 'Dereham'

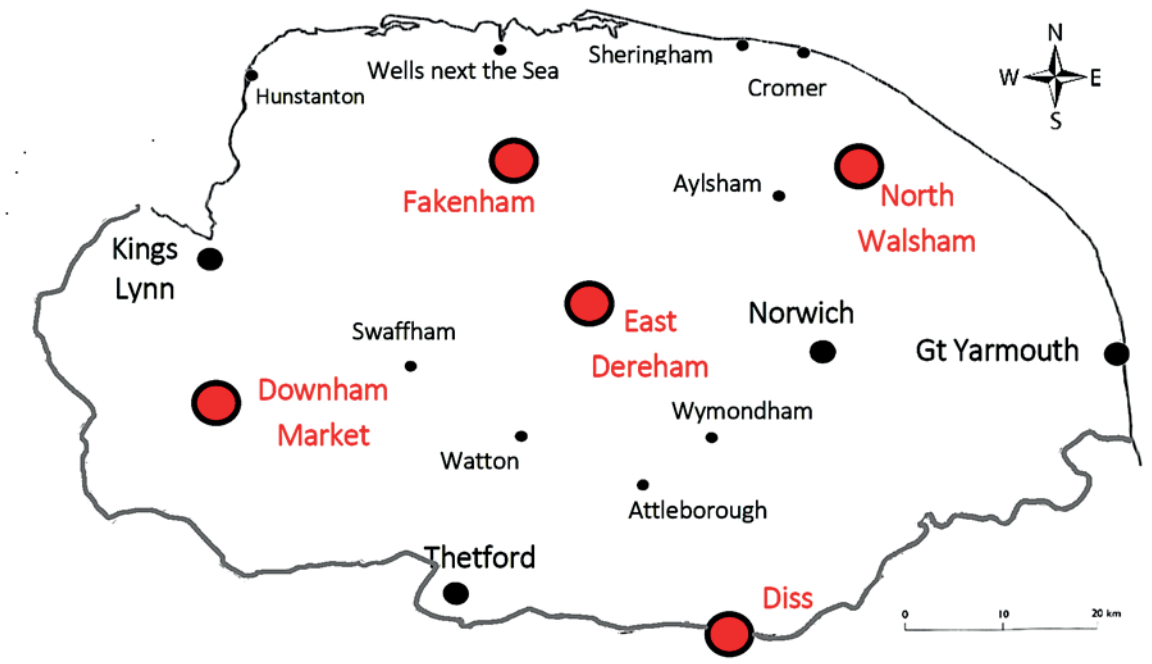

Figure 1 Norfolk showing principal Market Towns with those marked in red the focus of this work

The objective will be to identify and record all nineteenth-century industrial sites in parishes within a five-mile radius of each town centre and then to compare and contrast the type and amount of industrial activity in each area to determine if industries were sited to take advantage of locally available resources such as minerals and soils or if they needed a specific geographical location, for example adjacent to a water-course or close to appropriate transportation networks such as roads and railways. On occasions it might be shown that many were created by individual or family enterprise alone.

The research challenges the assumption that industry by-passed Norfolk and, by using nineteenth-century trade directories, the NIAS archive and NRO records it will be seen that was not the case. However, there is little published literature of significance to compare Norfolk with other counties in England.[11]

As industry in Norfolk was overwhelmingly driven by a home-grown agricultural imperative (as opposed to the heavier manufacturing, mining and 'metal-bashing' activity in the north of Britain) it is useful, first of all, to consider the physical nature of the county and its geology and soils as those were the raisons d'être for its rich agrarian heritage .

The county is generally low-lying (but not flat) with its highest point just managing to surpass one hundred metres above sea level on the north coastal Cromer Ridge, a terminal moraine of the last Great Ice Age. The solid geology (the underlying, basic geological structure) of the county consists of ancient metamorphic Precambrian and Palaeozoic rocks. These were overlain by a succession of sedimentary deposits including Jurassic Kimmeridge Clay in the west, much of which was scraped away by Ice-Age activity (to form the Fenland Basin) and deposited as a chalky Boulder Clay plateau through central Norfolk in a broad, north-south arc.[12]

In turn and in the west of the county, the Kimmeridge Clay was covered by Lower Cretaceous unconsolidated sands and Red Chalk but the most recent sedimentary deposits, which underlie later glacial deposits across most of Norfolk, date from the Upper Cretaceous period in the form of a White Chalk band nearly five-hundred metres thick which surfaces as a cliff escarpment in the north-east near Hunstanton.[13] This chalk mass is tilted in a south-easterly direction towards Great Yarmouth where it is found, overlain by assorted marine sands and gravels known as Crag, at a depth of eighty metres.[14]

Over the last 2.6 million years, distinct alternating periods of glacial activity have had a great influence in shaping the landscapes of Norfolk, both in its topography but to a greater extent its soils. Repeated incursions of ice sheets, moving in different directions, disturbed earlier glacial deposits with the result that contemporary soil patterns are complex and interwoven. The Anglian Glaciation (c.450,000 years ago) left deposits of various depths and composition and make up most of the surface cover of Norfolk, so they exerted "a strong influence on the county's soils and affected both the early colonisation and subsequent agricultural development".[15] (see Appendix for a detailed breakdown of the Soil Regions)

11 See Bibliography for sources and comments re specialised publications on industrial activity on page 42

12 Wade-Martins, Sand Williamson, T., Roots of Change: Farming and the Landscape in East Anglia, 1750-1870 (Exeter, 1999) p.9

13 Funnell, B., Geological Background in Ashwin, T. and Davison, A. eds. An Historical Atlas of Norfolk (Chichester, 2005) p.4

14 http://earthwise.bgs.ac.uk/index.php/East_Anglia_and_adjoining_areas_-_North_Norfolk (accessed 19/01/2018)

15 Funnell, B., Geological Background in Ashwin, T. and Davison, A. eds. An Historical Atlas of Norfolk (Chichester, 2005) p.5

Figure 3 The construction of North Walsham and Dilham Canal (1825-1826) [l] and 'Tyler's Cut' connecting Thomas Taylor's brickyard to the Canal [r]

Figure 4 Dereham railway station (1921) showing extensive maltings (built 1850) and waggons loaded with sacked barley or malt

well-before its advent) but access to bulk supplies of heavier commodities such as coal or pig iron[24] and the ability to distribute finished goods to distant markets by rail, encouraged existing businesses to grow and move.

One industry specifically related to railway engineering was started in the village of Melton Constable near Fakenham in 1881. Chosen for its geographical location in central North Norfolk and at a junction of two Midland and Great Northern lines, the works were primarily occupied in heavy repairs to locomotives but steam engines were also fabricated there. By 1900 there were thirty forges operating with huge carriage, waggon and engine shops and the population had risen from one hundred to nine hundred inhabitants.[25] Melton Constable had become the "Crewe of North Norfolk" but because of lower than expected traffic volume, it never developed to the extent that some had hoped.

Power – Water, Wind, Steam and Gas

Because Norfolk had poor fossil-fuel resources - only limited supplies of peat - natural power sources continued to be used until a much later date and to a greater extent than in more favourable areas of England.[26] Horses and donkeys were used to drive machinery or pump water in barns and brickworks across the county until the late nineteenth-century[27] but it was water-power which was in more common use, particularly for grinding flour but also across a wide range of activities (see Table A).

Water Power

Watermills have a long heritage in England and in Norfolk there were said to be 580 recorded in Domesday.[28] There was a higher incidence of mills in areas with a larger number of rivers and streams, for instance the Ant and Bure close to North Walsham and along the course of the Wensum from Fakenham to the north of Dereham and on to Norwich The Tas valley to the south of Norwich also had a concentration of watermills as did the region around Downham Market. In this county of gentle gradients it may be surprising that there was such a profusion of watermills but the development

24 The term "pig iron" dates back to the time when hot metal was cast into ingots for onward shipment to localised foundries. Moulds were laid out in sand beds and the group of moulds resembled a litter of pigs https://www.metallics.org/pig-iron.html (accessed 19/02/2018)

25 www.nrm.org.uk - National Museum of Science and Industry, Engineering drawings and records from the Melton Constable Locomotive works (2007) pp3-5 (accessed 17/02/2018)

26 Alderton, Dand Booker, J., The Batsford Guide (London, 1980) p.19

27 Norfolk Heritage Explorer: Records HER 43952, 22800, 50047, 51747 (accessed 18/02/2018)

28 http://www.norfolkmills.co.uk/watermills.html (accessed 19/02/2018)This figure should be used with caution as other academics set the number as low as 302 (Fewster, M. in An Historical Atlas of Norfolk p.166)